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Title:

Semi-Annual Monitoring Report January 1 - June 30, 2007

Air Quality Title V Operating Permit P100M1

Los Alamos National Laboratory

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Intended for:

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Identifying Information		
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Certification of Truth, Accuracy, and Completen	ess	
I, <u>Victoria A. George</u> 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 <u>Name Villian Wilkin for Villian A. Leorge</u> Date: <u>8/3/2007</u> .  Title: <u>Division Leader, Environmental Protection Division</u> .		

#### 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

## 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.	Monthly opacity reports are provided as Attachment A.  Monthly six minute opacity readings are taken using the required EPA Methods.
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.	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.  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).  Records are available on-site for NMED inspection.
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.

## 2. Beryllium Activities (Permit Section 2.2.4)

TA-3-29 Chemistry and	A log shall be maintained during operations which indicate the	The registration for this source has
Metallurgy Research Facility	number of Be samples processed.	been cancelled. Beryllium work is no longer performed at this location. A letter was sent to NMED on June 5, 2007 making this request.  A log with the number of Be samples processed during this six month reporting period is available on-site for NMED inspection.
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.	A log is maintained showing the number of metallographic specimens used in the polishing operation.  Logs are maintained showing the weight of Be samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations.  Logs are available on-site for NMED inspection.
Beryllium Technology Facility (BTF)	Facility exhaust stack will be equipped with a continuous emission monitor used to measure beryllium emissions.  Cartridge and HEPA filters will be	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.  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]  Cartridge and HEPA filters are

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.

### 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.

## 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.	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.  The TA-15-563 carpenter shop is equipped with an hour meter on the cyclone separator. The hour meter is read and recorded monthly.  Hours of operation are provided in Attachment D.

## 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.

## 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.

### 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.  Record hours of operation and the time operation begins and ends each day.	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.
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.

## 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.

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.

Permit	Monitoring Required	<b>Monitoring Performed</b>
Section		<b>6</b>
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.

Permit Section	Monitoring Required	Monitoring Performed
	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.	Delivery of pipeline quality natural gas is specified in the contract with the supplier (PNM).  Opacity measurements performed at the TA-03 Power Plant are provided in Attachment I.
2.9.4.11	Initial compliance tests are required on Unit TA-3-22 CT-1 for NOx 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 NOx, 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.	The Combustion Turbine has not started operations. No monitoring performed.
2.9.4.12	The permittee shall comply with fuel sulfur monitoring requirements at 40 CFR 60.334(h) applicable to Unit TA-	The Combustion Turbine has not started operations. No Monitoring performed.

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).	

#### **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.

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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

<sup>\*</sup> 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.

<sup>\*\*</sup> 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.

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Height Above Ground Lav	-13EC7	1/10/10	ative to Observe	POINT	196		2	0		, 14	<u> </u>			
Height Above Ground Lav	Feet '	Lundus He	AUVI to Chimiya	Feet	773	0	0	0	0	15		•		
Distance from Observer	Ver rec	. <b>t</b>	from Observer		•	<i>γ</i> ,				18				
35-0 40 Description of Plume (stars	k exit anivi	<u> </u>	<u>/                                    </u>	Trapping	4× 4	<u></u>	9	0	$\cup$					
Description of Plume (state	NO BA	SSIO S			+75	0	$\overline{O}$	$\bigcirc$	0	17			. }	
Emission Color	Plume Type	NOCH	MISSION'S.		50 6	<u>(1)</u>	0	0	/^)	18 (		·		
Water Oroplets Present?	Conta	NUOUS L. F	rugitive 🗆 inte	mittent		-			U		· ·			
At what point in the plume				Denuched	7					19		·	-	
17012 ABO					8	1				20			Ì	
Cescribe Background (Le. )	siue sky, trees	, etc.)	- <u></u>	,	g			-		7.				
BILLES	KY	Ta			9				}	- 21		]		
Background Color	•	Sicy Condit			10		ĺ	į		22	. 1	· j		1
Sind Speed	Wind Directi	on (Le, from	ONOTE TO South	ī	<del> </del>				<del>-  </del>	-				
notent Temperature		•		,	1,1	·			.	23			٠,	·
- m - f	Wet Tempera		Relative Humi	_	12					24	-			
APPROX / 2 *F		.*F	29	*	Average O	n city				Range of	Opacity	Rand	nos	
NO EMIS	(10-1 0	'B = 6-101	· / · · · ·	·* .			. 0	)	Į	Min	$\langle \overline{} \rangle$	Man	m.	
					CREKRY					<del></del>				·
TRANSPER			anveye	rc.	Name	Rici	4,4,727	C	257	Cata	يون ي	5/NO	EX	
BELT IS C	LOVER	(m),			Signature		~, ~~~~		Ì		./	20	017	- 1
				į	Ormanizati		0577			Cartificati				
					K	<u> 54</u>				_3	- 30	<i>) (</i>	76	
Oraw Arrow in North Direction		-	•	-		IMP	ORTA	NT: i	Piesse	indicate	the fo	lowin	g by si	ketch:
NOT OF DEPENDEN		•							بسين	- <u>-</u> -				-
								م			ne Oire			
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	701	PCE						`C	),	Sun	•			
	<u> </u>		0						,		-			•
	١.		+	3				- 1		Nort	ħ			
			. 🔿	1	· /							÷ ,		
7		,	<i>;</i>	~	<b>/</b>									
•		Observer's		\ \ \	` .					ipt of a.c. werverion		1718SE	,	]
*	لہ	Poext	lon	,,,,,		1		6	1	111	27		· · · · · · · · · · · · · · · · · · ·	
		1				SI	<b>GUSETIN</b>		14	f	Z			- 1
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	-				<i>.</i>	"	tie:		··········					-
						1 _		/-	/ "	7-0	7			- [

PATH BANKONANT						FART TIM		
ASPHACT PLANT	J-EP		•	D/2:	$\gamma \vec{D}$	2:50		STO
LOCATION	<b>Sec.</b>				<del>/ //</del>	Sec		1
TA-60	Min.	0.	15	30	45	MIC	0	15
Type of Source . Type of Control Equipment	1			,,,,,,,,,,,		13		
A SPHALT BASHOUSE  Describe Emission Point (top of stack, etc.)	<i>150</i>	(/	()	رم	10.	<u> </u>	<del> </del>	<del> </del>
	,512	0	Ò	~	10	. 14		
Height Above Ground Level . Height Relative to Observer	* *	<u>-</u> -2					<u> </u>	}
<u> </u>	,52 <b>3</b>	(/	()	()	0	15		
Olstanics from Observer  SS Yerds RC NNW	.53 <sup>4</sup>	$\bigcirc$	0	0	0	16		
Description of Plume (stack exit only)	54 <b>5</b>	$\bigcirc$	.,~			17		
Englasion Color Plume Type A / A	C-1.							<u> </u>
SMISSIDAS Continuous Fugitive Intermittent	5 <b>86</b>		Q	Q		18		<u> </u>
SZ-NO YES H YES, droplet plume is Attached Detached	7	·				19		
At what point in the plume was apacity determined?  12 TO 14 INCH AROUS SOURCE	8					20		
Describe Background (f.e. blue sky, trees, etc.)	9				. 1	. 21		
Background Color Sky Conditions			$\dashv$	-				,
CLEAR-BUYE-PC PC	10	·			<u>.                                    </u>	22		
Sind Speed Wind Direction (Ls. from North to South)	13					23	ļ	`
nblent Temperature Wet Temperature Relative Humidity	7,7	1				٦, ١		
COMMENTS:	12	1				24 Range of s		
	verage Of		<b>5</b> –		1	Manue or s	- 기기	y Hand Ma:
NO EMISSIONS WERE	BEKRVE							
OBSERVED FROM ANY EMISSION	Nume	RIC	HAT	<u>e) (</u>		774 · Title	* £	V3/)
POINT.	ignatura //	-		7	3	Cate	مرص	. M
<u></u>	rganizatio	wn			=	Cartification	on Oat	<u> </u>
10			/		]	5	7-	30
0	34	، حــــــــــــــــــــــــــــــــــــ						
				NT: F	Ease.	indicate 1	CHE IUI	
				NT: F	ease	indicate 1	CIPE ICI	
	£			NT: F	lease	indicate 1	CIPE IUI	
Draw Arrow in North Objection  ROTH Objection	<i>_</i>			NT: F	lease	<del>.</del>	ne Dine	cióon <sup>′</sup>
Draw Arrow in North Objection  RCOSTR  12:19-07  7:20Am	· .			NT: F	lease	Plum	ne Dîne	ction <sup>*</sup>
Draw Arrow in North Direction  RC Cost Tx 2:19-07	<u>K</u>			NT: F	);	<del>.</del>	ne Dîne	ción <sup>*</sup>
Draw Arrow in North Objection  **Z:19-07  7:20Am				MI CO CO +	)	Plum	ne Dire	ción <sup>*</sup>
Draw Arrow in North Objection  RCOSTR  12:19-07  7:20Am				NT: F	(lease	Plum	ne Dire	ction (
Draw Arrow in North Objection  **Z:19.07  9:20 Am				NT: TO CO. T	(lease	Plum	ne Dire	ción (
Draw Arrow in North Objection  RCGGTA  2:19-07  7:20Am		IMPC	ORTA Ockno	C C C	) ?	Plum Sum Nort	h h	<i></i>
Draw Arrow in North Objection  *Z:19.07  7:20Am  SOURCE		IMPC	ORTA Ockno	C C C	) ?	Plum Sum Nort	h h	<i></i>
Draw Arrow in North Objection  **Z:19.07  9:20 Am		/ 4 / 2	ocknov	t viedge	) ?	Plum Sum Nort	h h	<i></i>
Draw Arrow in North Direction  R Cost R 2:19.07 7:20 Am  source		/ 4 / 2	ORTA Ockno	t viedge	) ?	Plum Sum Nort	h h	<i></i>
Draw Arrow in North Objection  **Z:19.07  7:20 Am  Source		/4 /4 %	ORTA Scknos Sible w	t viedge	) ?	Plum Sum Nort	h h	<i></i>
Draw Arrow in North Direction  2:19:07 7:20Am  Sounce		/4 /4 %	ocknov	t viedge	) ?	Plum Sum Nort	h h	<i></i>
Draw Arrow in North Oliverion  R Costik 2:19.07 7:20Am  Source		/a vi	ORTA Scknos Sible w	t viedge	) ?	Plum Sum Nort	h h	<i></i>

# Los Alamos

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

Source Name:	Observation I			Start Time End Time				
LANL A	Asphalt Plant	3-5	07		9:51AM 9:57 AM			
Source Location:		Sec	1					
TA-60 (	Sigma Mesa)	Min	0	15	30	45	Comments	
Type of Source	Type of Control Equipment	.511	10	0		0		
Asphalt Plant	Baghouse	1 .31	+			100		
Describe Emission Point (Top of st	The state of the s	,5Z <sup>2</sup>	10	0	0	0		
· ·		1 1		Ĭ				
TOP OF SP Height Above Ground Level	Haight Palating to Observer	.533		0	0	10		
Feet Feet	40 Feet	,544		-		-		
45 Feet Distance From Observer	Direction of Source From Observer	1,57	10	$\mathcal{L}^2$	0	10		
	Direction of Source From Observer	.555		0	0	0		
50	N. M							
Description of Plume (stack exit on	lly)	1.566		0	0	0		
□Lofting □Trapping □Loopin	g □Fanning □Coning	7						
Emission Color Plume Typ	pe No Plume Present	-						
□Continu		8						
NO EMISSION			_		,,,, <del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>			
Water Droplets Present? ■NO □YES If YES, droplet plun	ne is FlAttached   FlDetached	9						
			<del></del>					
At what point in the plume was opa	eity determined?	10						
APPROX (Z'TO!4" AT Describe Background (i.e. blue sky,	OUE SOURCE	11						
Describe Background (i.e. blue sky,	, trees, etc.)	11						
Background Color		12						
Background Color	Sky Conditions							
BLUE	CLGIR	• 13						
Wind Speed Wind Direct		14					**************************************	
mph (provide fro	om/to, i.e. from North to South)	i T						
ONE KINE-	Ta << 14/	15						
OTO 5 NNE -	<u>アのららい</u> Relative Humidity							
APPOT 45 °F	resex 10 %	16						
Additional Comments/Information:	5.00-2-10	17						
NO EMISSIONS U	WHITE ORSERVED	L /	_					
NO EMISSIONE		18						
FROM ANYEM	SSION COINC		<del></del>				<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	
•		19						
CONTRACT	A SZONETON CHZ PROMONE	20						
Stack swith SOURCE LA	AYOUI SKEICH	<u> </u>				ĺ		
Plume	Draw Arrow in	Average 6-M	inute Op	pacity			f Opacity Readings	
Emis	ssion North Direction	- ()-			1	vin.	Max.	
Sun 🕀 Po	int (4)	OBSERVER	(please	nrint)				
Wind —		Name:	(Pieces)	p		Title:		
		RICHARO		577			N. 6. 3. 10 1 1 - 10 18	
		Signature		-1/		<del></del>	Date	
WIND /			1			ļ	Date	
DIR. \		$\perp$	_050				3-5-07	
	_ 우	Observer Org	ganizatio	on				
	7人~~	1 , , ,						
	/	K54						
	OBSERVER'S POSITION ' '	Certified by					Certification Date	
141	or SUN !	ETA					2-28-07	
							<u> </u>	
SUN LOCAT	TION LINE							

## Los Alamos

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

Source Name:	Observation D			Start '		End Time		
LANL	Asphalt Plant	4	111	07	12	OLP	n 12:07 F	2171
Source Location:		Sec	1					
TA-60 (	(Sigma Mesa)	Min	0	15	30	45	Comments	
Type of Source	Type of Control Equipment	1 1	0			0		
Asphalt Plant	Baghouse		£	<u> </u>	<u> </u>			*************
Describe Emission Point (Top of		- 1 2	10	0	0	0		
		3				-33		-
TOP OF  Iteight Above Ground Level	Height Relative to Observer		10	$\bigcirc$	0	0		
45 Feet	Feet	4	0	0	0	0	: 	
Distance From Observer	Direction of Source From Observer	5	Z-3					<b></b>
50 Feet	N.W.	]	<u> </u>		0			
Description of Plume (stack exit o	nly)	6	0	0	0	0	: İ	
☐Lofting ☐Trapping ☐Loopi	ng □Fanning □Coning	<b>                                     </b>				<b></b>		
Emission Color Plume Ty	pe No Plume Present	1						
NO EMISSIONS		8						
Water Droplets Present?  SNO □YES If YES, droplet plu	me is DAttached DDetached	9						
At what point in the plume was op		10						
APPROX. 12" TO 14" Describe Background (i.e. blue sky	AROVE SOURCE	11						
Packground Color	(PT)	12						
	Sky Conditions	13					<del>                                      </del>	
V and Speed Wand Dare		14					***************************************	
mph (provide f	rom/to, i.e. from North to South)	15						v.,,,,,,,,,,
Ambient Temperature	T TO CAST  Relative Humidity	<b>                                     </b>						
47 °F	12 %	16						
Additional Comments/Information:		17						
1 *	WERE OBSERVED	18						
FROM ANY EMIL (ROADS, TRANSFER PO	DINTS & STOCKPILES)	19						
Stack SOURCE L	AYOUT SKETCH	20	<b>†</b>					
vith Q	Draw Arrow in	Average 6-Mi	nute O	pacity	I	Range o	f Opacity Readir	ngs
Plume Em	ission North Direction	1 09				vin.	N.4	%
	oint	OBSERVER		print)		(	215	170
Wind —	$\mathbf{x}$	Name:	, g	x		Title:		
		RICHAR	D 6	30	7 Å		NGINCER	
		Signature			·	I	Date	
	,	James Company	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_			// - 1	, l
	$\mathcal{L}$	Observer Org	ر ے : anizatio				4-12.0	
_	OBSERVER'S POSITION	Certified by				T	Certification Da	ıte
							Cenneauti Di	110
	10"	ETA					<u> </u>	7
CLINITOCA	TIONLINE							



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

Source Name:	w		Observation Da	ite		Start '	Time	End Time	
		Asphalt Plant		MAY	8,5	7001	8:	77 AM	8:33 AM
Source Location:		Sigma Mesa)		Sec Min	0	15	30	45	Comments
Type of Source		Type of Control I	Equipment	1				-	
Aspha	t Plant	Bagh	ouse	2		0	$\mathcal{Q}_{-}$	0	
Describe Emissio	n Point (Top of s	tack, etc.)			0	0	0	0	
Height Above Gr	OF SHA	KEK Height Relative to (	Observer	3	0	0	0	0	
45	Feet		Feet 40	4	0	0	0	0	
Distance From O	Feet	Direction of Source		5	0	0	0	0	
APPROX 5 Description of Ph		<i></i>		6	0	0		0	
□Lofting □Tra  ■No Plume Prese	pping 🗆 Loopii		Coning	7			0		
Emission Color	Plume Ty	pe Mano Plume P lous	resent □Intermittent	8	:				
Water Droplets Pr		ne is □Attached □	Detached	9					
At what point in t				10					
/2"-To/	"AROUE	<u>-7)+€ .&lt; 0.01</u> , trees, etc.)	ece	11					
_		TO C/C Sky Conditions	]	12					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
_	1			13					
Wind Speed mpl	Wind Dire	CLOUDY ction om/to, i.e. from Nort	h to South)	14					
5.8	1		1000000	15					
Ambient Tempera		TO NE Relative Humidity	%	16					. , , , , , , , , , , , , , , , , , , ,
Additional Comm	ents/Information:			17					
	ASP	HALT PLA	NT FACE AND	18					
15 COMPLIA	ANT, AC	THIS TIME	c.	19					
Stack with	SOURCE L	AYOUT SKET	СН	20					
Plume Sun		ssion sint	Draw Arrow in North Direction	Average 6-Mir	2%		1	Range of C Min.	Opacity Readings Max.
Wind —		X		OBSERVER (1 Name:	•	orint)		Title:	
				Signature	D (	.OST	<u>*</u>		MGINEER Date
		0	- Jan 1	700	03	7 <del>7</del>	<u></u>		5-8-07
VMIND		1.	SUN	Observer Orga		n			
/ V*1/40		OBSERVER'S PO	` `	Certified by				C	ertification Date
_	14	œ		E	TF	1			2-28-07
	CERTIOCA:		1						

## **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 Wind Speed: 5-10 mph Precipitation: None Industry: National Defense Process Unit: All potential fugitive sources **Sketch of Process Unit:** Indicate: \* observer position relative to source \* wind direction \* potential emission and/or actual emission points \* North direction Conveyor Bag house Stack North Direction Elevator Don's location Wind Direction Dave's location Observations: (see note (2) below) Clock Time Accumulated emission Observation period duration (min:sec) time (min:sec) $0^{(2)}$ 8:04 Begin 1:01 pm 1:09 pm **End Observation** (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:

6-20-07

# 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	LAS Calibi	ration D Date: <u>03 - 06 0名</u> E (8.4.3)	iluter Calibration Expiration Date:	<u>06-18.</u>	-8 /- F	lution 2064 (8.4.2)
Step Number		Item			<b>FF-852</b> 1-5-1430	
9.1.12.2	Background conce	entration (part./cc)		A pullwork at a large	1.412x	2 part. concentration
9.1.12.3	Upstream concent	tration (part./cc)		Ì	1.188XI	
9.1.12.4	Challenge aerosol	concentration betwee	n 2.00 x10 <sup>6</sup> and			
9.1.12.5	1 <sup>st</sup> stage downstre	am concentration (part	t./cc)		,1617(1)	part. concentration
9.1.12.6	2 <sup>nd</sup> /3 <sup>rd</sup> stage down	stream concentration (	part./cc)	TO SERVICE A PROPERTY OF THE P	.412	XtO part concentration
9.1.12.7	1 <sup>st</sup> stage Penetrati	on ≤ 5.0 x10 <sup>-4</sup> (efficiend	cy ≥ 99.95%)	Í		X10 <sup>5</sup>
9.1.12.8	2 <sup>nd</sup> /3 <sup>rd</sup> stage Pener	tration ≤ 2.5 x10 <sup>-7</sup> (effic	iency <u>≥</u> 99.999	975%)	0.0	
9.1.13.3 9.1.13.4	Ensure all test por	t ball valves are closed	]	M	Initials	m www.
Name of the second seco	Valve	Required Position	Initials	Indeper		
	HV-852-H	Closed and Locked	po	mm		·
	HV-852-G	Closed	W	WIN		
	HV-852-F	Closed	PO	MW	Ž	,
	HV-852-D	Closed	w	MIN	1	TO.
	HV-852-C	Closed	W	(MW		
,	HV-852-B	Closed	file	Vin	Ī	
	HV-852-A					150 "A
	HV-852-AA	Closed	W	江京	Contract of the Contract of th	
HV-852-P Closed PD WWW HV-852-C Closed PD WWW HV-852-B Closed PD WWW HV-852-A Closed PD WWW HV-852-AA Closed PD WWW Comments:						
Surveillance Personnel Signature Date  OC On-duty Supervisor Date  OC On-duty Supervisor V/11/07  Signature Date						

1

#### 100 AREA GLOVEBOX EXHAUST IN-PLACE HEPA FILTER TESTING

# ATTACHMENT B 100 Area Glovebox Exhaust FF-853 Data Sheet

Date: 04-	LAS Calibration Diluter Calibration Expiration Date: 03-86-08 Expiration Date: 06-	Dilution Ratio: 2064 (8.4.2)			
Step Number	ltem	<b>FF-853</b> H-5-1440			
9.2.12.2	Background concentration (part./cc)  3.531XID part. concentration				
9.2.12.3	Upstream concentration (part./cc) 2. 400x16 part. concentration				
9.2.12.4	Challenge aerosol concentration between 2.00 x10 <sup>6</sup> and 2.71 x x10 <sup>6</sup> part./cc)				
9.2.12.5	1 <sup>st</sup> stage downstream concentration (part./cc) 7.536X10 part. concentration				
9,2.12.6	2 <sup>nd</sup> /3 <sup>rd</sup> stage downstream concentration (part./cc) 1, OS9V10 part. concentration				
9.2.12.7	1 <sup>st</sup> stage Penetration ≤ 5.0 x10 <sup>-4</sup> (efficiency ≥ 99.95%) 3.14×10 <sup>-5</sup>				
9.2.12.8	2 <sup>nd</sup> /3 <sup>rd</sup> stage Penetration ≤ 2.5 x10 <sup>-7</sup> (efficiency ≥ 99.999975%) 2.9 43 x to - 9				
9.2.13.3 9.2.13.4	Ensure all test port ball valves are closed $oldsymbol{arepsilon}$	Initials Independent Verification			

Valve	Required Position	Initials	Independent Verification	
HV-853-H	Closed and Locked	FW	Margi	
HV-853-G	Closed	M	Must	
HV-853-F	Closed	NO	Tww.	
HV-853-D	Closed	RO	mint	
HV-853-C	Closed	LNO	NW	L
HV-853-B	Closed	R10	wat:	
HV-853-A	Closed	40	MARIN	*
HV-852-AA	Closed	40		

Surveillance Def 4-11-07 OC On-duty
Personnel Signature Date Signature Date

Attachment C Boilers and Heaters Natural Gas Usage

# 2007 TA-21 Steam Plant Data Entry / Fuel Use

	DATA E	NTRY	1			
	Monthly I	-uel Use		_		
	TA-21	-357	Converted		Natural Gas Use	Fuel Oil Use
Month	Natural Gas (MCF)	Fuel Oil (gallons)	Natural Gas (MMscf)	Month	12-Month Rolling Total (MMscf)	12-Month Rolling Total (Gallons)
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	Мау	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			

15204

Jan. - June

July - Dec.

69

0

15.204

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

		Λ	letered Boile	ers				
		1	ler Gas Use SCF)	TA-50-2 (MSCF)	Total Gas Use		Non-Metered Gas Use	12-Month Rolling Total for
	Month	BHW-1B (B-602)	BHW-2B (B-603)	BS-1	(MSCF)	(MMSCF)	(MMSCF)	all Small Boilers (MMSCF)
	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
E	June	0	379	0.1	13,530	13.53	13.15	518.20
_	July							
Data	August			i i				
-	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-Metere	d (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

Attachment D
Carpenter Shop Hours of Operation

## 2007 TA-3 & TA-15 Carpenter Shops

TA-3	Data Entry
	Hours of Operation <sup>1</sup>
Month	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-15	Data Entry
	Hours of Operation <sup>1</sup>
Month	TA-15
January	9.4
February	17.4
March	47.2
April	13.6
Мау	20.6
June	8.9
6 mo. Total	117.1

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

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

Reference

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

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

> 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

# Attachment F Internal Combustion Generator Hours of Operation

#### 2007 Generator Hours

								First 6 M	onth Readi	ngs 2007	Second 6	Month Read	dings 2007
						Previous		6 Month			12 Month		
						Reading	Previous	Reading			Reading		
TA	Bldg	Manufacturer	MODEL	KW	Fuel Type	Date	Reading	Date	Reading	Hours Run	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	100DGDB	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	300DEFCB	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	<u> </u>		
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	<b></b>		
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			<del>                                     </del>
63	Yard	Murphy	3166-0084	20	Diesel	Nov-05	715.9	Jun-07	715.9	0.0			<u> </u>
64	1	Onan Sons	250DVG	250	Diesel	Nov-05	148.0	May-07	153,1	5.1		<u> </u>	
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 u	Se						TOTAL	455.1		TOTAL	0.0

46 Generators in use TOTAL 455.1 TOTAL 0.0

> First half average hours per unit 10.4 Second half average hours per unit

Attachment G
Data Disintegrator Box Throughput

## 2007 TA-52 Data Disintegrator

	Data Entry			Data Entry	
Month	Boxes <sup>(c)</sup> Shredded	12-Month Rolling Total	Month	Boxes <sup>(c)</sup> 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

Attachment H
Power Plant Natural Gas and Fuel Oil Usage

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

			DATA I	ENTRY				
	Boiler#1 (E	ower Plant dgemoor Iron MMBTU/hr)	Boiler # 2 (Ed	ower Plant dgemoor Iron MMBTU/hr)	TA-3-22 Po Boiler # 3 (Unio 210 MM	on Iron Works,	Monthly	<sup>,</sup> Totals
Month	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

	12-Mo. Rolling Total	12-Mo. Rolling Total
Month	Natural Gas (MMscf)	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		

Permit Limits:	2000 MMscf	500.000 gallons

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

#### 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	Average Opacity 0%
1A-3-22 Power Flant			0%
	01-11-07	10:32 am	0%
	01-11-07	10:42 am	
	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%

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%
TO THE PARTY OF TH	04-10-07	8:33 am	0%
	04-24-07	10:38 am	0%
TOTAL	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%

<sup>\*</sup> 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			
VISIBLE EMISSION OBSERVA		Start Time	Tr. Jerran
Source Name:	Observation Date		Find Time
Source Location:	1-11-07	1022	1031
	Sec	22 45	
TA 3 SM 22 STEAM PLANT Type of Source Type of Control Equipment	Min 0 15	30 45	Comments
1 / 1 1		00	
Describe Emission Point (Top of stack, etc.)	2 0 0		
1	1 400	O	
Top of W65T Stack Height Above Ground Level   Height Relative to Observer	1 3 00	00	
Feet 1 7 Feet	4 00		
Distance From Observer Direction of Source From Observer		$ \mathcal{Q} $	
72 Yards S E	1 5 00	00	
Description of Plume (stack exit only)	600	00	
OLofting Olymping OLooping OF anning OConing	11-199	10101	
Emission Color Plume Type Into Plume Present	1 7 00	00	
O/ Note   Continuous   Fugitive Engenuive	8 00		
Water Droplets Present?		20	······································
DNO DYES If YES, droplet plume is DAttached Detached	9 00	00	
At what point in the plume was opacity determined?	10 00	$\Delta \Delta$	
To p oF WEST STACK Describe Background (i.e. blue sky, trees, etc.)		$ \mathcal{Y} \mathcal{Y} $	
Describe Background (i.e. blue sky, trees, etc.)		F- 1-2-2	(10g)。明显说到:
BLUE - WHITE SKY  Buckground Color Sky Conditions  BLUE - WHITE SCOTTERED		22:46.24	
Buckground Color Sky Conditions			
Wind Speed Wind Direction		4-14-5-4	Madre
mph (provide from/to, i.e. from North to South)			A A TO SEC.
2-7 ETOWEST			
Ambi ent Temperature Relative Humidity			
¥ %	34 14 P 3 P 3 P 3 P 3 P 3 P 3 P 3 P 3 P 3 P	e de la compa	to such a residence
Additional Comments/Information:		77	
		- 44	
	Principles of the Control of the Con	7.5	NG CAMPARATA
Stack SOURCE LAYOUT SKETCH	190 point 1/12 1 1 2 1 2 2 2	1	Service of the Control
with Draw Arrow in	Average 10-Minute Opacity	Range of	Opacity Readings
Emission North Direction		Min.	Max.
Sun (7)			
Wind - X	OBSERVER (please print)	arried	permon
	Name: LEGNARD PACE	ALLO	
	Signature	7000	Date
E TO W	1/1/		1 // -
	7		1-11-07
	Organization	_	
	115L -Upp	<u> </u>	
OBSERVER'S POSITION	Certified by	'	Certification Date
140°	ETA		8-29-06
			<u> </u>
SUN LOCATIO CONTE			

• Los Alamos	LOS ALAMOS NATIONAL	LABORAT	ORY (LANI	.)	
	VISIBLE EMISSION OBSERV	ATION FOR	M (10 MINI		
Seirce Name:		Observation	Date	Start Thr.	End Time
#   BOILER	FUEL OIL	1-11	<i>-0</i> フ	1032	1041
Source Location:		Se	c		······································
T4 3 SM 2.	I power plant	Min	0 15	30 45	Comments
Type of Source		] 1	00	00	
DIEST FUEL	NA	<b>↓</b>			
Describe Emission Point (Top of	· · · · · · · · · · · · · · · · · · ·	$\frac{2}{1}$	1010	00	
TOP OF WES	T STACK	4 3	(m)	00	
Height Above Ground Level	Height Relative to Observer	\ <del>                                     </del>	1215	0	······································
Distance From Observer	Direction of Source From Observer		00	001	
7 7 Yards	Direction of Source From Costs via	5	$\bigcirc$	00	
		4	<del>-121</del> 2	12121	
Description of Plume (stack exit		6	1010	001	
No Plume Present		7		00	
Emission Color Plume T		} }	144	12121	
TXA(X/NoMb	nuous OFugitive Cintermittent	8	1010	00	
Water Droplets Present?	ume is DAttached DDetached	9	MA	00	
At what point in the plume was o		1 10		2/2/	
		10	100	001	
Describe Background (i.e. blue sl	ry, trees, etc.)	1 4 16		672 745	Approximation in
		7.434	ी ३ के छह		
Background Color	Sky Conditions				
RIDE WHITE	SCATTERED				
Wind Speed Wind Di	rection from/to, i.e. from North to South)	#17.553		bear and a second	
フ-フ ****   ****	h /		rae i i i .		
Ambient Temperature	Relative Humidity	1 2 1 2 2	Helia (Fil	The Taylor S.	
Amment Temperature	Relative membrany			distribute to a wife	and the section of
Additional Comments/Information	ı.			Resident yourse us	
Assertation Commission and Commission Commis		Sife			
		7.19	nda au		
		i i	in the		A CONTRACTOR STATE
COVERGE	Y AND TO A PART OF THE PART OF	i <del>                                    </del>			
Stack SOURCE with	LAYOUT SKETCH	200			
Plume	Draw Arrow in North Direction	Average 10	-Minute Opacin		Opacity Readings
Sun 🕀 E	mission		7	Min.	Max.
~ Y	Point	OBSERVE	R (please print)		<u> </u>
Wind —		Name:		Title:	
		<b>1</b> 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	es PACHE		
1		Signature	101		Date
		11 1	11	- total	1-11-07
		Observer C	rganization	<u> </u>	1-11-01
		1/5	,	n<	
:	OBSERVER'S POSITION	Certified by	c up,	<u> </u>	Certification Date
		11 - 1		***	
	140°	ETA		***	** <u></u>
l convitor	ATTION I THE	1			

LOS ALAMOS NATIONALI	ADODATODY (LANG	`
LOS ALAMOS NATIONAL I VISIBLE EMISSION OBSERVA		
Source Name:	Observation Date	Start Time   End Time
BOLLER # 1 PIESGL FUEL	1-11-07	1042 1052
Source Location:	Sec Min 0 15	30 45 Comments
TA 3 5M 22 JOWER PLANT Type of Source / Type of Control Equipment		30 4) Cullingles
DIESEL FUGI NA	1 00	
Describe Emission Point (Top of stack, etc.)	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	00
TOP OF WEST STACK	3 00	00
Height Above Ground Level Height Relative to Observer	4 00	
Distance From Observer Direction of Source From Observer		
72 Yards S.E	5 00	00
Description of Plume (stack exit only)  Citofling Citrapping Citooping Cifanning Ciconing	6 0 0	00
Emission Color Plume Type And Plume Present	7 00	00
Monic Continuous Pugitive Intermittent	8 00	00
Water Droplets Present?  MO DYES If YES, droplet plume is Elektached Eletached	9 00	00
At what point in the plume was opacity determined?	10	00
TO OF WEST STACK  Describe Background (i.e. blue sky, trees, etc.)	ing : Line	
Blue Sky - WHITE CLOUDS  Background Color Sky Conditions  BLUE - WHITE SCATTERED	Verdir State	
Wind Speed Wind Direction		and the territory
mph (provide from/to, i.e. from North to South)	2.42	
2-/ 5-4	to <b>dis</b> olves s	
Ambient Temperature Relative Humidity		
Additional Comments/Information:		
	Sala skipper	ar battar
	<b>3470</b> 13113113	
		and the second
Stack SOURCE LAYOUT SKETCH	# 20 = 1   E =	
Plume Draw Arrow in	Average 10-Minute Opacity	Range of Opacity Readings
Sun Point		Min. O Max.O
$ W_{\text{ind}} \rightarrow  $	OBSERVER (please print)	
	Name:	Title:
	Name:  EDNARD PALUSC Signature	O OPERATOR Date
1 '1 '1	Str	1-11-07
	Observer Organization	·
OPERANTE IS NOTED IN	Certified by	
OBSERVER'S POSITION		Certification Date
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SUN LOCATION LINE		<del>-</del>

LOS ALAMOS NATIONAL I	ABORATORY (LAN	TA.
VISIBLE EMISSION OBSERVA	-	•
Source Name:	Observation Date	Start Time End Time
BOLLER #   FUEL OIL Source Location:  +4 3 SM 22 DOWER DUNT  Type of Source  Type of Control Equipment	1-11-07	1052 1101
Source Location:	Sec	30 45 0
TA 3 SM 22 DOWER DUNT Type of Source Type of Control Equipment	Min 0 15	30 45 Comments
DIESGL FULL NA	100	000
Describe Emission Point (Top of stack, etc.)	$\frac{1}{2}$	
TO OF WEST STACK	3	
Height Above Ground Level Height Relative to Observer	1	
Distance From Observer Direction of Source From Observer	4 06	00
72 Yards 5 E	5 00	00
Description of Plume (stack exit only)	6 00	000
OLosting OTrapping OLooping OFanning OConing  —Ento Plume Present	7	
Emission Color Plume Type No Plume Present		1919
NONG	8 0 0	
Water Droplets Present?  MOO CIYES If YES, droplet plume is Clattached CDetached	9 00	200
At what point in the plume was opacity determined?	10 00	000
Describe Background (i.e. blue sky, trees, etc.)		
Business Business Conditions  Business		
Background Color Sky Conditions	10 m 10 m 10 m 10 m 10 m 10 m 10 m 10 m	
Wind Speed Wind Direction		
mph (provide from/to, i.e. from North to South)	and Carlot State	
2-/ S.N.		Programme to the second
Ambi ent Temperature Relative Humi dity  °F %		
Additional Comments/Information:		
	727(862) 12(84)	
	<b>建设在工作中运动程度的企业中发展的企业工作。</b>	and Markets of
Stuck with SOURCE LAYOUT SKETCH	. 20 Esta 6.	
Plume Draw Arrow in North Direction	Average 10-Minute Opac	ity Range of Opacity Readings Min. Max.
Sun Diese Sun Point		
$\mathbb{V}_{\text{ind}} \longrightarrow \mathbb{V}$	OBSERVER (please prin	
	Name:	Title:
1	Name: CONARD AC Signature	HECO OPERATOR Date
	111	1-11-07
/	Observer Organization  KSL UP	
OBSERVER'S POSITION	Certified by	Certification Date
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1 01011 001 <del>11</del> 0111 000		

TOO ALAMOG NATIONAL	I ADODATODY (I ANII)
LOS ALAMOS NATIONAL	
VISIBLE EMISSION OBSERVA	
Source Name:	
Bough #   VIESEL FUEL	1-11-07 1102 1111
	Sec
TA 3 5M 22 DOWER PLANT Type of Source Type of Control Equipment	Min 0 15 30 45 Comments
Type of Source Type of Control Equipment	
VICSELTUGE NA	
Describe Emission Point (Top of stack, etc.)	2 0000
TOD OF WEST STACK	3 0000
Height Above Ground Level Height Relative to Observer	
150	1 4 0000
Distance From Observer Direction of Source From Observer	5 0000
72 Yards 5-E	3 0000
Description of Plume (stack exit only)	
□Lofting □Trapping □Looping □Fanning □Coning	
Emission Color Plume Type Present	
Nant Oceaninous Offigitive Ointermittent	8 0000
Water Droplets Present?	
ZNO DYES If YES, droplet plume is DAttached Detached	
At what point in the plume was opacity determined?	
Describe Background (i.e. blue sky, trees, etc.)	
De C S Wil - 1 /MITT B.	
BICKE SKY -WHITE CLOUDS  Background Color Sky Conditions  BICK - WHITE SCATTERED	
RICK-WHTER SCATTERED	Taraca de la colonidad de la c
wind Speed wind Direction	
mph (provide from/to, i.e. from North to South)	ALLEGE STATE POST CONTRACTOR
12-7 $5-N$	
Ambi ent Temperature Relative Humi dity	
°F %	
Additional Comments/Information:	
COLDON LABOUR AND AND	
Stack SOURCE LAYOUT SKETCH	<b>37.20</b> (4)
Plume Draw Arrow in	Average 10-Minute Opacity Range of Opacity Readings
Emission North Direction	Min. Max.
Sun + Point	
Wind — X	OBSERVER (please print)
	Name: Title:
$\mathcal{M}\mathcal{H}$	Signature PALAGEO OPERATOR
/   \   \	Signature PACHECO OPERATOR  1-11-07
'   ' <b>/</b>	1-11-07
	Observer Organizatio:
	KSL -UPPS
OBSERVER'S POSITION	Certification Date
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Los Alamos

Source Name: BOILER

Type of Source

Describe Emission Point (Top of stack, etc.)

Description of Plume (stack exit only)

Feet

Yards

OLofting OTrapping OLooping OFaming

At what point in the plume was opacity determined?

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

WEST

Wind Direction

WHITE

5 - N Relative Humidity

Emission

Point

170

Height Above Ground Level

150

72

To Plume Present

Stut Sk ackground Color / BL///

Ambient Temperature

with

Plume

Wind -

**+** 

Additional Comments/information:

Emission Color

NUNG

Distance From Observer

• Los Alamos LOS ALAMOS NATIONAL I	I ABODATODY (I ANI	`
LOS ALAMOS NATIONAL I		
Source Name:	Observation Date	Start Time   End T' e
BOILER # 1 DIESEL FUEL	1-11-07	1122 1131
Source Location:	Sec	<del>                                     </del>
TA3 SM DZ TOWER PLANT	Min 0 15	30 45 Comments
Type of Source Type of Control Equipment	1 00	00
Vise Fuel NA		
Describe Emission Point (Top of stack, etc.)	2 00	
TOP OF WEST STACK	3 0	
Height Above Ground Level Height Relative to Observer Feet Feet		
/50 Feet /70 Feet  Distance From Observer Direction of Source From Observer	4 00	00
72 Yards S.E.	5 00	00
Description of Plume (stack exit only)	6	
OLofting OTrapping OLooping OFanning OConing	· 00	
Emission Color Plume Type No Plume Present	7 00	1001
Continuous Dispositive Dispositives	8 00	00
Water Droplets Present?		
ANO LIYES If YES, droplet plume is DAttached Detached	9 00	
At what point in the plume was opacity determined?	10 00	00
Describe Hickground (i.e. blue sky, trees, etc.)		
	281497 PF	所於原始 经正式的
Blut Sky - WHITE CLOUPS Background Color Sky Conditions Blut - WHITE SLATTERED	ing flesh to	
Background Color Sky Conditions	12.75	
wind Speed wind Direction	ren 🍪 🕳 est esta esta esta esta esta esta esta	<b>有一点的,有效的操作。</b>
mph (provide from/to, i.e. from North to South)	A TAPES DE PERSON	
2-1 S. N	2.4	2 <b>24</b> 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Ambient Temperature Relative Humicity		
Additional Comments/Information:		Ser Base Nation (Section
· _		
BOILER STABLE - STOPPED TAKING PENOWS		
BUT STAYED OUT OBSERVING		transfer to the state of
Stack SOURCE LAYOUT SKETCH	20 S 22 7/5	
with Q	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Plume Draw Arrow in North Direction Emission	Average 10-Minute Opacity	Range of Opacity Readings Min. Max.
Sun Point		
Wind — (X)	OBSERVER (please print)	
	Name:	Title:
	Signature,	Date
'   ( ' ' 7	17/7	
	10/1/	1-11-07
1	Observer Organization	
	KSL -Up	
OBSERVER'S POSITION	Certified by	Certification Date
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		<u>_                              </u>
SUN LOCATION LINE		

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LOS ALAMOS NATIONAL I	LABORATORY (LANI	·)
VISIBLE EMISSION OBSERVA	TION FORM (10 MINU	JTE)
Source Name:	Observation Date	Start Time End Time
BOILER- # DIEGE FUEL	1-11-07	1011 1001
Source Location:	<u>_</u>	121/122
	Min 0 15	30 45 Comments
TA3 SM-22 WWER PLANT	Mun 0 13	30 45 Comments
Type of Source Type of Control Equipment		00
DIBEL FUGI NA		
Describe Emission Point (Top of stack, etc.)		# HOT
TOO OF WEST STACK	1 00	MAIST
Height Above Ground Level Height Relative to Observer	3 00	$\cup \cup \cup$
Feet 170 Feet	4 00	00
Distance From Observer Direction of Source From Observer	100	
7 7 Yards	5 00	
	44	1214
Description of Plume (stack exit only)		$ \mathcal{O} $
Chofting OTrapping Chooping Fanning Coning	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
☐No Plume Present  Emission Color Plume Type ☐No Plume Present	7 00	$ CXC\rangle$
The state of the s		0 100 "-15°
1 / July 1	8 (2)	010 100 19
Water Droplets Present?	9 100 100	J.,
ZNO DYES If YES, droplet plume is DAttached Detached	100100	100100
At what point in the plume was opacity determined?	10 400	
TODAE WEST STACK	10 100 100	<del> </del>
TOD OF WEST STACK Describe Background (i.e. blue sky, trees, etc.)	11 4	
Background Color Sky Conditions	12	
	30	
Wind Speed Wind Direction	13	**
mph (provide from/to, i.e. from North to South)	1,4	
12-7	14 *	<u> </u>
4-1-3-A	15	
Ambient Temperature Relative Humidity		<u> </u>
°F %	16,	
Additional Comments/Information:		
Additional Comments Information:  ALE TO CASCADE  TROM MANUAL	3m, 17 30 100 100 100 100 100 100 100 100 100	
CASCAPC		
PROPE MANUAL		
(a)	4-3	
(OIL VALUE STUCK)		
Stack SOURCE LAYOUT SKETCH	764	39
with ( )		
Plume Draw Arrow in North Direction	Average 0-Mount Opacit	Range of Opacity Readings Min. Max.
Emission	1620	
Sun Point	1 1.5 /M	188° 0 100
$ w_{ind} \rightarrow (X)(^{\circ}) \times (1)$	OBSERVER (please print)	· ,
	Name:	Title:
	Signature	CHEO OPERATOR
	Signature	CHECO OPERTUR
' ' ' 7		1-11-07
]   4	Observer Organization	
	KSG UNG	16
OBSERVER'S POSITION	Certified by	Certification Date
	i i	
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• Los Alamos LOS ALAMOS NATIONAL		- y-1.
VISIBLE EMISSION OBSERVA		
Source Name:		
Boller # 1 DIESEL FUEL.	1-11-07	1221 1230
	Sec	
Type of Source Type of Control Equipment	Min 0 15	30 45 Comments
7	1 00	2 (2)
DIESEL FUEL NA		
Describe Emission Point (Top of stack, etc.)	2 000	2 0
TOP OF WEST STACK	3 0 0 0	70
Height Above Ground Level Height Relative to Observer Feet		<u> </u>
150 170	4 000	<b>プレ</b>
Distance From Observer Direction of Source From Observer	5 0 0	00
12 35		
Description of Flume (stack exit only)  Cit_ofting Cirepping CiLooping CiFanning CiConing	11 6 000	70
ONO Plume Present	7 000	
Emission Color Piume Type ENo Plume Present		J   C
NOME Continuous C Fugitive CIntermittent		$\cap$
Water Droplets Present?	9 00	20
ZNO TYES If YES, droplet plume is ClAttached Detached	1	
At what point in the plume was opacity determined?	10 000	)
Describe Background (i.e. blue sky, trees, etc.)		
		3   1   2   3   3   3   3   3   3   3   3   3
Background Color Sky Conditions	12	****
Background Color Sky Conditions  BUG CLAR		
Wind Speed Wind Direction	13	
mph (provide from/to, i.e. from North to South)	14	Same and the same
12-1 5-N	I I	
Ambient Temperature Relative Humidity	15	
°F %	- 16	4.
Additional Comments/Information:	1 * B	1 """
	**-17	
	18	
	€ <b>2</b> 19	
Stack SOURCE LAYOUT SKETCH	20 4 1224	
with Q	18/2-27/34 322	
North Direction	Average 10-Minute Opacity	Range of Opacity Readings Min. Max.
Sun Definit	II ()	Min. Max.
	OBSERVER (please print)	
Wind -	Name:	Title:
	Signature 2	eco Operator
	Signature	Dat#
		_ 1-11-07
	Observer Organization	
	Val 21136	
OBSERVER'S POSITION	Certified by	Cariffontian Data
	Cerunien by	Certification Date
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SUN LOCATION LINE		
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	Los Alamos	LOS ALAMOS NATIONAL	LABORATO!	RY (L	ANL	)				
	Salinghas, Addysatights	ISIBLE EMISSION OBSERVA								
1	Source Name:	TOTAL STATE OF THE	Observation Da		7111	Start	Time	Fn	d Time	
- 1	Source Name:	Diccor Col	1					1.41		
1	BOILEK #1	DIESEL FUEL		1-07	,	12	131	1	240	21
- 1	Source Location:		Sec	T -						
1	T47 5M 2	2 POWER PLANT Type of Control Equipment	Min	0	15	30	45	C	omments	1
	Type of Source	Type of Control Foundment		1	_	_				
- 1	M cock First	111	1	$\cup$	$\bigcirc$		$\bigcirc$	į.		
١	DIESEL TUE	1019	1	/2-	M	M	$\sim$			
I	Describe Emission Point (Top of		2	()	( <u>)</u>	()		1		
ı	TOU OF Was	T STACK		0			_	1		
1	Height Above Ground Level	Height Relative to Observer	3	0	0	U	0			
1	/ Feet	70 Feet			~	_	•	1		
- 1	/3 Q	1//	4	10	$\mathcal{O}$	0	()			1
	Distance From Observer	Direction of Source From Observer	_			1	m			
	72 Yards	56	5			$\cup$	$\cup$	l		1
	Description of Plume (stack exit of	atus —	1 /	0		A	1			
	□Lofting □Trapping □Loop		6	0		()	$\cup$			
	-Sino Plume Present	ag Eraning Scoring	7	1						
-1		ype INo Plume Present	1 L			U	ン			:
- 1	["Is antin	nous OFugitive Cintermittent	8	(	$\Delta$	41				
	NONE			0	$\cup$	0	()			
	Water Droplets Present?		9			5	5			
7	ZNO DYES If YES, droplet pit	ene is LiAttached LiDetached		(1)		()	$\mathcal{Q}$			
1	At what point in the plume was of	sacity determined?	10	1	~	0				
1	- 11/CE	- STACK	10	0	0	U	U	<u> </u>		
	Top of WES 7 Describe Background (i.e. blue sk		iı			***	******	mak <sub>né</sub> .	541,	·. 1
ı		y, trees, etc.)		F ***	· ·	<u> </u>				
	BLUE-SKY		12						1.7	
	Background Color	Sky Conditions	1	L		<u> </u>				
ļ	BLUE	LIKAR	12 7	Te				162	4.3	
- 1	Wind Speed Wind Di	rection	,13			* ~ ·				
i		from/to, i.e. from North to South)						FAEX:	200	
-	')-1	A Comme	* ~L#			F.".			#	
1		- N =	15	had .				ľ	790	(6)(3)
ı	Ambient Temperature	Relative Humidity	1.2 %		*			THE R	機当	]
	· •F	¥6	16 🖣 🖁	100	f		- 1		į.	8
4	Additional Comments/Information	l:		1					<del></del>	( <u>18</u>
			17*			1				
				20.00	- 14			_		
			18	100		A SAC	أتهما فأراء	1		-
				ļ		ļ	<u> </u>	<u> </u>	<del></del>	
			19 *				J	. yar		. ]
			1	<b></b>		ļ			······································	
	Stack SOURCE	LAYOUT SKETCH	2ď	A			1	]e-		
	with Q	Draw Arrow in	N.C.	1		1	<u> </u>	ــــــــــــــــــــــــــــــــــــــ		
	Plume	North Direction	Average 10-M	Imute (	<b>Opacity</b>				ity Readir	182
		nission			)	1	Min.		Max.	<b>`</b>
	Sun 🔱	Point	<u> </u>							_
	Wind —	$\nabla \setminus \wedge \setminus \setminus \setminus$	OBSERVER	please	print)					
	W Mile		Name:		2		Title:			
	!	$\forall I \ \ \square$	Signature	w	KAC.	460	0	00	CLATOR	2
ļ		1 ( ) \	Signature	<b>4</b>				Date		
1	•	L		,					(1-07	
i				1				1-1	1-07	
			Observe Of	anizati	07			<u> </u>		
1			JUSELY WOOL	, cus LC-Gi.i	VII		-			į
ı			11 1651	_	Un	25	۷.			
		OBSERVER'S POSITION	Certified by	······································	-//	/* <u>-</u> -		Certif	ication Da	ate
1								1	\ \ \ \ \ \ \	7
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		7					······			
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LOS ALAMOS NATIONAL	LARORATORY (LANI) 1-11-97
	ATION FORM (10 MINUTE) IF
Source Name:	Observation Date Start Time 7 End Time
SOILER #1 DIESEL FUEL	1-11-07 1240 1256
TA 3 5M-22 DOWER JIANT Type of Source Type of Control Equipment	Min 0 15 30 45 Comments
Type of Source Type of Control Equipment	1 0000
Describe Emission Point (Top of stack, etc.)	2 0000
TOD OF WEST STACK	3 0000
Height Above Ground Level Height Relative to Observer Feet 70	4 0 00 0
Distance From Observer Direction of Source From Observer	
72 Yards 5/=	5 0000
Description of Plume (stack exit only)  CLotting CTrapping CLooping CFanning CComing	6 0000
Emission Color Plume Type (INo Plume Present	7 0000
NONE Continuous Cl Fugitive Clintermittent	8 0000
Water Droplets Present?   DNO   DYES If YES, droplet plume is   Attached   Detached	9 0000
At what point in the plume was opacity determined?	10 0000
Describe Background (i.e. blue sky, trees, etc.)	l in a sale of the
BLUG SKY Background Color Sky Conditions	ia.
BLUG CLEAR	13
Wind Speed Wind Direction mph (provide from/to, i.e. from North to South)	14
2-7 W-E	13
Ambient Temperature Relative Humidity	
Additional Comments/Information:	16
Beinging up lone on # 1 Bonce	17
1247	18
	19
Stack SOURCE LAYOUT SKETCH	20
Plume Draw Arrow in	Average 10-Minute Opacity Range of Opacity Readings
Sun Dieta Sun Point	Min. Max.
$\begin{array}{c} \text{Wind} \longrightarrow \\ \end{array} \qquad \left( \begin{array}{c} X \\ \end{array} \right) \qquad \left( \begin{array}{c} X \\ \end{array} \right)$	OBSERVER (please print) Name: Title:
MM_,	Signatura) JACHECO OCRATOR Date
,	Observer Organization
	KSL-UppS  Certification Date
OBSERVER'S POSITION	Certified by Certification Date
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I OS AL AMOS NATIONAL	LADODATODY (LANE)
LOS ALAMOS NATIONAL	
VISIBLE EMISSION OBSERV.	Observation Date Start Time End Time
Source Name:	
BOLLER # 1 DIESEL # FUEL	1-11-0/ 1157 1301
Source Location:	Sec 30 46
TA 3 SM 22 DAVER DIANT Type of Source Type of Control Equipment	Min 0 15 30 45 Comments
	1 1 0000
DIESEL FUEL NO	
Describe Emission Point (Top of stack, etc.)	
TOD OF WEST STACK	1 3 0000
Height Above Ground Level Height Relative to Observer	
/30 //0	1 4 0000
Distance From Observer  Vards  Direction of Source From Observer	5 0000
12 1 Marcis   > E	
Description of Plume (stack exit only)	
☐ Offing ☐ Trapping ☐ Looping ☐ Fanning ☐ Coning ☐ No Plume Present	
Emission Color Plume Type CNo Plume Present	1 7 1 1 1
1/01/6 OContinuous OFugitive OIntermittent	8
Water Droplets Present?	
ZNO DYES If YES, droplet plume is DAttached Detached	] 9
At what point in the plume was ppacity determined?	10
TOD OF WEST STACK	
Describe Background (i.e. blue sky, trees, etc.)	
BLUE SKY Background Color Sky Conditions	1 12 1 1
BLUG CLEAR	13
Wind Speed Wind Direction	
mph (provide from/to, i.e. from North to South)	1 14.
12.1 W-E	
Ambi ent Temperature Relative Humidity	14
°F %	
Additional Comments/Information:	
1301 OFF OF FUEL OIL	
1500 000 000	18
	] 19
Stack SOURCE LAYOUT SKETCH	20
with ()	300 300 300 300 300 300 300 300 300 300
Plume Draw Arrow in	Average 10-Minute Opacity Range of Opacity Readings
Emission North Direction	Min. Max.
Sun 🔱 Point	Opportunity of the state of the
Wind - X	OBSERVER (please print) Name: Title:
	11 / // .
	Signature Date
	1-11-07
	Observer Organization
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OBSERVER'S POSITION	Certified by Certification Date
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LOS ALAMOS NATIONAL LABORATORY (LANL) VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)									
Source Name:	Observation Date Start Time End Time								
Fuel OIL # 1 Boiler	1-25-0		· 1	, —-	:40				
Source Location:  TA 3 SM 22 POWERPLANT  Type of Source Type of Control Equipment	Sec Min	0	15	30	45	1	mments		
Type of Source Type of Control Equipment	1	Ŏ					Bur all		
Fuel 01 L N/A Describe Emission Point (Top of stack, etc.)	2	0	0	0					
Top of Stack	3	· <del> </del>	0	0	0				
Height Above Ground Level Height Relative to Observer  /50 Feet /70 Feet	4	0	0		0	<u> </u>			
Distance From Observer Direction of Source From Observer	5	0	0	0	0	<u> </u>	······································		
250 Fact NE  Description of Plume (stack exit only)		Ó	$O_{-}$	0	0				
Description of Finance (State exit only)  Ex ofting Trapping Teaming T	6	0	0	0	0				
Emission Color Plume Type	7	0	0	0	0	ļ			
Black   Continuous   Fugifive Matermittent	8	0	0	2	0				
ZENO □YES If YES, droplet plume is □Attached □Detached	9	0	0	0	0	ļ			
At what point in the plume was opacity determined?  APROX. I FOOT Aboue Stack	10	O	0	0	0	45.00			
Describe Background (i.e. blue sky, trees, etc.)				nger.	1.00		110		
Blue Sky	W. FLAN	<b>3</b>		a ever	7.	Fig.	1272		
Background Color Sky Conditions Blue Clear									
Wind Speed Wind Direction						2.67	4 2 (2)		
0-5 mph (provide from/to, i.e. from North to South)  FLOM NF to SW				16 - F		A to 15	A TABLES		
Ambient Temperature Relative Humidity			k ei			2			
Additional Comments/Information:					<b>*</b>	16.5	ي والم		
	<b>853 N</b>	1			244		distant.		
	THE THE	715				7 -			
	69 S. (20)					24.7	REF CL		
	Market 1	87.	10		1	37.2	<b>10</b> 726		
Stack SOURCE LAYOUT SKETCH	2 20		2.5						
with Plume Draw Arrow in	Average 10-M	inute C	pacity	ionezara) - I	Range (	of Opacity	Readings		
Sun Point North Direction		0%					iax. O.O		
w <sub>ind</sub> $\rightarrow$	OBSERVER	(please	print)		Title	Main	υ£.		
	Name: BRI	42	<u>O</u> e	712	I luc.		st. Iman		
	Signature	. F	$\mathcal{L}$			Date			
	Observer Org	anizatio	<u>×</u>		<del></del>	1-25	5-07		
	-	5/							
OBSERVER'S POSITION	Certified by					Certific	ation Date		
1409	ETA					8/29	106		
SUN LOCATION LINE									

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•		KANDON, JANDONINA

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Source Name:					Observation Date					End Time	:
Source Location:					Sec		· · · · · · · · · · · · · · · · · · ·	<del>  .</del>	T	<del></del>	
						0	15	30	45	Comm	ents
Type of Source	Type of Source Type of Control Equipment					0	0	0	0		
Describe Emissi	on Point (Top of s	≭ack, etc.)		2		0	0	0	0		
Height Above C		Height Relative to C		3		0	0	0	0		· <del></del>
Distance From C	Feet	Direction of Source	Feet From Observer	4		0	0	0	0		
	Yards			5		0	0	0	0		
OLofting OT	lume (stack exit or rapping DLoopin		Coning	6		0	0	0	0		
ONo Plume Pre	Plume Ty		resent	7		0	0	0	0		
	□ Continu	ious 🗆 Fugitive	□Intermittent	8		0	0	0	0		
Water Droplets I □NO □YES I	Present? fYES, droplet plui	me is 🗆 Attached 🔻	Detached	9		0	0	0	0		
At what point in	the plume was op	acity determined?		10		0	0	0	0		
Describe Backgr	ound (i.e. blue sky	, trees, etc.)	·····				5				da di S
				S. T.	2.4	3		11.7	- 2		74.6
Background Col	or	Sky Conditions			367 - 1 24 - 24 6				102		arani i
Wind Speed	Wind Dire ph (provide f	ection rom/to, i.e. from North	to South)	Services			A SHALL WAS A				143157) - 240: 457
••••			1000000	THE SECTION			 1				
Ambient Temper	ature °F	Relative Humidity	%								
Additional Comm	nents/Information:									والمراجعة والمراجعة	
						Ž.			et e		野田湯
				法強	and A	2					
				1 9 9 9							
Stack with	SOURCE L	AYOUT SKET	СН	es in	~				4		
Plume			Draw Arrow in North Direction	Average 1				1	Range o	of Opacity Re	adings
Sun 🕁		ission oint						Į ľ	Min.	Max.	
wind		X		OBSERV. Name:	ER (pl	ease	print)		Title:		
		1		<u> </u>							
				Signature						Date	
				Observer	Organ	izatio	n	<del></del>			
		OBSERVER'S PO	SITION	Certified b	у					Certification	1 Date
		100						·			
	SUN LOCA	TION LINE									

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THE MANY OF THE PARTY PARTY AND ADDRESS.	V	121RFF FW1221	ON OBSERVA			MINI				
Source Name:			Observation Da	te		Start '	Time	End 7		
								11	:40	
Source Location:	*	-	,	7.00	1	·	-	<u> </u>	T	
				Min	0	15	30	45	Con	nments
Type of Source		Type of Control Equ	ui prn ent	1	0	0	0	0		
Describe Emission	Point (Top of s	tack, etc.)	<u> </u>	2	0	0	0	0		
				3	0	0		Ð		
Height Above Grou	nd Level Feet	Height Relative to Obs	server Feet	4	0	$\sim$	2	0		
Distance From Obse	erver Yards	Direction of Source Fr	om Observer	5	0	0	0	0		
Description of Plum				6	0	0	0	0		
□Lofting □Trapp □No Plume Present				7	0	0	0	0		
Emission Color	☐Continu		zen Intermittent	8	0	0	0	0		
Water Droplets Pres	sent? ES, droplet plu	ne is □Attached □D	etached	9	0	0	0	0		
At what point in the	plume was op	acity determined?		10	0	0	0	0	STOPF	
Describe Backgroun	d (i e hlue sky	trees etc)		33 11.		- 1 4	10.0		150	(ex)
Describe Data Book	IG (1.0. 0140 122)	,, 6,0.,			25.75				124	1/2 C
Background Color		Sky Conditions	·				e d	1000		$3 \leq 40$
Wind Speed	Wind Dire	ection							2.34	
mph		rom/to, i.e. from North t	o South)							
Ambient Temperatu	re F	Relative Humidity	%							
Additional Commen	ts/Information:						2	M.C	1.65	
Additions Comme	ALS ATTOCK THE MOLL.			CHADE:	vāg			***	44 Tab	Take T
					Salar (A)		A Contract of the Contract of	-8	Septime	
				April 24 Car				174.	sin' ka	
				14.12.35		(A)		*	40.4	<b>F</b> ebruiya
Stack Swith	OURCE L	AYOUT SKETC	ì	26 DO 12						
Plume	Emi	ission	Draw Arrow in North Direction	Average 10-M	inute C	pacity		Range ( Min.		Readings ax.
Sun 🕂		oint	()	OBSERVER (	nleace	ncint)				·
Wind —		X		Name:	P. 1-40~	p. ( 12.14)		Title:		
				Signature			<del>•</del>	<u>, , , , , , , , , , , , , , , , , , , </u>	Date	
				Observer Orga	anizatio	)n				
	ند. ند	Opena Name to Boom	TION	Contigue	<u></u>					
		OBSERVER'S POST	IRON	Certified by					Certifica	ition Date
~				<u> </u>	<del></del>					
	SUN LOCA	TION LINE								

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<u></u>						-
LOS ALAMOS NATIONAL I VISIBLE EMISSION OBSERVA						
Source Name:	Observation D		VA AL VA	Start	Time	End Time
Fuel 01/#/ Boiler		5-0	7	1	48	
TA 3 5 M 22 POWER Plant  Type of Source Type of Control Equipment	Sec Min	0	15	30	45	Comments
	1	10			<u></u>	Commence
Fuel oil NA		+=	10	10	1	
Describe Emission Point (Top of stack, etc.)	2	10	0	0	0	
Height Above Ground Level Height Relative to Observer	3	10	0	0	0	
150 Feet 170 Feet	4	0	0	0	$\alpha$	
Distance From Observer  Yards  Direction of Source From Observer	5	0	0	0	0	
250 Ft NE		1		1	<u> </u>	
Description of Plume (stack exit only)  Chooling Drapping DLooping DFanning DConing	6	0	0	0	0	
DNo Plume Present	7	0	0	0	0	
Black   Continuous   Fugitive   Mathematitent	8	0	0	0	0	
Water Droplets Present? ☑MO □YES If YES, droplet plume is □Attached □Detached	9	0	0	0	0	
At what point in the plume was opacity determined?	10	0	0	0	$\circ$	
Describe Background (i.e. blue sky, trees, etc.)						
Describe Background (i.e. blue sky, trees, etc.)		12.4.3				
Background Color Sky Conditions  Sky Conditions  Wind Direction					2 4 12	
Blue Clash		4				
Wind Speed Wind Direction (provide from/to, i.e. from North to South)		Jaga A				*/**
0-5 FROM NE tO SW						
Ambient Temperature Relative Humidity						
N/A % Additional Comments/Information:						
Acanona Commensumana.	<b>100 TO 100 TO 1</b>					
						11.24
		2.7	V-77			Section of the second
	19.57	. T			-	Erie Helen
Stack SOURCE LAYOUT SKETCH	4408	1				
with O Plume Draw Arrow in	Average 10-N	Ainute (	)nacin		Pange (	of Opacity Readings
Emission North Direction	^	~ °	/			0. O Max. O. C
	OBSERVER	Olease	Orint)			
Wind -		IAN	- 6×	IIZ	Title:	Maint head Man
	Signature		$\nearrow $			Date
	Dia	m 1		X		1/25/0
	Observer Org					
		KS	<u>_</u>			
OBSERVER'S POSITION	Certified by		<del></del>			Certification Date

SUN LOCATION LINE

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LOS Alamos LOS ALAMOS NATIONAL LABORATORY (LANL) VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)										
	Observation Da		*****	Start '	Time	End Time				
Fueloil 2 Boiler	1 2-8-		7	1		1/:22				
TA3 SM22 Power Plant	Sec Min	0	15	30	45	Comments				
Type of Source Type of Control Equipment	1	0	0	0	0	#3 Barrel				
Describe Emission Point (Top of stack, etc.)	2	0	0	0	0					
Height Above Ground Level Height Relative to Observer	3	0	0	0	0					
150' Feet 100 Feet	4	0	Ď	0	0	***************************************				
Distance From Observer  Yards  Direction of Source From Observer	5	$\cap$	ව	Ŏ	0					
Description of Plume (stack exit only)  Stofling	6	$\circ$	0	0	0					
□No Plume Present  Emission Color Plume Type □No Plume Present	7	0	0	0	0					
Black Ocontinuous OFugitive Statemaittent	8	0	0	Ö	Ð					
Water Droplets Present?  MYO □YES If YES, droplet plume is □Attached □Detached	9	0	0	0	0					
At what point in the plume was opacity determined?  ONE FOOT Aboue BIACK	10	0	0	0	0					
Describe Background (i.e. blue sky, trees, etc.)	2.14									
Blue SKy  Reckergund Color  Sky Conditions	12		· 传说		J. 4					
Background Color Sky Conditions Blue Clear	13	140	ci desi	<b>5.13</b> 2	20					
Wind Speed Wind Direction  O-3 mph (provide from/to, i.e. from North to South)	14	446.4 43.7	hod) Marin							
FROM SE TO NW	15									
Ambient Temperature Relative Humidity 19.9 °F 38 %	- 16									
Additional Comments/Information:	17	en en en	tera. Zaren		e se de la sec					
	18		All digelles 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8.7°						
	19									
Stack SOURCE LAYOUT SKETCH	20		) e/s			A STATE OF THE STA				
with O Draw Arrow in North Direction	Average 10-M	mute C	pacity	]	Range (	of Opacity Readings				
Sun Point	0.0	$\mathcal{D}^{\prime}$	%	]	Min. O	1.0 Max.				
$w_{ind} \rightarrow   m / X / M$	OBSERVER (	lease	pring)			hend Maint.				
1 1 9	Name: BLI	AN	a	1/2	Title:	Man				
	Signature		1	1)		Date				
	Duan S 7-8-07									
	Observer Orga	nizatio	n							
OBSERVER'S POSITION	Certified by			·····		Certification Date				
1409	ETA					8/29/06				
SUN LOCATION LINE										

SUN LOCATION LINE

A SOCIAL AMOUNTATION AT	I ADOMATICOMIZAT	A TRITTS	-		
Los Alamos LOS ALAMOS NATIONAL					
VISIBLE EMISSION OBSERVA					
Source Name: Hieloil#2 BoileR	Observation Date  2-8-07	Start Time	End Time		
		1/:22	- 11:32		
Source Location:  TA3 SM22 Power Plant  Type of Source, Type of Control Equipment	Sec Min 0	15 30 45	i   Comments		
Type of Source Type of Control Equipment	1 0	000			
Fueloil NONE					
Describe Emission Point (Top of stack, etc.)  7600 F 5 fack	2 0	000			
Height Above Ground Level Height Relative to Observer	3	000			
150 Feet 100 Feet	4 0	000			
Distance From Observer Direction of Source From Observer		$\subseteq  \subseteq $			
97 Yards NE	5 0	000			
Description of Plume (stack exit only)  ☑Lofting ☐Trapping ☐Looping ☐Fanning ☐Coning	6	000			
□No Plume Present	7 0	000			
Emission Color Plume Type	8 0	000			
Water Droplets Present?  ☑NO □YES If YES, droplet plume is □Attached □Detached	9	000			
At what point in the plume was opacity determined?	10 6	$\lesssim \lesssim \simeq$			
one Foot Above Stack	10	O[O]O			
Describe Background (i.e. blue sky, trees, etc.)					
Blues SKy	12:32	A.W. 2 44 5 5 5 5			
Background Color Sky Conditions  Sky Conditions					
Wind Speed Wind Direction	3   1 <b>3</b>   3   3   4   5   1		Bara Grand		
0-3 mph (provide from/to, i.e. from North to South)	14		Section 2		
From SE tONW			***		
Ambient Temperature Relative Humidity	15				
19.9 °F 38 %	16	specific less	CONTRACTOR		
Additional Comments/Information:					
	126-126-13-13-13-13-13-13-13-13-13-13-13-13-13-		Proceedings		
	18		. Eyen		
	19				
Stack SOURCE LAYOUT SKETCH	205	18.00 George - FE 1			
with O	Large of Souter of Hand of Precious Calleton	Secondary Control of the Control of			
Plume Emission North Direction	Average 10-Minute Op	Min.	of Opacity Readings Max.		
Sun Point	0.0%	1 A	D = D D		
Wind —	OBSERVER (please pr	rint)	Les & Maint		
- $ 1$	Name: BRIAN	OUTIZ Title	Lead Maint Man		
<u></u>	Signature	$\overline{\Lambda}\overline{\Lambda}$	Date		
	Buan (		2-8-07		
	Observer Organization	-			
	KSL	i .			
OBSERVER'S POSITION	Certified by		Certification Date		
140°	ETA		8/29/06		

LOS ALAMOS NATIONAL LABORATORY (LANL) VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)										
	Observation D			Start	Time	End Time				
Fueloi #2 Boiler	2-8		7		:32					
TA3 SM22 Power Plant	Min 3ei	0	15	30	45	Comments				
Type of Source, Type of Control Equipment  Fuel 0// NON R	1	0	0	0	0					
Describe Emission Point (Top of stack, etc.)	7 2	0	0	0	0	and the state of t				
To fot Stack  Height Above Ground Level   Height Relative to Observer	3	0	$\bigcirc$	0	0					
150 Feet 100 Feet	4		5	^	0					
Distance From Observer  Yards  Direction of Source From Observer	5	0	0	0	0					
Description of Plume (stack exit only)	6									
☑forting ☐Trapping ☐Looping ☐Fanning ☐Coning ☐No Plume Present		5		0	0					
Emission Color Plume Type	] <del>  8</del>	5	2	0						
Water Droplets Present?	9	8	0	0	0					
550 DYES If YES, droplet plume is DAttached Detached	l	0		0	O					
At what point in the plume was opacity determined?  ONC FOOT ALOVE STACK  Describe Background (i.e. blue sky, trees, etc.)	10	0	$\cup$	$\mathcal{O}_{\underline{}}$	$\bigcirc$					
Describe Background (i.e. blue sky, trees, etc.)  Blue 5ky  Background Color Sky Conditions  Blue Wind Speed Wind Direction	114 m									
Background Color Sky Conditions Cloud	<b>12</b>									
Wind Speed Wind Direction	132		le di h	ini.	37.57.5					
Wind Speed Wind Direction (provide from/to, i.e. from North to South)  FROM $SE \neq 0$ WW	. 14	2 (4) (4) 3 (4) (4)				o do se de la composición dela composición de la composición de la composición de la composición de la composición dela composición de la composición de la composición dela composición dela composición de la composición de la composición dela composición de la composición dela composición dela composición dela composición dela composición dela composición dela composici				
Ambient Temperature Relative Humidity	15		A 12							
19.9°F 38 %	16°				<i>3</i> \$ .	1000				
Additional Comments/Information:	17		right o	ŭ,						
	18									
	19									
Stack SOURCE LAYOUT SKETCH	20									
with Draw Arrow in	Average 10-M	inute C	pacity	F	Range o	f Opacity Readings				
Emission North Direction Sun Point	0.	0		I	Min.O.	O Max. O. O				
Wind -	OBSERVER	please	print)		This is a second	Lead Mainst				
	Name: BL	IAN		12 1	i ide:	Lead Mainst				
	Signature		Date 2-8-07							
	Observer Org	رے anizatjo	n							
	K.	5 <u> </u>		····						
OBSERVER'S POSITION	Certified by  ETA					Certification Date				
1400	L /	M				8-29=06				
SUN LOCATION LINE										



Source Name:		Observation Date Start Time			Time	End Time	
Power Plan	t at TA-3	2/22/	07		10:37		10:47
Source Location:		Sec	T				
TA-3		Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1	0		0	0	3 Barrez
Fuel Oil	No Particulate Control		<del>                                     </del>	$\prec$		$\prec$	Jumez
Describe Emission Point (Top of st		2	0	$\circ$		9	
Topot Most		3		0	$\sim$	$\cap$	
Height Above Ground Level	Height Relative to Observer		$+ \mathcal{O}$	9	$\geq$		
130	// 0	4	0	$\bigcirc$	0	0	
Distance From Observer Feet	Direction of Source From Observer	5	0	$\bigcirc$			
250	NW		1		$\subseteq$		
Description of Plume (stack exit on □Lofting □Trapping □Loopin	ly) g []Fanning []Coning	6	0	0	0	0	
No Plume Present	g caraming acoming	7	^	$\sim$	$\overline{\Delta}$	2	
Emission Color Plume Typ			0	$\cup$	U	0	
Black Continue	ous 🗆 Fugitive 🔑 etermittent	8	0	0	0	0	
Water Droplets Present?		9					
₩NO □YES If YES, droplet plum	e is LIAttached LIDetached	У	0	0	$\left( \right)$	$\cup$	
At what point in the plume was opac	city determined?	10	0	0	0	0	
ONE Foot Abo	ve Stack	1 1	-				
Describe Background (i.e. blue sky,	trees, etc.)	11	<u> </u>			<b></b>	
Partly Cloud	43 Kies	12					
Bluesky - WhiteClouds	Sky Conditions Loudy	1.3				<b></b>	
Wind Speed Wind Direct	ction	13					
1	om/to, i.e. from North to South)	14					
0-3 From	1 NtoS FomStoN.	1 #	<b> </b>			<del> </del>	
Ambient Temperature	Relative Humidity	15	<u></u>				
42° °F	45% %	16					
Additional Comments/Information:		1 ~7	<del> </del>		<b> </b>	<del> </del>	
		17					
		18					
		3.0	ļ		<del> </del>	<b></b>	
		19				ļ	
	AYOUT SKETCH	20					
with Q Plume	Draw Arrow in	Average 10-M	linute (	Dpacity	,	Range (	of Opacity Readings
<u>.</u> Emis	sion North Direction	7	0%	/s		Min. 🕖	
Sun Po	int /						0,0
Wind ->		OBSERVER (please print) Name: BRIAN ORTHZ  Signatures  Date  Date				Maint	
				)RT,	17	i iiic.	Leadman
/ /	Signature		7	<del>\_</del> _		Date	
1	15	/	X)	χ		2/20/07	
	ua	n (		<del></del>		7/4/0/	
		Observer Org					
		<u> </u>	<u>s L</u>	-			
OBSERVER'S POSITION		- <b> </b>					Certification Date
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		<u> </u>					L
SUN LOCAT	ION LINE						



Source Name:	Observation Date			Start Time End Time		
Power Plant at TA-3	] 2/28	107		10:	47	10:57
Source Location:	Sec	7				
TA-3-22	Min	<del>-</del>	15	30	45	Comments
Type of Source Type of Control Equipment No Particulate Control	1	101	0	0	0	
Fuel Oi ( No Particulate Control Describe Emission Point (Top of stack, etc.)	-{	0	0	$\overline{\wedge}$	1	
			$\cup$			
Tolof Most Westew Stack Height Above Ground Level Height Relative to Observer	3	0	0	$\bigcirc$	$\bigcirc$	
150 Feet 170 Feet	4	0	0	$\bigcirc$	$\triangle$	
Distance From Observer Direction of Source From Observer				$\prec$		
250 Feet NW	5	$ \mathcal{O} ^{\prime}$	Q	$\mathcal{O}$	$\circ$	
Description of Plume (stack exit only)	6	00	01	0	0	
□Lofting □Trapping □Looping □Fanning □Coning Stop Plume Present	7				0	
Emission Color Plume Type SNo Plume Present		+Q+4	4	$\mathcal{O}_{-}$		
Black Continuous Grugitive GIntermittent	8	0	0	0	0	
Water Droplets Present?  ★NO □YES If YES, droplet plume is □Attached □Detached	9	0	0	$\Omega$	1	
At what point in the plume was opacity determined?	10	0	0	0	Ŏ	
Describe Background (i.e. blue sky, trees, etc.)	J - 11		-			
Describe Background (i.e. blue sky, trees, etc.)	11	4				
Background Color, Sky Conditions	12					
Blue / Whit Partly Cloudy	13					
Wind Speed Wind Direction /	14				-	
O-3  FROM 5 to N  Ambient Temperature Relative Humidity	l <b> </b>	+				
Ambient Temperature Relative Humidity	15					
42°°F 45% %	16		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Additional Comments/Information:	17	1				
	<b>   </b>	+ +				
	18					
	19					
Stack SOURCE LAYOUT SKETCH with	20		***************************************			
Plume Draw Arrow in	Average 10-N	Ainute Op	pacity			of Opacity Readings
Sun Point 1	0.	0%		1	Min.	.0 Max.
	OBSERVER		rint)			
Wind	11	INN	2		Title:	Maint.
- Lest.		MN	$\mathcal{A}$	7112		Lealman
	Signature	· /.	1	)		Date / / —
	Dua		$\gg$	-		2/22/07
	Observer Org		1			
ODSERVEDIO POSTATONI	[ <u> </u>	52	<del> </del>			
OBSERVER'S POSITION	Certified by Certification Date					<i>ー</i> ) /
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SUN LOCATION LINE						



Source Name:		Observation Date			Start Time End Time		
Power Plan	nt at TA-3	1 2/20	2/0	/	//.	:30	11:40
Source Location:	2 22	Sec					
Type of Source	Type of Control Equipment	Min	0	15	30	45	Comments
Fuelo:	No Particulate Control	1	0	5	5	5	Put Air on caseado
Describe Emission Point (Top of s	tack, etc.)	2	5	15	40	50	
Topof Most u	Jostun Stack	] 3	20				
Height Above Ground Level Height Relative to Observer Feet Feet		]	<i>30</i>	25	)	$\mathbb{R}^{-}$	
Distance From Observer	Direction of Source From Observer	4	0	$\mathcal{O}$	0	<u> </u>	
250 Feet	N (N)	5	0	0	0	0	
Description of Plume (stack exit or		1 6	0	0	0	n	
Zotofting □Trapping □Loopin □No Plume Present	ng □Fanning □Coning		+				
Emission Color Plume Ty		7	Ô	0	$\cup$	$\cup$	
Black Continu	ous	8	0	0	0	0	
Water Droplets Present?  ZNO □YES If YES, droplet plur	ne is 🗆 Attached 🔻 🗇 Detached	9	0	0	0	0	
At what point in the plume was ope	acity determined?	10	0	O	0	0	
ONE FOOT A  Describe Background (i.e. blue sky	. trees. etc.)	11					
PARTLY	Cloudy Sties Sky Conditions Partly Cloudy	12					
Background Color White	Sky Conditions Partly Cloudy	13					
wind Speed wind Dife mph (provide fi	ection rom/to, i.e. from North to South)	14					
•	om 5 to N						
Ambient Temperature	Relative Humidity 450 %	15					
Additional Comments/Information:		16					*
Attempted to put A	FIRON CASCALE FF Cause of Smoke	17					
Hudto take Ito	tt cause of smoke	18					
		19			·		
	AYOUT SKETCH	20					
With U Plume	Draw Arrow in North Direction	Average 10-M	inute (	pacity	1	-	of Opacity Readings
	ssion Notth Direction	4.60	259			Min. O•	0 Max.
T	$\mathbb{Z}/$ $\mathbb{Z}/$ $\mathbb{Z}/$ $\mathbb{Z}/$	OBSERVER (					
Wind —		Name: /	:=			Title:	Maint
	La_	Signature,	7N	VU!	12/	}	Flat Man
	Signature	- 10 - 1		X	<del>)  </del>	Date 2/22/07	
		Observer Org	anizati	<u> </u>		<u> </u>	-10-10/
		L	<u>SL</u>				
	OBSERVER'S POSITION	Certified by	,				Certification Date
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SUN LOCA	TION LINE	***************************************					



Source Name:		Observation Da	ate /		Start	Time	End Time
Power Plan	it at TA-3	1 2/20	2/0	7	12	12	12:22
Source Location:		Sec	T	ſ		Ī	
TA-3		Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment No Particulate Control	1	0	0	0	0	Paul Parkerkuning
Describe Emission Point (Top of st		1 2		0			Cascade Mode
To a F Mx	st Western Stack		14			0	Cascade Mode
Height Above Ground Level	Height Relative to Observer	3	0	0	0	0	
150 Feet	/70 Feet	4	0	0	<b>/</b>	0	
Distance From Observer Feet	Direction of Source From Observer	5					
050	NW	]		$\cup$	$\cup$	10	
Description of Plume (stack exit on Execution  Trapping  Loopin		6	0	0	0	0	
□No Plume Present		7	0	0	$\bigcirc$	0	
Emission Color Plume Typ		8	5			5	
Water Droplets Present?		1 }		<u> </u>		0	
₩NO □YES If YES, droplet plum		9	5	5_	5	<u> </u>	
At what point in the plume was opa	of Apove Stack	10	5	5	0	0	
Describe Background (i.e. blue sky,	trees, etc.)	11					
Grey 5	kie S Sky Conditions Cloudy Ction	12					
Background Color (See 1	Cloudy	13					
(neovide for	ction / om/to, i.e. from North to South)	14					
0 · 3 mps (provide a	FROM 540 N Relative Humidity						
Ambient Temperature		15	ļ				
Additional Comments/Information:	45 %	16					
Additional Comments/Information.		17					
		18					
		19	ļ			<u> </u>	
c i counce i	AVOTE GLEEGY						
with SOURCE L.	AYOUT SKETCH	20					
Plume	Draw Arrow in North Direction	Average 10-M		^ 7	, }	Range ( Min.	of Opacity Readings Max.
Sun Po	/ / 1 / / / /	0.8	375	%	ン∐	D-	0 5%
37/:- 1	$\omega$	OBSERVER (	(please	print)	<del></del>		00-11
Wind -		Name: Quita Title:					MAINE
<i></i>							
		Signature _ Date					Date
		Juan 2/22/07					2/22/07
		Observer Organization					
		KSL					
	OBSERVER'S POSITION	Certified by Certification, Date					
14	© \	E7.	A				8/29/06
<del></del>						·····	1 -7 -7 -0
SITN LOCAT	FIGNITINE						



Source Name:		Observation	Observation Date			Time	End Time
Power Plan	t at TA-3	] ]/2	2/22/07			:22	12:32
Source Location: TA-3	-22	Min Se	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1					Commissio
Fueloil	No Particulate Control		_   0	0	$\cup$	10	
Describe Emission Point (Top of sta	ack, etc.)	2	0	0	0	0	
Tolof M.	157 Westew Stack Height Relative to Observer	3		0	0	0	
Height Above Ground Level	Feet	4		7		5	
Distance From Observer	Direction of Source From Observer	1	$+$ $\circ$		2		
250 Feet	NW	5		0	$\cup$	0	
Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of Plume (stack exit onless of the Description of the De	y) g DFanning DConing	6	0	0	0	0	
□No Plume Present		7	0	0	0	0	
Emission Color Plume Type		8	5	5	5	0	
Water Droplets Present?	e is □Attached □Detached	9	0	0		5	
At what point in the plume was opac	city determined?	10	0	Ď		5	
OND FOOT AL	nue Stack		+				
Describe Background (i.e. blue sky,							
Background Color S	12						
Describe Background (i.e. blue sky, trees, etc.)  Gley Skie S  Background Color Sky Conditions  Gley Wind Direction		13		<u></u>			
mph (provide fro	om/to, i.e. from North to South)	14					
Ambient Temperature	Flom 5 to N Relative Humidity	15					
₩5 °F	45 %	16					
Additional Comments/Information:		17					
		18	***************************************				
				<u> </u>			
		19					
with Q	AYOUT SKETCH  Draw Arrow in	20					
Plume Emise	North Direction	Average 10		<i>` ,</i> `		Range of	of Opacity Readings Max.
- Sun 💮 Poi	/ ///		375		<u>'</u>	0.0	5%
Wind -> X		OBSERVE Name:	1	4.1	7	Title:	maint
			RIAN		112	<del></del>	Lendman
	Signature	ian (	()	$\bigvee$		Date /07	
	Observer Organization						
OBSERVER'S POSITION							Certification Date
140	<u> </u>	ET	A				8/29/06
SUNTOCAT	TON I INE						



Source Name:	Observation D		Start Time	End Time	
Power Plant at TA-3	] ]-2	2-07	12:32	- 12:42	
Source Location:	Sec				
TA-3-22	Min	0 15	30 45	Comments	
Type of Source Type of Control Equipment  No Particulate Control	1	00	00	1	
Describe Emission Point (Top of stack, etc.)	2	00	00		
top of most Western Stack	<b>                                     </b>	1010	U U		
Height Above Ground Level Height Relative to Observer	3	00	00		
150 Feet 170 Feet	4	00	00		
Distance From Observer  Feet  Direction of Source From Observer	5	00	00		
750 700	<b>.</b>	1919			
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning	6	00	00		
No Plume Present	7	00	00		
Emission Color Plume Type SNo Plume Present  Continuous Fugitive Clintermittent	8				
Water Dronlets Present?	<b>1</b>	00	00		
MO DYES If YES, droplet plume is DAttached DDetached	9	00	00		
At what point in the plume was opacity determined?	10	00	00		
Describe Background (i.e. blue sky, trees, etc.)	11				
Describe Background (i.e. blue sky, dees, etc.)		<del>  </del>			
Describe Background (i.e. blue sky, trees, etc.)  Grey Skies  Background Color Sky Conditions  Grey Conditions	12				
Wind Speed Wind Direction	13	***************************************			
- mnh (provide from/to, i.e. from North to South)	14				
0-3 From Ston	15				
Ambient Temperature Relative Humidity					
Additional Comments/Information:	16				
Auditional Commons	17				
	18				
	19				
Stack SOURCE LAYOUT SKETCH	20				
with Q Draw Arrow in	Average 10-N	Ainute Opacita	Range	l of Opacity Readings	
Plume North Direction		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Min. C	Max.	
Sun Point		0.0%			
Wind → X	OBSERVER Name:	(please print)	. Title:	Maint.	
	Selan Ortiz Lead ma				
	Signature		$\gamma$	Date /	
	1 Din ( ) 3/22/07				
	Observer Org	ganization		1	
OBSERVER'S POSITION	Certified by	······································	Certification Date		
	ETA UL 1				
140°	E11	+		0/29/06	
SUN LOCATION LINE				• •	



Source Name:		Observation Date			Start	Γime	End Time
Pow er Plant at TA-3		2/22/07			12	:46	12:56
Source Location: TA-3-22		Sec Min	- 0	15	30	45	Comments
Type of Source - , Type of Control Equipment	$\dashv$	1	Ô		0		
Fuel D. No Particulate Control			<del></del>	0		0	Kunwang 10575
Describe Emission Point (Top of stack, etc.)		2	0	0	0	0	ONCASCADE
Top of Most Wastern Stack Height Above Ground Level Height Relative to Observer	_	3	0	0	0	0	Runing Tosts On Cascade Mode
150 Facet 170 Feet		4	0	0	0	0	
Distance From Observer  Direction of Source From Observer		5	0	0	0	Ó	
Description of Plume (strack exit only)	4			<u> </u>			
□ Lofting □ Trapping □ Looping □ Fanning □ Coning		6	0	0	0	2	**************************************
Emission Color Plume Type ANo-Plume Present	-	7	0	0	0	0	
Black   Continuous   Fugitive   Intermittent		8	0	0	0	0	
Water Droplets Present?  MNO □YES If YES, droplet plume is □Attached □Detached		9	0	0	0	0	
At what point in the plume was opacity determined?	1	10	0	0	0	0	
Describe Background (i.e. blue sky, trees, etc.)		11		<u> </u>			
Gey Skie S		12		<u> </u>	<del>                                     </del>	<b></b>	
Describe Background (i.e. blue sky, trees, etc.)  Background Color  Sky Conditions  Wind Speed  Wind Direction		13		<u> </u>	<u> </u>		
				<u> </u>			
0-3 From 5 to N		14			ļ		
Ambient Temperature Relative Humidity	1	15				<u> </u>	
75 93	_	16	Anna Anna Anna Anna Anna Anna Anna Anna				
Additional Comments/In formation:	l	17					
		18	<u> </u>				
		19		<b></b>		<del> </del>	
Stack SOURCE LAYOUT SKETCH	٦	20		<u> </u>			
with O Plume Draw Arrow in		Average 10-M	linute (	L Opacity	<u>I.</u> y	l Range	of Opacity Readings
Sun Point North Direction		D.	00	2/		Min.	0.0 Max.
		OBSERVER (please print)  OBSERVER (please print)				Matrit	
Wind	Name: BLIAN DITIZ Title: Lead Man						
		Signature	710	7	*		Date,
		154	æl	15	$\forall$		2/22/07
		Observer Org	anizati	ion			
OBSERVER'S POSITION		Certified by Certification					Certification Date
140°		FIA Stalat				8/20/01	
SUN LOCATION LINE							100/100



Source Name:					End Time		
Power Plan	nt at TA-3	2-22-07		12:56		1:06	
Source Location: TA-	3-22	Sec Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1	0	0	0	$\bigcirc$	
fuel oil	No Particulate Control	2	<del>                                     </del>			$\stackrel{\sim}{\sim}$	
Describe Emission Point (Top of s		<b>[</b>	0	$\mathcal{Q}$	0	0	
Top of Most Height Above Ground Level	Westuw Stack Height Relative to Observer	3	0	0	0	0	
150 Feet	170 Feet	4	$\wedge$	$\wedge$	0	0	
Distance From Observer	Direction of Source From Observer	5	0		<u>A</u>		
250 Feet	NW	]	$\cup$	0	U	$\cup$	
Description of Plume (stack exit of DLofting Trapping Looping	nly) ng 🛮 Fanning 🔻 🗘 Coning	6	0	0	0	0	
Mo Plume Present Emission Color Plume Ty	rpe PNo Plume Present	7	0	0	0	0	
Black Continu	ous ☐ Fugitive ☐ Intermittent	8	0	0	0	0	
Water Droplets Present?	me is Attached Detached	9	0	0	0	0	
At what point in the plume was op-	acity determined?	10	0	0	0	0	
Describe Background (i.e. blue sky	+ Above Stack	11					
Gren S	Sky Conditions	12					
Background Color See 7	Sky Conditions Cloudy	13					
Wind Speed / Wind Dire	ection from/to, i.e. from North to South)				<u> </u>		
	3	14					
Ambient Temperature	on 5 to V Relative Humidity 4 5 %	15					
Additional Comments/Information		16					
Additolial Confidences Information	•	17		***************************************			
		18					
		19					
	AYOUT SKETCH	20					
with Q Plume	Draw Arrow in North Direction	Average 10-M	linute (	Opacity			of Opacity Readings
	ission 1	$\Box$	0.0			Min. D i	$\bigcap$ Max.
Wind —	<b>6</b> ' (')	OBSERVER (	please	print)			01-tust
WIN		Name:					hadman
	Signature)			42		Date / /	
		1 /Sino ( A 2/22/n					2/22/17
		Observer Organization				10/0/10/	
		KSL					
						Certification Date	
	46°	ETA	7			:	8/29/06
	THAN I TAIT	-					



Source Name:	Observation Date			Start	Time Z	End Time
Power Plant at TA-3 Boiler ≠2	3-6-	07				M 10:49 AM
Source Location: TA-3-22	Sec Min	0	15	30	45	Comments
Type of Source 3-4-07 Type of Control Equipment	1	0	0	0	0	
Fuel & (Roiler 2) No Particulate Control Describe Emission Point (Top of stack, etc.)	2	0	0	0	0	
West stack	3	G	20	25	30	
Height Above Ground Level Feet 150 Height Relative to Observer Feet 170	4	25	10	0	30	
Distance From Observer Direction of Source From Observer	5	<del>                                     </del>	0	0	v	
Description of Plume (stack exit only)		0		_		
□ Lofting □ Trapping □ Looping □ Fanning □ Coning □ No Plume Present	6	0	0	0	δ	
Emission Color / Plume Type  No Plume Present	7	0	0	0	0	
Black & Continuous   Fugitive Intermittent Water Droplets Present?	8	0	0	0	0	
☑NO □YES If YES, droplet plume is □Attached □Detached	9	0	0	0	B	
At what point in the plume was opacity determined?	10	0	0	0	0	
Top of Stach Describe Background (i.e. blue sky, trees, etc.)	11					
Blue Skys & wite louds  Background Color Sky Conditions  ve & wite Clear	12					
	13					
Ambient Temperature  oF 40  Wind Direction (provide from/to, i.e. from North to South)  From 5E 3-6-07  Relative Humidity  % 15	14					
Ambient Temperature Relative Humidity	15		:			:
	16					
Additional Comments/Information: Fuel DIL test	17					
Tuel OIL 1851	18					
	19				···	<del>14.,,</del>
Stack SOURCE LAYOUT SKETCH	20					: : : : : : : : : : : : : : : : : : :
Plume Draw Arrow in	Average 10-M	inute C	pacity	R R	ange of	Opacity Readings
Sun Direction Point  North Direction	2.5	7	$1$ $^{5}$	N	¹in. △	Max. ろる。
$W_{\text{ind}} \longrightarrow X$	OBSERVER (	please	print)		optal.	
Wests The Fact	Name: Title: OPerater					
West->     * East	Signature Date 3-6-07					Date
	Observer Organization 3-6-07					3-6-07
	KSL KSL	amzaliC	711			
OBSERVER'S POSITION	Certified by					Certification Date
140°	EPA				i	3-1-07
SUN LOCATION LINE						

Los Alamos

	Source Name:		Observation Da			Start Time End Time			
	Power Plant at TA-3 BOILER #2	floor	3-6-0	シア		10:	49 AM	10:59AM	
	Source Location:		Sec		T T				
	TA-3-22 Type of Source Type of Control Equipment	╛╏	Min	0	15	30	45	Comments	
	Type of Source Type of Control Equipment		1	6	0	0	0		
	fuel Oil (Boiler #2) No Particulate Control	┨┨	_		<del> </del>	1			
	Describe Emission Point (Top of stack, etc.)		2	0	0	0	0		
	yest stack	] [	3	0	0	D	0		
	Height Above Ground Level Height Relative to Observer			0	<del> </del>		<del></del>		
	Feet (50 Feet 176	11	4	8	0	O	0		
- 1	Distance From Observer  Plyouds  Direction of Source From Observer  Feet  Gettleman 411-07		5	0	0	6	0		
	Alyends gods winds 411.07	┛┞		<u> </u>					
	Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning		6	0	0	0	0		
	ZNo Plume Present		7	٥	0	<i>f</i> >	0		
أرص	Emission Color Plume Type No Plume Present  D   Continuous   Fugitive   Intermittent	11				0			
4	Albert Color		8	٥	0	6	0		
	Water Droplets Present?  ☑NO □YES If YES, droplet plume is □Attached □Detached		9	G	0	<i>C</i>			
	·	] }		<u> </u>		6	0		
	At what point in the plume was opacity determined?	11	10	0	0	0	0		
	To O of Stuff Describe Background (i.e. blue sky, trees, etc.)	┨╏	11						
	Rhan Chile & with Alexander	I							
	Background Color Sky Conditions	11	12						
	Background Color Sky Conditions  Ne Wite Wind Direction  Describe Background (i.e. blue sky, trees, etc.)  Blue Sky's Wind Cloud's  Sky Conditions  Clear  Mind Speed Wind Direction	П	13						
	.nd Speed Wind Direction mph (provide from/to, i.e. from North to South)	I							
	3-5 CVI 11	L	14						
	Ambient Temperature Relative Humidity	$\  \ $	15				4,3344		
- 1	°F 40 % 15		16				<del></del>		
	Additional Comments/Information:	1	16						
	Fuel Oil test		17						
	queron (es)	<b> </b>	18						
		-	10						
Į			19						
	Stack SOURCE LAYOUT SKETCH		20						
	with O Plume Draw Arrow in	╽┢	Average 10-Mi	nute C	Inacity		ange of (	Opacity Readings	
	Emission North Direction				· pacity	N	Ain.	Maxa	
l	Sun Point		$\underline{\hspace{1cm}}$	} 			<u>U</u>	<u>.</u>	
	$W_{ind} \longrightarrow X$		OBSERVER (r	olease j	print)		ant. 1		
			Name:		1111	1 -	Title:	Martin	
	West   East	1	Signature	<u>u.                                    </u>	<u> </u>			Arcraror	
1				///	·	0		Merator ate 3-6-07	
		L	Zac 4					5-0-0/	
		1	Observer Orga	nizatič	m				
	' \	K54							
,	OBSERVER'S POSITION	Certified by Certification Da							
l	140°		ETA				1 7	5-01-07	
	SUN LOCATION LINE	<b></b>							
	SUN LUCATION LINE								

Los Alamos

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

Source (value)		3-6-07 16:59AM 11:00						
<b></b>	Power Plant at TA-3 Boiler#2 3-6-67				16	:59A	11:09 AM	
Sourc	e Location: TA-3-22	Sec	0	1.5	The state of the s			
Type		Min	0	15	30	45	Comments	
Fu	Joil (130) er No Particulate Control	1	0	0	0	0		
Descr	ibe Emission Point (Top of stack, etc.)	2	0	0	0	G		
	est Stacks It Above Ground Level Height Relative to Observer	3	6	8	0	0		
	Feet 150 Feet 70	4	0	$\circ$	Ò	0		
1	Feet 50 Feet 70  nce From Observer Direction of Source From Observer  Feet Tomore From Observer  Feet Tomore From Observer  Feet Tomore From Observer	5	B	~	٥	6		
Descri	purds That wants 4/1/0/1	6	<u> </u>	<u>~</u>				
□Lof	ting OTrapping OLooping OFanning OConing Plume Present		0	8	0	0		
P Emiss	ion Color Plume Type ZiNo Plume Present	7	0	0	6	6		
O to	Droplets Present?	8	0	B	0	0		
	□YES If YES, droplet plume is □Attached □Detached	9	8	0	0	0		
	at point in the plume was opacity determined?	10	0	0	0	0		
Descri	ibe Background (i.e. blue sky, trees, etc.)	11						
BA	re 6kgs à wite clouds	12						
Backg XU	Background Color Sky Conditions  Rear & wife Plear							
ind	Speed Wind Direction  (provide from/to i.e. from North to South)	13 14						
3-	5 th From SE							
Ambie	ent Temperature Relative Humidity % (	15						
Additi	onal Comments/Information:	16						
1 ~.	l Oil test	17						
7 ue	NUNTEN	18						
<u> </u>		19						
Stack		20		i				
with Plum	e Draw Arrow in	Average 10-M	inute C	pacity	ī		f Opacity Readings	
Sun	Emission North Direction Point		0			Ain.	Max.	
Wind		OBSERVER (	please	print)				
		Name;	11.	Mi	"/w/	Fitle: (	Ofesafor	
	west East	Signature	1		<del></del>		Date	
		Such	_				3-6-07	
		Observer Organization						
j	OBSERVER'S POSITION	Certified by	·	Certification Date				
ı	140°	FIA				*Philindenson.e	13-1-07	
	SUN LOCATION LINE	6 7 7 7 7 T				1_		



Source Name:	i :	Observation Date Start Time			Time	End Time
Power Plant at TA-3	3-20	-· }		10:	3544	10:0500
TA-3-22	Sec Min	0	15	30	45	Comments
Type of Source The Type of Control Equipment Fuel Oil (Boile #3) No Particulate Control	1	0	0	0	٥	
Describe Emission Point (Top of stack, etc.)	2	0	0	0	0	
East Stach Ift above Stach	3	0	0	0	0	
Height Above Ground Level   Height Relative to Observer   Feet 150	4	d	0	0	0	
Distance From Observer Direction of Source From Observer	5	0	a	0	0	· · · · · · · · · · · · · · · · · · ·
Description of Plume (stack exit only)	6	0	<del> </del>	0	0	
□Lofting □Trapping □Looping □Fanning □Coming	7	0	<u>O</u>	<del>                                     </del>		
ZNo Plume Present	8		<del> </del>	0_	0	
Water Droplets Present?	9	<u>් ර</u>	0	<u>B</u>	0	<u> </u>
ZNO □YES If YES, droplet plume is □Attached □Detached  At what point in the plume was opacity determined?	<del> </del>	+	0	0	0	#A-###################################
Describe Background (i.e. blue sky, trees, etc.)	10	0	0	0	0	
	11					
Background Color Sky Conditions Rive Clear	12	<u> </u>				
nd Speed Wind Direction	13	<u> </u>				
mph (provide from/to, i.e. from North to South)	14					
Ambient Temperature Relative Humidity	15					
or 53 % 26 Additional Comments/Information	16					
ful Dil I sot	17					
July 2001	18					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	19		***			
Stack with SOURCE LAYOUT SKETCH	20		***************************************			V
Plume Draw Arrow in North Direction	Average 10-1	/linute (	pacity	F	Range of	Opacity Readings Max.
Sun Point	OBSERVER				······· <i>O</i>	
Wind - X	Title: 9	Pearlo				
O East	Signature	М.	<u> </u>	1/1/4		Date
		L				3-20-07
1 1 1 1 1 1	Observer Org	ganizatio	on	·····	1.	
OBSERVER'S POSITION	Certified by	(	Certification Date			
140°	F1A 3-1-0;					3-1-07
SUNA.OCATION LINE	1 1	-		***********		

ENV-EAQ-307, R3, AT/TACHMENT 3 (OPACITY DETERMINATION AND EXCESS EMISSIONS REPORTING)



Source Name:	Observation Da			Start Time End Time				
Power Plant at TA-3	3-50-	-07		10	:450	10:55 94		
Surce Location: TA-3-22	Sec Min	0	15	30	45	Comments		
Type of Source Type of Control Equipment	1	0	0	0				
Fuel Oil (Bailuts) No Particulate Control		+			0			
Describe Emission Point (Top of stack, etc.)	2	0	0	0	0			
Height Above Ground Level   Height Relative to Observer	3	$\circ$	0	0	Ó			
Feet [56] Feet [76]	4	10	Ö	<u>~</u>	0			
Distance From Observer  Flyewods  Direction of Source From Observer  Flyewods  Feet  M.W. 4-11-27	1	<del>                                     </del>	0					
	5	0		0_	0			
Description of Plume (stack exit only)  □Lofting □Trapping □Looping □Fanning □Coning	6	0	O	U	0			
Emission Color Plume Type PiNo Plume Present	7	0	0	$\circ$	0			
Huch Class Continuous   Fugitive   Intermittent	8	0	Ò	U	0			
Water Droplets Present?  ☑NO □YES If YES, droplet plume is □Attached □Detached	9	0	0	0	0			
At what point in the plume was opacity determined?	10	0	0	S	0			
Describe Background (i.e. blue sky, trees, etc.)	11				=			
	12							
Blue 5kz S Background Color Sky Conditions Blue Cew								
and Speed Wind Direction	13							
mph (provide from/to, i.e. from North to South)	14							
Ambient Temperature Relative Humidity % 26	15			l				
	16							
Additional Comments/Information:	17							
Ful Dil Tent	18				<del></del>			
'	19							
Stack SOURCE LAYOUT SKETCH			$\dashv$					
with Q	20 Average 10-M	in a to O				Opacity Readings		
Emission North Direction			acity	N	Ain.	Max.		
Sun Point		places n						
Wind	OBSERVER (please print) Name: Title: Frate							
West / E	Signature		<i>t//</i>			Date		
	5-20-07							
	Observer Organization							
OBSERVER'S POSITION	Certified by		·	·	1	Certification Date		
140°	5+P					3-1-07		
ONDIVOCATION LINE	UTT		<del></del>	···		0,		



Source Name:		Observation Da			Start 7		End Time	
Power Plant at TA-3	_]	5-20-	07	-	رسا	:55 Jan	1:05 Mg	
Surce Location:		Sec						
TA-3-22 Type of Source Type of Control Equipment	-   -	Min	0	15	30	45	Comments	
Type of Source Type of Control Equipment No Particulate Control		1	0	0	0	Ø		
Describe Emission Point (Top of stack, etc.)	1	2	0	0	0	0		
East Stack 15+ above 5tack  Height Above Ground Level Height Relative to Observer		3		a	A			
Height Above Ground Level Height Relative to Observer Feet 156 Feet 176	<b>]</b>  -		0		0	0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Distance From Observer Direction of Source From Observer	-   _	4	0	0	0	0		
Feet S=N/M 4-11-07		5	0	U	0	0		
Description of Plume (stack exit only)	┨┞	6	0	O	0	a		
□Lofting □Trapping □Looping □Fanning □Coning □No Plume Present.		7	0		д			
Emission Color Plume Type DNo Plume Present  Continuous Fugitive Contentitent	11-			0		$\cup$		
I INGO C I I I I I I I I I I I I I I I I I I	┨┞	8	g	6	0	0		
Water Droplets Present?  NO DYES If YES, droplet plume is DAttached Detached		9	$\circ$	Ø	0	в		
At what point in the plume was opacity determined?		10	0	0	0	0		
Describe Background (i.e. blue sky, trees, etc.)	┨┞	11						
	╽┞	12						
Background Color Sky Conditions  Sky Conditions  Sky Conditions  Wind Direction  (drovide from to i.e. from North to South)		,						
ind Speed Wind Direction		13						
Whit (Moston name to) that the pount)		14						
6-10 Awst to East Ambient Temperature oF 5 3 Relative Humidity % 25	1	15						
	$\prod$	16						
Additional comments/Information:		17						
I will ver year		18						
	$\parallel$							
	┪┝	19						
Stack with SOURCE LAYOUT SKETCH		20						
Plume Draw Arrow in North Direction	Α	verage 10-M	inute (	pacity		Range of Ain.	Opacity Readings Max.	
Sun Point		<u> </u>				0	0	
$W_{ind} \longrightarrow \begin{pmatrix} X \end{pmatrix}$		BSERVER () lame: /	please	print)		Title: C	pual	
Fist Fist		locas	M	M	1/4			
wish	S	ignature		- /		I	Date	
	Je 1 3-20-07							
	Observer Organization							
OBSERVER'S POSITION	C	ertified by					Certification Date	
140°	E7A 3-1-07							
SUN LOCATION LINE		-						



Source Name:		Observation Date Start Time			End Time			
Power Plant at TA-3		3-27-	07		9:0	52 A	m 10:02 AR	
ource Location: TA-3-22		Sec Min	0	15	30	45	Comments	
Type of Source Type of Control Equipment	-	1	0	6		O	Comments	
fuel oil (Boiler#1) No Particulate Control						<del> </del>		
Describe Emission Point (Top of stack, etc.)		2	20	<b>a</b> 5		30		
West Stach 1Ft above Stach Height Above Ground Level Height Relative to Observer	1	3	20	10	6	0		
Feet ISO Feet 170		4	۵	0	٥	0		
Distance From Observer  Hyeards  Feet  Direction of Source From Observer  SF-NW  W-11-07		5	0	٥	0	0		
Description of Plume (stack exit only)	+	6	ß	O	6	0		
☐ Coning ☐		7		0				
Emission Color Plume Type   No Plume Present	11		S		ð	0		
Water Droplets Present?	$\{ \}$	8	<u>6</u>	O	0	0		
☑NO □YES If YES, droplet plume is □Attached □Detached		9	0	0	6	0		
At what point in the plume was opacity determined?	11	10	0	0	0	0		
Top of Stach Describe Background (i.e. blue sky, trees, etc.)	$\int \int \int dx  dx$	11						
Blue Skie & Steaturel.  Background Color Sky Conditions	lt	1:2		<u> </u>				
Blue Stuterd	bracket	13		1				
Wind Speed Wind Direction  mph (provide from/to, i.e. from North) South)	lŀ	14						
wind Speed wind Direction  mph (provide from/to, i.e. from North to South)  5-10  South east  4-11-07	$\ \cdot\ $							
S-10 South east 4-11-07 Ambient Temperature *F 48.2 Relative Humidity % 54	11	15				<u></u>		
Additional Comments/Information:	1  -	16						
Additional Comments/Information:		17						
		18						
		19						
Stack with SOURCE LAYOUT SKETCH	$\prod$	20						
Plume Draw Arrow in		Average 10-Mi	nute O	pacity			Opacity Readings	
Sun Point Point Notth Direction		3.5			l N	<sup>4in.</sup> O	Max. 30	
Wind -		OBSERVER (p Name:	lease p	orint)	····	Title. A	Deado	
Name: Title: Offert Ucas 11. Miller							[0-1	
		Signature			_	I	Date	
	3-27-07							
	1	Observer Organ	nizatio	n				
OBSERVER'S POSITION	Certified by Certification						Certification Date	
140°								
OUNT OCCUTION I INTE	L	LIT	<del></del>			1 4	3-1-07	



Source Name:	Observation Date			Start	Time	End Time	
Power Plant at TA-3	3-27-0	7		10	0.020	a lo iran	
ource Location:	Sec		Ī .		]		
TA-3-22 Type of Source Type of Control Equipment	Min	0	15	30	45	Comments	
Guelail (Roil #1) No Particulate Control	1	0	0	0	0		
Describe Emission Point (Top of stack, etc.)	2	6	0	0	0		
Height Above Ground Level Height Relative to Observer	3	0	0	0	0		
Height Above Ground Level Feet 156 Height Relative to Observer Feet 176	4	0	0	0	Ö		
Distance From Observer Direction of Source From Observer	5	0		Ö	0		
7/yarda Feet SENW 874-11-07	3		O				
Description of Plume (stack exit only)  □Lofting □Trapping □Looping □Fanning □Coning	6	0	٥	٥	0		
Emission Color Plume Type No Plume Present	7	0	0	0	0		
Black Class Continuous   Fugitive   Intermittent	-8	0	Ò	0	0		
Water Droplets Present?  ☑NO □YES If YES, droplet plume is □Attached □Detached	9	0	0	Ô	C		
At what point in the plume was opacity determined?	10	0	٥	0	0		
Describe Background (i.e. blue sky, trees, etc.)	11						
Blue offer & Oak Los	12						
Background Color , Sky Conditions							
Wind Speed   Wind Direction	13						
mph (provide from/to, i.e. from North to South)  5-16  Southered 323-27-87	14						
Ambient Temperature Relative Humidity	15		***************************************	To an angle and an annual section of the section of			
°F 48.2 %54	16						
Additional Comments/Information:	17						
trul Did Test	18						
	19						
Stock - SOUDCE LAVOUT SVETCH							
Stack with Draw Arrow in	20		1	1			
Emission North Direction	Average 10-Mi		распу	N N	ange or s	Opacity Readings Max	
Sun (f)	OBSERVER (F				$\mathcal{O}$		
Wind - Déast	Name;	,			Title: 6	Real	
The Mass	wear	M	11	ller	T_	)ate	
,	Signature		2		1	!	
	Obcarrie	$\leq$		·*		3-27-07	
	Observer Organization  KSL						
OBSERVER'S POSITION	Certified by Certification De						
140°	EtA 3-1-07					3-1-07	
SUN LOCATION LINE							



Source Name:	Observation Date			1	Time	End Time
Power Plant at TA-3	3-27	3-27-07			:12A	~ 16:27 Am
Jurce Location: TA-3-22	Sec Min	0	15	30	45	Comments
Type of Source Type of Control Equipment	1		0		0	Odining
Free oil (Boil #) No Particulate Control	<u> </u>	6	<del>                                     </del>	0	<del>                                     </del>	
Describe Emission Point (Top of stack, etc.)	2	0	0	0	0	
Height Above Ground Level Height Relative to Observer	3	0	0	0	0	
Feet 176	4	0	0	0	0	
Distance From Observer  Feet  Direction of Source From Observer	5	0	٥		٥	
Peet SENUS 4-11-97  Description of Plume (stack exit only)		<del>                                     </del>	<del> </del>			
□Lofting □Trapping □Looping □Fanning □Coning	6	0	0	0	0	
ZiNo Plume Present Emission Color Plume Type ZiNo Plume Present	7	0	0	0	0	
black   Continuous   Fugitive   Intermittent	8	0	0	O	5	
Water Droplets Present?  ☑NO □YES If YES, droplet plume is □Attached □Detached	9	5	5	5	Ô	
At what point in the plume was opacity determined?	10	0	٥	0	)	
Topof State Describe Background (i.e. blue sky, trees, etc.)	11					
Bluese Sky Schahuel	12	-				
Blue Sky S Schahuel  Background Color Sky Conditions  Blue & wife Schahuel  'ind Speed Wind Direction						
'ind Speed Wind Direction	13		- 19			
mph (provide from/to, i.e. from North to South)  5-(0) Scartley from/W Wy  7-27-07  Ambient Temperature  °F U. Relative Humidity  % 5-4	14					
Ambient Temperature Relative Humidity	15		z.			7
	16					
Additional Comments/Information:  Sul Oil Tsul	17					
Jul V 21 / SKI	18					
}	19					
Stack SOURCE LAYOUT SKETCH	20					
with Plume Draw Arrow in	Average 10-M	inuto (	المد		ones of	Opacity Readings
Emission North Direction	Average 10-1v	mane C	pacity	N	Ain. O	Max.
Sun Point	OBSERVER (	nlease	orint)			
Wind	Name:				Title: C	fecto
11 Hest	Loco 1 Signature	1. M	US.			Date
					an and a strainment	
	Observer Orga	nizatio	n			3-22-07
	KSL					
OBSERVER'S POSITION	Certified by Certification					
140°	Eta 3-1-07					
SUN LOCATION LINE						



Source Name:	Observation Date			Start Time		End Time	
Power Plant at TA-3	3- 77-0	3-27-07			2-2- Ac	10:370-	
Jurce Location: TA-3-22	Sec Min		15	30	45		
TA-3-22 Type of Source Type of Control Equipment		0	1			Comments	
fewel oil (Roll #1) No Particulate Control	11	0	0	0	ð		
Describe Emission Point (Top of stack, etc.)	2	C	٥	0	0		
West State 15+ about State  Height Above Ground Level Height Relative to Observer	3	0	0	0	0		
Feet /36 Feet /36	4	0	0	0	0		
Distance from Observer Direction of Source From Observer	5	0	B	0	Ă	······································	
Track 50 NW 4-11-87					$\mathcal{O}$		
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning	6	0	G	O	0		
Emission Colors Plume Type No Plume Present	7	0	6	ව	6		
Emission Color (1) Plume Type   DNo Plume Present   Continuous   Fugitive   Continuous   Fugitive   Continuous   Continuou	8	0	0	0	0		
Water Droplets Present?  ☐NO ☐YES If YES, droplet plume is ☐Attached ☐Detached	9	٥	O	0	6	-	
At what point in the plume was opacity determined?	10	C	0	0	0		
Describe Background (i.e. blue sky, trees, etc.)	11						
Describe Background (i.e. blue sky, trees, etc.)  Rue & Scarce &  Background Color Sky Conditions  Survey & Wind Direction  Wind Speed	12						
	13						
mpn John Tolling	14						
Ambient Temperature Relative Humidity	15						
°F 48.7 % 5 9	16				e e e e e e e e e e e e e e e e e e e	······································	
Additional Comments/Information:	17						
ful out had							
	18	-					
	19						
Stack SOURCE LAYOUT SKETCH with	20			v 4	-		
Plume Draw Arrow in North Direction	Average 10-M	inute C	pacity		tange of the Ain.	Opacity Readings Max.	
Com A Built		$\sim$			····· 0	1918Y-O	
$\begin{array}{c c} \text{Sun} & & & \\ \text{Wind} & \longrightarrow & & \\ \end{array}$	OBSERVER (j Name:	olease	print)		Title: 41	Pache	
M West	wan	u. 1	1/10		ري . ۱۹۹۰ د	,	
	Signature		/		ļ	Date	
	3-27-07						
	Observer Orga	nizatio	n				
OBSERVER'S POSITION	KSL Certified by	Certification Date					
140°						3-1-07	
	6/1					<u> </u>	
SUN LOCATION LINE							



Source Name:	Observation D			Start	Time	End Time		
Power Plant at TA-3	3-57-	-07		0)	32	10:42		
Arce Location: TA-3-22	Sec Min	0	15	30	45	Comments		
Type of Source Type of Control Equipment	1		3			Commens		
Inde al (Boilwith) No Particulate Control	1	10		0	ठ			
Describe Emission Point (Top of stack, etc.)	2	0	0	O	0			
Height Above Ground Level Height Relative to Observer	3	0	0	0	0			
Feet/Se Feet 176	4	0	3	a	a			
Distance From Observer Direction of Source From Observer	1 5	<u>a</u>	0	0	0			
Description of Plume (stack exit only)	<b>   </b>	<del>                                     </del>	ł					
□Lofting □Trapping □Looping □Fanning □Coning	6	0	0	0	0			
Emission Color 125 Prome Type   ZNo Plume Present   Place   Intermittent   Place   Intermittent   Place   Intermittent   Inter	7	0	0	Q	0			
Black Can Idontinuous   Fugitive   Intermittent	8	Q	0	Ø	0			
Water Droplets Present?  ☐NO ☐YES If YES, droplet plume is ☐Attached ☐Detached	9	0	0	0	0			
At what point in the plume was opacity determined?	10	۵	6	S	0			
Describe Background (i.e. blue sky, trees, etc.)	11							
Blee are 3 calord	12	1						
Blue au Scafud  Background Color Sky Conditions  Blue awite Scafral	13							
Find Speed     Wind Direction		·	***					
mph (provide from/to, i.e. from North to South)  3-10  Ambient Temperature Relative Humidity	14							
Ambient Temperature Relative Humidity	15							
°F 49.2 % 54	16							
Additional Comments/Information:  Luck Oil with	17							
1 well as I was	18							
	19							
Stack SOURCE LAYOUT SKETCH	20							
with O Draw Arrow in	Average 10-M	inute C	)pacity	1	lange of	Opacity Readings		
Sun Point A North Direction			<b>&gt;</b>		Ain. O	Max.		
The const	OBSERVER (	please	print)		<del></del>			
Wind	Name:	. 11	M	1	Title: ¿	The of		
Yeast	Signature		/* 1/ /l ~	Y	***************************************	Date		
				$\geq$	mentersystem designation of the second	3-27-02		
	Observer Organization							
	KSL		<del></del>					
OBSERVER'S POSITION	Certified by				1	Certification Date		
140°	tth					3-1-02		
SUNLOCATION LINE								



Source Name:		7	Observation De	ite _	Start Time		Time	End Time
Power Plan	nt at TA-3		3/27	101	10	10	:474	10:52A -
ource Location:	2.22		Sec				1	
	3-22	_	Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment No Particulate Control		1	0	0	0	0	
Geelow C Boils #1 Describe Emission Point (Top of s	stack, etc.)	1	2		0	a	0	
West Stalk (Ft above stalk Height Above Ground Level Height Relative to Observer			3	0	<u>ට</u>	O	0	
Height Above Ground Level	Height Relative to Observer Feet 170			<b>-</b>	<del> </del>	ļ		
Distance From Observer	Direction of Source From Observer	1	4	0	0	0	0	
71xad Feet	Se (11) 4-11-17		5	0	0	<u>U</u>	0	
Description of Plume (stack exit of DLofting DTrapping DLooping			6	0	0	0	0	
Mo Plume Present		$\  \ $	7	0	0	٥	0	
Blak Cless Continu			8	0	0	0	0	
Water Droplets Present? □NO □YES If YES, droplet plus	me is □Attached □Detached	11	9		O	0	0	
At what point in the plume was ope	acity determined?	┨╏	10	0	0	J	0	
Top of State  Describe Background (i.e. blue sky	/ tree etc )	┨┟	11					
Blow Shas & Sch	hrd		12					
Blue Shys & Sch Background Color Blue h where	Sky Conditions Scutoch	1	· · · · · · · · · · · · · · · · · · ·					
rina Speed wina Dire	rom/to, i.e. from North to South)	1	13					
1 5.00 Age	Inom Sw (3)-27-07	$\ \cdot\ $	14					
Ambient Temperature	Relative Humidity	1	15				·	
°F 48.2 Additional Comments/Information	<sup>%</sup> 54		16					
Additional Comments/Information:	at		17	***************************************				
I was			18					
			19					
	AYOUT SKETCH		20			r.		
with O Plume	Draw Arrow in North Direction		Average 10-M	inute O	pacity			Opacity Readings
B _ /1\ ;	ission Notth Direction			0		N	lin. O	Max. O
Wind —	$\hat{\mathbf{x}}$ ) $\hat{\mathbf{y}}$		OBSERVER (1	olease p	orint)	<u></u>	m' d	/
	Name: Low et Miller Title: Offerte							
A CONTRACTOR OF THE PARTY OF TH			Signature		2		1	Date
		The			$\Rightarrow$	- 2	3-720>	
-	Observer Organization							
	Certification D							
	OBSERVER'S POSITION							3.1-07
	ATION I INF	L	U/ #	-				0, 7



Source Name:						End Time		
Power Plant at TA-3	3-27-	<b>7</b>		10.	5 2	11.00		
ource Location:	Sec	T		<u> </u>	T			
TA-3-22	Min	0	15	30	45	Comments		
Type of Source Type of Control Equipment	1	0	0	0	0			
Rulail Boils #1 No Particulate Control	<u> </u>	<del> </del>	-	_				
Describe Emission Point (Top of stack, etc.)	2	0	a	0	0			
WeSt Stack Ist above Staff Height Above Ground Level Height Relative to Observer	3	/O\	ß	1				
Height Above Ground Level Height Relative to Observer Feet 170		0	0	U	O			
	4	d	0	0	0			
Distance From Observer Direction of Source From Observer	5	0	0	A				
Thords Feet 58 4/11 4-11-07	3			()	0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
Description of Plume (stack exit only)	6	0	O	O	0			
□Lofting □Trapping □Looping □Fanning □Coning □Mo Plume Present	7	0	0	0	0	·		
Emission Color Plume Type No Plume Present		0		<u> </u>	$\cup$			
Black Continuous   Fugitive   Intermittent	8	$\bigcirc$	0	0	0			
Water Droplets Present?	9	B	^/	$\sim$	7)			
ZINO DYES If YES, droplet plume is DAttached Detached			0	0	0	····		
At what point in the plume was opacity determined?	10	G	0	8	0			
Describe Background (i.e. blue sky, trees, etc.)	11							
Describe Background (i.e. bille sky, trees, etc.)								
Background Color Sky Conditions	12				***************************************			
Bloue Stays Scotrol  Background Color Sky Conditions  Flow & with Scoperal  Find Sand Wind Direction	13							
, gran, J. J. (Mar)	14							
Ambient Temperature Relative Humidity	15			ļ				
Ambient Temperature Relative Humidity % 54	16							
A 33'C 1 Competition								
Lucl Oil Trest	17							
1 / wee 0.00 /	18		Ì					
	19							
Stack with SOURCE LAYOUT SKETCH	20							
Plume Draw Arrow in	Average 10-M	nute C	pacity			Opacity Readings		
Sun Point			0	N	Ain. O	Max. a		
	OBSERVER (	olease i	orint)		<del></del>			
$\begin{bmatrix} W_{\text{ind}} & \longrightarrow \\ & & & \end{bmatrix}$	Name:			A .	Title:	Serta		
1 1 M 11	Luca	اسلىر	. M	1/5				
	Signature		_			Date		
	3.27.07							
	Observer Orga	nizatio	Л					
	KSL							
OBSERVER'S POSITION	Certified by Certification Dat							
140°	ETN					3-1-07		
	2/15	······························				0''		
SUNTOCATION LINE								



Source Name:	Observation D	Observation Date Start			Γime	End Time	
	ant at TA-3	4-10-07			8:00	) a.m.	8:10 a.m.
Source Location:	x-3-22	Sec Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1	0	0	0	0	COLLEGE
Boiler # <sup>2</sup>	No Particulate Control						
Describe Emission Point (Top of		2	0	0	0	0	
Top of West Boiler St Height Above Ground Level	Height Relative to Observer	_ 3	0	0	0	0	OCCUPATION AND ADDRESS OF THE PROPERTY OF THE
152 Feet	174 Feet	4	0	0	0	0	**************************************
Distance From Observer 73 Yards Direction of Source From Observer		5	0	0	0	0	
Description of Plume (stack exit only)  □Lofting □Trapping □Looping □Fanning □Coning		6	0	0	0	0	
□Lofting □Trapping □Loc □No Plume Present	No Plume Present		0	0	0	0	
Emission Color Plume Type		8	0	0	0	0	
Water Droplets Present?  DINO DYES If YES, droplet plume is DAttached Detached		9	0	0	0	0	
At what point in the plume was	10	0	0	0	0		
1 Ft. above top of star  Describe Background (i.e. blue start)	-						
Cloudy		12					
Background Color Grey	Sky Conditions Cloudy	]   13					
The control of the control of	Direction le from/to, i.e. from North to South)	CONTRACTOR					
1 13 ' '	m Southeast	14.					
Ambient Temperature 32.5 °F	Relative Humidity 61 %	15					
Additional Comments/Information		_ 16					
Fuel Oil Test Unit tripped - came	back at 8:30 a.m	17					
Om appor ourse		18					
		19					
Stack SOURCE with	LAYOUT SKETCH	20					
Plume	Draw Arrow in North Direction Point	Average 10-1		Opacit	y	Range of Min. 0	of Opacity Readings % Max. 0%
Wind —	OBSERVER Name: Luc	(please as Mi	• ,		Title:	Operator	
	Signature		9			Date	
		200			>		4-10-07
	Observer Or KSL	ganizat	ion				
OBSERVER'S POSITION		1 I				Certification Date	
	ETA 2-28-07				2-28-07		
		***************************************			·	<del></del>	



Source Name:	ource Name: Power Plant at TA-3							End Time
Source Location:	wer Pla	nt at 1A-3	4-10-07		-	8:3	3 a.m.	8:43 a.m.
	TA-	3-22	Sec Min	0	15	30	45	Comments
Type of Source		Type of Control Equipment	1	0	0	0	0	
Boiler # 2  Describe Emission Poi	ent (Top of s	No Particulate Control	$ \frac{1}{2}$	0	0	0	0	
Top of West Bo	oiler Sta		3	0	0	0	0	
Height Above Ground 152	Level Feet	Height Relative to Observer	4	0	0	0	0	
Distance From Observ	er Yards	Direction of Source From Observer	5	0	0	0	0	
Description of Plume (stack exit only)		6	0	0	0	0		
No Plume Present			7	0	0	0	0	
Clear	Emission Color Plume Type		8	0	0	0	0	
Water Droplets Present?  □XNO □YES If YES, droplet plume is □Attached □Detached		9	0	0	0	0		
At what point in the ph	10	0	0	0	0			
Describe Background (			-   11					
Cloudy								
Background Color Grey		Sky Conditions Cloudy	13					
Wind Speed mph	Wind Dire	ection from/to, i.e. from North to South)	14					
13 <sup>mpn</sup>	1 "	Southeast	204 (40.275.22.22.2					100 100 100 100 100
Ambient Temperature 32.5 °F	1	Relative Humidity 61 %	-  <u>  15</u>					
Additional Comments/	Information:		16	7000	S. 12.55	Geog. v.s.		
Fuel Oil Test			17					
Unit tripped -	came ba	ck at 8:30 a.m	18					
			19					
Stack SO with	URCE L	AYOUT SKETCH	20					
Plume Sun		Draw Arrow in North Direction oint	Average 10-1 0%		)pacity	P	Range of Min. 0%	Opacity Readings Max. 0%
Wind —	OBSERVER Name: Luc	(please as Mil	•		Title:	Operator		
7	Signature			)	1	Date		
			4-10-07					
	Observer Organization KSL							
OBSERVER'S POSITION			Certified by Certification I					Certification Date
140°			ETA 2-28-07					
# = # =	SUN LOCATION LINE							



Source Name: Power Plant at TA-3			Observation Date Start Time End Time 4-24-07 10:38 a.m. 10:48 a.m.					
	wer Plai	nt at 1A-3	4-24-07			10:3	38 a.n	n. ∮0:48 a.m.
Source Location:	TA-		Sec Min	0	15	30	45	Comments
Type of Source		Type of Control Equipment	1	0	0	0	0	
Boiler # 2		No Particulate Control	***************************************	+				
Describe Emission Poil Top of Boiler S		tack, etc.)	2	0	0	0	0	
Height Above Ground	Level	Height Relative to Observer	3	0	0	0	0	
150 Distance From Observ	Feet	175 Feet  Direction of Source From Observer	4	0	0	0	0	-
71	Yards	NW	5	0	0	0	0	
Description of Plume (			6	0	0	0	0	
No Plume Present	Plume Ty	pe IXNo Plume Present	7	0	0	0	0	
Emission Color Clear	□Continu		8	0	0	0	0	
Water Droplets Present? □NO □YES If YES, droplet plume is □Attached □Detached		9	0	0	0	0		
At what point in the pl	10	0	0	0	0			
Describe Background (	- 1				a ji Bayi			
Cloudy	_ 12				1			
Grey					<u> </u>			
Wind Speed	Wind Dire	ection rom/to, i.e. from North to South)		1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
5-10 <sup>mpn</sup>		North to South	14			\$255K	îşan lipiye.	
Ambient Temperature		Relative Humidity	15					
37.4 °F		64 %	16					
Additional Comments/ Fuel Oil Test	intormation:		17					
			18					
			19					
Stack SO	URCE L	AYOUT SKETCH	20					
Plume Sun		Draw Arrow in North Direction oint	Average 10-Minute Opacity Range of Opacity Reading					
Wind -		OBSERVER Name: Luc	(please as Mil			Title:	Operator	
		,	Signature			····	***************************************	Date
		/	4-24-07					
		-	Observer Organization KSL					
OBSERVER'S POSITION			Certified by Certification Date					Certification Date
140°			ETA 2-28-07					
	SUBLI OCATION LINE							



Source Name:						End Time	
Power Pla	int at TA-3	4-24-07			10:4	l8 a.m	n. 10:58 a.m.
ource Location:		Sec	- Contract C				
	-3-22	Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1	0	100	100	100	
Boiler # 2	No Particulate Control	<u> </u>					
Describe Emission Point (Top of	stack, etc.)	2	50	50	30	10	
Top of Boiler Stack		] 3	0	0	0	0	
Height Above Ground Level 150 Feet	Height Relative to Observer 175 Feet						
[ .		4	0	0	0	0	00000
Distance From Observer 71 Yards	Direction of Source From Observer	5	0	0	0	0	
/ !		_	ļ			ļ	
Description of Plume (stack exit of Male Description of Male Description of Male		6	0	0	0	0	
No Plume Present	· ·	7	0	0	0	0	
Emission Color Plume T	ype No Plume Present		ļ				
Clear/Black Clear Contin	nuous  Fugitive Intermittent	_]	0	0	0	0	Toronto Carlos C
Water Droplets Present?		9	0	0	0	0	
□XNO □YES If YES, droplet plu			-	U	-	-	
At what point in the plume was of	10	0	0	0	0		
1 Ft. above top of stac							
Describe Background (i.e. blue sk	11			47,47,21			
	- 12						
Background Color Grey	13		139,620,11				
ind Speed Wind Di		- 13					
provide from/to, i.e. from North to South)		14					
Fron	n North to South	17.5					
Ambient Temperature	Relative Humidity	15					
37.4 °F	64 %	<b>」</b> 16					
Additional Comments/Information Fuel Oil Test	1:						
ruei Oii Test		17					
		18					
	\	LL				2.42.43.23 2.42.43.23	
		<b>M</b> 19					
Stack SOURCE	LAYOUT SKETCH	20					
with O Plume	Draw Arrow in	Average 10-N	linute (	) Innocits		Panga	of Openity Pendings
1	mission North Direction	11.0 0 -84		Эраспу		Min. 0	of Opacity Readings 1% Max. 100%
	Point	1 /10 10 00	3-70				a · m • • •
Wind —	$\mathbf{X}$	OBSERVER	(please	print)			_
VV III.G	$\Lambda$	Name: Luca	as Mil	ler		Title:	Operator
						15-4	
		Signature	/				Date
	V		$-\epsilon$			<del></del>	#-24-03
		Observer Org	anizati	on			
		KSL					
OBSERVER'S POSITION							Certification Date
	140°						2-28-07
SUN LOC	-						



Source Name:	the sec			Observation Date Start Time End Time					End Time
	Power Pl	ant at TA-3		4-24-07			10:5	i8 a.m	. 11:08 a.m.
Source Location		-3-22		Sec Min	0	15	30	45	Comments
Type of Source		Type of Control Equ		1	0	0	0	0	***************************************
Boiler #		No Particulat	te Control		<u> </u>	<u> </u>	· ·		
Describe Emissi Top of Boil		f stack, etc.)		2	0	0	0	0	***************************************
Height Above C		Height Relative to Obs	Server	3	0	0	0	0	
150	Feet	175	Feet	4	0	0	0	0	
Distance From (	Observer Yards	Direction of Source Fr	om Observer	5	0	0	0	0	
Description of P	Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning		nning	6	0	0	0	0	
No Plume Pre	Tono Plume Present Emission Color Plume Type Type Typo Plume Present			7	0	0	0	0	
Clear	Clear			8	0	0	0	0	
Water Droplets Present? □NO □YES If YES, droplet plume is □Attached □Detached		etached	9	0	0	0	0		
At what point in the plume was opacity determined?  1 Ft, above top of stack				10	0	0	0	0	
Describe Background (i.e. blue sky, trees, etc.)				11					
Cloudy				12					
	Background Color Sky Conditions Cloudy			13					
Wind Speed		irection from/to, i.e. from North to	o South)	14					
5-10 <sup>m</sup>		m North to South		14					
Ambient Tempe	rature	Relative Humidity		15					
37.4		64	%	16					
Additional Com Fuel Oil	ments/Information Fest	n:		17					
				18					
				19					
Stack with	SOURCE	LAYOUT SKETC	H	20					
with O Plume	E	mission Point	Draw Arrow in North Direction	Average 10-M		Opacity		Range o	f Opacity Readings % Max. 0%
Wind X				OBSERVER (	please is Mil			Title:	Operator
-	***************************************	Signature Date 4-24-07							
				Observer Organization KSL					
OBSERVER'S POSITION			Certified by Certification Date					Certification Date	
140°				ETA 2-28-07					
	STINITO	Arrivation and the state of the		·					



Source Name:				Observation Date Start Time End Time				
	int at TA-3	4-24-07			11:0	)8 a.m	n. 11:18 a.m.	
Source Location:	-3-22	Sec Min	0	15	30	45	Comments	
Type of Source	Type of Control Equipment	1	0	0	0	0		
Boiler # 2	No Particulate Control	<b>                                     </b>						
Describe Emission Point (Top of Top of Boiler Stack	stack, etc.)	2	0	0	0	0		
Height Above Ground Level	Height Relative to Observer	3	0	0	0	0		
150 Feet Distance From Observer	175 Feet  Direction of Source From Observer	4	0	0	0	0		
71 Yards	NW	5	0	0	0	0		
Description of Plume (stack exit of DLofting □Trapping □Loop	only) ing □Fanning □Coning	6	0	0	0	0		
Emission Color Plume T		7	0	0	0	0		
Clear □Contin		8	0	0	0	0		
Water Droplets Present?  □XNO □YES If YES, droplet plu	9	0	0	0	0			
At what point in the plume was of	10	0	0	0	0			
1 Ft. above top of stac  Describe Background (i.e. blue sk	i i i i i i i i i i i i i i i i i i i				şi sağı			
Cloudy		12						
Background Color Grey	Sky Conditions Cloudy	13	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	144.25		7		
Wind Speed Wind Dir 5-10 mph (provide	rection from/to, i.e. from North to South)	14						
Fron	n North to South	100/100/100/100						
Ambient Temperature 37.4 °F	Relative Humidity 64 %	15						
Additional Comments/Information	1 1:	16					489,499	
Fuel Oil Test		17						
		18						
		19						
Stack with SOURCE I	LAYOUT SKETCH	20						
Plume	Draw Arrow in North Direction Point	Average 10-N	6			Range o Min. O	of Opacity Readings 6 Max. 0%	
Wind —	$\mathbf{x}$	OBSERVER (	(please as Mil		2	Title:	Operator	
Terrenal Control of the Control of t	,	Signature			/		Date	
		7	4				4-24-07	
	Observer Org KSL	anizati	on					
	OBSERVER'S POSITION						Certification Date	
	ETA 2-28-07							
SUN LOCA	SUN LOCATION LINE							



Source Name:				Observation Date			Time	End Time		
Pov	ver Plar	nt at TA-3	5-1-07			9:4	8 a.m.	9:58 a.m.		
Source Location:	TA-3	3-22	Sec Min	0	15	30	45	Comments		
Type of Source		Type of Control Equipment	1	0	0	0	0			
Boiler # 2		No Particulate Control		<del>                                     </del>	-	<del>                                     </del>	<del>                                     </del>			
Describe Emission Point Top of Boiler st	-	tack, etc.)	2	0	0	0	5			
Height Above Ground I	evel	Height Relative to Observer	3 	5	0	0	0	од и текстор «140 м 160 м 1400 м наражин <mark>и и текстор по пределения преде</mark> рия и текстор по предоставления пределения предоставления предоста		
100 200		200 Feet Direction of Source From Observer	4	0	0	0	0			
•	Yards	NW	5	0	0	0	0			
Description of Plume (s	tack exit on	nly) ng □Fanning □Coning	6	0	0	0	10			
Emission Color	Plume Typ		7	10	5	5	0			
black/clear	□Continu		8	0	5	5	0	***************************************		
Water Droplets Present □ NO □ YES If YES,		ne is   Attached   Detached	9	0	0	0	0	## (1999)		
At what point in the plume was opacity determined?  1 ft. above stack			10	0	0	0	0	a Sarah Bagagan gang menungkan kembulan dan kebadah kembulan kembulan dan kembulan kembulan kembulan kembulan		
Describe Background (i.e. blue sky, trees, etc.)			11							
Clear skys	Clear skys									
	Background Color Sky Conditions Clear									
Wind Speed 3-5 mph	Wind Dire (provide fr	ction om/to, i.e. from North to South)	13 14							
	From N	lorth to South	16	<del>                                     </del>						
Ambient Temperature 61		Relative Humidity 51 %	15 16			100 Sep				
Additional Comments/In Boiler #2 Fuel O	formation:	a	17							
							+			
			18							
			19	<u> </u>		ļ				
with Q	JRCE L	AYOUT SKETCH  Draw Arrow in	20							
Plume Sun		ssion North Direction	Average 10-N 1.25%		)pacity		Range of Min. 0%	Opacity Readings Max. 10%		
Wind —	x ()	OBSERVER (please print) Name: Lucas Miller Title: Operator					Operator			
	,		Signature	11/11/4	***************************************			Date		
<b>√</b>			Tue 1 5-107					5-1-02		
					Observer Organization  KSL					
	OBSERVER'S POSITION		Certified by Certification				Certification Date			
	140°			ETA 2-28-07						
•	SUN LOCATION LINE									



Source Name:							Start	Time	End Time
	wer Plai	nt at TA-3		5-1-07			9:58	3 a.m.	10:08 a.m.
Source Location:	TA-:	3-22		Sec Min	0	15	30	45	Comments
Type of Source		Type of Control Equipment		1	0	0	0	0	
Boiler # 2		No Particulate Control			U		<u> </u>		
Describe Emission Po		tack, etc.)		2	100	100	100	100	
Top of Boiler s		Height Relative to Observer		3	100	100	50	50	
Height Above Ground Level 150 Feet Height Relative to Observer 200 Feet		200 Feet		4	25	20	15	10	**************************************
Distance From Observ 75	er Yards	Direction of Source From Observer NW		5	10	10	5	0	
Description of Plume (				6	0	5	25	50	
Fivo Plume Present  Emission Color	Plume Ty	<u> </u>		7	20	15	5	0	
black/clear	☐ Continu			8	0	0	0	0	
Water Droplets Presen □NO □YES If YES.	t? , droplet plui	ne is   Attached   Detached		9	0	50	25	10	
At what point in the pl	ume was op:	acity determined?		10	0	0	0	0	
Describe Background		trees etc.)	-	11					
Clear skys	(2,0,0,0)			12					
Background Color blue		Sky Conditions clear		13					
Wind Speed 3-5 mph	Wind Dire	ection rom/to, i.e. from North to South)							
1000 111,411	1 "	lorth to South		14					
Ambient Temperature		Relative Humidity 51 %		15					
Additional Comments/ Boiler #2 Fuel (	Information:		-	16					
Told by James	to stand	by - having problems with		17					
valves.				18					
			4	19					
Stack SO with	URCE L	AYOUT SKETCH  Draw Arrow i		20					
Plume Sun	n n	Average 10-M 25%		pacity	,	Range o Min. 09	f Opacity Readings 6 Max. 100%		
Wind —		OBSERVER ( Name: Lucas			and the development of the second	Title:	Operator		
				Signature					Date 5-/-02
		Observer Orga KSL	anizatio	on					
OBSERVER'S POSITION			Certified by Certification De				Certification Date		
-/-	140°			ETA 2-28-07					
	SINIOCATIONLINE								



S	ource Name:									End Time
		wer Pla	nt at TA-3		5-1-07			10:32 a.m.		n. 10;42 a.m.
S	ource Location:	TA-			Sec Min	0	15	30	45	Comments
	ype of Source		Type of Control Equipn	<b>1</b> 3	1	20	10	5	0	
	Boiler # 2		No Particulate	Control	4			<del>  </del>		and the first section of the section
	escribe Emission Po Fop of Boiler s		tack, etc.)		2	0	0	0	0	internet 1994 (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994)
H	eight Above Ground	l Level Feet	Height Relative to Observe	er Feet	3 ************************************	0	0	0	0	iteratus (PP (International Control of Advisory Control of Control
<u></u>	Distance From Observer Direction of Source From Observer			4	0	0	0	0		
	75	Yards	NW		5	0	0	0	0	
	escription of Plume Lofting Trappin			ıg	6	0	0	0	0	o de la companya del companya de la companya del companya de la co
	No Plume Present mission Color	Plume Ty	pe No Plume Present		7	0	0	0	0	
ʻbl	ack/clear	Continu		ermittent	8	0	0	0	0	
	ater Droplets Preser NO □YES If YES		me is □Attached □Detac	ched	9	0	0	0	0	<del></del>
	t what point in the p		acity determined?		10	0	0	0	0	<del> </del>
1	escribe Background		r trees etc.)		11					
10	Clear skvs	(	,,,		12					
B	ackground Color		Sky Conditions clear		13			las S		
W	ind Speed 3-5 mph	Wind Din	ection rom/to, i.e. from North to Sc	outh)						
	3-5 mph	1 -	North to South	ouni)	14					
A	mbient Temperature 61		Relative Humidity 51	%	15					
	dditional Comments Foiler #2 Fuel				16					
E	loiler #2 Fuel	Oil Testir	ng		17					
					18					
					19					
	tack SC	URCE I	AYOUT SKETCH	l l	20					
P	lume un			Oraw Arrow in Forth Direction	Average 10-M 0.8759		pacity			Opacity Readings 0% Max. 20%
V	Wind — X				OBSERVER () Name: Lucas			**************************************	Title: (	Operator
					Signature	<del></del>				Date
	V				<u> </u>	26		E.	21	5-1-04
					Observer Organization  KSL					
	OBSERVER'S POSITION		ON	Certified by Certification Dat					Certification Date	
	140°			ETA					2-28-07	
	SUNTOCATION LINE						***********		i	



Source Name:	Fower Plant at TA-3			Observation Date Start Time End Time				
	er Plan	t at 1A-3	5-1-07	Ngaliwa kanana manana mana	<del></del>	10:	42 a.n	n. 10:52 a.m.
Source Location:	TA-3	-22	Sec Min	0	15	30	45	Comments
Type of Source		Type of Control Equipment		0	0	0	0	
Boiler # 2	/m _£ .	No Particulate Control	4 2	0	0	0	0	
Describe Emission Point ( Top of Boiler state	_	ack, etc.)		***************************************			<u> </u>	######################################
Height Above Ground Le	vel	Height Relative to Observer	3	0	0	0	0	
150 Fe Distance From Observer	et	200 Feet Direction of Source From Observer	4	0	0	0	0	
	- · · · · · · · · · · · · · · · · · · ·		5	0	0	0	0	
Description of Plume (stack exit only)  □Lofting □Trapping □Looping □Fanning □Coning			6	0	0	0	0	
DNo Plume Present	· · · · · · · · · ·			0	0	0	0	i
clear	Continuo		8	0	0	0	0	
Water Droplets Present? □ NO □YES If YES, dro	oplet plun	ne is   Attached Detached	9	0	0	0	0	
At what point in the plume was opacity determined?  1 ft, above stack			10	0	0	0	0	
Describe Background (i.e.	. blue sky,	trees, etc.)	11					
Clear skys	12							
Background Color blue	ckground Color Sky Conditions IUE Clear							
	Vind Directory	ction om/to, i.e. from North to South)	- 13					
1 1	•	orth to South	14					
Ambient Temperature		Relative Humidity 51 %	65.00 <b>15</b> .00					
Additional Comments/Info Boiler #2 Fuel Oil	ormation:		16					Substitute (Structure)
Boiler #2 Fuel Oil	lestin	9	17					
			18					
			19					
Stack SOU	RCE L	AYOUT SKETCH	20					
Plume Sun	Draw Arrow in North Direction int	Average 10-M 0%	linute (	Opacity		Range o Min.	f Opacity Readings 0% Max. 0%	
Wind —	OBSERVER ( Name: Luca	please s Mill	print) er		Title:	Operator		
			Signature Date 5-/-07					
	Observer Organization  KSL							
OBSERVER'S POSITION			Certified by					Certification Date
140°			ETA 2-28-07					
SU	SUN LOCATION LINE				***************************************			



Source Name:				Observation Date			Time	End Time
	wer Plar	nt at TA-3	5-1-07			10:	52 a.m	n. 11:02 a.m.
Source Location:	TA-3	3-22	Sec Min	0	15	30	45	Comments
Type of Source		Type of Control Equipment		0	0	0	0	
Boiler # 2		No Particulate Control		ļ	ļ	-	<del>                                     </del>	***************************************
Describe Emission Poi		ack, etc.)	2	0	0	0	0	
Top of Boiler st		Height Relative to Observer	3	0	0	0	0	
150	Feet	200 Feet	4	0	0	0	0	
Distance From Observer Direction 75 Yards NW		Direction of Source From Observer NW	5	0	0	0	0	
Description of Plume (			6	0	0	0	0	200 g 19 (19 (19 (19 (19 (19 (19 (19 (19 (19
Deno Plume Present Emission Color	Plume Ty		7	0	0	0	0	
clear	□Continu		8	0	0	0	o	aa aa ah in in in in ah ah ah ah ah ah ah ah ah ah ah ah ah
Water Droplets Present □ NO □ YES If YES,	? droplet plur	ne is □Attached □Detached	9	0	0	0	0	**************************************
At what point in the plume was opacity determined?			10	0	0	0	0	
1 ft. above stack  Describe Background (i.e. blue sky, trees, etc.)			4 11					
Clear skys						-	$\vdash$	
Background Color Sky Conditions Clear		12	-					
Wind Speed	Wind Dire	etion	13	6000				
3-5 mph	*	rom/to, i.e. from North to South)	14			100 000 00		
Ambient Temperature 61 F		Relative Humidity	15					
		51 %	16					
Additional Comments/ Boiler #2 Fuel C	ntormation: Dil Testin	g	17					
			18					
			19					
Stack SO	URCE L	AYOUT SKETCH	20				0.0	
with O Plume Sun		Draw Arrow in North Direction June	Average 10-M 0%				Range of	f Opacity Readings )% Max. 0%
wind -> X			OBSERVER ( Name: Luca	please s Mill	print) er	——————————————————————————————————————	Title:	Operator
			Signature					Date 5-1-07
			Observer Organization KSL					
OBSERVER'S POSITION						Certification Date		
	140°			ETA 2-28-07				
	SUN LOCATION LINE							

ENV-EAQ-307, R3, ATTACHMENT 3 (OPACITY DETERMINATION AND EXCESS EMISSIONS REPORTING)



Source Name:				Observation Date Start Time End Tim					
Power Plan	nt at TA-3	5-11-	07		8:35 An 8:454				
Jurce Location:	2 11	Sec							
TA-3 Type of Source	Type of Control Equipment	Min	0	15	30	45	Comments		
1	No Particulate Control	1	0	0	٥	0			
Boiler #3 Describe Emission Point Top of s	1	1 2	0	d	d	d	7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -		
Describe Emission Point (Top of s	OP of Railor Stach		<u>-</u>	ļ		·			
Height Above Ground Level	Height Relative to Observer	3	0	d	0	0			
150 Feet	200 Feet	4	0	B	0	0			
Distance From Observer	Direction of Source From Observer	5	٥	O	U	25			
76 yours	North west								
Description of Plume (stack exit or	ny) ng □Fanning □Coning	6	25	25	5	0			
□No Plume Present Emission Color Plume Ty	pe □No Plume Present	- 7	6	0	0	0			
Black to Clear Continu		8	b	0	0	0			
Water Droplets Present?		9	0	0	0	0			
≅NO □YES If YES, droplet plur	<b>.</b>	1		0	<del> </del>				
At what point in the plume was opa	10	6	0	0	0				
Describe Background (i.e. blue sky	, trees, etc.)	11							
Blue Sky's Background Color	Sky Conditions	12		-teuriteininsk					
Nue Skys	Clear	13							
ind Speed Wind Dire	rant/to, i.e. from North to South)	14	<u> </u>				<u> </u>		
6.9 West	South west						·		
Ambient Temperature	Relative Humidity	15				In the second			
47.3°F	62. %	16				a Charles more southful.			
Additional Comments/Information:		17				NAME OF THE PARTY			
Simil our me B	01100 42	18							
l									
		19	-						
Stack SOURCE L	AYOUT SKETCH	20				name of the second			
Sun $\bigoplus$ Unit Em	Draw Arrow in North Direction Stach	Average 10-M OBSERVER	2.0	%			of Opacity Readings		
Wind — Are the second of the s	Name:	M.	sino) Mill	<u> </u>	Title:	Steater			
27.01		Signature Date 5-11-02							
	OBSERVER'S POSITION	Observer Organization  ASL  Certified by Certification Date							
	140°								
							2-28-07		
SUN LOCA	TION LINE								



Source Name:	Observation D	ate		Start	End Time		
Power Plan	nt at TA-3	」 ら-11-0	7		8	450.	~ 8:55 An
Jurce Location:		Sec				7.3	
TA-		Min	10	15	30	45	Comments
Type of Source	Type of Control Equipment	1	0	0	0	0	
Bailer#3	No Particulate Control	1		1		-	
Describe Emission Point (Top of s	tack, etc.)			0	0	0	**************************************
Height Above Ground Level	Height Relative to Observer	- 3	5	15	5	0	
150 Feet	200 Feet	4	۵	٥	0	ď	
Distance From Observer	Direction of Source From Observer			-			
75 years	North west	5	a	0	0	0	
Description of Plume (stack exit on Lofting  Trapping  Loopin		6	0	0	0	O	
□No Plume Present Emission Color Plume Ty		7	٥	0	0	0	
Black to clear Continu		8	5	5	5	5	
Water Droplets Present?  ☑NO □YES If YES, droplet plun	ne is  Attached Detached	9	0	a	0	đ	
At what point in the plume was opa		10	1	-	ر ر	<u>σ</u>	
IFt. above Stack			<u>U</u>		Ü	<u> </u>	
Describe Background (i.e. blue sky	, trees, etc.)	11	ļ			<b> </b>	
Blue Sky S Backeround Color	Sky Conditions	12					
I Sue Sky C Wind Dire	Clerc	13					
mph (provide fr	compto, i.e. from North to South)	14					
	St Sout west Relative Humidity	10 10 10 10 10 10 10 10 10 10 10 10 10 1					
Ambient Temperature 47.3 °F	Relative Humidity  62 %	15					
Additional Comments/Information:	62	16					
adding Mare	11 to B.	17					
mae,	tal 10 marcaets	18					
		19					
Stack SOURCE L	AVOUT OVETCH				·		
with Q	AYOUT SKETCH  Draw Arrow in	20					
Plume Sun A U-St Emi	North Direction	Average 10-M	inute (	pacity		Range of Min	Opacity Readings
Sun + Stock 17 Po	ssion East int 17 Stack		0.84			Min. 6	% Max. 5%
Wind →		OBSERVER (				Title: 4	Resutor
		Lucus	U	Mil	4		
		Signature	/ /	•	_	im.	Date
1		The same of the sa	4				5-11-07
		Observer Orga	anizani	)II			
	Certified by	2020 <del>2**</del> *******************************		·	[ 1	Certification Date	
14	140°					Applying the second	2-28-07
SUN LOCA	TION I INE	LETA			<del>Voles, I.,</del>	:	
NEIN LLR.A	I D ZOV L. GYE.						



Source Name:		Observation E			Start Time End Time			
Power Pla	nt at TA-3	5-11-	07-		8.	55	A. 9:05 A.	
Source Location:	3-22	Sec						
Type of Source	Type of Control Equipment	Min	0	15	30	45	Comments	
Boile(#3	No Particulate Control	And the second s	<u></u> <u></u>	0	0	0		
Describe Emission Point (Top of	stack, etc.)	2	0	0	٥	0		
Height Above Ground Level	Height Relative to Observer	3		g	0	C		
ISO Feet	200 Feet	4	Δ	O	D	0		
Distance From Observer	Direction of Source From Observer  North west	5	0	0	D	a		
Description of Plume (stack exit o	nly)	1 6	0	O	Ø	0		
□Lofting □Trapping □Loopi  □No Plume Present		1	1	0		0		
Emission Color Plume Ty		]   8	0	·	<u>U</u>			
Water Droplets Present?		9	_,	0	0	5		
At what point in the plume was op		<b>                                     </b>	0	0	0	0		
IFt. Above Stock Describe Background (i.e. blue sky	·	10	0	0	O	$Q_{-}$		
	y, trees, etc.)	11						
Blue Sky S Background Color Ky S	Sky Conditions	12						
Wind Speed Wind Dir	ection	13						
6.7	from to, i.e. from North to South)	14						
Ambient Temperature	St South west Relative Humidity	15				,		
47.3 °F Additional Comments/Information	<i>6</i> 2 %	16						
Additional Comments/Information	•	17						
fuel oil Bu	ازمر	18					**************************************	
, αοι σ σ		19						
Stack SOURCE I	AYOUT SKETCH	20						
Plume Sun  Wind  P	OBSERVER'S POSITION	OBSERVER Name: Lucux Signature Observer Org KSL Certified by	(please	o print) Mill	1	Min. C	f Opacity Readings  Max. Op  Oferato  5-1-07  Date  5-11-07  Certification Date	
	***************************************	ETH					2-28-07	
SUN LOCA	ATION LINE							



Serree Name:								End Time	
<u> </u>	wer Plan	t at TA-3		5-11-	07	and the same	9:	057	2 9:15 A.
Source Location:	TA-3	5-22		Sec Min	0	15	30	45	Comments
Type of Source		Type of Control Ed		1	0	a	0	0	
Boiler #3 Describe Emission Poi		No Particula	tte Control	2	1	0	ð	σ	
19-11-17 above 15+		ack, etc.)	1		<u> </u>	12	<del></del>	<u> </u>	
Height Above Ground	Level	Height Relative to Ob	server	3	0	0	0	Q	
150	Feet		760 Feet	4	10	O	0	0	October Andrews
Distance From Observ		Direction of Source F	ı	5		<del>                                     </del>	0		
	Feet gerels	North wa	·s+		$\frac{1}{G}$	<u>D</u>	12	Q_	
Description of Plume ( □Lofting □Trapping			oning	6	10	0	0	0	
Emission Color	Plume Typ	pe No Plume Pro	sent	7	O	0	0	O	
Che	Continu		□Intermittent	8	Ö	0	0	$\overline{a}$	
Water Droplets Present	t? droplet plun	ne is OAttached OI	Detached	9	10	0	0	a	And the second of the second o
At what point in the pl		city determined?		10	Ô	0	0	0	
Describe Background (	stack	trees etc.)				1	3.3	75	
Blue 5	Lia C	, acoos, occ.,			<b>.</b> =				
Background Color	10 A 2	Sky Conditions		12/07					
Jpeed	Wind Dire	Clar		o entre d					
nph mph		one to i.e. from North	to South)	14.5	0.00				
6.9	1119	ct South W	net.		1 2				7.80.000
Ambient Temperature	<u>, 22 </u>	SF South W Relative Humidity					1916		
47.3 °F		6	2 %	16					April 18 December 1981
Additional Comments/				17.7					
fuel o	1 43	Boiler		53-5-80-140	100	2.5	48.4	7.5	
7 ceel	1 10'	,		18			147		
				10					
Stack SO	TIDOFI	AYOUT SKET	CII		-				
with Q	ORCE D	AIOCI BREZI	Draw Arrow in			0000			
Plume	No Emi	ssion	North Direction	Average 10-N	Ainute (	Opacity	1	Range ( Min.	of Opacity Readings
Sun 🕁 🦪		ssion Fast oint Stuck			00	(v)	4	*****	00/000
Wind>	3	X		OBSERVER	(please	print)			
			_	Name:	11. A		:	Title:	OResta
			į	Signature		1 /		***************************************	Date
			Sucre	4	i de la companya della companya della companya della companya de la companya della  2		5-11-07		
		######################################		Observer Or	ganizati	on			-
OBSERVER'S POSITION		SITION	Certified by					Certification Date	
_		400		E+A					2-28-07
	-	TION I INTE		L 6 / */			<del></del>		



ce Name:	Observation Date Start Time End Ti					End Time	
Power Plan	t at TA-3	5-11-	o>-		9.	15A	2 9:25 Ha
Source Location:		Sec	T	I	7		
TA-3		Min	0	15	30	45	Comments
Type of Source  Bo//w#3	Type of Control Equipment No Particulate Control	1	0	<u> </u>	0	0	
Describe Emission Point (Top of st		2	0	٥	0	6	
TOPOF B	1944 #3 Stack Height Relative to Observer	3	10	6		M	
Height Above Ground Level	Height Relative to Observer アード・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・		+	<del> </del>	<u> </u>	10	
Distance From Observer	Direction of Source From Observer	4	0	0	0	0	
75 yo Feet	last was	5	0	2	0	۵	
Description of Plume (stack exit on □Lofting □Trapping □Loopin		6	0	0	0	۵	
Emission Color Plume Typ		7	0	0	٥	C	
Clar DContinue		8	0	8	0	0	
Water Droplets Present?	ne is Attached Detached	9		0	٥	0	
At what point in the plume was opa		10	0	0	8	0	
Describe Background (i.e. blue sky,	ach	- 11'- 1	100	(22)		<b>5</b> 55 34 3	
Describe Background (i.e. blue sky,	trees, etc.)	211					290
Blue sky S	Sky Conditions	120,0	·	e in		100	er e dine
Hlue	Clear	e semicos.					
and Speed Wind Dire	ction				1000	L	noble of ballions in
mph (provide fr	ometo, i.e. from North to South)	14					
6.9 W	British Court (Cury)			7.00			Market Control
Ambient Temperature  17. 2 °F	Relative Humidity  6 7 %						# 10 mm 1 mm 1 mm 1 mm 1 mm 1 mm 1 mm 1
Additional Comments/Information:		. 16					Standardon de transcrio de la compansión
A Real Collinguity Information.		17.7	200		0.00	440	
			23.4	124	-	173 S	
		-18	2.0	(4-ii)		6.90%	996
		119n			7 -2		
Stack SOURCE L	AYOUT SKETCH	- 20		3.55			tiger spiele toe.
with Plume	Draw Arrow in	Average 10-N	Ainute (	Opacity	1-452-934	Range o	of Opacity Readings
Emi	ssion Forth Direction	_			1		% Max. 0%
Sun + Slav Pr	ssion Start		) 70			······································	
Wind —	X \	OBSERVER Name: 4	(please	print)	a . 1	Title:	,
		Lucos	ل ک	( . )	4/4	. 1115.	Ofert
		Signature		<u> </u>			Date
1		- Zec		cx			5-11-03
/		Observer Org	ganizati	on			
, 	Certification I						
	OBSERVER'S POSITION	-11					
<i></i>	•	LE+1+			····	***************************************	2-38-03
SUN LOCA	TION LINE						



e Name:	vo.t		110	Observation Date			Start		End Time
Power Plant at TA-3			4 L	8-11-	0 4	•	7.	254	n 9.35An
Source Location:	TA-3	3-22		Sec Vin	0	15	30	45	Comments
Type of Source		Type of Control Equipment No Particulate Control		1	0	0	C	٥	
Bork #3 Describe Emission Poin	t (Top of st		┨┞	2	0	O	0	٥	
700 00	Boi	1 # 3 Stach Height Relative to Observer	<b>4</b>	3	۵	<u>a</u>	a	0	
	evel eet	Height Relative to Observer		4	S	<u> </u>	3	3	
Distance From Observe	ł	Direction of Source From Observer	┧┠-	5	()	0	0	0	
15 4au		Watt west	┪┝				<b></b>	<del>                                     </del>	
Description of Plume (s			11	6	0	<u>a</u>	0	0	
Emission Color	Plume Ty		1 -	7	0	0	Ő	0	
Water Droplets Present	Continu	ous	-{	8	0	0	<u>0</u>	0	
BYO DYES If YES,	droplet plut	ne is   Attached   Detached		9	0	0	0	0	
At what point in the plu	me was opa	acity determined?		10	0	Q	0	0	
Describe Background (i	ک سیر ای blue sky	trees etc)	- 6	211		30.0		442.7	3.00
Beschie Background (	1.0			1.00					
Blue 5	1587	Sky Conditions		inger best	1862	600		100.00	
Blue		Sky Conditions		10					
and Speed mph	Wind Dire (provide f	ection rom/to, i.e. from North to South)		e Mercia					
6.9	Ü	relative Humidity				2.0			niconario de la composición dela composición de la composición de la composición de la composición dela composición dela composición de la composición dela composición de la composición de la composición de la composición dela composic
Ambient Temperature 42. 2°F		Relative Humidity 62 %							
Additional Comments/I	nformation		<b>- 1</b> 월	16		4	63		Shells (et al. 6)
				<b>"</b> "					5.00
$\Gamma_{m,l}$	ail	Burning on #3 Boils					l de la	Heri	
Tuck	<i>-</i> , ,			18					Call to the
				110					
CL-L CO	IDCE I	AVOUT SEPTCH	7 🏻		7	er II	7.7	210	
Stack SO SO	UKCE I	LAYOUT SKETCH		-20	2 3 4				
Plume	_	Draw Arrow in North Direction		Average 10-M	linute '	Opacit	у	Range	of Opacity Readings
Sun 🕀 🖫		vission East North Direction			0	9/		MIII.	0% Max 0%
1 2.	· ·	oint I stack (/)		OBSERVER	(please	print)			
Wind — Sign				Name: ,	₹		,	Title:	~ /
				Luca	¥	4	Lie		Ohras
		Explored and the second and the seco		Signature			<i></i>		Date
								5-11-07	
1				Observer Org	ganizat	ion			
OBSERVER'S POSITION				Certified by	po negrada negrada a jeruda de				Certification Date
		140		EHA					2-28-07
	SUN LOC	ATION LINE							



S - Name:		Observation Date Start Time End Time					1
	ant at TA-3	5=11.	5=11-07 9:35Ha 8:			8:115 Au	
Source Location:	3-22	Min Se	- 0	15	30	45	Comments
Type of Source	Type of Control Equipment	I		***************************************	<b>†</b>		Comments
Boily#3	No Particulate Control	]   1	10	0	G	0	
Describe Emission Point (Top o	_	] 2	۵	G	0	0	
Top of Boiler	Height Relative to Observer	3	۵	0	0	0	
Height Above Ground Level	Height Relative to Observer	4	3	13	0	0	
Distance From Observer	Direction of Source From Observer	1 <b> </b>		<b> </b>	<del>                                     </del>		
75 your 4 Feat	Narth west	5	10	0	0	0	
Description of Plume (stack exical Control of Plume (stack exical of the plume of t	only)	6	G	0	0	O	
Palo Plume Present Emission Color Plume		7	0	0		a	
Check Cont		8	0	0	0	0	
Water Droplets Present?  55NO □YES If YES, droplet p	plume is  Attached  Detached	9	0		0		
At what point in the plume was		10			<b></b>	0_	
			$\mathcal{Q}$		0	ಲ್ಲಿ	
Describe Background (i.e. blue	sky, trees, etc.)			200		į.,,	7,410 (1)
Bue Sky S Background Color	J. O. B. CO 452	1   355					
Background Color	Sky Conditions Cle w	(Perforance			-	1	
Speed Wind I	Direction						<u> </u>
	efrom to, i.e. from North to South)	140					
6-9 L Ambient Temperature	Relative Humidity	- 156		4.9			
Amoient reinperature	62 %	16					A Company of the Comp
Additional Comments/Informati	on:			<b>L</b>			Total Control of the Control
found sil Beco	in a #3Boller	17					
,	, , , , , , , , , , , , , , , , , , ,	18					
		100					
Stack SOURCE	LAYOUT SKETCH			<b>1</b>			
with Q	Draw Arrow in	2,1				(2)	
Plume	Emission North Direction	Average 10	-Minute	Opacit			of Opacity Readings
Sun Dust	Point   East		0%	0	O Profit Complete world	C	0/0 Max) 0/0
Wind - State	X Start	OBSERVE	R (please	print)		O#54.4	<del></del>
		Name:	ارائل س	1 L	11/	Title:	Alunk
		Signature			<i>j. I.</i> I	······	Date
_		ليسم	<u>e</u>	2	:	5-11-07	
1	Observer O	rganizat	ion				
	OBSERVER'S ROSITION				·	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
_	OBSERVER'S POSITION	Certified by	•				Certification Date
	140°	EtA	<u></u>				2-28-07
SIDNIA	CATION LINE						



e me Name:						End Time	
Power Plan	it at TA-3	5-11-07 9:45 pm 9:					9'.65p=
Source Location:	2.22	Sec					
TA-3		Min	0	15	30	45	Comments
Type of Source  Boll #7	Type of Control Equipment No Particulate Control	1	0	٥	0	6	
Describe Emission Point (Top of st	_ <u> </u>	2	0	٥	0	0	
		4	<del> </del>		,		
Height Above Ground Level		3	0	0	0	0	:
/50 Feet	Zoo Feet  Direction of Source From Observer	4	0	0	0	0	
Distance From Observer	Lary thest	5	0	0	0	0	Name to the state of the state
Description of Plume (stack exit on	ly)	6	7	~	0		***************************************
□Lofting □Trapping □Loopin  □No Plume Present			0	0		0	
Emission Color Plume Typ		7	0	0	0	0	· · · · · · · · · · · · · · · · · · ·
Chew Continue	ous	8	0	O	0	0	
Water Droplets Present? БÃO □YES If YES, droplet plum	ne is 🗆 Attached 🔻 🗇 Detached	9	0	0	U	6	<del></del>
At what point in the plume was opa		10	6	0	0	0	
Describe Background (i.e. blue sky,		-411				<b>7</b> 594	
1	trees, etc.)						
Blue Star S Background Color	Sky Conditions	eta i 12x. re	19	ar in			a forest production
Blue ships	Sky Conditions	3 e13 ( ) 5					
J Speed Wind Dire	ction on to, i.e. from North to South)	200 800 - 300	30.004	7.4		e de la compa	Mile Company
		145					
Ambient Temperature	Palative Humidia	150					
423°F	C2 %		200				
Additional Community Teformations	6Z <sup>%</sup>	16	er er				
We Stablized At 9.1	55 Am or Fuel oil	17.	100			10.00	
COR DIROLOGO		18 , -			e e Zod		
		3 J. 6 J. 6		16-7	4	6 9 70 6	ANG BEET STORY
		19					
Stack SOURCE L	AYOUT SKETCH	3502					
with U	Draw Arrow in		A	i Rossa	100	garan i	
Plume	North Direction	Average 10-M	linute (	pacity			Opacity Readings
	int To EUSF		0%	()	1		% Max. 0%
Wind -	X Stack	OBSERVER (	please	print)		<del></del>	^
		Name:		, ,	Lu.	Title:	Ofwal-
		Signature		<u> </u>	711 <u>7</u>		Date Date
1		-	9			The second secon	5-11-07
		Observer Org	<u> </u>	on	- Contracts		3 // 4/
		KSL					
	Certified by Certification						
		EtA				doryan magazini	2-28-07
SINT OCA	TION LINE	L 4 1 1		<del></del>	***		<u> </u>



Source Name:			- 1	Observation Da			Start		End Time
Pov	ver Plar	it at TA-3		5-11-	67	-	10	124.	10:224
Source Location:	TA-3	3-22		Sec Min	0	15	30	45	Comments
Type of Source		Type of Control Equipment	┪	1	_			a	
Boiler#3		No Particulate Control			٥	0	0		
Describe Emission Poin				2	0	$\bigcirc$	0	0	
Height Above Ground	evel #	3 Stack Height Relative to Observer	-	3	٥	0	0	٥	
	Feet	Zoo Feet		4	۵	0	0	O	
Distance From Observe		Direction of Source From Observer		5	6	0	0	0	
75 gacks Description of Plume (s	tack exit or	North West	_	6	0	<b> </b>	٥	<del>  </del>	
□Lofting □Trapping  ENo Plume Present			-			0	<b></b>	0	
Emission Color	Plume Ty	·		7	0	0	0	0	
Vater Droplets Present	Continu	ous	$\dashv$	8	0	0	0	۵	
Water Droplets Fresent ZNO □YES IF YES,		ne is DAttached Detached		9	0	0	0	0	
At what point in the plu				10	٥	0	0	٥	
1 f f & Sta Describe Background (i	e. blue sky	. trees. etc.)	$\dashv$	11		250		Sec. 1	98.00
					1	<b>1</b> 4.4	35.5		
Background Color	42	Sky Conditions			2,725			6.0	Part of the second of
Blue 5 ky S Objection Speed Wind Direction			(F) Brose		b.	9.4	100	100000000000000000000000000000000000000	
mph	(provide f	ronnto, i.e. from North to South)		14 14					
69				alide due b				2.00	
Ambient Temperature		Relative Humidity					2.5		
4/23°F		62 %	_	10.00					
Additional Comments/I	information	ounce in Boils 43							
o o h	). }. ~	earner in Boils 43 w will was PALBO				1		2 = -	the organization is
ou know	a Jen	aby wermen !		18					eranese acesas
				1,10					
Stack SO	URCE I	AYOUT SKETCH		n e		A-1.	10.00		
with Q		Draw Arrow i		Average 10-M		196 E		D	of Opacity Readings
Plume	/ Em	ission North Direction	n	Average to-w		•			Max.
Sun 🕁 😡	LΠP	oint I shall	ı		2%				370 870
Wind —				OBSERVER (	please	print)		Title:	
				Lucu	-6 /	Ú(; )	1/2	1 HIG.	Ofwide Date
_				Signature	p		ممر		Date
			4		2			5-11-02	
				Observer Org	anizati	on			
	OBSERVER'S POSITION			Certified by Certification					
	OBSERVER'S FOSITION								
		3		17B					2-28-07
ł	SUN LOC.	ATION LINE	- 1						



° me Name:	Observation Date Start Time End Time					1 1		
Power Plan	it at TA-3	5-11-07 10:22A				10:32pm		
Source Location:	2 22	Sec					_	
TA-S	Type of Control Equipment	Min	0	15	30	45	Comments	
Bily#3	No Particulate Control		0	0	0	0		
Describe Emission Point (Top of s		2	0	0	0	0		
16P OF Boily#	Height Relative to Observer	3	0	5	5	5		
Height Above Ground Level	Height Relative to Observer  Zow Feet	4	-		<u> </u>	5	G. 4	
Distance From Observer	Direction of Source From Observer		<u>ر</u>	0	٥	<del>                                     </del>		
To year	North west	5	5	5	0	0		
Description of Plume (stack exit or AL ofting Trapping Theopin	ıly)	6	0	0	0	0		
□No Plume Present		7	0	0	0	0		
Black to chear Continu		8	0	٥	0	0		
Water Droplets Present?	me is 🗆 Attached 🗆 Detached	9	Ō	0				
At what point in the plume was op				ļ	0	2		
		10	6	0	$\cup$	0		
Describe Background (i.e. blue sky	r, trees, etc.)	6 11					minds on the second	
Blue Skys Background Color	Sky Conditions	10.5						
Background Color Sky Conditions  Blue Sky Speed Wind Direction		108.5						
. Speed Wind Dire mph (provide)	ection ropeto, i.e. from North to South)	ing propagation						
	F South West Relative Humidity							
Ambient Temperature		15					3.3222	
47.3 °F Additional Comments/Information	6٤ %	16					da Paris .	
Stop take waste	at this time stablize	10						
with thew Bearn	at this film stablizer or Per James on 10:324	18						
<i>w</i>	2 · · · O 4 44 4	E-10.00 (0.0		169 (4) A				
		* 195		į.				
Stack SOURCE I	AYOUT SKETCH	2:020					All and College was the	
Plume	Draw Arrow in North Direction	Average 10-M		Opacity		Range of	f Opacity Readings	
	oint 17 East		. 87	10		- C	% Max. 5%	
Wind —	X Joseph V	OBSERVER (	please	print)		Title:		
		Name: Luca	~8	И.,	$\mathcal{U}'_{i l}$	<u> </u>	operates	
1	Signature	• _				Operater Date 5-11-07		
		1	عے			->	5-11-07	
	Observer Org	anizatí	on					
	OBSERVER'S POSITION	Certified by Certification Date						
	140*	rin				***************************************		
	ATION I INE	LETT_					5-58-02	

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وسمر		
	Los Alamos	
	NATIONAL LABORATORY	

Source Name:			Observation Da	ite /		Start	Time	End Time
Power Pla	nt at TA-3		5/15/07				324	1334
Source Location:		71	Sec	/	T			
	TA-3-22			0.	15	30	45	Comments
Type of Source	Type of Control Equipment		1	0	0	0	0	Lit #4
Boiler # 1	No Particulate Control	┧┟	2					var ver
Describe Emission Point (Top of s				O		$ \mathcal{O} $	C	
Height Above Ground Level	St West Stack Height Relative to Observer	-[ [	3	0	10	0	0	
Feet /5	Feet		4	0	$\sim$			
Distance From Observer	Direction of Source From Observer	<b>1</b>	<u> </u>		9			
200 Yards	NE	┨┞	5	10	0	0	$ \mathcal{O} $	
Description of Plume (stack exit of Loging Trapping Looping	nly) ng □Fanning □Coning		6	0	0	0	0	
□No Plume Present Emission Color Plume Ty		41	7	0	0	0	0	
Black Continu			8	0	75	100	100	
Water Droplets Present?  NO □YES If YES, droplet plu	me is   Attached   Detached		9	100	25	10	5	
At what point in the plume was op	acity determined?	$\  \ $	10	$\bigcirc$	0	$\circ$		Printed to the second s
Describe Background (i.e. blueysky	t Above Stack	┨┞	11					
(7)	n - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	╽┠	12					
Background Color Bue 6/64 Wind Speed Wind Dire	Sky Conditions // Cloudy	<b>/</b>  }	13					
Wind Speed / Wind Dire	ection / rom/to, i.e. from North to South)	1 -	14					
F	om South to North Relative Humidity	$\ \cdot\ $		i				
Ambient Temperature	Relative Humidity %		15					**************************************
Additional Comments/Information:		┪┞	16					
Boiled to	obe Put		17					
1 10	To Run Tarbine		18					
ONFINE	TO ROW TORDING		19		- Translation of the state of t			N .
Stack with SOURCE L	AYOUT SKETCH		20				·	
Plume	Draw Arrow in North Direction		Average 10-M	nute C	pacity			Opacity Readings
Sun $\leftrightarrow$ Eth	ission North Discoulding		10 3	75	0/0	N N	fin. ). 0%	Max.
			OBSERVER (1		print)			10070 Maint.
Wind — \			Vame:	. 1	$\hat{\Delta}$			head
			<u>UKI</u>	AN	UL.	1/2	Α	MAN
l <		٤	Signature	-	1	1	()	Date
\			Du	an	_(	$\angle X$		5/15/07
			Observer Orga				<del></del>	
				K 5	<u> </u>		<del></del>	
OBSERVER'S POSITION			Certified by	- 1				Certification Date
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SINIOCA	ATION LINE						<u>i</u>	

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<ul> <li>Los Alamos</li> </ul>
NATIONAL LABORATORY

Source Name:	Observation Date			Start		End Time
Power Plant at TA-3	5/15/07		1334		1344	
Source Location:	Sec	T/				
TA-3-22	Min	0	15	30	45	Comments
Type of Source Type of Control Equipment  Boiler # 1 No Particulate Control	1	10	0	0	0	
Describe Emission Point (Top of stack, etc.)	2	10	^	$\sim$	-	
TOP OF Most West Stack	<u> </u>	10	$ \mathcal{O} $	$\cup$	$\perp \mathcal{O}$	
Height Above Ground Level Height Relative to Observer	3	10	0	0	0	
150 Feet 150 Feet	4	0	0	0	0	
Distance From Observer Direction of Source From Observer		<del>  _</del> -				Li+#2
200 Yards NE	5	0	0	0	$ \mathcal{O} $	Lit#2 BURNER
Description of Plume (stack exit only)  ■Looping □Fanning □Coning	6	0	0	0	0	
☐No Plume Present	7	0	_			
Emission Color Plume Type		1	-	$\cup$	$ \mathcal{Q} $	
DIACK	8	0	0	0	0	
Water Droplets Present?  NO □YES If YES, droplet plume is □Attached □Detached	9	0	0			
At what point in the plame was onacity determined?	10		00	n		
ONE FOOT Above Stack	<u> </u>		75	10	100	
Describe Background (i.e. bluesky, trees, etc.)	11					
Blue/Gley Sky	12					
Background Color GIEU Sky Conditions 7/4 Cloudy	13					
Wind Speed / Wind Direction /						
mph (provide from/to, i.e. from North to South)	14	, .				
Ambient Temperature Relative Humidity	15	1				
Amorem remperature Relative Humany	16					
Additional Comments/Information:	10					
	17	.]				
	18					
	- <del></del>					
	19	2:				***
Stack with SOURCE LAYOUT SKETCH	20		, f	2000		
Plume Draw Arrow in North Direction	Average 10-N	(linute	Dpacity			f Opacity Readings
Sun Direction North Direction	(0	25	0/2		Ain. O.O	% 100%
	OBSERVER	(please	print)	<u>'</u>	<u> </u>	Maint.
Wind	Name:		$\dot{\mathcal{L}}$		Title:	head.
	Signature	MN	<u> </u>	1/2	<del>^</del>	MAN Date
	Signature 2		d		_)	-/ -/
	1	lave	_(\	$\mathcal{X}$		5/15/07
	Observer Org					· /
		<u>K5</u>	<u>_</u>			
OBSERVER'S POSITION	Certified by	-1		Certification Date		
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	Los Alamos
	NATIONAL LABORATORY
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Source Name:			Observation Da	ate /		Start	Time	End Time
Power Plant at TA-3			5//	5/0	7	13	44	1354
Source Location:			Sec	1	T			
TA-		Min	0	15	30	45	Comments	
Type of Source Boiler # 1	Type of Control Equipment No Particulate Control		1	5	5	0	0	
Describe Emission Point (Top of s		-	2		10		0	
TOP OF MI	ost west Stack		<u> </u>		10			
Height Above Ground Level	Height Relative to Observer		3	0	0	0	0	
150 Feet	150 Feet		4	0	0	0	$\bigcirc$	
Distance From Observer Yards	Direction of Source From Observer		5		0	0	0	
Description of Plume (stack exit or	/	┨╏						
□	ng □Fanning □Coning		6	0	0	0	$\bigcirc$	
□No Plume Present Emission Color Plume Ty	pe    No Plume Present	11	7	10	0	0	0	
Black Continu	lous □ Fugitive Suntermittent	┦╏	8	0		0	0	
Water Droplets Present?  NO □YES If YES, droplet plus	me is DAttached Detached		9	0	$\bigcirc$	$\bigcirc$	0	
At what point in the plume was ope	acity determined?		10	0	0	0	0	
Describe Background (i.e. blueysky	Above Stack	$\left\{ \right\}$	11					
Blue 16	sey SKY		12					
B410/6/24	Background Color Sky Conditions // Cloudy							
Wind Speed / Wind Dire	ection rom/to, i.e. from North to South)	1	13					
f / ' /	om South to North	$\ \cdot\ $	14					
Ambient Temperature	Relative Humidity		15					
Additional Comments/Information:	7.3		16	*.	,			·
			17		***************************************	ĺ		,
			18					
			19					
	AYOUT SKETCH		20	9				
with Plume	Draw Arrow in North Direction	<b> </b>	Average 10-M	inute C	) Dpacity	]   R	ange of	Opacity Readings
Sun $\bigoplus$ Em		_	.25	- %	- 1	fin.	Max.	
Y V	-	OBSERVER (	nlease	nrint)		0.0%	Maint.	
Wind —			Name:	, \			Title:	head,
			<u> </u>	AN	UĽ,	112		MAN
			Signature .			$\mathcal{L}$		Date
`	1		Du	are		$\simeq$		5/15/07
			Observer Orga	anizatio KS				( ' (
	OBSERVER'S POSITION	1	Certified by	W O	<u> </u>		1	Certification Date
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	$\theta$	L	s-11	,				3-13-07
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Source Name:			Observation Date Start Tir			Time	End Time	
Power Plant at TA-3			5/15/07		7	13	54	1404
Source Location:		71	Sec	<del></del>	T	1.9		
1	3-22	┚	Min	0.	15	30	45	Comments
Type of Source Boiler # 1	Type of Control Equipment No Particulate Control		1	0	0	0	0	
Describe Emission Point (Top of s	§	IJÌ	2					
	ost west Stack			$  \bigcirc$	0	0	0	
Height Above Ground Level	Height Relative to Observer	┨╏	3	0	0	0	0	
150 Feet	(50) Feet		4	0		$\mathcal{O}$	$\bigcirc$	
Distance From Observer	Direction of Source From Observer	1 }	<u> </u>	19				
200 Yards	NE		5		$\mathcal{O}$	0	0	
Description of Plume (stack exit or		11	6	0	0	$\circ$	0	
☐ Lofting ☐ Trapping ☐ Looping ☐ Lo	<u> </u>		7		~			·····
Emission Color Plume Ty		] }						
Water Droplets Present?	July Market Miller Control of the Co	┨╏	8	0	0	0	0	***
NO DYES If YES, droplet plus	me is □Attached □Detached		9	0	0	$\circ$	0	
At what point in the plume was opa	acity determined?	$\ \cdot\ $	10			$\overline{\wedge}$		
	- Above Stack	╽┟		0			-	***************************************
Describe Background (i.e. bluesky		$\  \ $	11					
Blue /6) Background Color /	Sky Conditions // O/	$\  \ $	12			ļ		
Blue/G/ey	MOST/4Cloudy		13					
Wind Speed / Wind Dire	rom/to, i.e. from North to South)	╽┟	14					
./ /	om South to North	╟						
Ambient Temperature	Relative Humidity		15					
62.5°	45 %		16					:
Additional Comments/Information:		╽┟	17					
		┞						
			18					
			19		-			
Stack SOURCE L	AYOUT SKETCH	-	20					
with O Plume	Draw Arrow in	-	Average 10-M		nacity	T R	ange of C	Ppacity Readings
E hai		ATVOLUGU TO TAK		pacity	M.	lin.	Max.	
Sun 🕀	oint (	0.0% 0.0% 0.0%						0.0%
Wind —		OBSERVER (please print) Maint.						
		Name: BRIAN OLIZ Title: Lead MAN						MAN
<			Signature	· .		1		ate /
\				un	$\mathcal{C}$	艾	7	5/15/07
	1	Observer Orga	nizatio	n			7-7-	
		_	5					
1	OBSERVER'S POSITION							ertification Date
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SUN LOCA	ATION LINE							



Source Name:	Observation D	ate /		Start	Time	End Time	
Power Plan	5//	5/0	7	14	104	1414	
Source Location:	Sec	<del>-</del> /	T				
TA-		Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1	0	0	0	0	
Boiler # 1	No Particulate Control	2					
Describe Emission Point (Top of s			$\downarrow O$	0	0	Q	
Height Above Ground Level	ST West Stack Height Relative to Observer	3	0	0		0	
Feet	Feet	4					
Distance From Observer	Direction of Source From Observer	4	$\perp \mathcal{O}$		$\bigcirc$	$ \mathcal{O} $	
200 Yards	NE	5	0	$\bigcirc$	$\bigcirc$	0	:
Description of Plume (stack exit or		6					
☐Lofting ☐Trapping ☐Loopin	ng □Fanning □Coning	<u> </u>	10	0	$\mathcal{O}$	$ \mathcal{Q} $	
Emission Color Plume Ty	oe <b>™</b> No Plume Present	7	0	0	0	$\bigcirc$	
None Continu		8	6				
Water Droplets Present?			-	$\mathcal{C}$	$\cup$		
NO □YES If YES, droplet plur	ne is   Attached Detached	9	0	$\bigcirc$	0	0	
At what point in the plume was opa	icity determined?	10	0				
one toot	Above Stack	<u> </u>			-	$\rightarrow$	
Describe Background (i.e. bluesky	, trees, etc.)	11					
	ey SKY	12				l	
Background Color Bue 6/84	Sky Conditions 5 +/4 Cloudy	* · ·					AND THE PROPERTY OF THE PROPER
Wind Speed / Wind Dire	ction	13					
	om/to, i.e. from North to South)	14				.	
1 / 1 / 1	om South to North	15			, ,		
Ambient Temperature	Relative Humidity %	<b>}</b>		-			<u> </u>
62.5 °F Additional Comments/Information:	75	16		-	ĺ		
Additional Comments/Information.		17					
		18					
		19		.			
Stock SOUDCE I	AYOUT SKETCH						
Stack with SOURCE L	<b>!</b>	20	Maria Pa Second			<u></u>	
Plume	Draw Arrow in North Direction	Average 10-M	inute C	pacity		ange of Iin.	Opacity Readings Max.
Sun Emi	0	09	6		0.09	6 0.0%	
777-1		OBSERVER (please print) Maint.					
Wind — \		Name: Rad Title: head					
		Signature /	MN	UR.	1/2	<u> </u>	MAN Date
<b>\</b>		Josephanie Land					
\			was	<u>ر (</u>			7/15/07
		Observer Org		_			
			K5	_			
	OBSERVER'S POSITION	Certified by	- 4				Certification Date
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Source Name:			Observation Date			Start	Time	End Time
Power Plant at TA-3			5//5	5/0	7	14	14	1424
Source Location: TA-3-22		11	Sec		Ţ,		<del>-/</del>	
I		┦╏	Min	0	15	30	45	Comments
Type of Source Boiler # 1	Type of Control Equipment No Particulate Control		1	0	0	$\bigcirc$	0	- Anna Paris Caraca Car
Describe Emission Point (Top of st		$+ \Gamma$	2			$\wedge$		
	st west Stack	1			$\vdash$	$\cup$	0	
Height Above Ground Level	Height Relative to Observer	┨╽	3	0	0	0	0	
/50 Feet	150 Feet		4	0	$\bigcirc$	0	0	
Distance From Observer Yards	Direction of Source From Observer		5	0				
700	NE	┨┠					4	
Description of Plume (stack exit or □Lofting □Trapping □Loopin	nry) ng □Fanning □Coning		6	0	$\Box$	0	$\cup$	
ZiNo Plume Present Emission Color Plume Ty	pe No Plume Present	$\  \ $	7	0	0	0	0	
NONE Continu			8	0	$\overline{\bigcirc}$	$\bigcirc$	$\bigcirc$	
Water Droplets Present? NO □YES If YES, droplet plur	me is   Attached Detached	$\  \cdot \ $	9		X	0		
At what point in the plume was one	acity determined?	┨┠	10			)		
one took	Above Stack	┨├						
Describe Background (i.e. blue sky		$\ \cdot\ $	11					
Background Color	sky Conditions Nostly Cloudy	$\left\{ \left[ \right] \right\}$	12					
Wind Speed   Wind Direction   Word Direction   Wind Direc			13					
mph (provide from/to, i.e. from North to South)			14					
MO MO	om South to North Relative Humidity	┨┞	15					
Ambient Temperature	4.5 %	lŀ	16	<u> </u>	+ -			
Additional Comments/Information:		1  -						
			17					
			18			-		
			19					
	AYOUT SKETCH		20				;	
with Plume	Draw Arrow in North Direction		Average 10-M	inute C	pacity			f Opacity Readings
Sun $\bigoplus$ Emi		0.0% Min. Max. 0% 0.0%						
Y	I	OBSERVER (	please	print)		2.07	Maint.	
Wind — S			Name: Z	آیما	$\widehat{\mathcal{L}}$		Title:	head.
		$\ \cdot\ $	Signature	MN	K	<u> //Z</u>	— т	Date /
1			Signature			1)		Date
\	¥	$\  \ $	I Jua			$\succeq$		215/0/
			Observer Orga	anizatio				ψ <b>\$</b> /
	OBSERVER'S POSITION		Certified by	<u> </u>				Certification Date
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Source Name:	Observation I	Date /		Start		End Time
Power Plant at TA-3	5//	5/0	7	14	24	1434
Source Location:	Sec	1	T .			<u> </u>
TA-3-22	Min	0.	15	30	45	Comments
Type of Source Type of Control Equipment	1	10	0	0	0	
Boiler # 1 No Particulate Control	2	† -				
Describe Emission Point (Top of stack, etc.)	<u> </u>	0	0	0	$\cup$	
TOP OF MOST West Stack Height Above Ground Level Height Relative to Observer	3	0	0	0	0	
reight Adove Ground Level Reight Relative to Observer Feet	4		<u> </u>			
Distance From Observer Direction of Source From Observer	**		0	$\mathcal{O}$	$\mathcal{L}$	
200 Yards NE	5	10	0	0	0	
Description of Plume (stack exit only)	6					
□Lofting □Trapping □Looping □Fanning □Coning	<u> </u>	10	0		$\cup$	
Emission Color Plume Type Plume Present	7		0	0	0	
NONE Continuous Fugitive Continuous	8	1				
Water Droplets Present?		10				
NO DYES If YES, droplet plume is Attached Detached	9	0	0	0	$\bigcirc$	
At what point in the plume was opacity determined?	10	0	0	$\bigcirc$	0	
one foot Above Stack	11					
Describe Background (i.e. blue sky, trees, etc.)  Blue 6124 5Ky						
Background Color / Sky Conditions / / O /	12					
Bue/6/ey Most/4Cloudy	13					
Wind Speed / Wind Direction (provide from/to, i.e. from North to South)						
V2 From South to North	14			<del></del>		
Ambient Temperature Relative Humidity	1.5					
62.5°F 45%	16		:			i i
Additional Comments/Information:	<u> </u>					i i
	17					
	18					
	19	<del>                                     </del>				,
	19	- A				
Stack with SOURCE LAYOUT SKETCH	20					
Plume Draw Arrow in	Average 10-N	linute (	pacity			f Opacity Readings
Sun Brission North Direction	100	0/2			16in. D. 09	Max.
	OBSERVER	(please	nrint)	<u> </u>	<i>J.O<sub>Z</sub></i>	Maint.
Wind	Name:	(P14425-			Title:	read.
	DR.	AN	L	7/2	····	MAN
	Signature	. /		)		Date /
	1 Dias	1	XX/			5/15/07
	Observer Org	anizatio	on			- t - t - t
		K5	1			
OBSERVER'S POSITION	Certified by			·	T	Certification Date
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Source Name:	1 [	Observation Date Start Time					End Time	
Power Plant at TA-3	П	5/15	5/0	7	19	/34	1444	
Source Location:	11	Sec	<b></b>	T	<u> </u>			
TA-3-22		Min	0	15	30	45	Comments	
Type of Source Type of Control Equipment		1	0	0	0	0		
Boiler # 1 No Particulate Control	<b>↓</b> ↾	3	<u> </u>		_			
Describe Emission Point (Top of stack, etc.)  7090 F Most West Stack		2	()	$  \mathcal{O}  $	$\cup$	0		
Height Above Ground Level Height Relative to Observer	11	3	0	0	0	0		
/50 Feet /50 Feet		4	0	0	0			
Distance From Observer  Direction of Source From Observer  Yards		5			<u> </u>			
DE NE	▍├	·		$  \bigcirc$	$\cup$	2		
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning		6	0	0	0	0		
Mo Plume Present Emission Color Plume Type Mo Plume Present		7	0	0	0	0		
NON C Continuous Fugitive Continuent		8	6	0	0			
Water Droplets Present?	╽┟	9			) (	0		
NO DYES If YES, droplet plume is Dattached Detached  At what point in the plume was opacity determined?	╟	· · · · · · · · · · · · · · · · · · ·	2		$\frac{2}{2}$			
ONE FOOT Aboue Stack		10	$\cup$	$\mathcal{C}$	$\bigcirc$	$\cup$		
Describe Background (i.e. bluesky, trees, etc.)		11						
Blue /Gsey Sky  Background Color / Sky Conditions // O/		12						
Bue/6/24 Most/4Cloudy		13						
Wind Speed Wind Direction (provide from/to, i.e. from North to South)	ŀ	14						
From South to North	-		<del> </del>			· · ·		
Ambient Temperature Relative Humidity	_	15	<u> </u>	i.	<u></u>		ę .	
Additional Comments/Information:		16		/				
Additional Common Livers		17				ľ	,	
		18						
		19				-		
Stack SOURCE LAYOUT SKETCH	-	20	i Magazin				· · · · · · · · · · · · · · · · · · ·	
with Q	L		in the C	manita		longs of	One oiths P and in an	
Plume Emission Draw Arrow in North Direction	1	Average 10-Minute Opacity Range of Opacity Read Min. Max.						
Sun point	L	<u> </u>	1/0	)		0.0%	0.0%	
Wind -		OBSERVER (1	pléase	print)			Maint.	
	1	Name: R	41)	()	To	Title:	MAN	
	-	Signature)	7170	7	46	\ T	Date .	
		15	2.1	1 s	$\forall V$	/	distant	
	+	Observer Orga	mizatio	on		, ,	41701	
			K5	1				
OBSERVER'S POSITION	T	Certified by				T	Certification Date	
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Source Name:		1	Observation Da	ate /		Start	Time	End Time
Power Plant at TA-3			5//	5/0	7	14	144	1454
Source Location: TA-3-22		Sec		T.	<b>-</b>			
Type of Source	_	Min	0	15	30	45	Comments	
Boiler # 1	Type of Control Equipment No Particulate Control		1	0	0	0	0	
Describe Emission Point (Top of st	ack, etc.)	1	2	0	0	0	0	
	st west Stack		3			0		
Height Above Ground Level	Height Relative to Observer Feet		· · · · · · · · · · · · · · · · · · ·					
Distance From Observer	Direction of Source From Observer	┨┃	4	0	0	0	$\mathcal{O}$	
200 Yards	NE		5	0	0	0	0	
Description of Plume (stack exit on □Lofting □Trapping □Loopin		11	6	0	0	0	0	
Mo Phyme Present	• •		7	0	0	0	0	
Emission Color Plume Typ			8	0			0	
Water Droplets Present?		1 }				$\frac{\mathcal{O}}{2}$		
NO □YES If YES, droplet plum		] }	9	9	$\mathcal{O}$	$ \mathcal{Q} $	$\mathcal{L}$	
At what point in the plume was opa			10	$\mathcal{O}$	$\mathcal{O}$	0	0	
Describe Background (i.e. bluesky,	trees, etc.)		11					
	Cy Sky Sky Conditions // O/		12					
Blue/G/EU MOST/4Cloudy			13					
Wind Speed Wind Direct mph (provide free	om/to, i.e. from North to South)	<b> </b>	14					
10 Fre	om South to North	$\ \cdot\ $		į.			•.	
Ambient Temperature	Relative Humidity %	$\ \cdot\ $	15		:			
Additional Comments/Information:	73		16				·	
			17					
			18		***************************************	į		
			19					·.
Stack SOURCE L	AYOUT SKETCH		20		ř			
with O Plume	Draw Arrow in		Average 10-M		pacity	R	ange of	Opacity Readings
C (1)	ssion North Direction		000	/2		M	fin.	Max.
T C		OBSERVER (please print)  OBSERVER (please print)						0.0/0
Wind ->		Name: Read						
		DRIAN CLETZ MAN					MAN	
<			Signature	F	1		www.	Date /
/			Cual		<u> </u>			5/15/07
			Observer Orga	nizatio K 5			. —	/ /
	OBSERVER'S POSITION	ľ	Certified by		·····		(	Certification Date
14	10°		ETI	4				3-15-07
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