NEW INDY
CONTAINERBOARD

May 2, 2014

Mr. Dan Searcy
Compliance Manager
Ventura County APCD
669 County Square Drive
Ventura, CA 93003

Re: New-Indy Oxnard, LLC
2013-2014 Annual Title V Certification Package (PTO 0157)

Dear Mr. Searcy:

Enclosed, please find a binder containing the 2013-2014 Title V Certification Forms and related documentation for the New-Indy Oxnard facility. The supporting documentation is included after the last APCD form.

If you have any questions, please feel free to contact Robyn Lebrilla at 805.271.7284.

Respectfully submitted,

Rudy Rehbein
Mill Manager

enc: 2013-2014 Annual Title V Compliance Certification Binder

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NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

SESPE
CONSULTING, INC.

468 Poli Street, Suite 2E • Ventura, California 93001

2013 – 2014 TITLE V COMPLIANCE CERTIFICATION

New-Indy Oxnard, LLC
5936 Perkins Road
Oxnard, California

May 1, 2014

Prepared for:	New-Indy Oxnard, LLC P.O. Box 519 Pt. Hueneme, California 93044
Prepared by:	Sespe Consulting, Inc. 468 Poli Street, Suite 2E Ventura, California 93001 (805) 275-1515

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Requirement ID	Description
6.a. 74.15N3-0157	Boilers, Steam Generators, and Process Heaters – Exemption for Emergency Standby Units.
6.b. 103N5-0157	Stack Monitoring
6.c. STRMLN157- NOx, CO, NH3	Gas Turbine Based Cogeneration Unit; NOx, CO, and NH3 Applicable Requirements – NOx Streamlined.
6.d. STRMLN157-SOx	Gas Turbine Based Cogeneration Unit; SOx Applicable Requirements – Streamlined.
New Requirement	Mandatory GHG Reporting (40CFR 98)
New Requirement	Adhesives and Sealants (Rule 74.20)
7.a. PO0157PC1	General Recordkeeping Requirements.
7.b. PO0157PC1	Solvent Cleaning Additional Requirements.
7.c. PO0157PC1	Stationary Gas Turbine Path Cleaning Solvent Use
7.d. PO0157PC2	Turbine NOx and CO Emissions Limits.
7.e. PO0157PC2	Turbine and Duct Burner Natural Gas Only Requirement.
7.f. PO0157PC2	Nebraska Boiler and Turbine Simultaneous Operation Limits.
7.g. PO0157PC2	Nebraska Boiler NOx Emissions Limits.
7.h. PO0157PC2	Nebraska Boiler NOx and Oxygen Continuous Monitoring Requirements.
7.i. PO0157PC2	Nebraska Boiler Fuel Oil Limitations.
7.j. PO0157PC2	Recordkeeping Requirements for the Nebraska Boiler Fuel Oil Limitations.
7.k. PO0157PC2	Recordkeeping Requirements for the Maxon Duct Burner.
8.a. Rule 50	Opacity.
8.b. Rule 54.B.1	Sulfur Compounds – SOx at Point of Discharge.
8.c. Rule 54.B.2	Sulfur Compounds – SOx at or Beyond Property Line.
8.d. Rule 55	Fugitive Dust

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ANNUAL COMPLIANCE CERTIFICATION
SIGNATURE COVER FORM

A copy of each Annual Compliance Certification shall be submitted to EPA, Region 9, at the following address:

Mr. Gerardo Rios, Chief
Permits Office (AIR-3)
Office of Air Division
EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Confidentiality

All information in a Part 70 permit compliance certification is public information. The Part 70 permit is also public information.

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this compliance certification are true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Title: Mill Manager	5/2/2014

Time Period Covered by Compliance Certification

04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

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Section 1 Signature Cover Form

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Section 2 Deviation Summary Forms

Deviation Summary Table

Date	Breakdown/Event	Comment
April 5, 2013	Nebraska Start-up Failure	Unit attempted to start for a total of one-hour.
May 15, 2013	Nebraska Start-up	During scheduled maintenance shutdown it was discovered that the turbine's hot section was damaged and needed repair off-site.
May 18, 2013	Cold Start-up of Lease Turbine	Ammonia pressure valve failure caused excess NOx during cold start stabilization period.
June 26, 2013	PI data loss	Server was rebooted to allow for network address change coincidentally with start-up of cogen.
July 3, 2013	Corrupted data	Spike in gas use caused by corrupted data from HMI 2 (GE) and the AC 450 on node 12.
September 25, 2013	Nebraska Start-up	Boiler was fired for maintenance check after undergoing boiler tube repairs.
October 8, 2013	Low Inlet NOx Emissions	NOx emission reverted to expected levels after replacing the inlet NOx sample valve.
October 15, 2013	Nebraska Start-up	Replace lease turbine with Mill turbine back from repair off-site.
October 15, 2013	Nebraska CEMS failed O_2 Calibration	Sample probe malfunction due to high temperature resolved by adding blower to cool area.
November 22, 2013	Nebraska Start-up	Boiler was fired to repair the cogen boiler tube leak on the economizer.
December 1, 2013	PI data loss	Power disturbance brought down network.
December 11, 2013	PI data loss	Network connection loss including distributed control system (DCS) and PI interface.
January 8, 2014	Low Inlet NOx Emissions	NOx emission reverted to expected levels after replacing the fitting on the pressure side of the inlet sample line.
February 17, 2014	PI data loss	Voltage drop due to SCE power issue resulted in momentary loss of data between Mark V turbine control system and the DCS.
February 27, 2014	PI data loss	Modbus system failure resulted in momentary loss of data communication.
March 6, 2014	PI data loss	Configuration settings of the new Human Machine Interface were amended to include redundant back-up of Modbus signals.

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DEVIATION SUMMARY FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
7.f. PO00157PC2	Nebraska Boiler	Begin: 4/5/13, 7:07 AM End: 4/5/13, 11:49 PM When Discovered: Date & Time 4/5/13, 7:07 AM
D. Parameters monitored: Simultaneous operation	E. Limit: 3 hours during cogen start up or shutdown.	F. Actual: 1 hour
G. Probable Cause of Deviation: Boiler did not start.	H. Corrective actions taken: Repair boiler.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
7.f. PO00157PC2	Nebraska Boiler	Begin: 5/15/13, 8:45 PM End: 5/15/13, 8:45 PM When Discovered: Date & Time 5/15/13, 8:45 AM
D. Parameters monitored: Simultaneous operation.	E. Limit: 3 hours during cogen start up or shutdown.	F. Actual: 0 hours
G. Probable Cause of Deviation: During scheduled maintenance shutdown discovered turbine hot section needed repair off-site.	H. Corrective actions taken: Arrange for installation of lease turbine which started up May 18 at 6:16 PM.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
6.c. STRMLN0157- NOx, CO, NH3	Cogeneration Unit	Begin: 5/18/13, 6:18 PM End: 5/18/13, 10:18 PM When Discovered: Date & Time 5/18/13, 6:18 PM
D. Parameters monitored: NOx	E. Limit: 12 hour cold startup.	F. Actual: 4 hours
G. Probable Cause of Deviation: Ammonia pressure valve failure.	H. Corrective actions taken: Valve replaced.	

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Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
6.c. STRMLN157-NOx, CO, NH3	Cogeneration CEMS	Begin: 6/26/13, 8:12 AM End: 6/26/13, 9:39 AM When Discovered: Date & Time 6/26/13, 8:12 AM
D. Parameters monitored:	**E. Limit:**	**F. Actual:**
Intermittence	96 hours to fix CEMS breakdown (Rule 32).	1.45 hours.
G. Probable Cause of Deviation:	**H. Corrective actions taken:**	
IP/New Indy network separation project interrupted communication.	Reboot server to allow for a network address change	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
6.c. STRMLN157-NOx, CO, NH3	Cogeneration CEMS	Begin: 7/3/13, 6:00 AM End: 7/3/13, 7:00 AM When Discovered: Date & Time 7/3/13, 7:00 AM
D. Parameters monitored:	**E. Limit:**	**F. Actual:**
Intermittence	96 hours to fix CEMS breakdown (Rule 32).	1.5 minutes.
G. Probable Cause of Deviation:	**H. Corrective actions taken:**	
Corrupted turbine gas use data from from HMI 2(GE) and the AC450 on node 12.	Filtered turbine gas use data to exclude corrupted data from permit compliance calculations.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
7.f. PO00157PC2	Nebraska boiler	Begin: 9/25/13, 7:07 PM End: 9/25/13, 7:24 PM When Discovered: Date & Time 9/25/13, 7:07 PM
D. Parameters monitored:	**E. Limit:**	**F. Actual:**
Simultaneous operation.	3 hours during cogen start up or shutdown.	17 minutes.
G. Probable Cause of Deviation:	**H. Corrective actions taken:**	
Maintenance check after undergoing tube repairs.	None.	

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DEVIATION SUMMARY FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
6.c. STRMLN157-NOx, CO, NH3	Cogeneration CEMS	Begin: 10/8/13, 10:30 AM End: 10/9/13, 3:00 PM When Discovered: Date & Time 10/9/13, 8:30 AM
D. Parameters monitored: Intermittence.	E. Limit: 96 hours to fix CEMS breakdown (Rule 32).	F. Actual: 28.5 hours
G. Probable Cause of Deviation: Faulty sample valve restricted air flow to NOx probe.	H. Corrective actions taken: Replaced sample valve.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
7.f. PO00157PC2	Nebraska boiler	Begin: 10/15/13, 4:17 AM End: 10/15/13, 7:00 AM When Discovered: Date & Time 10/15/13, 4:17 AM
D. Parameters monitored: Simultaneous operation.	E. Limit: 3 hours during cogen start up or shutdown.	F. Actual: 2.72 hours for shutdown and start up.
G. Probable Cause of Deviation: Replace lease turbine with Mill turbine back from off-site repair.	H. Corrective actions taken: None.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
7.h. PO00157PC2	Nebraska boiler CEMS	Begin: 10/15/13, 11:22 AM End: 10/15/13, 6:07 PM When Discovered: Date & Time 10/15/13, 11:22 AM
D. Parameters monitored: Intermittence	E. Limit: 96 hours to fix CEMS breakdown (Rule 32).	F. Actual: 6.75 hours.
G. Probable Cause of Deviation: Probe affected by heat.	H. Corrective actions taken: Install blower to cool probe and shut down boiler on October 17 at 11:00 AM.	

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DEVIATION SUMMARY FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
7.f. PO00157PC2	Nebraska boiler	Begin: 11/22/13, 3:35 PM End: 11/22/13, 8:08 PM When Discovered: Date & Time 11/22/13, 3:30 PM
D. Parameters monitored: Simultaneous operation.	E. Limit: 3 hours during cogen start up or shutdown.	F. Actual: 23 minutes.
G. Probable Cause of Deviation: Repair cogen boiler tube leak on the economizer.	H. Corrective actions taken: None.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
6.c. STRMLN157-NOx, CO, NH3	Cogeneration CEMS	Begin: 12/1/13, 6:52 AM End: 12/1/13, 4:28 PM When Discovered: Date & Time 12/1/13, 2:00 PM
D. Parameters monitored: Intermittence	E. Limit: 96 hours to fix CEMS breakdown (Rule 32).	F. Actual: 9.6 hours.
G. Probable Cause of Deviation: Power disturbance brought down network in server room.	H. Corrective actions taken: Reboot firewalls and servers.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
6.c. STRMLN157-NOx, CO, NH3	Cogeneration CEMS	Begin: 12/11/13, 6:06 AM End: 12/11/13, 8:10 PM When Discovered: Date & Time 12/11/13, 6:06 AM
D. Parameters monitored: Intermittence.	E. Limit: 96 hours to fix CEMS breakdown (Rule 32).	F. Actual: 1.32 hours.
G. Probable Cause of Deviation: Total electrical power outage tripped cogen and breaker.	H. Corrective actions taken: Reset breaker and restart cogen and CEMS.	

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DEVIATION SUMMARY FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
6.c. STMLN157- NOx, CO, NH3	Cogeneration CEMS	Begin: 1/8/14, 12:40 PM End: 1/8/14, 3:10 PM When Discovered: Date & Time 1/8/14, 2:30 PM
D. Parameters monitored: Intermittence	E. Limit: 96 hours to fix CEMS breakdown (Rule 32).	F. Actual: 2.5 hours.
G. Probable Cause of Deviation: Loose fitting connection at the pressure side of the inlet NOx sample line.	H. Corrective actions taken: Replaced fitting.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
6.c. STRMLN157- NOx, CO, NH3	Cogeneration CEMS	Begin: 2/17/14, 2:53 PM End: 2/17/14, 3:00 PM When Discovered: Date & Time 2/17/14, 2:53 PM
D. Parameters monitored: Intermittence.	E. Limit: 96 hours to fix CEMS breakdown (Rule 32).	F. Actual: 7 minutes.
G. Probable Cause of Deviation: Voltage drop in Mill due to SCE power issue.	H. Corrective actions taken: None.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
6.c. STRMLN157- NOx, CO, NH3	Cogeneration CEMS	Begin: 2/27/14, 1:20 AM End: 2/27/14, 1:35 AM When Discovered: Date & Time 2/27/13, 3:00 AM
D. Parameters monitored: Intermittence.	E. Limit: 96 hours to fix CEMS breakdown (Rule 32).	F. Actual: 15 minutes.
G. Probable Cause of Deviation: Modbus system.	H. Corrective actions taken: Considering upgrade to modbus system	

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A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time Begin: 3/6/14, 10:52 PM End: 3/7/14, 8:35 AM When Discovered: Date & Time 3/6/14, 11:42 PM
6.c. STMLN157- NOx, CO, NH3	Cogeneration CEMS	
D. Parameters monitored: Intermittence	E. Limit: 96 hours to fix CEMS breakdown (Rule 32).	F. Actual: 9.72 hours.
G. Probable Cause of Deviation: Modbus data not updating due to installation of new Human Machine Interface (HMI).	H. Corrective actions taken: Amended configuration of new HMI to allow for redundant back up of Modbus signals.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time Begin: End: When Discovered: Date & Time
D. Parameters monitored:	E. Limit:	F. Actual:
G. Probable Cause of Deviation:	H. Corrective actions taken:	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time Begin: End: When Discovered: Date & Time
D. Parameters monitored:	E. Limit:	F. Actual:
G. Probable Cause of Deviation:	H. Corrective actions taken:	

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Section 3 Source Test Summary Forms

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ANNUAL COMPLIANCE CERTIFICATION

SOURCE TEST SUMMARY FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Emission Unit Description:			B. Pollutant:
Gas turbine based cogeneration unit			NOx
C. Measured Emission Rate:	**D. Limited Emission Rate:**	**E. Specific Source Test or Monitoring Record Citation:**	**F. Test Date:**
10.9 ppm @ 15% O2	12 ppm @ 15% O2	AirX Source Test	3/25/2014

A. Emission Unit Description:			B. Pollutant:
Gas turbine based cogeneration unit			NH3
C. Measured Emission Rate:	**D. Limited Emission Rate:**	**E. Specific Source Test or Monitoring Record Citation:**	**F. Test Date:**
3.4 ppm @ 15% O2	20 ppm @ 15% O2	AirX Source Test	3/25/2014

A. Emission Unit Description:			B. Pollutant:
Gas turbine based cogeneration unit			CO
C. Measured Emission Rate:	**D. Limited Emission Rate:**	**E. Specific Source Test or Monitoring Record Citation:**	**F. Test Date:**
16.43 lbs/hr	59.65 lbs/hr	AirX Source Test	3/25/2014

A. Emission Unit Description:			B. Pollutant:
Gas turbine based cogeneration unit			NOx
C. Measured Emission Rate:	**D. Limited Emission Rate:**	**E. Specific Source Test or Monitoring Record Citation:**	**F. Test Date:**
45.74 tons/year calculated by CEMS	50 tons/year	AirX RATA Test to confirm CEMS data.	3/25/2014

A. Emission Unit Description:			B. Pollutant:
Gas turbine based cogeneration unit			CO
C. Measured Emission Rate:	**D. Limited Emission Rate:**	**E. Specific Source Test or Monitoring Record Citation:**	**F. Test Date:**
62.9 tons/year calculated by CEMS.	97.66 tons/year	AirX RATA Test to confirm CEMS data.	3/25/2014

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SOURCE TEST SUMMARY FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Emission Unit Description:			B. Pollutant:
Nebraska Boiler (stand-by only, natural gas only)			NOx
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:
52 ppm @ 3% O2	74 ppm @ 3% O2	West Coast Environmental	12/22/94

A. Emission Unit Description:			B. Pollutant:
Nebraska Boiler (stand-by, fuel oil only)			NOx
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:
not applicable	67 ppm @ 3% O2	n/a, not operated on fuel oil.	n/a

A. Emission Unit Description:			B. Pollutant:
Maxon Duct Burner			NOx
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:
0.92 tons/year	1.90 tons/year	West Coast Environmental	8/17/95

A. Emission Unit Description:			B. Pollutant:
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:

A. Emission Unit Description:			B. Pollutant:
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:

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Section 4 Permit Attachment Forms

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PERMIT ATTACHMENT FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 6.a.74.15N3-0157	D. Frequency of monitoring: Continuous
B. Description: Rule 75.15.C.3. Boilers, Steam Generators, and Process Heaters - Exemption for Emergency Stand-by Units	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Hour meter and CEMS. Nebraska unit operated on 9 days and so no tune-up was performed.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 6.b.103N5-0157	D. Frequency of monitoring: Continuous
B. Description: Rule 103, Stack Monitoring - Nebraska Boiler	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Fuel meter and CEMS. Maximum rolling 12-month capacity factor is 1.09% and unit remains exempt from 103.A.2.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 6.c.STRMLN157-NOx,CO,NH3	D. Frequency of monitoring: Continuous
B. Description: Gas Turbine Based Cogeneration Unit; NOx, CO, NH3 Applicable Requirements - NOx Streamline	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: EPA Method 20, ARB Method 100 BAAQMD Method ST-1B
C. Method of monitoring: Annual source test and CEMS for fuel use, NOx, CO, O2, NH3, and control system operating parameters.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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PERMIT ATTACHMENT FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 6.d. STRMLN157-SOx	D. Frequency of monitoring: Continuous
B. Description: Gas Turbine Based Cogeneration Unit; SOx Applicable Requirements - Streamlined	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: EPA Method 6, 6A, 6C, 15, 16A, 16B, or SCAQMD 307-94
C. Method of monitoring: Facility burns PUC quality gas only. Annual source test would be required if non-PUC quality gas were used.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: New Requirement	D. Frequency of monitoring: Continuous and monthly
B. Description: Mandatory Greenhouse Gas Reporting (40 CFR 98)	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Natural gas consumption by fuel meters, CEMS, and invoices from gas company.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: New Requirement	D. Frequency of monitoring: Monthly
B. Description: Rule 74.20 - Adhesives and Sealants	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Maintain records of quantity and ROC content for each adhesive purchased to document emissions less than 200 lb/yr.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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PERMIT ATTACHMENT FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 7.a. PO00157PC1	D. Frequency of monitoring: Continuous
B. Description: General Recordkeeping Requirements	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Monthly records of throughput and consumption.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 7.b. PO00157PC1	D. Frequency of monitoring: Continuous
B. Description: Solvent Cleaning Additional Requirements	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Monthly records of solvent purchases. MSDS provided for new materials in Section 5 (LPS Chainmate and LPS LST).	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 7.c. PO00157PC1	D. Frequency of monitoring: continuous
B. Description: Stationary Gas Turbine Gas Path Cleaning Solvent Use	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Maintain solvent information. No cleaning activities occurred during permit year.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 7.d. PO00157PC2	D. Frequency of monitoring: Continuous
B. Description: Turbine NOx and CO Emissions Limits	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Monthly calculations based upon NOx and CO hourly emissions from CEMS.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 7.e. PO00157PC2	D. Frequency of monitoring: Continuous
B. Description: Turbine and Duct Burner Natural Gas Only Requirement	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Fueled by natural gas only.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 7.f. PO00157PC2	D. Frequency of monitoring: Continuous
B. Description: Nebraska Boiler and Turbine Simultaneous Operation Limits	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Annual compliance certification and records of operation of the Boiler.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

Ventura County Air Pollution Control District

ANNUAL COMPLIANCE CERTIFICATION
PERMIT ATTACHMENT FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 7.g. PO00157PC2	D. Frequency of monitoring: Continuous, Daily
B. Description: Nebraska Boiler NOx Emissions Limits	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: CEMS for fuel consumption, NOx and oxygen. Daily zero and span drift checks when boiler is in operation.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 7.h. PO00157PC2	D. Frequency of monitoring: Continuous, Daily
B. Description: Nebraska Boiler NOx and Oxygen Continuous Monitoring Requirements.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: CEMS for fuel consumption, NOx and oxygen. Daily zero and span drift checks when boiler is in operation.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 7.i. PO00157PC2	D. Frequency of monitoring: Continuous
B. Description: Nebraska Boiler Oil Limitations	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: ASTM Method D4294-83 or D2622-87
C. Method of monitoring: No diesel fuel was burned. If fuel oil is burned, then record: the reason for firing fuel oil; delivery dates and amounts; and fuel sulfur content.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

Ventura County
Air Pollution
Control District

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PERMIT ATTACHMENT FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 7.j. PO00157PC2	D. Frequency of monitoring: Continuous
B. Description: Recordkeeping Requirements for the Nebraska Boiler Fuel Oil Limitations	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable ASTM Method D4294-83 or D2622-87
C. Method of monitoring: No diesel fuel was burned. If fuel oil is burned, then record: the reason for firing fuel oil; delivery dates and amounts; and fuel sulfur content.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 7.k. PO00157PC2	D. Frequency of monitoring: Continuous
B. Description: Recordkeeping Requirements for the Maxon Duct Burner	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable n/a
C. Method of monitoring: Monitor time and duration of the Maxon Burner's use, and fuel consumption.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 8.a. Rule 50	D. Frequency of monitoring: Quarterly
B. Description: Opacity	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable EPA Method 22
C. Method of monitoring: Stack opacity routinely observed. Observations on 5/21/13, 8/15/13, 11/21/13, and 2/10/14 are formally documented.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 04 / 01 /13 (MM/DD/YY) to 03 / 31 /14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 8.b. Rule 54.B.1	D. Frequency of monitoring: Continuous
B. Description: Sulfur Compounds - SOx at Point of Discharge	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Follow Rule 64 monitoring requirements. Compliance with Rule 64 ensures compliance with this rule based on District analysis.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 8.c. Rule 54.B.2	D. Frequency of monitoring: Continuous
B. Description: Sulfur Compounds - SOx at or Beyond Property Line	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Compliance by use of PUC quality natural gas as discussed in District memo (5/23/96)	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C *H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 8.d. Rule 55	D. Frequency of monitoring: Continuous
B. Description: Fugitive Dust	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: EPA Methods 9 and 22
C. Method of monitoring: There are no operations, disturbed surface areas or man-made conditions at this stationary source that are subject to Rule.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 8.e. Rule 57.1	D. Frequency of monitoring: Continuous
B. Description: Particulate Matter Emissions from Fuel Burning Equipment	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Compliance assured based on District analysis (12/3/97).	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 8.f. Rule 64.B.1	D. Frequency of monitoring: Continuous
B. Description: Sulfur Content of Fuels - Gaseous Fuel Requirements	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: SCAQMD Method 307-94 or ASTM Method D1072-90
C. Method of monitoring: Monitor source of natural gas and perform source test annually if non-PUC gas is burned.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 8.g. Rule 64.B.2	D. Frequency of monitoring: Continuous
B. Description: Sulfur Content of Fuels - Liquid Fuel Requirements	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: ASTM Method D4294-83 or D2622-87
C. Method of monitoring: Monitor type of fuel burned and obtain a fuel supplier certification or fuel test per each delivery.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 8.h. Rule 74.6 (2003)	D. Frequency of monitoring: Continuous
B. Description: Surface Cleaning and Degreasing	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Maintain current solvent information. Routine surveillance of solvent cleaning activities. Solvent testing upon request.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 8.i. Rule 74.11.1	D. Frequency of monitoring: Continuous
B. Description: Large Water Heaters and Small Boilers	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Facility did not install an affected unit (between 75,000 BTU/hr and 2,000,000 BTU/hr).	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 8.j. Rule 74.22	D. Frequency of monitoring: Continuous
B. Description: Natural Gas-Fired, Fan Type Central Furnaces	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Maintain furnace identification. Rule only applies to future installs.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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PERMIT ATTACHMENT FORM

Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 9.a. Rule 74.1	D. Frequency of monitoring: Continuous
B. Description: Abrasive Blasting	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Routine surveillance and visual inspections. CD Lyon Construction, Inc. (PTO 7141) performs abrasive blasting at the facility.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 9.b. Rule 74.2	D. Frequency of monitoring: Continuous
B. Description: Architectural Coatings	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Routine surveillance and visual inspections. CD Lyon Construction, Inc. (PTO 7141) performs architectural coating activities at the facility.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 9.c. 40CFR61.M	D. Frequency of monitoring: Continuous
B. Description: Asbestos NESHAPS	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: X
C. Method of monitoring: Follow inspection, recordkeeping, and notification procedures from 40CFR61.145.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 10.a. Part 70 General	D. Frequency of monitoring: Continuous
B. Description: Part 70 Permit General Conditions	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Throughput and emissions limits; other requirements of the permit; notification; permit modification and renewal; and reporting requirements.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 10.b. PO General	D. Frequency of monitoring: Continuous
B. Description: Permit to Operate General Conditions	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: The facility operated in compliance with these requirements including postings.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 11.a 40CFR68RMP-157	D. Frequency of monitoring: Continuous
B. Description: Accidental Release Prevention and Risk Management Plans	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: The facility is exempt from federal regulation based on quantity stored. State plan was updated in 2011 in coordination with Oxnard Fire Dept.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 11.b 40CFR82	D. Frequency of monitoring: Continuous
B. Description: Protection of Stratospheric Ozone	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Facility did not conduct activities subject to this regulation.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 11.c.1 SHIELD-D,Da,Db,Dc	D. Frequency of monitoring: Continuous
B. Description: Permit Shield for 40CFR60, Subparts D, Da, Db, and Dc	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Facility did not modify or install equipment that would trigger these requirements. Therefore, this permit shield remains in effect.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 11.c.2. SHIELD-60KKKK	D. Frequency of monitoring: Continuous
B. Description: 40CFR60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Facility did not modify or install equipment that would trigger these requirements. Therefore, this permit shield remains in effect.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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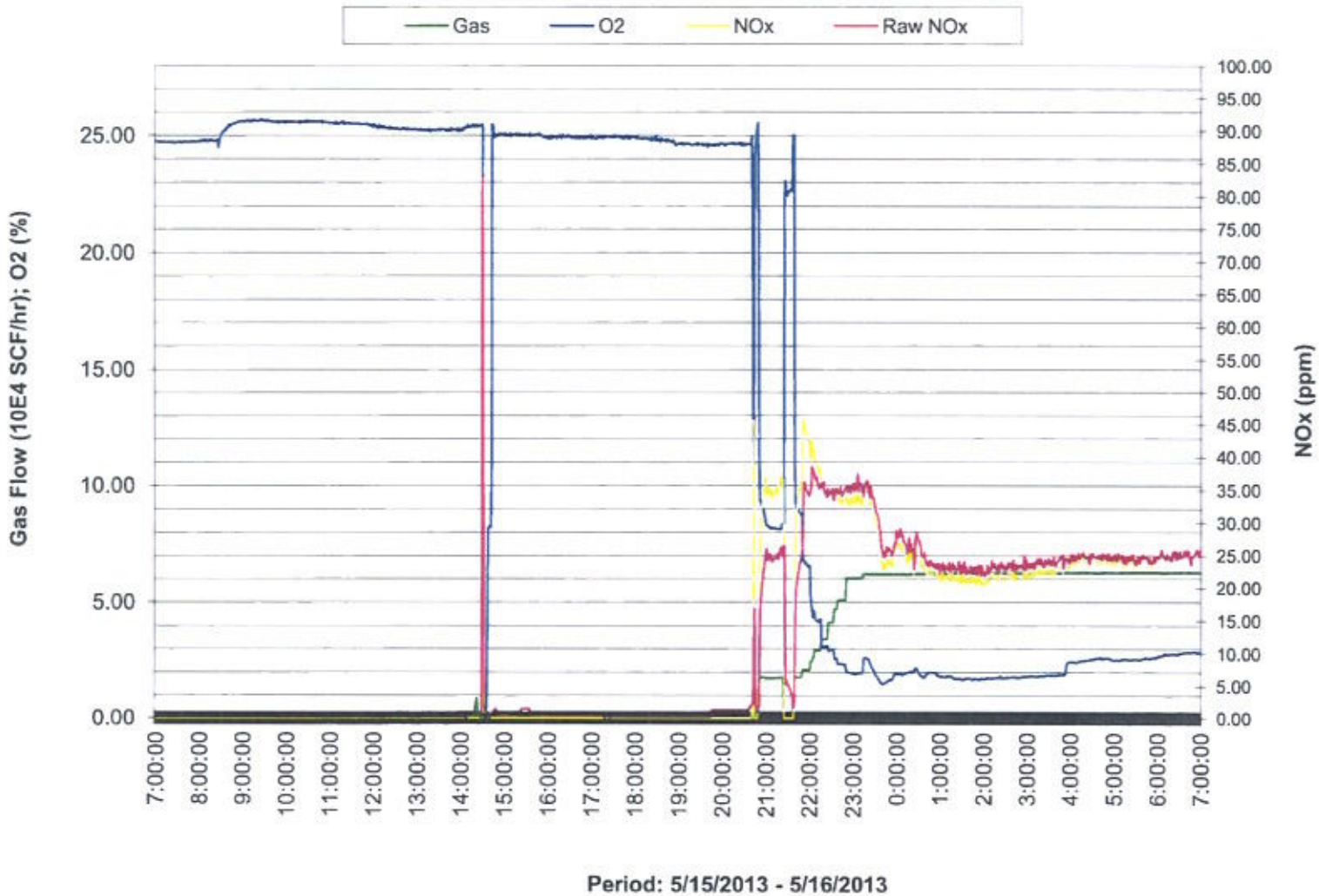
Period Covered by Compliance Certification: 04 / 01 / 13 (MM/DD/YY) to 03 / 31 / 14 (MM/DD/YY)

A. Attachment # or Permit Condition #: 11.c.3 SHIELD-63YYYY	D. Frequency of monitoring: Continuous
B. Description: National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Emissions of Hazardous Air Pollutants remain less than major source thresholds (10 tpy single HAP, 25 tpy combined HAPs).	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

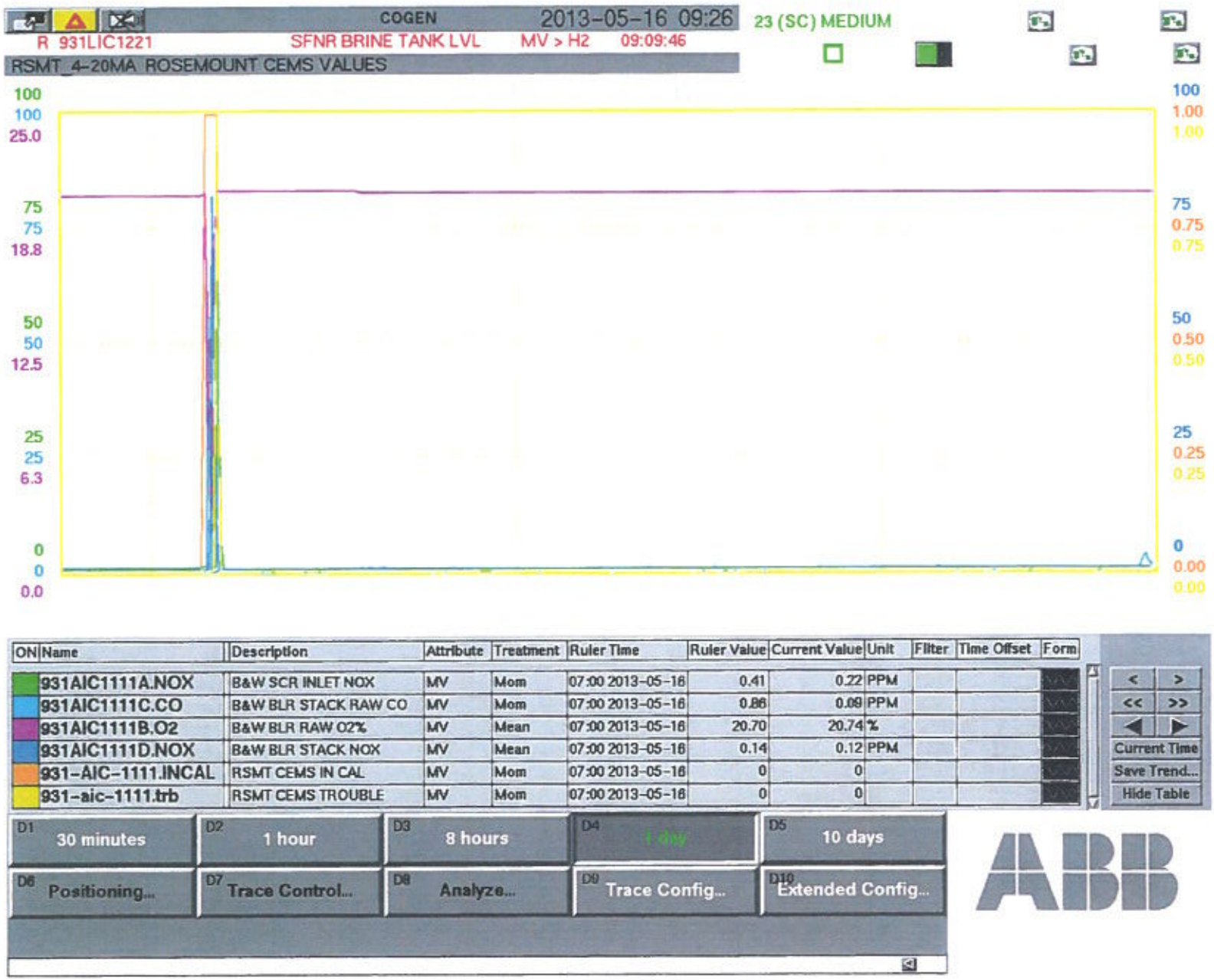
A. Attachment # or Permit Condition #: 11.c.4 SHIELD-Engines	D. Frequency of monitoring: Annual and continuous during operation
B. Description: Permit Shield for 40CFR60 Subparts JJJJ and 40CFR63 Subpart ZZZZ	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: Facility did not modify or install equipment subject to the NSPS JJJJ. Non-resettable hour meter and reasons for operation as needed to qualify for this permit shield.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 11.c.5 SHIELD-40CFR72-78	D. Frequency of monitoring: Continuous
B. Description: Permit Shield for 40CFR Parts 72 through 78	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: n/a
C. Method of monitoring: The facility supplied less than 219,000 MW-hr/yr to any utility power distribution system. Therefore, this permit shield remains in effect.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

Nebraska Boiler - Daily Environmental Report



Period: 5/15/2013 - 5/16/2013


COGEN
2013-05-16 09:26
23 (SC) MEDIUM
R 931LIC1221
SFNR BRINE TANK LVL
MV > H2
09:09:46
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 07:00 2013-05-16 0.41 0.22 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 07:00 2013-05-16 0.86 0.09 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 07:00 2013-05-16 20.70 20.74 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 07:00 2013-05-16 0.14 0.12 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 07:00 2013-05-16 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 07:00 2013-05-16 0 0
<
>
<<
>>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR NAME: H. Hoang

DRY SHIFT OPERATOR NAME: Van Tandt

Huhtamaki Paper Mill

SAFETY IS ALWAYS NO. 1

DATE: 5-15-13

CHEMICAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	MEGAWATTS
CURRENT	084320430	52898206	62508178	6	30	1898460	1566360	249868	1385	/	89198
PREVIOUS	084052570	52836680	62482546	8	8	1866350	1566360	216230	834		89198

NEW DEMIN TRAILER YES NO TIME:

NEBRASKA ONLINE TIME FROM: TO:

AMMONIA DELIVERY YES NO % FULL:

NEBRASKA WARM STORAGE CHECK YES NO

GAS & ELECTRIC READING

TURBINE

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR %												
Inlet Temp °F												
Humidity %												
Vibration (Max) MILS												
Steam Injection #/SEC												
Turbine L.O. Level %												
T48 °F												

BATTERIES V HP RECOUPE FAL

AIR INLET DIFF IN/H20 HP RECOUPE FAR

L.O. DIFFERENTIAL PSI HP RECOUPE AFT

BATTERIES V HP RECOUPE FAL

AIR INLET DIFF IN/H20 HP RECOUPE FAR

L.O. DIFFERENTIAL PSI HP RECOUPE AFT

GENERATOR

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain °F												
L.O. Supply °F												
Gen. Vibration (Max) IPS												
Tie Line MW												

GEN. AMPS GEN.VARS MEGA VARS

FIELD AMPS FIELD VOLTS V

COOLING TWR INLET F COOLING TWR INLET F

GEN. AMPS GEN.VARS MEGA VARS

FIELD AMPS FIELD VOLTS V

COOLING TWR INLET F COOLING TWR INLET F

COGEN BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp °F												
HP Drum Level IN												
LP Drum Level IN												
HP Drum Pressure PSI												
LP Drum Pressure PSI												
CO PPM												
NOX PPM												
O2 %												
Hot Well Level %												

DOWN

1150 SET POINT 1103 B SET POINT

SCANNER BLOWER (ON) Y/N DUCT BURNER SP

1150 SET POINT 1103 B SET POINT

SCANNER BLOWER ON Y/N DUCT BURNER S.P.

COMPRESSORS

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator PSI												
Gas Receiver PSI												

NEBRASKA BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level IN								50%	45%	47%	48%	48%
Drum Pressure PSI								200	200	280	290	290
Steam Flow #/HR								84156ED	84120911	843WD	84266	84166
Steam Temp °F												
NOX PPM								35.2	34.3	20.2	21.7	23.2
O2 %								3.10	2.53	1.75	1.82	2.55
Blow Down Conductivity MHOS												

ON LINE TURBINE WATER WASH YES NO CONDUCTIVITY MHOS BOILER FEED WATER PUMP OPERATION NO. 1 YES NO NO. 2 YES NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP–pH 8.5 –9.5		
Conductivity<20mmhos		
LP–pH 8.5–9.5		
Conductivity<20mmhos		
HP		
pH 9.5 – 10.5		
Conductivity 75–150		
Phosphate 5–15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 – 10.5		
Conductivity 75 – 150		
Phosphate 5–15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 – 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:

ADED CaCl2 to Neb

STARTED AT 20:45 / FIRED OUT AT 21:30

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident Turbine LM2500 plus hot section damage		Incident Date 5/15/13
Exact Location Incident Cogen		
Reported By C. Wilson	Estimated Start and Stop Times of Incident: @2045	Possible Cause: start up Nebraska Blr

Incident Type: ☐ Spill Internal ☐ Improper Waste Disposal ☐ Spill External ☐ Near miss or below spill release guidelines X Air Emission ☐ Other_____	Released To ☐ Storm Water System ☐ Secondary Containment ☐ Process Sewer X Air ☐ Ground (External) ☐ Ground (Inside Mill Property) ☐ Near Miss ☐ Other_____

Detailed Description of Event

On 14 Apr= borescope of turbine LM 2500+ found damage to Hot section - making it unserviceable.

APCD was contacted @2045 5/15/13 on start-up of Nebraska boiler. Message left by C. Wilson.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
☐ _____ Gallons ☐ _____ Pounds ☐ Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.) APCD @ 2045*
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Lars Gustavson, Rudy Rehbein, Robyn Lebrilla , Victor Kumpera	Any Acute or Chronic Health Risks *(refer to MSDS)N/A*
Describe Any Emergency Response Actions N/A	

Suggestions to Prevent Reoccurrence	Estimated Completion Date
1.	1.
2.	2
3.	3.
4.	4.

Root Cause after investigation Maintenance issue- reported to APCD- start up of Nebraska Boiler.	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ☐ 1 ☐ 2 ☐ 3 ☐ 4
Investigated By: Charlie Wilson	Investigated Date 5/15/13

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
Department Manager 5/16/13	Technical Superintendent 5/16/2013	Mill Manager

Print Time: 5/16/2013 11:21:05 AM

Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

May 21, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Turbine start-up – May 18, 2013

Dear Mr. Olson:

This letter is a follow up on the call made by Charlie Wilson to the VCAPCD Breakdown Center Hotline on May 18, 2013 at about 8:45 PM.

During the scheduled maintenance shutdown on May 14, it was discovered that the turbine's hot section was damaged. The turbine was pulled out for offsite repair and the Nebraska boiler was fired up while waiting for the lease turbine. The lease turbine arrived in the mill on May 17 and was started-up on May 18 at 6:16 PM. During the start-up, the NOx emission was high for 4 hours and O2 was at 17% to 18% range. Troubleshooting revealed that the ammonia pressure regulator had failed. After replacing the failed pressure regulator, the ammonia flow was operated back in automatic control for NOx. For O2 issue, the CEMS was inspected for potential air leak and sample lines were checked for potential moisture issue. The technician did not find any issues so the mill had planned to contact Rosemount CEMS specialist. However, O2 reverted to expected values on May 19 at about 7 PM.

The cogen was down from May 14 at 5:19 AM to May 18 at 6:16 PM. Since the cogen was down for more than 24 hours, NOx emission limits do not apply during the stabilization period associated with cold start-up. Therefore, there was no associated excess emission during the start-up described above.

The Daily Emission Sheets, PI trends, DCS trends, Cogen Reports and Environmental Incident Report have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: [signature]	5/21/2013
Title: Mill Manager	

DAILY ENVIRONMENTAL REPORT

End Time: 5/18/2013 7:00 Start Time: 5/17/2013 7:00

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR Inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2)
8:00	-0.03	0.00	497.91	0.22	6.39	-872485.38	0.06	0.00	0.00	[illegible]	3.03	0.00	1.79	1.90	1.78	20.92	19.56
9:00	-0.03	0.00	497.92	0.22	-2.78	287858.45	0.06	0.00	0.00	[illegible]	-3.17	0.00	2.50	2.17	1.71	20.33	18.96
10:00	-0.03	0.00	497.93	0.23	-2.08	231141.88	0.06	0.00	0.00	[illegible]	3.26	0.00	2.73	2.34	1.62	19.77	18.36
11:00	-0.03	0.00	497.94	0.31	-1.76	130277.44	0.00	0.00	0.00	[illegible]	-3.50	0.00	5.14	3.46	2.32	21.52	20.73
12:00	-0.03	0.00	497.95	0.31	-1.76	130245.92	0.03	0.00	0.00	[illegible]	-3.50	0.00	4.44	4.10	1.73	19.35	18.07
13:00	-0.03	0.00	497.96	0.31	-1.76	130245.92	0.05	0.00	0.00	[illegible]	-3.50	0.00	4.09	4.56	1.75	19.14	17.89
14:00	-0.03	0.00	497.97	0.31	-1.76	130245.92	0.06	0.00	0.00	[illegible]	-3.50	0.00	3.74	4.09	1.70	18.76	17.49
15:00	-0.03	0.00	497.98	0.31	-1.76	130245.92	0.07	0.00	0.00	[illegible]	-7.91	0.00	4.05	3.96	1.75	19.05	17.81
16:00	-0.03	0.00	497.99	0.47	-1.76	93180.10	0.05	0.00	0.00	[illegible]	-7.94	0.00	3.93	3.91	1.73	18.74	17.50
17:00	-0.03	0.00	498.00	0.50	-1.76	81403.70	0.06	0.00	0.00	[illegible]	-8.14	0.00	3.82	3.93	1.71	18.30	17.07
18:00	-0.03	0.00	498.01	0.50	-1.76	81403.70	0.06	0.00	0.00	[illegible]	-7.09	0.00	3.69	3.81	1.71	18.50	17.25
19:00	-0.03	0.00	498.02	0.50	-1.76	81403.70	0.06	0.00	0.00	[illegible]	-16.30	0.00	3.61	3.50	1.61	18.11	16.81
20:00	-0.03	0.00	498.03	0.50	-1.76	81403.70	0.05	0.00	0.00	[illegible]	-6.81	0.00	3.58	3.43	1.69	19.12	17.83
21:00	-0.03	0.00	498.04	0.50	-1.76	81403.70	0.05	0.00	0.00	[illegible]	+11.03	0.00	4.20	3.60	1.73	19.61	18.30
22:00	-0.03	0.00	498.05	0.50	-1.76	81403.70	0.04	0.00	0.00	[illegible]	-4.96	0.00	2.67	3.49	1.77	20.70	19.37
23:00	-0.03	0.00	498.05	0.50	-1.76	81403.70	0.04	0.00	0.00	[illegible]	-3.81	0.00	3.79	3.56	1.87	20.83	19.40
0:00	-0.03	0.00	498.06	0.50	-1.76	81403.70	0.04	0.00	0.00	[illegible]	-7.26	0.00	3.16	3.21	1.82	21.39	20.06
1:00	-0.03	0.00	498.07	0.50	-1.76	81403.70	0.05	0.00	0.00	[illegible]	-8.99	0.00	3.47	3.47	1.76	21.09	19.72
2:00	-0.03	0.00	498.08	0.50	-1.76	81403.70	0.05	0.00	0.00	[illegible]	+10.98	0.00	2.80	3.14	1.76	20.53	19.20
3:00	-0.03	0.00	498.09	0.50	-1.76	81403.70	0.05	0.00	0.00	[illegible]	-9.18	0.00	3.27	3.18	1.78	20.32	19.00
4:00	-0.03	0.00	498.10	0.50	-1.76	81403.70	0.05	0.00	0.00	[illegible]	-5.74	0.00	3.58	3.22	1.83	21.42	20.11
5:00	-0.03	0.00	498.11	0.50	-1.76	81403.70	0.05	0.00	0.00	[illegible]	-8.74	0.00	4.24	3.70	1.82	21.48	20.16
6:00	-0.03	0.00	498.12	0.50	-1.76	81403.70	0.03	0.00	0.00	[illegible]	-4.51	0.00	3.86	3.89	1.72	20.53	19.16
7:00	-0.03	0.00	498.13	0.50	-1.76	81403.70	0.04	0.00	0.00	[illegible]	1.74	0.00	4.38	4.16	1.75	20.25	18.93

Daily Av Cogen NOx lb/h	Daily Av Cog+Neb NOx lb/h
0.00	9.21

Daily Av Cogen CO lb/h	Daily Av Cog+Neb CO lb/h
0.00	1.15

Stack NOx analyzer	
zero value	0.03
zero drift %	0.03
span value	82.03
span drift %	0.04

Stack CO Analyzer	
zero value	-1.09
zero drift %	-1.09
span value	91.34
span drift %	0.34

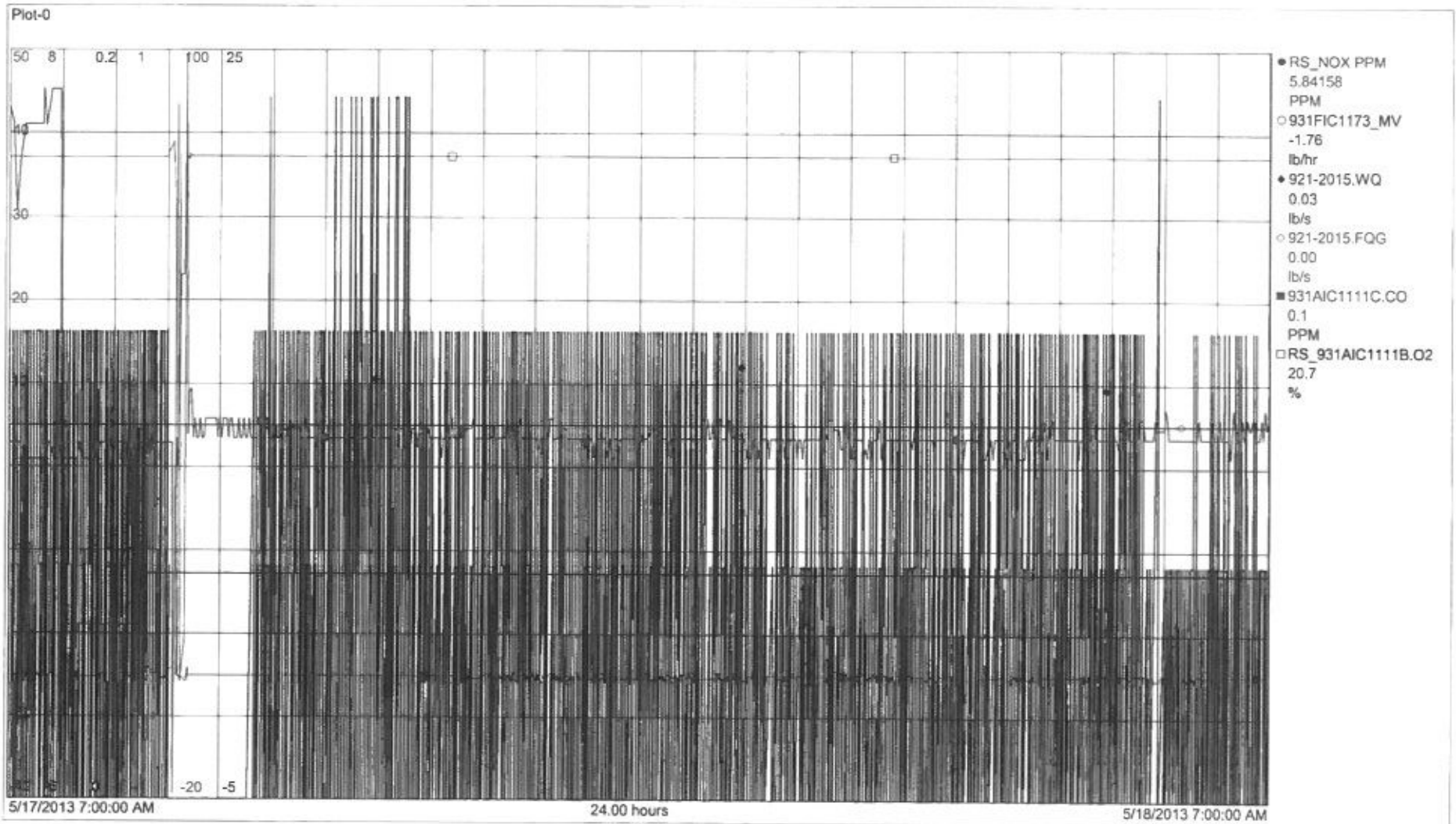
Stack O2 Analyzer	
zero value	21.37
zero drift%	2.14
span value	-0.05
span drift %	-0.19

Nebraska Gas	1,451,581

Comment: Cogen down on 5/17/13 from 7:00 am - 7:00 am - turbine hot section damage, a total of 24 hrs. Nebraska running on 5/17/13 from 7:00 am - 7:00 am, a total of 24 hrs.

PRINT TIME: 5/18/2013 8:19 AM

NOTE: This document is valid for only ONE week after print time


Plot-0
50 8 0.2 1 100 25
40
30
20
-20 -5
5/17/2013 7:00:00 AM
24.00 hours
5/18/2013 7:00:00 AM
RS_NOX PPM
5.84158
PPM
931FIC1173_MV
-1.76
lb/hr
921-2015.WQ
0.03
lb/s
921-2015.FQG
0.00
lb/s
931AIC1111C.CO
0.1
PPM
RS_931AIC1111B.O2
20.7
%

ON	Name	Description	Attribute	Treatment	Ruler Time	Ruler Value	Current Value	Unit	Filter	Time Offset	Form
	931AIC1111A.NOX	B&W SCR INLET NOX	MV	Mom	06:00 2013-05-17	0.22	89.34	PPM			
	931AIC1111C.CO	B&W BLR STACK RAW CO	MV	Mom	06:00 2013-05-17	0.14	20.55	PPM			
	931AIC1111B.O2	B&W BLR RAW O2%	MV	Mean	06:00 2013-05-17	20.85	14.71	%			
	931AIC1111D.NOX	B&W BLR STACK NOX	MV	Mean	06:00 2013-05-17	0.08	10.95	PPM			
	931-AIC-1111.INCAL	RSMT CEMS IN CAL	MV	Mom	06:00 2013-05-17	0	0				
	931-aic-1111.trb	RSMT CEMS TROUBLE	MV	Mom	06:00 2013-05-17	0	0				

< > << >> Current Time Save Trend... Hide Table

D1 30 minutes | D2 1 hour | D3 8 hours | D4 1 day | D5 10 days

D6 Positioning... | D7 Trace Control... | D8 Analyze... | D9 Trace Config... | D10 Extended Config...

ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR — NAME: Van Zandt

DRY SHIFT OPERATOR — NAME: WS

Huenneme Paper Mill

DATE: 5-17-13

SAFETY IS ALWAYS NO. 1

CHEMICAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Corrisil 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCC LP	TURBINE
CURRENT	08515764	53169215	16262462	2	0	2073400	15663400
PREVIOUS	08473047	53032778	16256924	0	0	1989950	15663400

NEW DEMIN TRAILER YES NO TIME:

AMMONIA DELIVERY YES NO % FULL:

NEBRASKA ONLINE TIME FROM TO:

NEBRASKA WARM STORAGE CHECK YES NO

GAS & ELECTRIC READING

MAXON	BURNER	NEBRASKA	MEGAWATTS
509586	0		89198
383997	179		89198

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%												
Inlet Temp	°F												
Humidity	%												
Vibration (Max)	MILS												
Steam Injection	#/SEC												
Turbine L.O. Level	%												
T48	°F												

BATTERIES V HP RECOUPE FAL
AIR INLET DIFF IN/H2O HP RECOUPE FAR
L.O. DIFFERENTIAL PSI HP RECOUPE AFT

BATTERIES V HP RECOUPE FAL
AIR INLET DIFF IN/H2O HP RECOUPE FAR
L.O. DIFFERENTIAL PSI HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F												
L.O. Supply	°F												
Gen. Vibration (Max)	IPS												
Tie Line	MW												

GEN. AMPS GEN VARS MEGA VARS
FIELD AMPS FIELD VOLTS V
COOLING TWR INLET F COOLING TWR INLET F

GEN. AMPS GEN.VARS MEGA VARS
FIELD AMPS FIELD VOLTS V
COOLING TWR INLET F COOLING TWR INLET F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F												
HP Drum Level	IN												
LP Drum Level	IN												
HP Drum Pressure	PSI												
LP Drum Pressure	PSI												
CO	PPM												
NOX	PPM												
O2	%												
Hot Well Level	%												

1150 SET POINT 1103 B SET POINT
SCANNER BLOWER (ON) Y/N DUCT BURNER SP

1150 SET POINT 1103 B SET POINT
SCANNER BLOWER ON Y/N DUCT BURNER S.P.

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI												
Gas Receiver	PSI												

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity MHOS													

ON LINE TURBINE WATER WASH YES NO CODUCTIVITY MHOS BOILER FEED WATER PUMP OPERATION NO. 1 YES NO NO. 2 YES NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP-pH 8.5 –9.5		
Conductivity<20mmhos		
LP-pH 8.5–9.5		
Conductivity<20mmhos		
HP		
pH 9.5 – 10.5		
Conductivity 75–150		
Phosphate 5–15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 – 10.5		
Conductivity 75 – 150		
Phosphate 5–15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 – 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:

End Time 5/19/2013 7:00 Start Time 5/18/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2)
8:00	-0.03	0.00	498.14	0.50	-1.76	81483.70	0.05	0.00	0.00	20.74	-4.41	0.00	4.19	4.14	1.72	20.44	19.08
9:00	-0.03	0.00	498.15	0.50	-1.76	81483.70	0.04	0.00	0.00	20.74	-5.40	0.00	3.72	4.09	1.64	20.44	19.00
10:00	-0.03	0.00	498.16	0.50	-1.76	81483.70	0.04	0.00	0.00	20.74	-10.89	0.00	4.67	4.19	1.60	19.71	18.29
11:00	-0.03	0.00	498.17	0.68	-1.76	125342.68	0.05	0.00	0.00	20.75	7.49	0.00	4.31	4.23	1.60	19.37	17.97
12:00	-0.03	0.00	498.18	0.09	-1.76	434153.09	0.04	0.00	0.00	20.75	0.00	0.00	4.10	4.36	1.63	19.52	18.13
13:00	-0.03	0.00	498.19	0.09	-1.76	434153.09	0.03	0.00	0.00	20.75	-0.39	0.00	4.29	4.23	1.62	19.82	18.22
14:00	-0.03	0.00	498.20	0.09	-1.76	434153.09	0.05	0.00	0.00	20.75	2.44	0.00	4.00	4.13	1.62	19.31	17.93
15:00	-0.03	0.00	498.21	0.09	-1.76	434153.09	0.06	0.00	0.00	20.75	3.88	0.00	3.67	3.98	1.60	19.21	17.82
16:00	-0.03	0.00	498.22	0.09	-1.76	434153.09	0.05	0.00	0.00	20.75	5.42	0.00	3.73	3.80	1.54	19.20	17.76
17:00	-0.03	0.00	498.23	0.09	-1.76	434153.09	0.06	0.00	0.00	20.75	1.25	0.00	3.66	3.69	1.58	19.07	17.65
18:00	-0.03	0.00	498.23	0.09	-1.76	434153.09	0.06	0.00	0.00	20.75	-1.81	0.00	3.83	3.74	2.06	21.74	20.68
19:00	-0.03	40.06	498.24	10.06	-1.76	177036.85	0.04	0.07	4.73	18.11	148.92	16.80	24.26	10.56	1.47	18.50	17.04
20:00	1.93	156.24	557.53	62.34	5.58	0.24	0.60	0.30	27.83	17.44	65.51	21.18	48.97	25.69	3.86	8.82	9.27
21:00	6.84	218.63	604.80	52.81	13.57	0.94	1.83	0.69	11.82	17.64	35.69	17.64	14.67	29.30	19.87	-0.97	
22:00	6.37	226.59	612.70	53.24	12.00	0.75	2.04	0.74	19.67	17.6	33.44	17.36	21.19	28.27	22.09	-1.81	
23:00	5.16	216.76	604.58	48.84	10.51	1.15	1.97	0.74	5.93	17.48	37.73	18.38	7.17	14.34	22.49	-1.98	
0:00	-0.01	238.93	605.33	59.65	24.49	1.35	2.10	0.73	3.87	17.68	25.79	13.58	4.62	10.99	22.75	-2.00	
1:00	2.45	260.99	619.79	69.92	24.06	1.01	2.39	0.75	9.26	17.52	22.93	13.58	9.60	7.13	22.93	-1.77	
2:00	2.45	271.76	627.32	72.92	25.82	0.95	2.55	0.77	9.60	17.61	21.25	13.22	9.57	7.93	23.12	-1.47	
3:00	1.70	276.43	627.23	71.97	25.75	0.94	2.63	0.78	10.05	17.49	22.01	13.77	9.81	9.66	23.31	-1.44	
4:00	1.78	276.76	624.86	69.52	25.87	0.99	2.65	0.78	9.17	17.25	23.40	14.80	8.92	9.43	23.54	-1.47	
5:00	1.65	276.59	624.71	69.24	25.61	0.99	2.65	0.78	9.09	16.99	22.93	14.40	8.89	9.21	23.70	-1.73	
6:00	0.08	276.59	623.73	70.40	25.53	0.97	2.65	0.78	9.26	16.84	19.92	12.33	9.12	8.98	23.70	-1.86	
7:00	0.08	276.59	623.95	70.29	25.51	0.96	2.61	0.78	9.09	17.00	19.85	12.20	8.96	8.89	23.59	-1.59	

Daily Av Cogen NOx	Daily Av Cog+Neb NOx
lb/h	lb/h
5.77	10.58

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
8.30	8.99

Stack NOx analyzer	
zero value	0.03
zero drift %	0.03
span value	82.00
span drift %	0.00

Stack CO Analyzer	
zero value	-1.31
zero drift %	-1.31
span value	91.66
span drift %	0.69

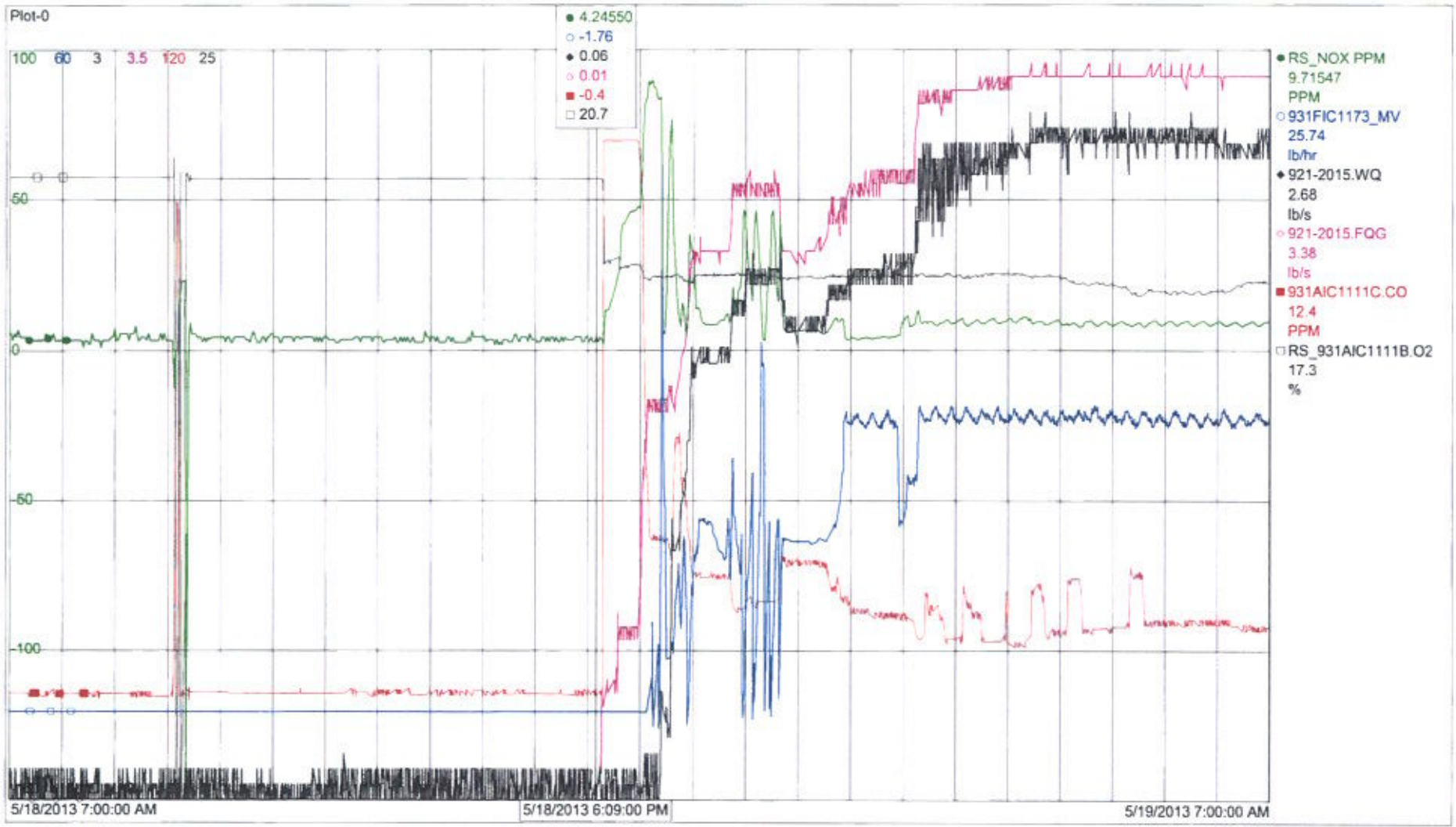
Stack O2 Analyzer	
zero value	21.41
zero drift%	2.32
span value	0.00
span drift %	0.00

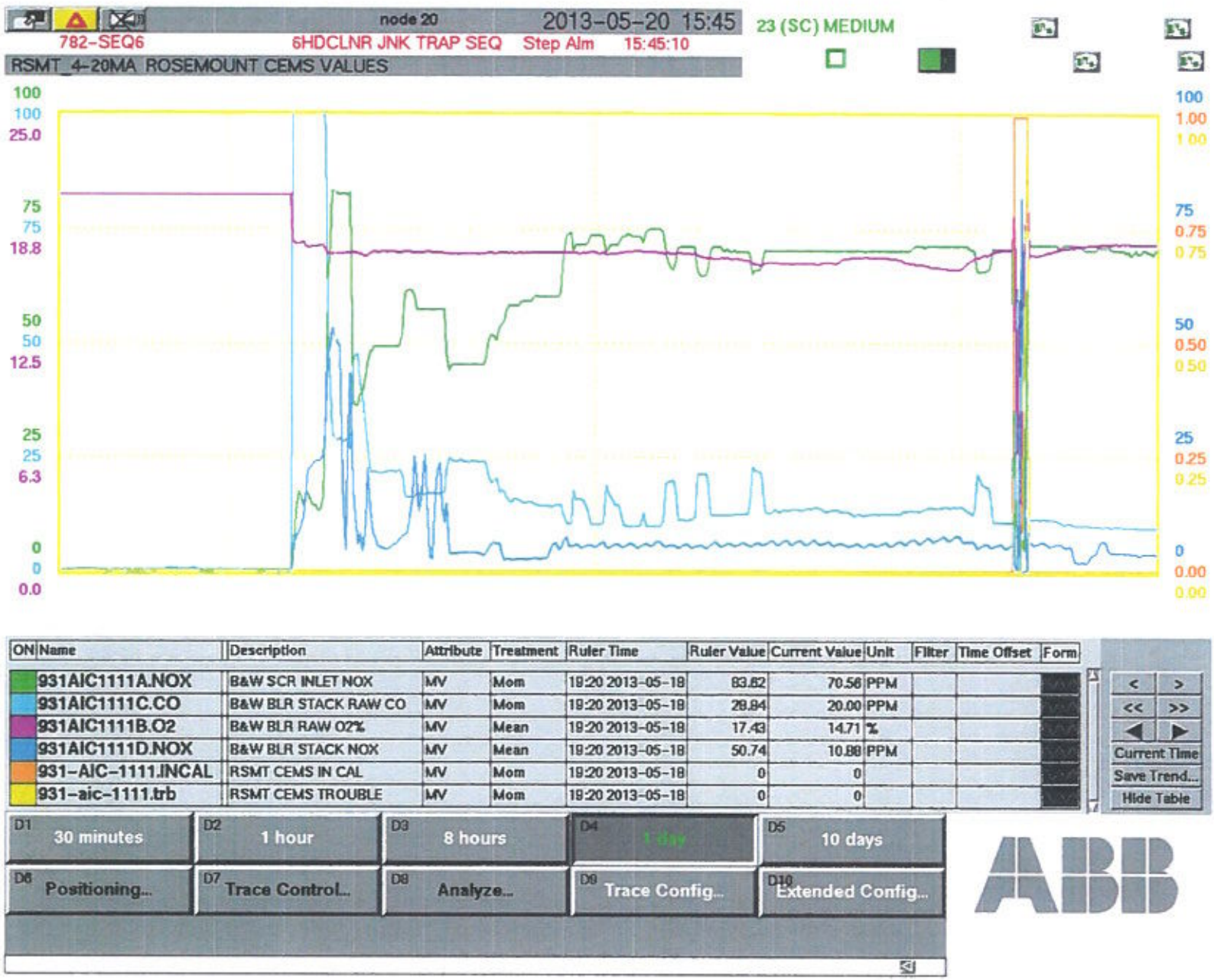
Nebraska Gas	753,810

Comment: Cogen down on 5/18/13 from 7:00 am - 8:08 pm - turbine hot section damage, a total of 11.13 hrs. Nebraska running on 5/18/13 from 7:00 am - 7:29 pm, a total of 12.5 hrs. APCD contacted for start-up issues.

PRINT TIME: 5/18/2013 8:27 AM

NOTE: This document is valid for only ONE week after print time


Plot-0
4.24550
-1.76
0.06
0.01
-0.4
20.7
100 60 3 3.5 120 25
50
0
-50
-100
5/18/2013 7:00:00 AM
5/18/2013 6:09:00 PM
5/19/2013 7:00:00 AM
RS_NOX PPM
9.71547
PPM
931FIC1173_MV
25.74
lb/hr
921-2015.WQ
2.68
lb/s
921-2015.FQG
3.38
lb/s
931AIC1111C.CO
12.4
PPM
RS_931AIC1111B.O2
17.3
%


node 20
2013-05-20 15:45
23 (SC) MEDIUM
782-SEQ6
6HDCLNR JNK TRAP SEQ
Step Alm
15:45:10
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 19:20 2013-05-18 83.82 70.56 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 19:20 2013-05-18 28.84 20.00 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 19:20 2013-05-18 17.43 14.71 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 19:20 2013-05-18 50.74 10.88 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 19:20 2013-05-18 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 19:20 2013-05-18 0 0
<
>
<<
>>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR NAME: Van Zandt

DRY SHIFT OPERATOR NAME: [illegible]

Huenome Paper Mill

SAFETY IS ALWAYS NO. 1

DATE: 5-18-13

CHEMICAL PUMPS

	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP
CURRENT	546522	53305587	62687777	117533
PREVIOUS	0515764	53169215	62628962	2

NEW DEMIN TRAILER YES NO TIME

AMMONIA DELIVERY YES NO % FULL: 75%

GAS & ELECTRIC READING

	HP	SCG LP	TURBINE	BURNER	NEBRASKA	mGAWATTS
CURRENT	786	1110470	17369600	5025579	3065571	87171
PREVIOUS	0	2073400	15666360	5095860	0	89195

NEBRASKA ONLINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK YES NO

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%									46.9	52.5	58.2	57.3
Inlet Temp	°F									63	61	53	53
Humidity	%									49.3	52.4	53.4	55.4
Vibration (Max)	MILS									.26	.29	.31	.31
Steam Injection	#/SEC									2.16	2.46	2.65	2.68
Turbine L.O. Level	%									100	100	100	100
T48	°F									1423	1501	1493	1492

BATTERIES V HP RECOUPE FAL
AIR INLET DIFF IN/H2O HP RECOUPE FAR
L.O. DIFFERENTIAL PSI HP RECOUPE AFT

BATTERIES V HP RECOUPE FAL
AIR INLET DIFF IN/H2O HP RECOUPE FAR
L.O. DIFFERENTIAL PSI HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F									152	152	152	157
L.O. Supply	°F									127	128	128	128
Gen. Vibration (Max)	IPS									.42	.41	.41	.38
Tie Line	MW									13.50	1351	1361	1351

GEN. AMPS GEN.VARS MEGA VARS
FIELD AMPS FIELD VOLTS V
COOLING TWR INLET F COOLING TWR INLET F

GEN. AMPS GEN.VARS MEGA VARS
FIELD AMPS FIELD VOLTS V
COOLING TWR INLET F COOLING TWR INLET F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F									710	713	709	711
HP Drum Level	IN									0.9	1.0	1.4	0.9
LP Drum Level	IN									1.2	1.4	1.3	0.9
HP Drum Pressure	PSI									474	481	481	474
LP Drum Pressure	PSI									90	116	105	110
CO	PPM									256	32.1	18.8	20.2
NOX	PPM									4.2	8.7	9.9	9.9
O2	%									12.43	12.46	12.49	16.43
Hot Well Level	%									150	145	135	144

1150 SET POINT 1103 B SET POINT
SCANNER BLOWER (ON) Y/N DUCT BURNER SP

1150 SET POINT 1103 B SET POINT
SCANNER BLOWER ON Y/N DUCT BURNER S.P.

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI									245	241	241	239
Gas Receiver	PSI									420	420	420	420

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity MHOS													

ON LINE TURBINE WATER WASH YES NO CODUCTMTY MHOS BOILER FEED WATER PUMP OPERATION NO 1 YES NO NO. 2 YES NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75- 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP-pH 8.5 -9.5		
Conductivity<20mmhos		
LP-pH 8.5-9.5		
Conductivity<20mmhos		
HP		
pH 9.5 - 10.5		
Conductivity 75-150		
Phosphate 5-15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 - 10.5		
Conductivity 75 - 150		
Phosphate 5-15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 8.0 - 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 - 10.5		
Conductivity 75 - 200		
Silica		
Phosphate 5-25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES: N.B. BOILER OFFLINE 19:32 D.V
CHILLER ON 2:50 A.M.
IDLE 18:14
AUTO 18:30
ON-LINE 18:37
[illegible]

End Time: 5/20/2013 7:00 Start Time: 5/19/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2)	Daily Av Cogen NOx lb/h	Daily Av Cog+Neb NOx lb/h
																		8.59	8.59
8:00	0.10	276.59	624.17	70.55	25.74	0.98	2.63	0.78	9.48	[illegible]	19.67	12.35	9.31	9.13	23.54	-1.59			
9:00	0.14	276.76	624.38	71.28	25.65	0.96	2.66	0.78	9.78	[illegible]	19.57	12.02	9.69	9.32	23.52	-1.66			
10:00	2.18	277.79	626.40	69.28	25.72	0.98	2.67	0.79	9.60	[illegible]	23.45	14.76	9.34	9.45	23.53	-1.58		Daily Av Cogen	Daily Av Cog+Neb
11:00	-0.01	277.78	623.82	71.58	25.47	0.94	2.66	0.79	10.12	[illegible]	19.39	12.19	10.02	9.68	23.57	-2.51		CO	CO
12:00	-0.01	279.16	623.63	71.19	26.92	1.06	2.69	0.79	7.34	[illegible]	19.36	12.03	7.21	8.86	23.56	-2.30		lb/h	lb/h
13:00	-0.01	280.64	623.71	70.32	26.42	0.97	2.74	0.80	8.88	[illegible]	19.18	12.08	8.48	8.57	23.55	-2.26		12.48	12.48
14:00	-0.01	280.73	623.79	71.11	27.11	0.99	2.71	0.79	7.87	[illegible]	19.05	11.83	7.85	7.78	23.58	-2.53		Stack NOx analyzer	
15:00	-0.01	280.64	623.88	65.06	26.98	1.76	2.72	0.80	8.76	[illegible]	16.76	10.60	8.50	8.21	23.58	-2.72		zero value	0.03
16:00	-0.01	279.72	623.96	69.97	26.84	1.01	2.70	0.79	8.15	[illegible]	19.70	12.29	7.93	8.03	23.59	-2.90		zero drift %	0.03
17:00	-0.01	279.66	624.04	71.14	26.84	0.99	2.71	0.79	8.12	[illegible]	19.29	12.08	7.86	8.10	23.63	-3.35		span value	82.03
18:00	-0.01	278.25	624.12	71.45	26.87	0.99	2.67	0.79	7.79	[illegible]	19.73	12.17	7.64	7.81	23.63	-3.61		span drift %	0.04
19:00	-0.01	277.49	624.20	71.78	26.81	0.98	2.67	0.79	7.79	[illegible]	18.63	11.55	7.63	7.71	23.73	-3.41			
20:00	-0.01	277.62	624.29	71.15	27.11	0.99	2.67	0.79	7.45	14.86	19.24	12.06	7.27	7.51	23.74	-3.33		Stack CO Analyzer	
21:00	-0.01	279.45	624.37	70.71	27.03	1.00	2.71	0.79	7.28	14.81	19.33	12.12	7.09	7.33	23.72	-3.00		zero value	-0.97
22:00	-0.01	279.84	624.45	70.33	22.08	0.82	2.69	0.79	7.85	14.80	19.24	12.13	7.64	7.33	23.72	-2.55		zero drift %	-0.97
23:00	-0.01	280.18	624.53	69.74	20.77	0.79	2.71	0.79	7.95	14.87	19.47	12.28	7.73	7.49	23.73	-2.17		span value	91.31
0:00	1.79	279.02	626.86	67.56	18.45	0.72	2.68	0.79	8.59	15.07	23.97	15.28	8.35	7.91	23.74	-2.26		span drift %	0.31
1:00	0.07	278.26	623.95	69.84	18.42	0.70	2.66	0.79	8.77	14.95	19.80	12.39	8.60	8.23	23.76	-2.36			
2:00	1.81	280.35	626.28	68.62	18.42	0.70	2.71	0.79	8.89	14.74	24.19	15.27	8.57	8.51	23.77	-2.36		Stack O2 Analyzer	
3:00	0.04	281.02	626.22	70.39	18.47	0.69	2.71	0.79	9.09	14.72	19.87	12.47	8.82	8.68	23.83	-2.38		zero value	20.88
4:00	0.04	278.47	625.11	70.52	18.48	0.69	2.66	0.79	9.11	14.71	19.87	12.40	8.89	8.76	23.86	-2.36		zero drift%	-0.18
5:00	0.04	277.79	624.58	70.52	18.46	0.70	2.66	0.79	9.04	14.72	19.90	12.42	8.84	8.85	23.89	-2.39		span value	-0.01
6:00	0.04	277.48	623.84	70.20	18.48	0.70	2.67	0.78	9.04	14.73	20.00	12.39	8.83	8.86	23.92	-2.39		span drift %	-0.03
7:00	0.04	279.45	624.11	70.36	18.34	0.69	2.70	0.79	9.31	14.72	20.02	12.54	9.06	8.91	23.96	-2.15			
																		Nebraska Gas	0

Comment:

PRINT TIME: 5/20/2013 8:57 AM

NOTE: This document is valid for only ONE week after print time


node 20
2013-05-21 13:27
23 (SC) MEDIUM
782-SEQ6
6HDCLNR JNK TRAP SEQ
Step Alm
13:27:52
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 19:14 2013-05-19 70.88 69.34 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 19:14 2013-05-19 20.09 20.78 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 19:14 2013-05-19 14.72 14.89 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 19:14 2013-05-19 7.81 10.99 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 19:14 2013-05-19 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 19:14 2013-05-19 1 0
<
>
<<
>>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR

DRY SHIFT OPERATOR

NAME: Rob

NAME:

Hueneme Paper Mill

SAFETY IS ALWAYS NO. 1

DATE: 5-13-13

CHEMICAL PUMPS

	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	MEGAWATTS
CURRENT	6549875	5342403	6274601	239050	1806	1121960	2120240	622549	6412		90158
PREVIOUS	8540323	5330887	6263577	117533	756	1110470	1736940	602559	30651		59471

NEW DEMIN TRAILER: YES NO TIME:

AMMONIA DELIVERY: YES NO % FULL:

NEBRASKA ONLINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK: YES NO

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%	56	61	60	64	64	61	61.5	63.0	65.6	54.0	59.1	63.1
Inlet Temp	°F	54	55	57	56	54	55	55	55	55	54	54	54
Humidity	%	54	90	35	34	40	44	49	56	57	55	55	54
Vibration (Max)	MILS	31	32	31	32	32	32	31	31	32	.32	.32	.32
Steam Injection	#/SEC	2.4	2.6	2.6	2.10	2.6	2.4	2.62	2.75	2.75	2.62	2.69	2.69
Turbine L.O. Level	%	100	100	100	100	100	100	100	100	100	100	100	100
T48	°F	1492	1501	1505	1505	1508	1506	1506	1506	1504	1500	1508	1502

BATTERIES 135 V | HP RECOUPE 152 FAL | BATTERIES V | HP RECOUPE FAL

AIR INLET DIFF 4" IN/H20 | HP RECOUPE 152 FAR | AIR INLET DIFF IN/H20 | HP RECOUPE FAR

L.O. DIFFERENTIAL 5" PSI | HP RECOUPE 53 AFT | L.O. DIFFERENTIAL PSI | HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F	153	155	155	156	157	157	157	157	157			
L.O. Supply	°F	126	128	128	129	129	129	129	129	129			
Gen. Vibration (Max)	IPS	38	33	42	9.1	41	38	.41	.39	.37	.36	.36	.35
Tie Line	MW	13.5	15.4	13.5	13.3	13.5	13.5	13.50	13.56	13.47	13.55	13.48	13.62

GEN. 1200 AMPS | GEN.VARS MEGA VARS | GEN. AMPS | GEN.VARS 6.01 MEGA VARS

FIELD 210 AMPS | FIELD VOLTS 155 V | FIELD AMPS | FIELD VOLTS V

COOLING TWR INLET 75 F | COOLING TWR INLET 75 F | COOLING TWR INLET F | COOLING TWR INLET F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F	710	711	710	711	711	711	710	711	711	711	710	710
HP Drum Level	IN	1	1	1.1	1.1	1	1.1	1.0	0.9	0.9	1.3	1.1	1.0
LP Drum Level	IN	1.1	1	1.2	1	1	.9	0.9	0.9	0.9	1.8	1.0	1.0
HP Drum Pressure	PSI	479	484	484	484	486	486	486	479	479	480	480	480
LP Drum Pressure	PSI	121	122	122	122	122	122	122	122	122	150	128	128
CO	PPM	19.8	38.9	18.7	17.9	19.9	19.2	19.0	19.2	19.4	28.4	14.8	19.8
NOX	PPM	9.8	9.5	3.4	7.6	7.5	7.5	8.0	3.3	7.4	8.9	4.5	9.1
O2	%	18.1	17.5	17.7	17.4	17.4	17.3	17.30	17.19	14.35	14.40	14.68	14.68
Hot Well Level	%	149	131	143	149	153	134	145	152	156	158	154	147

1150 SET POINT 449 | 1103 B SET POINT 444 | 1150 SET POINT | 1103 B SET POINT

SCANNER BLOWER (ON Y/N | DUCT BURNER S.P. | SCANNER BLOWER ON Y/N | DUCT BURNER S.P.

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI	237	235	235	237	237	237	237	239	239	241	239	235
Gas Receiver	PSI	420	420	420	419	420	419	420	420	420	420	420	420

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity	MHOS												

ON LINE TURBINE WATER WASH: YES NO | COOLCTIVITY MHOS | BOILER FEED WATER PUMP OPERATION: NO. 1 YES NO | NO. 2 YES NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5	8.9	
Conductivity <5mmhos	10	
Silica < 20 ppb	45	
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)	9.2	
CONDENSATE		
HP–pH 8.5 –9.5	8.8	
Conductivity<20mmhos	11.7	
LP–pH 8.5–9.5	9.3	
Conductivity<20mmhos	30	
HP		
pH 9.5 – 10.5	9.7	
Conductivity 75–150	95	
Phosphate 5–15 ppm	5.8	
Silica < 5 ppm	3.4	
Iron ppm		
LP		
pH 9.5 – 10.5	9	
Conductivity 75 – 150	136	
Phosphate 5–15 ppm	26	
Silica <5 ppm	UR	
Iron ppm		
MIXED BED		
pH 6.0 – 7.5	8.4	
Conductivity< 1mmhos	4.15	
Silica <10 ppb	UR	
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident B&W boiler Start-up issues		Incident Date 5/18/13
Exact Location Incident Cogen		
Reported By C. Wilson	Estimated Start and Stop Times of Incident: 1800	Possible Cause: Pressure regulator - tripping ammonia flow. O2 drift - unknown

Incident Type: ف Spill Internal ف Improper Waste Disposal ف Spill External ف Near miss or below spill release guidelines X Air Emission ف Other_____	Released To ف Storm Water System ف Secondary Containment ف Process Sewer X Air ف Ground (External) ف Ground (Inside Mill Property) ف Near Miss ف Other_____

Detailed Description of Event

On 18 Apr 2013- after Cogen plant start-up- after permissives met for DCS control to inject NH3 into SCR, the pressure regulator was tripping solenoid valve on high pressure.

Troubleshooted and decided- issue rested with pressure regulator- could not control to setpoint of 20-30 psig range.

O2 issue investigated but did not find air leak. Cleaned lines.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
ف _____ Gallons ف _____ Pounds ف Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.)* *APCD @ 2045*
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Lars Gustavson, Rudy Rehbein, Robyn Lebrilla , Victor Kumpera	Any Acute or Chronic Health Risks *(refer to MSDS)* *N/A*

Describe Any Emergency Response Actions
N/A

Suggestions to Prevent Reoccurrence	Estimated Completion Date
1. install new pressure regulator	1. 5/20/13
2.	2
3.	3.

Root Cause after investigation Failed ammonia pressure regulator	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ف 1 ف 2 ف 3 ف 4
Investigated By: Charlie Wilson	Investigated Date 5/18/13

Follow Up	By When	Completion Date	By Whom

Issued By	Reviewed by	Approved by
Department Manager 5/21/13	Technical Superintendent 5/21/2013	Mill Manager 5/21/2013

Print Time: 5/18/2013 9:08:26 AM

Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

June 28, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: PI data loss due to maintenance on PI-server

Dear Mr. Olson:

This letter is a follow up on the calls made to the VCAPCD Breakdown Center Hotline on June 27, 2013 by Victor Kumpera.

The New-Indy Containerboard was performing maintenance on the PI server and the relocation of the server from the IP to the New-Indy domain June 26, 2013 morning. The maintenance was part of the IP/New-Indy network separation project. The server had to be shut down and rebooted to allow for a network address change. During the maintenance process the PI emission data from 8:12 a.m. – 9:39 a.m. was lost. The turbine was in a start-up mode and the 3-h emission start-up grace period at that time.

The Daily Emission Sheets, PI trends, DCS trends have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7279.

Sincerely,

Vitezslav Kumpera
Technical Manager

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date: 6/28/2013
Signature: 	
Title: Technical Manager	

End Time 6/27/2013 7:00 Start Time 6/26/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2)
8:00	0.04	12.28	498.78	2.22	0.53	21466.94	0.01	0.01	0.53	20.06	51.77	4.09	4.53	5.13	24.35	1.19	
9:00	0.04	177.64	561.55	86.72	21.53	1.41	0.16	0.09	28.69	15.62	45.09	17.28	83.52	23.62	24.36	1.07	
10:00	0.04	192.08	596.04	55.85	17.40	0.84	1.19	0.51	13.87	15.41	46.84	22.36	10.46	25.17	24.31	0.97	
11:00	2.26	199.15	613.11	61.33	19.54	1.18	1.58	0.65	9.84	15.01	37.35	19.56	11.17	28.20	24.34	0.97	
12:00	6.03	247.77	624.43	64.88	21.55	0.98	2.03	0.68	9.86	14.85	38.01	21.94	10.56	10.55	24.30	0.97	
13:00	2.05	250.21	622.16	66.48	22.43	1.00	2.07	0.68	9.78	14.90	36.60	20.59	10.54	10.58	24.27	0.77	
14:00	5.71	251.15	625.83	65.36	22.59	1.00	2.09	0.68	9.90	14.82	38.96	22.51	10.58	10.53	24.31	0.54	
15:00	0.44	277.42	630.88	75.40	27.69	1.01	2.46	0.73	10.84	14.65	39.55	18.83	10.65	10.56	24.28	0.14	
16:00	1.94	279.50	635.64	74.92	28.30	0.98	2.51	0.73	10.88	14.59	32.93	20.84	10.51	10.55	24.28	-0.24	
17:00	-0.01	277.01	634.40	75.59	27.92	0.98	2.45	0.73	10.69	14.66	30.98	19.20	10.49	10.55	24.30	-0.52	
18:00	-0.01	277.70	633.43	75.38	27.84	0.99	2.46	0.73	10.69	14.67	31.39	19.60	10.48	10.49	24.30	-0.54	
19:00	-0.01	281.03	633.30	76.23	28.44	0.98	2.51	0.73	10.87	14.65	31.14	19.64	10.52	10.50	24.30	-0.58	
20:00	-0.01	280.44	633.17	75.97	28.14	0.97	2.50	0.73	10.79	14.70	31.49	19.72	10.46	10.48	24.30	-0.49	
21:00	-0.01	276.59	633.04	74.67	27.42	0.97	2.46	0.73	10.64	14.70	32.22	19.89	10.46	10.48	24.34	0.04	
22:00	-0.01	276.76	632.92	74.25	27.28	0.98	2.46	0.73	10.68	14.72	32.54	20.11	10.50	10.47	24.34	0.47	
23:00	-0.01	276.93	632.79	73.90	27.27	0.99	2.46	0.73	10.70	14.73	32.58	20.18	10.51	10.49	24.31	0.61	
0:00	-0.01	276.59	632.66	73.81	27.03	0.97	2.46	0.73	10.67	14.81	32.88	20.47	10.50	10.50	24.32	1.11	
1:00	-0.01	275.23	631.73	73.31	26.85	0.98	2.41	0.72	10.64	14.78	33.34	20.63	10.52	10.51	24.29	0.91	
2:00	-0.01	271.80	630.83	73.84	26.85	0.99	2.37	0.71	10.51	14.78	33.23	20.26	10.50	10.51	24.27	1.01	
3:00	4.33	248.54	625.99	61.56	21.28	0.92	2.13	0.70	9.55	14.98	41.92	23.53	10.21	10.41	24.24	1.19	
4:00	6.55	207.90	609.83	45.05	13.46	0.98	1.69	0.67	8.23	15.31	56.02	26.78	10.38	10.36	24.23	1.14	
5:00	6.65	187.81	599.54	39.25	11.21	1.07	1.44	0.63	7.48	15.48	64.79	28.32	10.47	10.35	24.22	1.03	
6:00	6.63	187.87	598.11	38.99	11.12	1.11	1.45	0.63	7.50	15.49	65.49	28.37	10.56	10.47	24.24	1.03	
7:00	10.06	240.29	625.60	57.64	19.34	1.07	2.02	0.69	9.78	14.84	43.41	24.25	10.64	10.56	24.21	0.97	

Comment:

Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
lb/h	lb/h
10.56	10.58

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
20.79	20.79

Stack NOx analyzer	
zero value	0.09
zero drift %	0.09
span value	82.50
span drift %	0.61

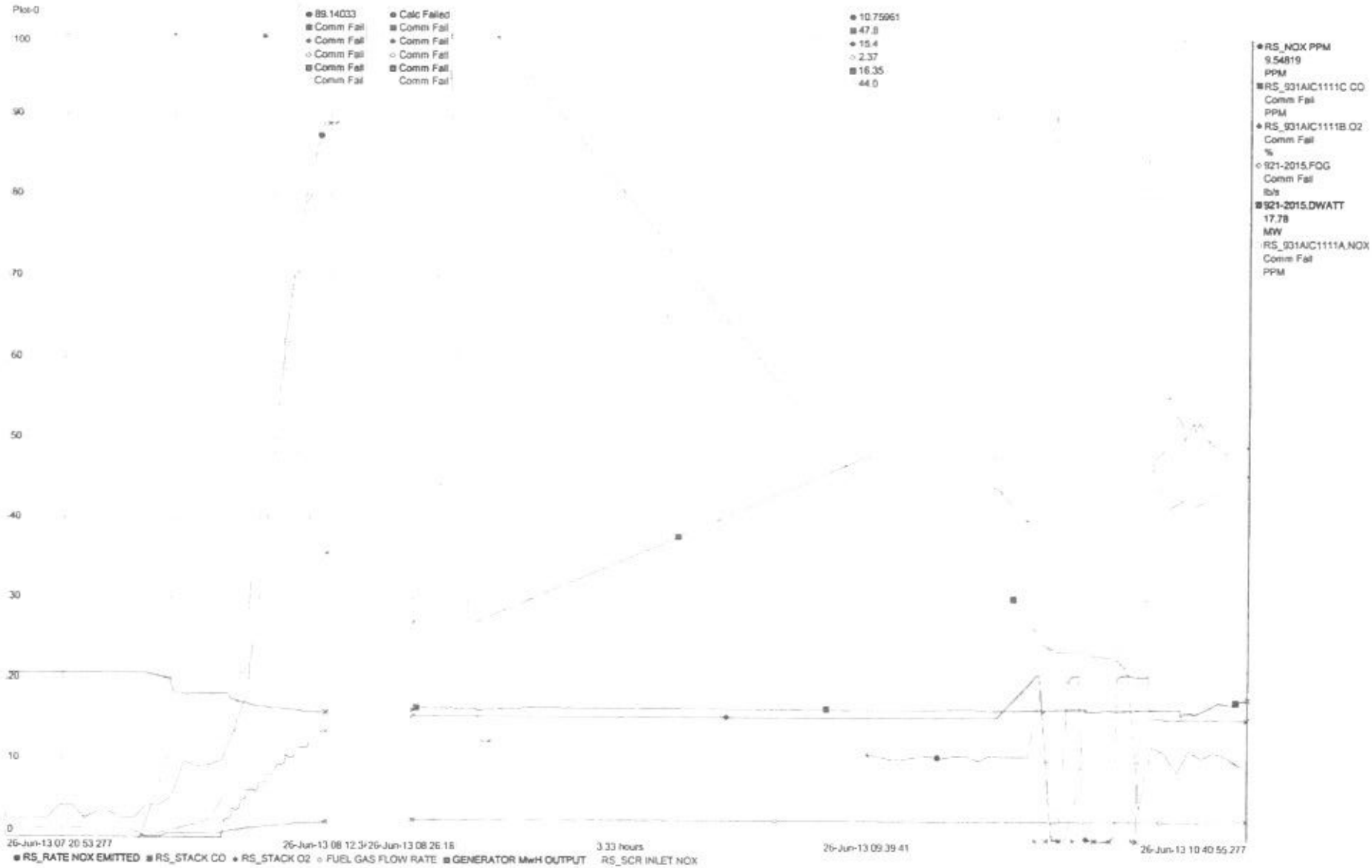
Stack CO Analyzer	
zero value	-0.84
zero drift %	-0.84
span value	80.41
span drift %	-0.89

Stack O2 Analyzer	
zero value	20.86
zero drift%	-0.29
span value	-0.05
span drift %	-0.22

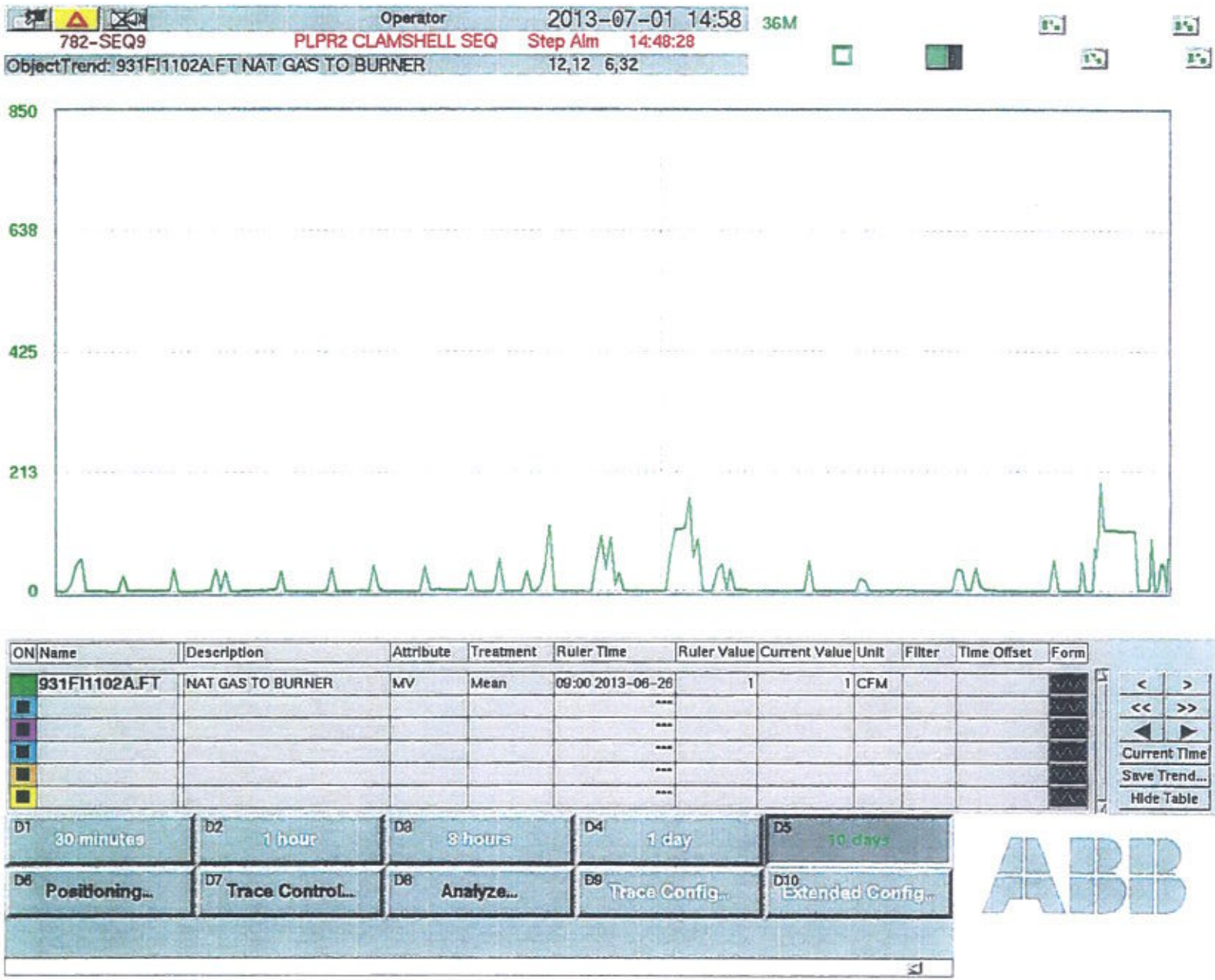
Nebraska Gas	0

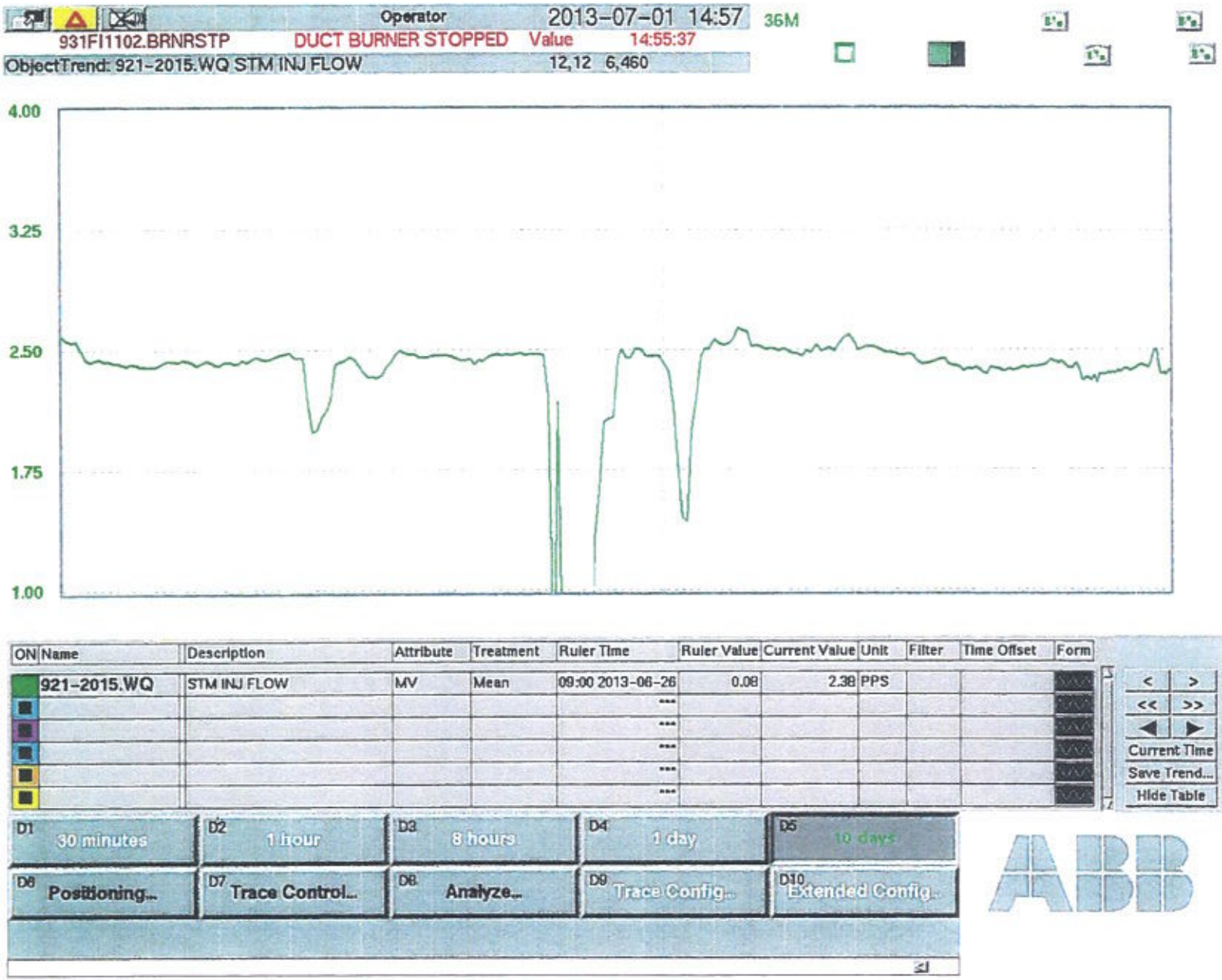
PRINT TIME: 7/1/2013 9:01 AM

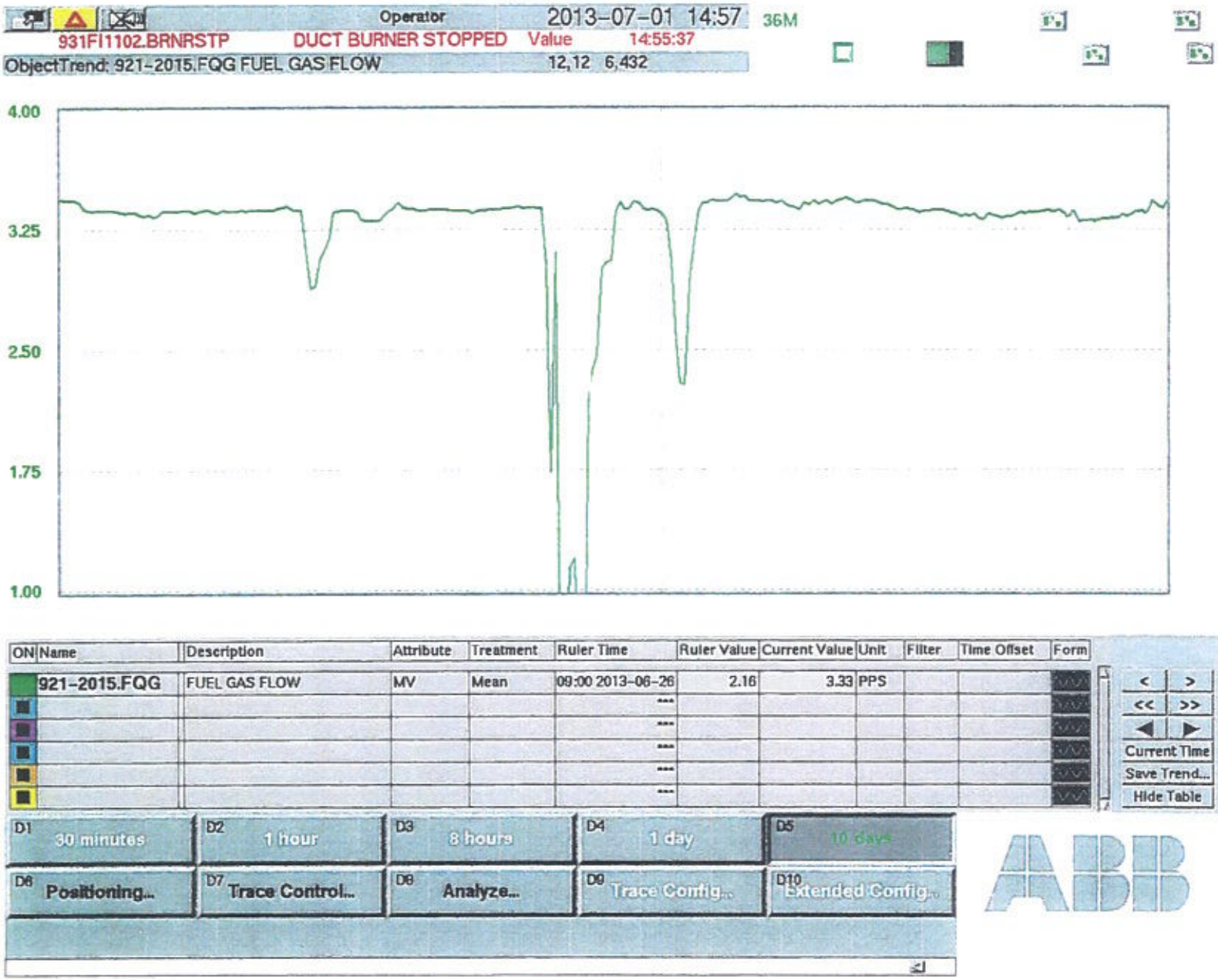
NOTE: This document is valid for only ONE week after print time


Plot-0
89.14033
Comm Fail
Comm Fail
Comm Fail
Comm Fail
Comm Fail
Calc Failed
Comm Fail
Comm Fail
Comm Fail
Comm Fail
Comm Fail
10.75961
47.8
15.4
2.37
16.35
44.0
RS_NOX PPM
9.54819
PPM
RS_931AIC1111C.CO
Comm Fail
PPM
RS_931AIC1111B.O2
Comm Fail
%
921-2015.FOG
Comm Fail
lb/s
921-2015.DWATT
17.78
MW
RS_931AIC1111A.NOX
Comm Fail
PPM
100
90
80
70
60
50
40
30
20
10
0
26-Jun-13 07:20:53.277
26-Jun-13 08:12:3
26-Jun-13 08:26:16
3.33 hours
26-Jun-13 09:39:41
26-Jun-13 10:40:55.277
RS_RATE NOX EMITTED
RS_STACK CO
RS_STACK O2
FUEL GAS FLOW RATE
GENERATOR MwH OUTPUT
RS_SCR INLET NOX


Operator
2013-07-01 14:58
36M
782-SEQ9
PLPR2 CLAMSHELL SEQ
Step Alm
14:48:28
ObjectTrend: 931FIC1173
12,12 62,2
60.0
60.0
100
45.0
45.0
75
30.0
30.0
50
15.0
15.0
25
0.0
0.0
0
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931FIC1173 NH3 FLOW MV Mean 09:00 2013-06-26 16.2 28.6 PPH
931FIC1173 NH3 FLOW SP Mean 09:00 2013-06-26 18.4 28.6 PPH
931FIC1173 NH3 FLOW OUT Mean 09:00 2013-06-26 26.0 56.5 %
< > << >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...


Operator
2013-07-01 14:58
36M
782-SEQ9
PLPR2 CLAMSHELL SEQ
Step Alm
14:48:28
ObjectTrend: 931FI1102A.FT NAT GAS TO BURNER
12,12 6,32
850
638
425
213
0
ON Name
Description
Attribute
Treatment
Ruler Time
Ruler Value
Current Value
Unit
Filter
Time Offset
Form
931FI1102A.FT
NAT GAS TO BURNER
MV
Mean
09:00 2013-06-26
1
1
CFM
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...


Operator
2013-07-01 14:57
36M
931FI1102.BRNRSTP
DUCT BURNER STOPPED
Value
14:55:37
ObjectTrend: 921-2015.WQ STM INJ FLOW
12,12 6,460
4.00
3.25
2.50
1.75
1.00
ON Name
Description
Attribute
Treatment
Ruler Time
Ruler Value
Current Value
Unit
Filter
Time Offset
Form
921-2015.WQ
STM INJ FLOW
MV
Mean
09:00 2013-06-26
0.08
2.38
PPS
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...


Operator
2013-07-01 14:57
36M
931FI1102.BRNRSTP
DUCT BURNER STOPPED
Value
14:55:37
ObjectTrend: 921-2015.FQG FUEL GAS FLOW
12,12 6,432
4.00
3.25
2.50
1.75
1.00
ON Name
Description
Attribute
Treatment
Ruler Time
Ruler Value
Current Value
Unit
Filter
Time Offset
Form
921-2015.FQG
FUEL GAS FLOW
MV
Mean
09:00 2013-06-26
2.16
3.33
PPS
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

2013 - 2014
Annual Title V Compliance Certification
New-Indy Oxnard, LLC
May 1, 2014

Section 5 Supporting Records

NEW INDY
CONTAINERBOARD

April 10, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Nebraska Start up - April 5, 2013

Dear Mr. Olson:

This letter is a follow up on the call made by Charlie Wilson to the VCAPCD Breakdown Center Hotline on April 5, 2013 at about 7:00 AM.

On April 5, 2013, the Nebraska boiler had maintenance service and was started up in preparation for the planned repair of the B&W boiler low temperature economizer tube. However, the attempts to start up Nebraska boiler failed. Nebraska attempted to start up from 7:07 AM – 7:27 AM and from 11:09 AM – 11:49 AM, a total of 1 hour.

On April 6, 2013, the cogen was shut down for repair of the B&W boiler economizer tube leak. The Daily Emission Sheet, PI and DCS trends and cogen logs have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

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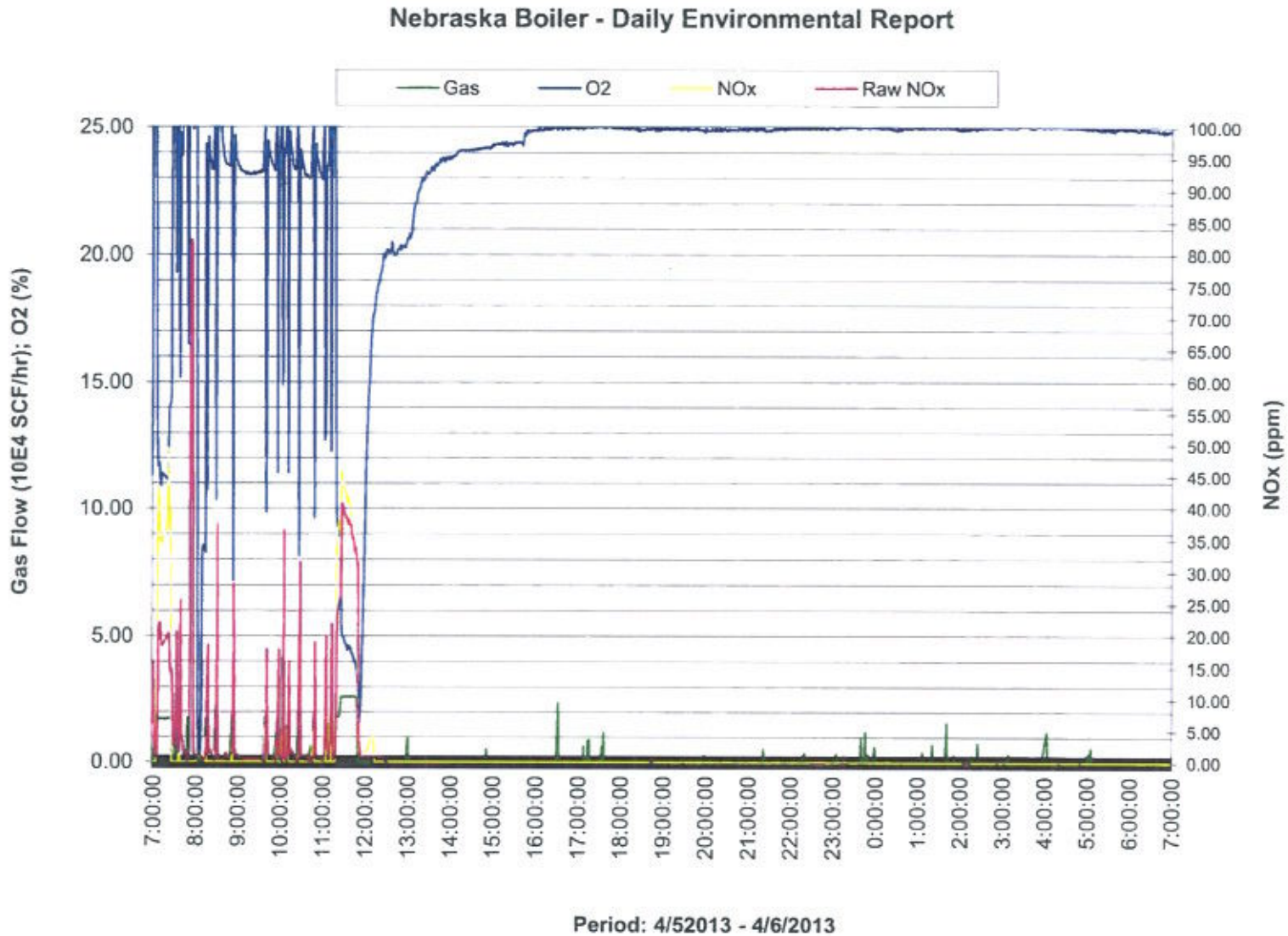
Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: 	4/10/2013
Title: Technical Superintendent	


Nebraska Boiler - Daily Environmental Report
Gas
O2
NOx
Raw NOx
Gas Flow (10E4 SCF/hr); O2 (%)
NOx (ppm)
25.00
20.00
15.00
10.00
5.00
0.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
18:00:00
19:00:00
20:00:00
21:00:00
22:00:00
23:00:00
0:00:00
1:00:00
2:00:00
3:00:00
4:00:00
5:00:00
6:00:00
7:00:00
Period: 4/52013 - 4/6/2013

End Time 4/6/2013 7:00 Start Time 4/5/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3 NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2)
8:00	16.64	233.95	622.74	57.10	17.98	0.92	1.97	0.69	**9.77**	15.38	28.42	**16.84**	**10.53**	**10.56**	19.89	14.68	
9:00	7.30	259.11	623.02	69.42	23.90	0.98	2.20	0.69	**10.49**	15.47	25.46	**15.30**	**10.68**	**10.64**	19.29	2.84	
10:00	6.46	261.74	623.23	70.14	25.02	0.98	2.23	0.70	**10.40**	15.51	24.94	**15.03**	**10.48**	**10.56**	22.86	1.50	
11:00	2.03	262.77	621.40	74.95	25.91	0.95	2.23	0.70	**10.36**	15.64	17.41	**10.52**	**10.80**	**10.59**	22.51	2.98	
12:00	4.14	261.13	622.08	72.82	25.62	0.98	2.21	0.69	**10.26**	15.53	22.83	**13.63**	**10.43**	**10.50**	10.67	18.93	33.10
13:00	0.23	259.94	619.19	73.80	25.47	0.98	2.16	0.69	**10.16**	15.41	17.62	**10.38**	**10.55**	**10.53**	18.70	0.19	
14:00	0.06	260.54	619.08	75.54	25.99	0.98	2.17	0.69	**10.16**	15.58	18.93	**9.93**	**10.54**	**10.51**	22.85	-0.26	
15:00	0.06	260.88	619.27	76.27	26.32	0.98	2.19	0.69	**10.12**	15.77	18.71	**9.68**	**10.47**	**10.52**	24.08	-0.81	
16:00	0.27	261.23	619.46	76.93	26.44	0.97	2.21	0.69	**10.18**	15.70	18.51	**9.55**	**10.52**	**10.51**	24.46	-1.33	
17:00	0.07	261.23	619.65	76.73	26.13	0.96	2.19	0.69	**10.12**	15.78	18.77	**9.89**	**10.47**	**10.49**	24.94	-1.15	
18:00	1.84	261.23	621.01	76.57	26.26	0.96	2.20	0.69	**10.21**	15.68	18.80	**11.20**	**10.47**	**10.49**	25.00	-0.88	
19:00	0.03	261.40	619.71	77.09	26.10	0.95	2.21	0.69	**10.15**	15.58	18.69	**9.70**	**10.49**	**10.48**	24.93	-0.91	
20:00	0.03	261.23	619.56	76.90	26.06	0.95	2.21	0.69	**10.16**	15.38	18.73	**9.76**	**10.51**	**10.49**	24.92	-1.13	
21:00	0.03	261.69	619.41	76.41	26.07	0.96	2.21	0.69	**10.19**	15.40	18.78	**9.90**	**10.53**	**10.51**	24.90	-1.13	
22:00	0.03	261.44	619.28	76.26	26.09	0.96	2.22	0.69	**10.15**	15.40	18.70	**9.80**	**10.48**	**10.51**	24.91	-1.19	
23:00	0.03	261.23	619.12	75.52	25.86	0.96	2.21	0.69	**10.16**	15.37	17.39	**10.25**	**10.50**	**10.51**	24.96	-0.71	
0:00	0.03	261.23	618.97	75.58	25.88	0.96	2.21	0.69	**10.13**	15.44	17.18	**10.00**	**10.48**	**10.49**	24.99	-0.86	
1:00	0.03	261.05	618.78	75.07	25.73	0.96	2.21	0.69	**10.15**	15.39	17.85	**10.44**	**10.50**	**10.49**	24.96	-1.11	
2:00	0.03	261.74	618.28	74.09	25.41	0.95	2.21	0.69	**10.14**	15.38	17.99	**10.62**	**10.48**	**10.48**	24.99	-1.09	
3:00	0.03	261.23	618.80	72.75	24.74	0.95	2.20	0.69	**10.14**	15.51	18.88	**10.95**	**10.49**	**10.48**	24.97	-0.71	
4:00	0.03	261.23	617.06	72.26	24.32	0.94	2.19	0.69	**10.17**	15.57	19.09	**11.21**	**10.51**	**10.49**	25.03	-1.01	
5:00	3.11	261.23	620.26	71.54	24.53	0.95	2.20	0.69	**10.30**	15.49	23.15	**13.91**	**10.53**	**10.51**	25.02	-0.88	
6:00	-0.01	255.49	616.45	71.12	23.80	0.93	2.15	0.69	**9.79**	15.54	19.50	**11.27**	**10.30**	**10.44**	24.93	-1.00	
7:00	0.20	213.67	600.96	54.48	16.18	0.88	1.75	0.63	**8.48**	[redacted]	37.43	**19.38**	**8.98**	**9.93**	24.88	-1.00	

Comment: Turbine down for boiler repair 6:55 a.m.-7:00 a.m. for 0.1 hour, Nebraska attempted to start up at 7:07-7:27 AM and 11:09-11:49 AM for total 1 hour

Daily Av Cogen NOx	Daily Av Cog+Neb NOx
lb/h	lb/h
10.10	10.50

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
11.60	11.85

Stack NOx analyzer	
zero value	0.03
zero drift %	0.03
span value	82.03
span drift %	0.04

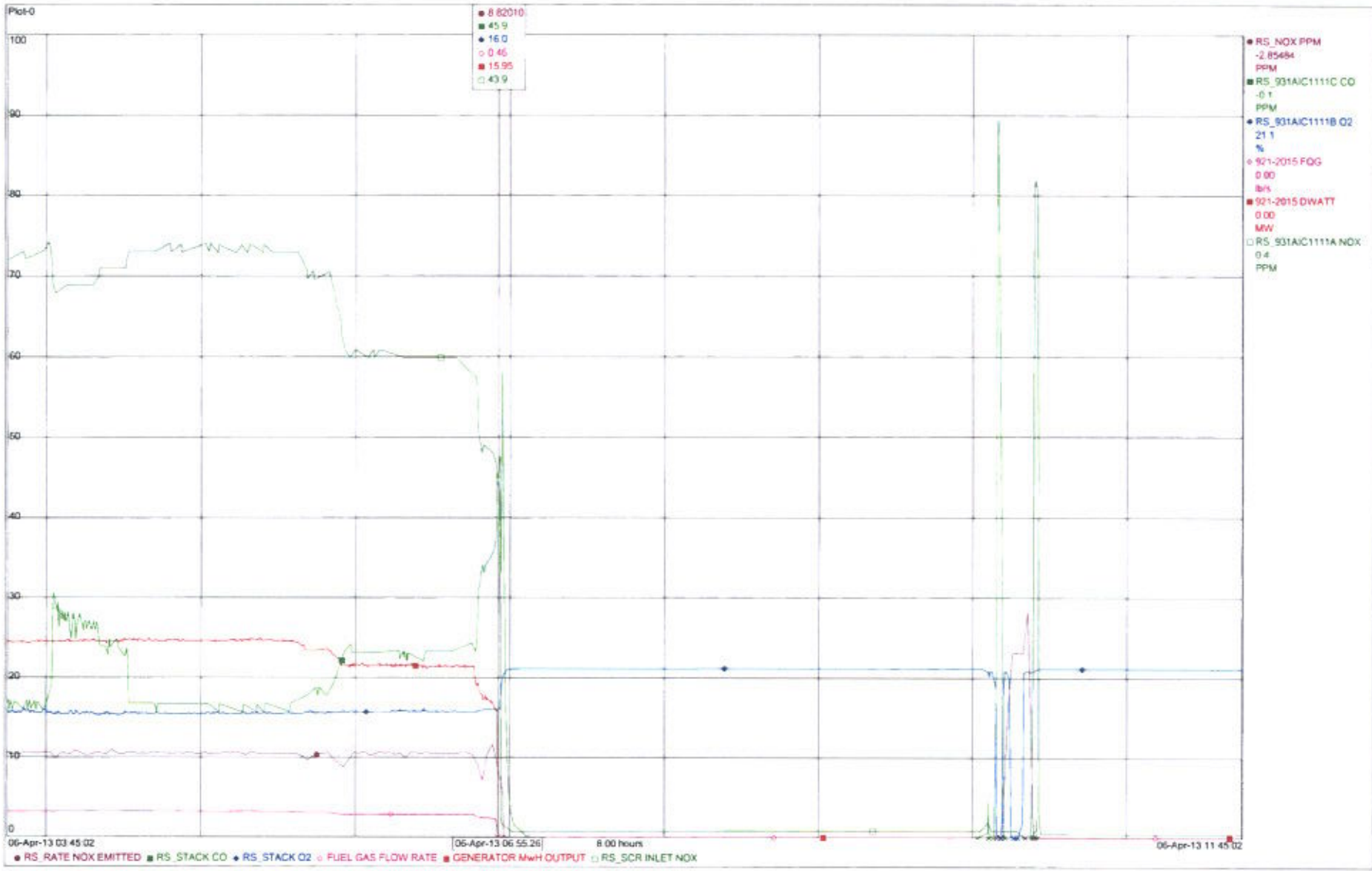
Stack CO Analyzer	
zero value	-1.44
zero drift %	-1.44
span value	89.72
span drift %	-0.03

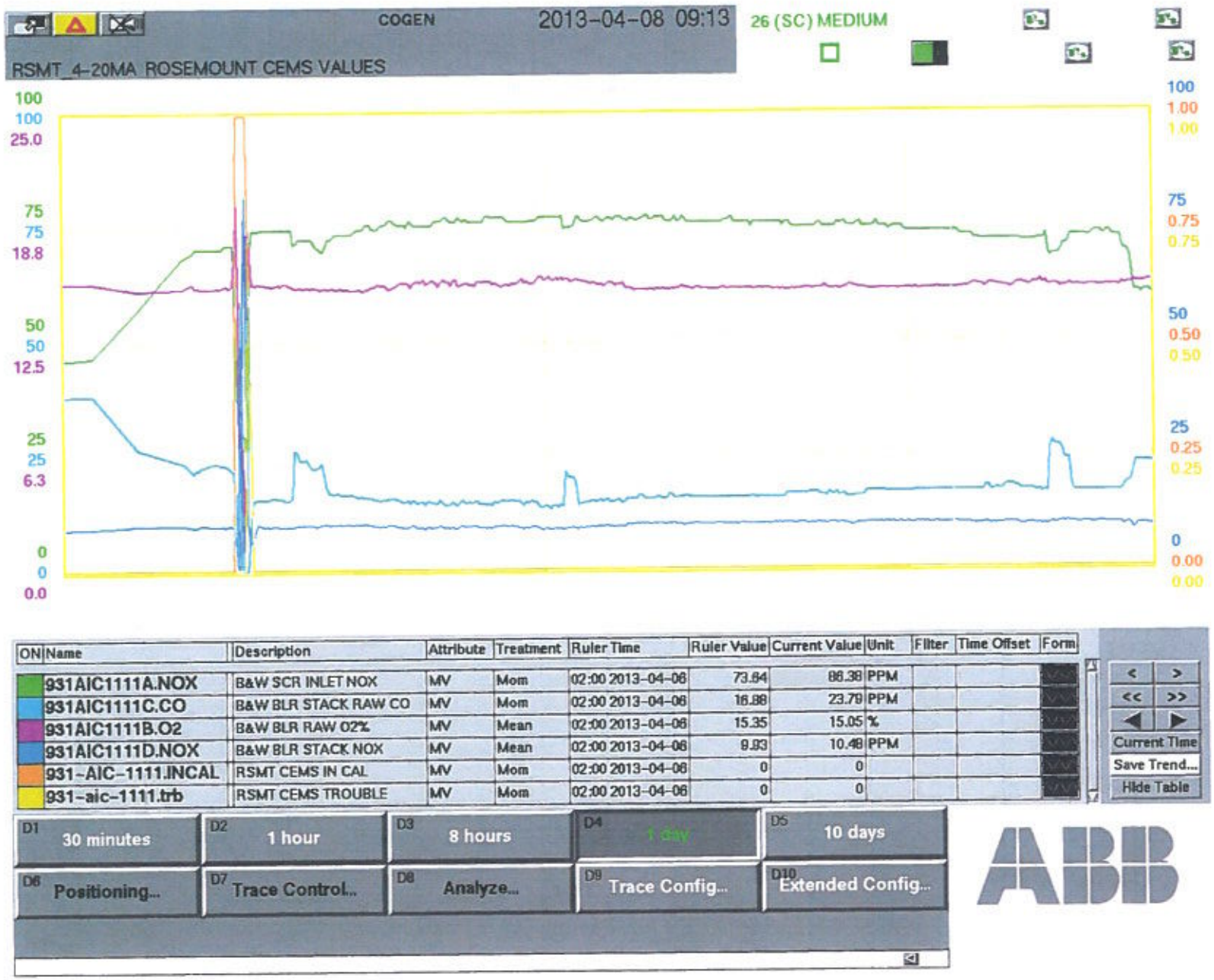
Stack O2 Analyzer	
zero value	20.90
zero drift%	-0.10
span value	-0.02
span drift %	-0.09

Nebraska Gas	12,905

PRINT TIME: 4/6/201312:17 PM

NOTE: This document is valid for only ONE week after print time


Plot-0
8.82010
45.9
16.0
0.46
15.95
43.9
100
90
80
70
60
50
40
30
20
10
0
RS_NOX PPM
-2.85484
PPM
RS_931AIC1111C CO
-0.1
PPM
RS_931AIC1111B O2
21.1
%
921-2015 FQG
0.00
lb/s
921-2015 DWATT
0.00
MW
RS_931AIC1111A NOX
0.4
PPM
06-Apr-13 03:45:02
06-Apr-13 06:55:26
8.00 hours
06-Apr-13 11:45:02
RS_RATE NOX EMITTED
RS_STACK CO
RS_STACK O2
FUEL GAS FLOW RATE
GENERATOR MwH OUTPUT
RS_SCR INLET NOX


COGEN
2013-04-08 09:13
26 (SC) MEDIUM
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 02:00 2013-04-06 73.64 86.38 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 02:00 2013-04-06 16.88 23.79 PPM
931AIC1111B.O2 B&W BLR RAW 02% MV Mean 02:00 2013-04-06 15.35 15.05 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 02:00 2013-04-06 9.93 10.48 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 02:00 2013-04-06 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 02:00 2013-04-06 0 0
< >
<< >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR: M

DRY SHIFT OPERATOR: Van Zandt

DATE: 4-5-13

SAFETY IS ALWAYS NO. 1 — Hunnewell Paper Mill

CHEMICAL PUMPS

	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	HP	SCC LP	TURBINE
CURRENT	066141760	48942298	6070 1495	204678	1593	16523 06	76910 20
PREVIOUS	065902890	47549021	6063 8537	193815	1632	16496 50	73273 50

NEW DEMIN TRAILER: YES / NO — TIME:

AMMONIA DELIVERY: YES / NO — % FULL:

NEBRASKA ONLINE TIME — FROM: — TO:

NEBRASKA WARM STORAGE CHECK: YES / NO

GAS & ELECTRIC READING

	MAXON	BURNER	NEBRASKA	SAWATTS
CURRENT	526715	42805	/	65540
PREVIOUS	525794	114552		64956

TURBINE

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR %	41.3	49.3	49.3	47.3	47.8	48.2	48.4	48.2	48.1	48.4	48.3	48
Inlet Temp °F	61	62	63	66	65	64	64	64	63	62	57	57
Humidity %	55.6	54.6	53.6	46.4	40.4	44.8	50.8	48.8	50.9	53	58	57
Vibration (Max) MILS	.12	.11	.11	.12	.12	.11	.12	.12	.12	.12	.12	.12
Steam Injection #/SEC	198	219	233	223	221	229	222	227	228	223	221	220
Turbine L.O. Level %	100	100	100	100	100	100	100	100	100	100	100	100
T48 °F	1402	1470	1477	1473	1475	1475	1477	1475	1473	1469	1454	1456

BATTERIES 135 V — HP RECOUPE 160+ FAL — BATTERIES 136 V — HP RECOUPE 160+ FAL

AIR INLET DIFF 3.8 IN/H2O — HP RECOUPE 160+ FAR — AIR INLET DIFF 3.8 IN/H2O — HP RECOUPE 160+ FAR

L.O. DIFFERENTIAL 5 PSI — HP RECOUPE 54 AFT — L.O. DIFFERENTIAL 5 PSI — HP RECOUPE 50 AFT

GENERATOR

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain °F	154	155	156	157	156	156	157	157	156	155	155	154
L.O. Supply °F	128	129	130	131	130	130	130	130	130	125	125	125
Gen. Vibration (Max) IPS	.40	.41	.40	.41	.41	.39	.38	.39	.38	.38	.36	.36
Tie Line MW	12.48	12.50	12.63	12.52	12.50	1260	12.52	12.46	12.50	1261	12.50	13.52

GEN. 475 AMPS — GEN.VARS 3.98 MEGA VARS — GEN. 112.0 AMPS — GEN.VARS 4.64 MEGA VARS

FIELD 180 AMPS — FIELD VOLTS 155 V — FIELD 198 AMPS — FIELD VOLTS 173 V

COOLING TWR INLET 80 F — COOLING TWR INLET 74 F — COOLING TWR INLET 83 F — COOLING TWR INLET 77 F

COGEN BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp °F	710	718	710	710	709	715	710	710	711	710	710	710
HP Drum Level IN	0.8	1.0	1.0	1.0	0.9	1.0	0.8	1.1	0.7	1	1	1
LP Drum Level IN	1.1	1.2	1.0	1.2	0.9	1.0	0.9	1	0.9	1.1	1	1
HP Drum Pressure PSI	475	475	475	475	475	477	477	477	477	477	477	477
LP Drum Pressure PSI	138	140	140	131	131	139	132	132	132	132	132	132
CO PPM	249	253	181	169	193	326	165	165	175	178	185	18
NOX PPM	10.5	10.4	10.6	10.5	10.7	9.3	10.1	10.5	10.4	10.5	10.4	10.5
O2 %	15.43	15.43	15.39	15.42	15.62	15.45	15.34	15.34	15.53	15.35	15.45	15.46
Hot Well Level %	142	151	144	144	133	147	147	158	154	136	154	146

1150 SET POINT 449 — 1103 B SET POINT 444 — 1150 SET POINT 449 — 1103 B SET POINT 449

SCANNER BLOWER (ON) ON — DUCT BURNER 442 SP — SCANNER BLOWER ON ON — DUCT BURNER S.P. 442

COMPRESSORS

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator PSI	235	233	233	235	239	237	235	235	237	239	241	240
Gas Receiver PSI	420	420	420	420	420	490	420	420	420	420	420	420

NEBRASKA BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level IN												
Drum Pressure PSI												
Steam Flow #/HR												
Steam Temp °F												
NOX PPM												
O2 %												
Blow Down Conductivity MHOS												

ON LINE TURBINE WATER WASH: YES / NO — CODUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION — NO. ✓ — (YES) / NO — NO. 2 — YES / NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5	8.8	8.9
Conductivity <5mmhos	4.8	5.6
Silica < 20 ppb	2.3	4
R.O.		
Feed TDS<1000 ppm	10.46	10.2
Permeate TDS<10 ppm	16.1	
ph (Feed 7.5)	6.23	6.9
CONDENSATE		
HP–pH 8.5 –9.5	9.6	9.7
Conductivity<20mmhos	1.96	18.1
LP–pH 8.5–9.5	9.0	
Conductivity<20mmhos	7.3	8.1 7.5
HP		
pH 9.5 – 10.5	8.8	9.1
Conductivity 75–150	6.94	68.1
Phosphate 5–15 ppm	9.4	10.3
Silica < 5 ppm	1.2	.412
Iron ppm		
LP		
pH 9.5 – 10.5	8.6	9.1
Conductivity 75 – 150	168.8	171.2
Phosphate 5–15 ppm	3.28	27.8
Silica <5 ppm	0.4	.412
Iron ppm		
MIXED BED		
pH 8.0 – 7.5	9.38	9.1
Conductivity< 1mmhos	.65	.69
Silica <10 ppb		8
HP Steam Test		
Silica <20 ppb		12
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		2
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NEBRASKA

NOTES:

ACAD# 000-2011 - REV E — WCX 10280

End Time 4/7/2013 7:00 Start Time 4/6/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2)
8:00	-0.01	0.00	502.07	0.66	2.12	-187426.51	0.00	0.00	0.00	[illegible]	10.48	0.00	-7.97	3.77	24.96	-1.00	
9:00	-0.01	0.00	499.81	0.74	-2.97	231791.84	0.00	0.00	0.00	21.10	15.52	0.00	-6.35	+1.78	24.81	-1.07	
10:00	-0.01	0.00	499.71	0.76	-3.81	282332.84	0.00	0.00	0.00	[illegible]	14.43	0.00	-5.26	-5.53	24.78	-1.03	
11:00	-0.01	0.00	499.82	0.41	-3.81	511410.19	0.00	0.00	0.00	[illegible]	3.81	0.00	-3.46	-5.02	24.79	-1.03	
12:00	-0.01	0.00	499.92	0.41	-3.81	542947.75	0.00	0.00	0.00	[illegible]	3.81	0.00	-3.18	-3.94	24.81	-1.03	
13:00	-0.01	0.00	500.02	0.41	-2.59	397427.06	0.00	0.00	0.00	[illegible]	3.81	0.00	-3.84	-3.47	24.80	-1.03	
14:00	-0.01	0.00	500.13	0.41	-1.84	247307.53	0.00	0.00	0.00	[illegible]	3.81	0.00	-3.47	-3.47	24.80	-1.03	
15:00	-0.01	0.00	500.23	0.41	-1.84	247307.53	0.00	0.00	0.00	[illegible]	3.81	0.00	-3.34	-3.55	24.79	-1.04	
16:00	-0.01	0.00	500.33	0.41	-1.84	247307.53	0.00	0.00	0.00	[illegible]	3.81	0.00	-3.55	-3.45	24.87	-2.03	
17:00	-0.01	0.00	500.44	0.41	-1.84	247307.53	0.00	0.00	0.00	[illegible]	3.81	0.00	-3.13	-3.34	24.77	-2.00	
18:00	1.28	40.72	500.54	13.96	-1.84	150304.54	0.02	0.02	6.05	[illegible]	163.84	12.46	16.79	3.30	24.72	-2.06	
19:00	8.20	148.90	569.00	55.48	12.87	1.23	0.77	0.42	9.90	[illegible]	61.63	21.89	15.34	9.60	24.77	-2.02	
20:00	8.41	196.56	590.48	47.85	13.11	1.03	1.56	0.85	7.90	[illegible]	45.67	20.58	10.56	14.16	24.77	-1.14	
21:00	8.42	175.39	587.26	42.08	11.01	1.02	1.29	0.80	7.02	[illegible]	55.19	22.65	10.40	12.10	24.79	-1.03	
22:00	8.44	193.39	590.37	46.58	12.79	1.10	1.54	0.84	7.87	[illegible]	48.17	21.32	10.73	10.56	24.86	-0.98	
23:00	7.84	257.01	621.16	73.33	24.49	0.99	2.16	0.89	10.47	[illegible]	24.46	14.49	10.70	10.61	24.74	-0.88	
0:00	0.11	264.09	617.38	77.58	26.10	0.92	2.22	0.89	10.26	15.27	17.00	10.81	10.49	10.64	24.64	-0.82	
1:00	0.08	262.46	615.74	75.88	25.43	0.93	2.22	0.89	10.18	15.29	17.86	10.47	10.48	10.56	24.61	-0.84	
2:00	-0.02	263.44	614.72	75.28	25.18	0.93	2.22	0.89	10.22	15.28	18.04	10.72	10.48	10.48	24.65	-0.87	"
3:00	-0.02	261.23	614.33	74.97	25.07	0.93	2.20	0.89	10.13	15.32	18.79	11.01	10.48	10.48	24.67	-0.82	
4:00	-0.02	261.23	613.94	74.97	24.93	0.94	2.20	0.89	10.15	15.34	18.66	10.89	10.49	10.48	24.65	-0.76	
5:00	-0.02	261.05	613.37	74.88	24.81	0.93	2.20	0.89	10.10	15.39	19.01	11.24	10.46	10.47	24.64	-0.97	
6:00	-0.02	261.40	613.64	74.51	24.86	0.93	2.21	0.89	10.16	15.34	18.85	11.11	10.50	10.48	24.66	-0.97	
7:00	1.64	261.57	614.16	74.48	24.94	0.94	2.21	0.89	10.19	15.33	21.57	12.83	10.47	10.48	24.69	-0.97	

Comment: Turbine down for boiler leak repair on 4/6/13 from 7 AM - 5:30 PM, a total of 10.5 hrs

Daily Av Cogen NOx lb/h	Daily Av Cog+Neb NOx lb/h
5.44	5.44

Daily Av Cogen CO lb/h	Daily Av Cog+Neb CO lb/h
8.40	8.40

Stack NOx analyzer	
zero value	0.03
zero drift %	0.01
span value	81.88
span drift %	-0.15

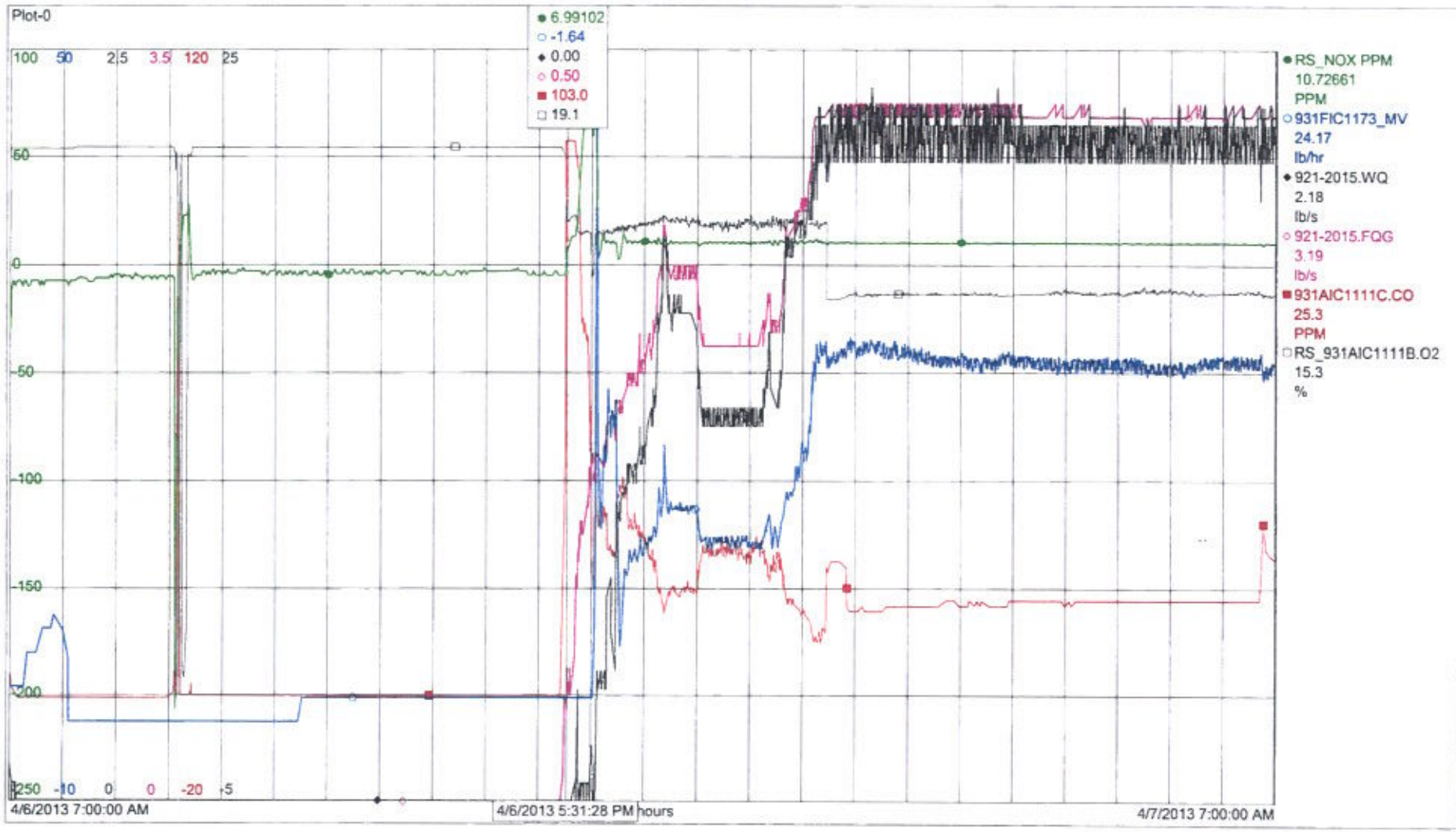
Stack CO Analyzer	
zero value	-1.00
zero drift %	-1.00
span value	89.56
span drift %	-0.21

Stack O2 Analyzer	
zero value	21.09
zero drift%	0.83
span value	-0.04
span drift %	-0.18

Nebraska Gas	0

PRINT TIME: 4/7/20138:29 AM

NOTE: This document is valid for only ONE week after print time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-1.64
0.00
0.50
103.0
19.1
100 50 2.5 3.5 120 25
50
0
-50
-100
-150
-200
250 -10 0 0 -20 5
RS_NOX PPM
10.72661
PPM
931FIC1173_MV
24.17
lb/hr
921-2015.WQ
2.18
lb/s
921-2015.FQG
3.19
lb/s
931AIC1111C.CO
25.3
PPM
RS_931AIC1111B.O2
15.3
%
4/6/2013 7:00:00 AM
4/6/2013 5:31:28 PM hours
4/7/2013 7:00:00 AM


COGEN
2013-04-08 09:15
26 (SC) MEDIUM
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 07:06 2013-04-06 0.86 86.38 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 07:06 2013-04-06 1.74 23.51 PPM
931AIC1111B.O2 B&W BLR RAW 02% MV Mean 07:06 2013-04-06 21.05 15.09 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 07:06 2013-04-06 0.23 10.85 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 07:06 2013-04-06 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 07:06 2013-04-06 0 0
< >
<< >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR — NAME: M.L.

DRY SHIFT OPERATOR — NAME: Van Tandt / M.L.

781-2158 NO3 Cool Fan

Hueneme Paper Mill

SAFETY IS ALWAYS NO. 1 — DATE: 4-6-13

START UP 5:15

CHEMICAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O		HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	KAWATTS
CURRENT	1657871	48811437	60731894	100032	926	1654190	7851300	826883	38061		45835
PREVIOUS	0661411760	47742298	60701475	204078	1573	1652306	7691020	826715	42805		65540

NEW DEMIN TRAILER: YES / NO — TIME:

NEBRASKA ONLINE TIME — FROM: — TO:

AMMONIA DELIVERY: YES / NO — % FULL:

NEBRASKA WARM STORAGE CHECK: YES / NO

GAS & ELECTRIC READING

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP–pH 8.5 –9.5		
Conductivity<20mmhos		
LP–pH 8.5–9.5		
Conductivity<20mmhos		
HP		
pH 9.5 – 10.5		
Conductivity 75–150		
Phosphate 5–15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 – 10.5		
Conductivity 75 – 150		
Phosphate 5–15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 – 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES: CO-GEN DOWN
Flow 1 - 70M

IDLE – 17:31
AUTO – 17:40
ON LINE – 17:44

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%								33.4	48.8	48.5	48.1	48
Inlet Temp	°F								64	63	60	59	58
Humidity	%								46.8	50.6	55.4	56.1	57.6
Vibration (Max)	MILS								.27	.12	.14	.14	.15
Steam Injection	#/SEC								1.31	2.25	2.18	2.20	2.23
Turbine L.O. Level	%								100	100	100	100	100
T48	°F								1263	1480	1470	1465	1463

BATTERIES V — HP RECOUPE FAL — AIR INLET DIFF IN/H2O — HP RECOUPE FAR — L.O. DIFFERENTIAL PSI — HP RECOUPE AFT

BATTERIES V — HP RECOUPE FAL — AIR INLET DIFF IN/H2O — HP RECOUPE FAR — L.O. DIFFERENTIAL PSI — HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F								156	157	156	156	155
L.O. Supply	°F								129	129	129	129	128
Gen. Vibration (Max)	IPS								.46	.38	.39	.38	.39
Tie Line	MW								1209	12.61	12.46	12.50	12.48

GEN. AMPS — GEN.VARS MEGA VARS — FIELD AMPS — FIELD VOLTS V — COOLING TWR INLET F — COOLING TWR INLET F

GEN. 6.50 AMPS — GEN.VARS 1.20 MEGA VARS — FIELD 152 AMPS — FIELD VOLTS 125 V — COOLING TWR INLET F — COOLING TWR INLET F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F								699	710	707	708	710
HP Drum Level	IN								1	-0.8	0.9	1	1.1
LP Drum Level	IN								2.1	1.6	1.1	1	1
HP Drum Pressure	PSI								480	484	484	484	484
LP Drum Pressure	PSI								145	147	145	145	145
CO	PPM								577	25.4	17.5	18	18.7
NOX	PPM								10.8	10.6	10.3	10.3	10.7
O2	%								18.09	15.07	15.27	15.20	15.32
Hot Well Level	%								136	160	143	139	150

1150 SET POINT — 1103 B SET POINT — SCANNER BLOWER (ON) Y/N — DUCT BURNER SP

1150 SET POINT 449 — 1103 B SET POINT 444 — SCANNER BLOWER ON Y/N — DUCT BURNER S.P. 442

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI								241	237	241	241	241
Gas Receiver	PSI								420	420	420	420	426

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity MHOS													

ON LINE TURBINE WATER WASH: YES / NO — CODUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION: NO. 1 YES / NO — NO. 2 YES / NO

ACAD# 000-3011 – REV E — WECX 10310

NEW INDY
CONTAINERBOARD

May 16, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Nebraska Start up – May 15, 2013

Dear Mr. Olson:

This letter is a follow up on the notification call made by Charlie Wilson to the VCAPCD Breakdown Center Hotline on May 15, 2013 at about 8:45 PM.

During the scheduled maintenance shutdown on May 14, 2013, it was discovered that the turbine's hot section was damaged. Offsite repair is required for the damaged section of the turbine. Nebraska boiler was then started up on May 15, 2013 at 8:45 PM to provide steam for paper production. Nebraska CEMS was successfully calibrated prior to start-up.

The Daily Emission Sheet, PI and DCS trends and cogen logs have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution
Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: 	5/16/2013
Title: Technical Superintendent	

End Time 5/16/2013 7:00 Start Time 5/15/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2)
8:00	0.00	0.00	497.25	0.69	7.17	128802.30	0.00	0.00	0.00	[illegible]	-20.25	0.00	3.55	3.36	24.72	0.13	
9:00	0.00	0.00	497.25	0.69	7.92	146855.70	0.00	0.00	0.00	[illegible]	-19.90	0.00	3.94	3.64	25.08	0.13	
10:00	0.00	0.00	497.25	0.70	7.38	137832.41	0.00	0.00	0.00	[illegible]	-18.78	0.00	3.67	3.72	25.60	0.13	
11:00	0.00	0.00	497.25	0.41	-2.37	-74313.26	0.00	0.00	0.00	[illegible]	4.64	0.00	8.41	5.34	25.57	0.13	
12:00	0.00	0.00	497.25	0.41	-2.37	-74241.41	0.00	0.00	0.00	[illegible]	1.71	0.00	6.83	6.30	25.48	0.13	
13:00	0.00	0.00	497.25	0.41	1.08	26316.04	0.00	0.00	0.00	[illegible]	2.24	0.00	5.42	6.89	25.30	0.13	
14:00	0.00	0.00	497.25	0.41	9.02	286294.74	0.00	0.00	0.00	[illegible]	7.82	0.00	4.51	5.59	25.23	0.13	
15:00	0.00	0.00	497.25	0.41	-3.27	-101534.15	0.00	0.00	0.00	[illegible]	6.38	0.00	4.94	4.96	21.02	3.23	
16:00	0.00	0.00	497.25	0.41	1.47	42378.89	0.00	0.00	0.00	[illegible]	-1.27	0.00	4.89	4.78	25.01	0.61	
17:00	0.00	0.00	497.25	0.41	-4.34	-136060.28	0.00	0.00	0.00	[illegible]	4.56	0.00	5.02	4.95	24.93	0.34	
18:00	0.00	0.00	497.25	0.41	-4.34	-136060.28	0.00	0.00	0.00	[illegible]	1.53	0.00	4.59	4.83	24.92	0.17	
19:00	0.00	0.00	497.25	0.41	-4.34	-136060.28	0.00	0.00	0.00	[illegible]	-3.50	0.00	4.84	4.81	24.81	0.19	
20:00	0.00	0.00	497.25	0.41	-4.34	-136060.28	0.00	0.00	0.00	[illegible]	0.31	0.00	5.04	4.82	24.82	0.45	
21:00	0.00	0.00	497.25	0.41	-4.34	-136060.29	0.00	0.00	0.00	[illegible]	3.25	0.00	5.52	5.13	21.73	4.87	
22:00	0.00	0.00	497.25	0.41	-4.04	-126896.47	0.02	0.00	0.00	[illegible]	2.90	0.00	5.32	5.29	11.61	21.28	40.95
23:00	0.00	0.00	497.25	0.41	1.16	23415.81	0.02	0.00	0.00	[illegible]	0.01	0.00	4.86	5.24	3.14	35.32	35.80
0:00	0.00	0.00	497.25	0.41	2.23	71330.53	0.05	0.00	0.00	[illegible]	4.65	0.00	5.22	5.14	1.93	31.21	29.44
1:00	0.00	0.00	497.25	0.41	5.15	157844.49	0.04	0.00	0.00	[illegible]	4.86	0.00	3.92	4.67	1.94	25.06	24.23
2:00	0.00	0.00	497.25	0.41	7.45	234986.08	0.05	0.00	0.00	[illegible]	3.84	0.00	3.95	4.36	1.74	23.01	21.50
3:00	0.00	0.00	497.25	0.41	7.83	239829.10	0.06	0.00	0.00	[illegible]	4.15	0.00	4.10	3.99	1.78	23.27	21.77
4:00	0.00	0.00	497.25	0.41	2.29	79302.36	0.06	0.00	0.00	[illegible]	1.94	0.00	3.80	3.95	1.90	23.97	22.59
5:00	0.00	0.00	497.25	0.41	-3.84	-119587.42	0.06	0.00	0.00	[illegible]	5.66	0.00	3.81	3.93	2.53	24.78	24.15
6:00	0.00	0.00	497.25	0.41	-3.30	-103643.98	0.07	0.00	0.00	[illegible]	5.03	0.00	3.61	3.74	2.56	24.50	23.91
7:00	0.00	0.00	497.25	0.41	-3.30	-103643.98	0.08	0.00	0.00	[illegible]	20.40	0.00	3.54	3.75	2.80	25.07	24.79

Daily Av Cogen	Daily Av Cog+Neb
NOx lb/h	NOx lb/h
0.00	4.01

Daily Av Cogen	Daily Av Cog+Neb
CO lb/h	CO lb/h
0.00	0.50

Stack NOx analyzer	
zero value	0.09
zero drift %	0.09
span value	81.91
span drift %	-0.11

Stack CO Analyzer	
zero value	-2.31
zero drift %	-2.31
span value	91.59
span drift %	0.62

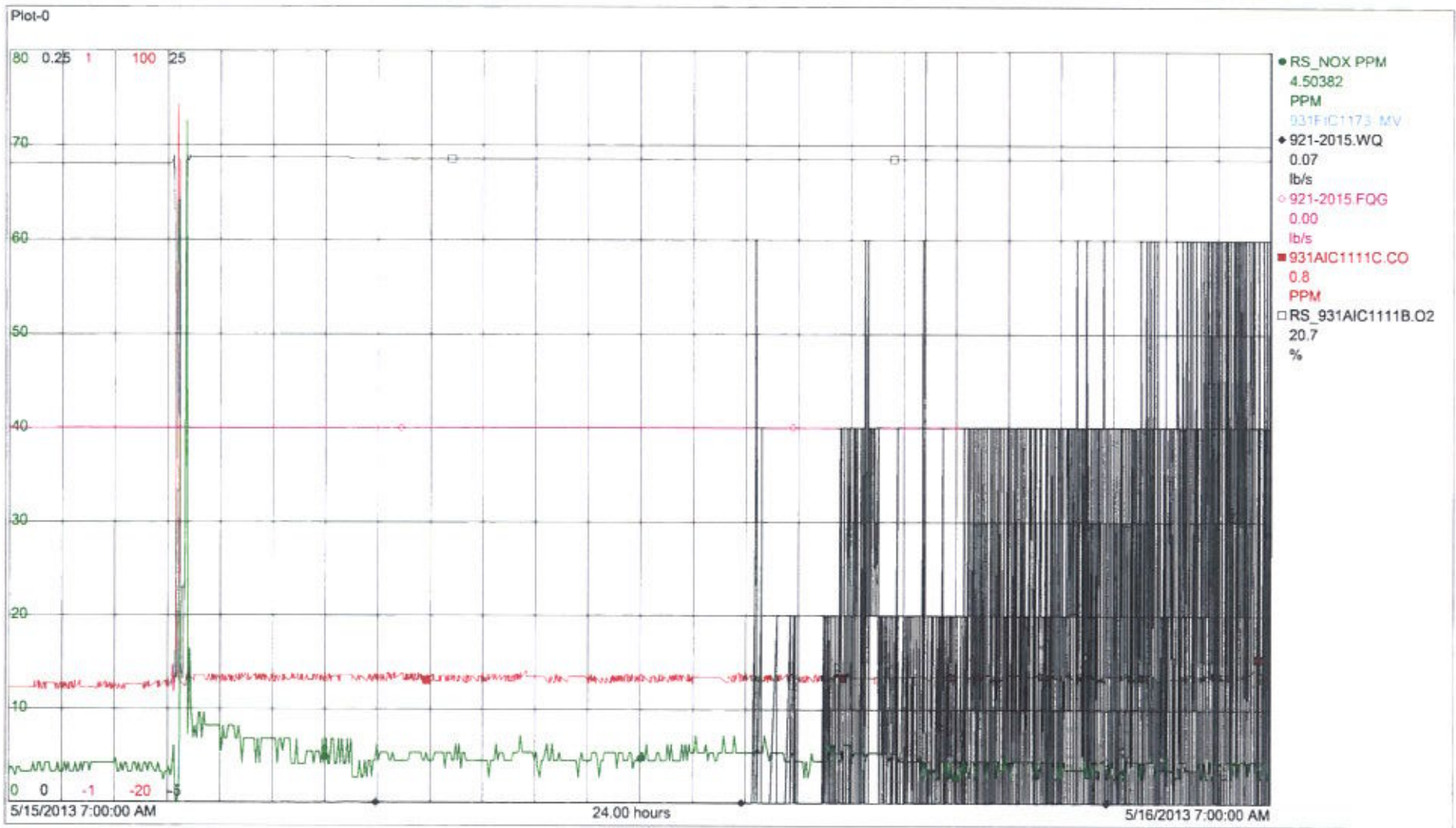
Stack O2 Analyzer	
zero value	20.86
zero drift%	-0.29
span value	-0.07
span drift %	-0.28

Nebraska Gas	517,985

Comment: Cogen down - turbine hot section damage on 5/15/13 from 7:00 AM - 7:00 AM, a total of 24 hrs. Nebraska was fired up on 5/15/13 from 10:45 pm - 5/16/13 7:00 am, a total of 8.25 hrs.

PRINT TIME: 5/16/2013 8:35 AM

NOTE: This document is valid for only ONE week after print time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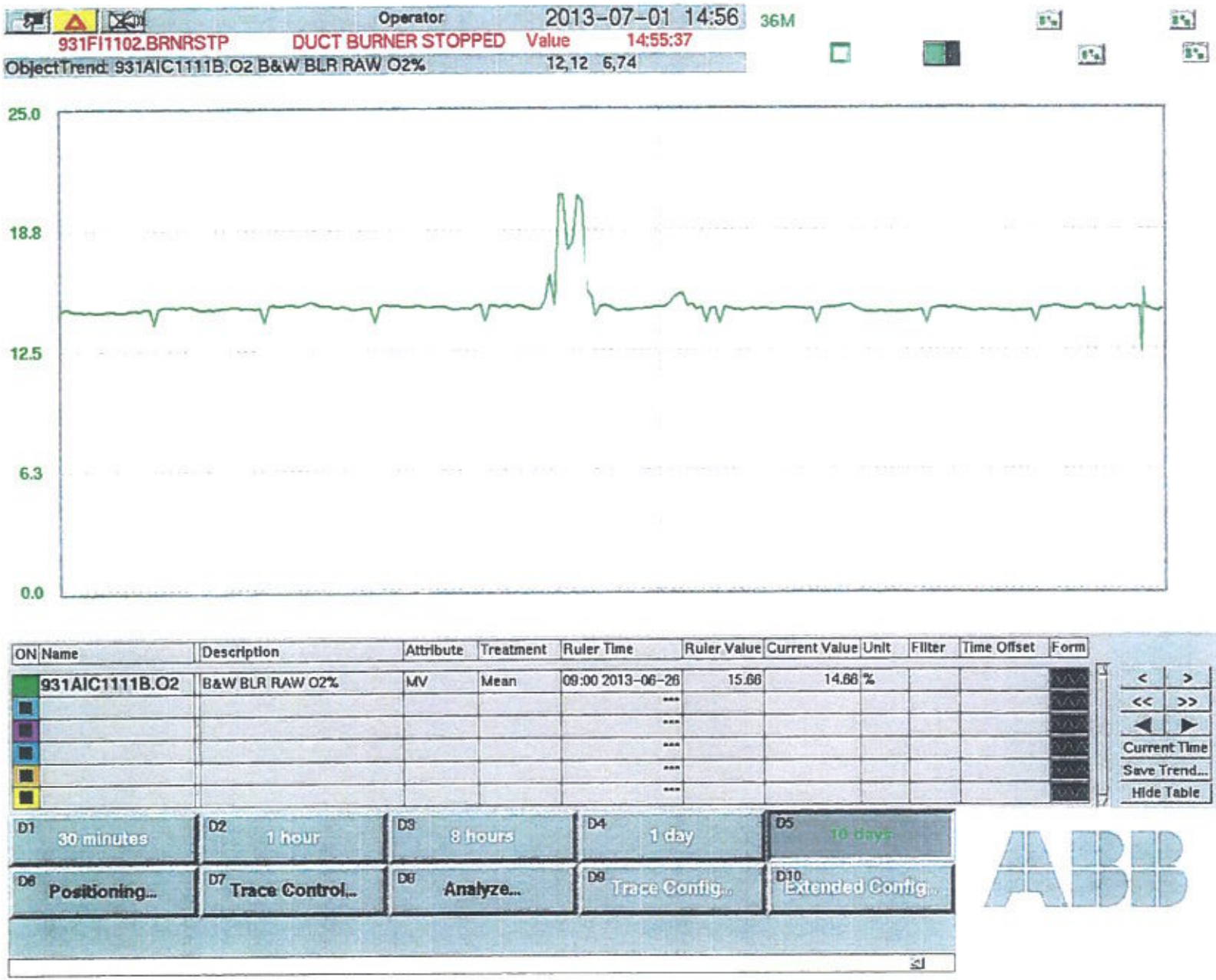
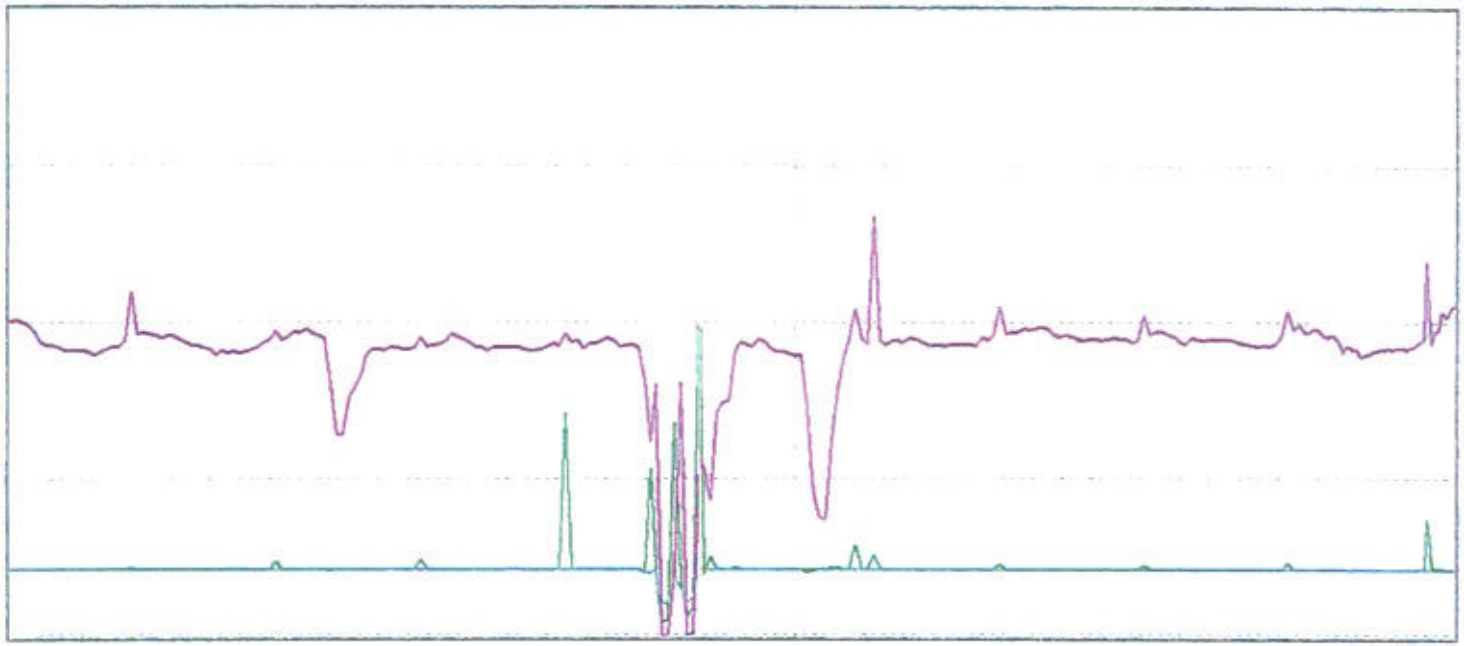
80 0.25 1 100 25
70
60
50
40
30
20
10
0 0 -1 -20 -5
5/15/2013 7:00:00 AM
24.00 hours
5/16/2013 7:00:00 AM
RS_NOX PPM
4.50382
PPM
921-2015.WQ
0.07
lb/s
921-2015 FQG
0.00
lb/s
931AIC1111C.CO
0.8
PPM
RS_931AIC1111B.O2
20.7
%


Operator
2013-07-01 14:56
36M
931FI1102.BRNRSTP
DUCT BURNER STOPPED
Value
14:55:37
ObjectTrend: 931AIC1111B.O2 B&W BLR RAW O2%
12,12 6,74
25.0
18.8
12.5
6.3
0.0
ON Name
Description
Attribute
Treatment
Ruler Time
Ruler Value
Current Value
Unit
Filter
Time Offset
Form
931AIC1111B.O2
B&W BLR RAW O2%
MV
Mean
09:00 2013-06-26
15.66
14.66
%
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...

Operator 2013-07-01 14:55 36M

931FI1102.BRNRSTP DUCT BURNER STOPPED Value 14:55:37

ObjectTrend: 931AIC1110 12,12 62,1



ON	Name	Description	Attribute	Treatment	Ruler Time	Ruler Value	Current Value	Unit	Filter	Time Offset	Form
	931AIC1110	B&W BLR STACK CNOX	MV	Mean	09:00 2013-06-26	54.8	10.2	PPM			
	931AIC1110	B&W BLR STACK CNOX	SP	Mean	09:00 2013-06-26	10.5	10.5	PPM			
	931AIC1110	B&W BLR STACK CNOX	OUT	Mean	09:00 2013-06-26	28.5	51.3	%			

< > << >> ◀ ▶ Current Time Save Trend... Hide Table

D1 30 minutes | D2 1 hour | D3 8 hours | D4 1 day | D5 10 days

D6 Positioning... | D7 Trace Control... | D8 Analyze... | D9 Trace Config. | D10 Extended Config.

ABB


Operator
2013-07-01 14:55
36M
931FI1102.BRNRSTP
DUCT BURNER STOPPED
Value
14:55:37
ObjectTrend: 931AI1193.CCO B&W BLR STACK CCO
12,12 6,113
120
90
60
30
0
ON Name
Description
Attribute
Treatment
Ruler Time
Ruler Value
Current Value
Unit
Filter
Time Offset
Form
931AI1193.CCO
B&W BLR STACK CCO
MV
Mean
09:00 2013-06-26
46.6
30.1
PPM
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...

NEW INDY
CONTAINERBOARD

July 4, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Corrupted data

Dear Mr. Olson:

This letter is a follow up on the calls made to the VCAPCD Breakdown Center Hotline on July 3, 2013 by Victor Kumpera.

During emission review on July 3, 2013, it was noticed that emission data sheet indicated extremely high hourly average of the turbine gas usage on July 3, 2013 between 6:00 and 7:00 AM. The detail review of the data showed a sudden, 1.5 minute gas flow spike of hundreds of lb/sec gas flow into the turbine. The gas flow of such magnitude is not realistic. The subsequent investigation indicated that the spike was caused by corrupted data flow from HMI 2 (GE) and the AC 450 on node 12.

All other parameters of the turbine were normal and stable. The data was filtered and it was not used in calculations for the purpose of the permit compliance.

The Daily Emission Sheets, PI trends, the Environmental Incident Report have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7279.

Sincerely,

Vitezslav Kumpera
Technical Manager

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

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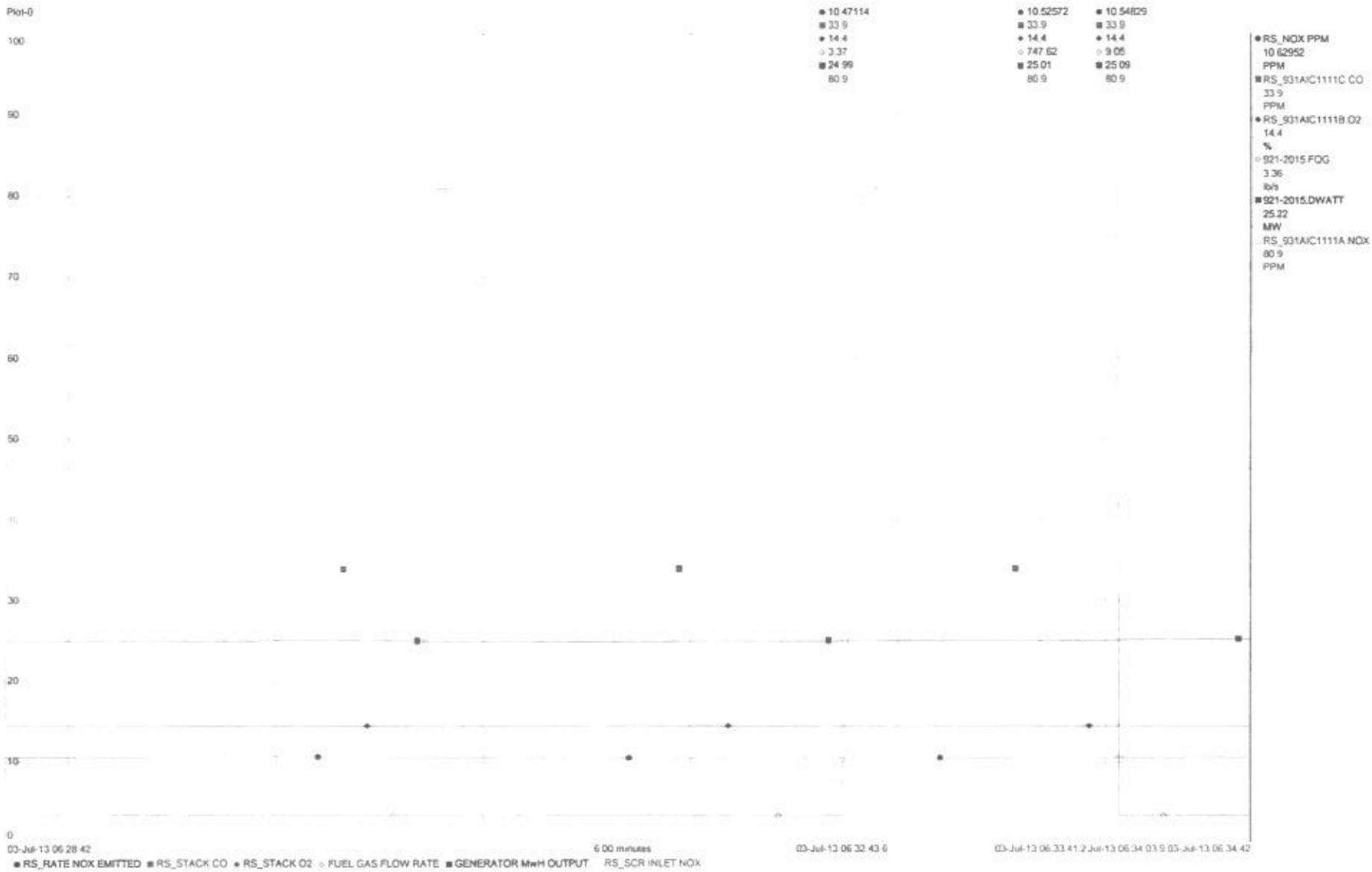
Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date: 7/4/2013
Signature: 	
Title: Technical Manager	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10.47114
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14.4
3.37
24.99
80.9
10.52572
33.9
14.4
747.62
25.01
80.9
10.54829
33.9
14.4
9.05
25.09
80.9
RS_NOX PPM
10.62952
PPM
RS_931AIC1111C.CO
33.9
PPM
RS_931AIC1111B.O2
14.4
%
921-2015.FQG
3.36
lb/s
921-2015.DWATT
25.22
MW
RS_931AIC1111A.NOX
80.9
PPM
100
90
80
70
60
50
40
30
20
10
0
03-Jul-13 06:28:42
6.00 minutes
03-Jul-13 06:32:43.6
03-Jul-13 06:33:41.2 Jul-13 06:34:03.9 03-Jul-13 06:34:42
RS_RATE NOX EMITTED
RS_STACK CO
RS_STACK O2
FUEL GAS FLOW RATE
GENERATOR MwH OUTPUT
RS_SCR INLET NOX

DAILY ENVIRONMENTAL REPORT

End Time: 7/3/2013 7:00 Start Time: 7/2/2013 7:00

Time	Duct burner gas flow	Turbine gas flow	SCR Temperature	SCR inlet NOx	Ammonia Usage	NH3 NOx mole ratio	Injection steam rate	Steam to fuel ratio	NOx	Stack O2	Stack CO	CO	Stack NOx	3h Running Average NOx	Nebraska O2	Nebraska NOx	Nebraska Corrected NOx (to 3% O_2)	Daily Av Cogen NOx	Daily Av Cog+Neb NOx
	MSCFH	MSCFH	°F	ppm	lb/h		lb/h	lb/lb	lb/h	%	15% O2 ppm	lb/h	15% O2 ppm	ppm	%	%		lb/h	lb/h
																		10 56	10 56
8 00	-0 01	273 61	636 12	84 58	30 37	0 96	2 26	0 68	**10.56**	14 61	32 08	**19.60**	**10.49**	**10.50**	24 40	0.28			
9 00	0 37	270 88	634 60	84 25	29 95	0 96	2 20	0 67	**10.43**	14 72	32 35	**19.61**	**10.45**	**10.47**	24 40	0.27		Daily Av Cogen	Daily Av Cog+Neb
10 00	0 07	267 54	634 36	83 56	29 35	0 96	2 14	0 66	**10.32**	14 74	32 18	**19.36**	**10.45**	**10.46**	24 46	-0 22		CO	CO
11 00	0 37	272 14	635 44	83 48	30 72	0 97	2 27	0 67	**10.63**	14 67	33 10	**20.42**	**10.46**	**10.53**	24 43	-0.21		lb/h	lb/h
12 00	3 10	276 08	640 53	79 81	29 63	0 98	2 37	0 70	**10.75**	14 53	35 18	**21.98**	**10.47**	**10.54**	24 42	-0 17		18 99	18 99
13 00	0 43	276 59	637 98	79 97	29 55	0 98	2 43	0 72	**10.67**	14 56	31 48	**19.46**	**10.48**	**10.54**	24 46	-0 28		Stack NOx analyzer	
14 00	0 02	276 59	637 83	80 22	29 80	0 99	2 42	0 72	**10.67**	14 57	30 73	**19.07**	**10.50**	**10.48**	24 50	-0 65		zero value	0 06
15 00	-0 01	276 34	637 67	82 02	30 24	0 99	2 42	0 72	**10.70**	14 56	29 95	**18.51**	**10.54**	**10.50**	24 44	-0 98		zero drift %	0 06
16 00	-0 01	272 92	637 52	85 92	31 64	1 00	2 37	0 71	**10.52**	14 54	29 34	**17.94**	**10.49**	**10.51**	24 44	-1 43		span value	82 81
17 00	-0 01	276 59	637 36	83 60	30 35	0 96	2 43	0 72	**10.68**	14 57	29 66	**18.37**	**10.51**	**10.51**	24 48	-1 51		span drift %	0 99
18 00	-0 01	276 08	637 21	82 78	29 71	0 95	2 40	0 72	**10.65**	14 50	29 61	**18.34**	**10.49**	**10.50**	24 42	-1 20			
19 00	-0 01	273 61	636 92	82 09	29 26	0 96	2 36	0 71	**10.57**	14 50	29 65	**18.22**	**10.51**	**10.50**	24 36	-1 29		Stack CO Analyzer	
20 00	-0 01	272 84	636 30	81 03	28 86	0 96	2 35	0 71	**10.52**	14 51	30 24	**18.42**	**10.49**	**10.50**	24 43	-0 94		zero value	-0 66
21 00	-0 01	271 98	635 66	80 78	28 59	0 96	2 34	0 70	**10.48**	14 50	30 41	**18.48**	**10.49**	**10.49**	24 45	-0 74		zero drift %	-0 66
22 00	0 13	271 64	635 14	80 19	28 29	0 96	2 31	0 70	**10.46**	14 48	30 67	**18.63**	**10.47**	**10.48**	24 42	-0 31		span value	91 38
23 00	0 06	272 92	635 09	80 39	28 39	0 95	2 35	0 70	**10.54**	14 45	30 68	**18.69**	**10.51**	**10.49**	24 43	-0 16		span drift %	0 38
0 00	0 06	273 44	635 09	80 78	28 50	0 95	2 35	0 71	**10.56**	14 45	30 61	**18.58**	**10.50**	**10.49**	24 45	-0 18			
1 00	0 06	273 35	635 09	81 20	28 63	0 95	2 35	0 71	**10.54**	14 46	30 63	**18.76**	**10.49**	**10.50**	24 46	-0 09		Stack O2 Analyzer	
2 00	0 06	272 84	635 09	80 78	28 44	0 95	2 35	0 70	**10.53**	14 43	30 63	**18.74**	**10.50**	**10.50**	24 46	0 47		zero value	20 95
3 00	0 06	271 98	635 09	80 84	28 44	0 96	2 34	0 70	**10.50**	14 43	30 80	**18.83**	**10.50**	**10.49**	24 45	0 47		zero drift%	0 16
4 00	0 06	271 72	635 09	80 75	28 32	0 95	2 34	0 70	**10.49**	14 44	30 83	**18.76**	**10.51**	**10.50**	24 45	0 47		span value	-0 04
5 00	0 10	272 07	635 09	80 75	28 32	0 95	2 34	0 70	**10.50**	14 41	30 43	**18.70**	**10.49**	**10.50**	24 45	0 43		span drift %	-0 16
6 00	0 10	272 84	635 09	81 32	28 43	0 94	2 35	0 70	**10.54**	14 43	30 88	**18.85**	**10.50**	**10.50**	24 42	0 47			
7 00	-0 03	276 08	635 09	81 23	28 55	0 94	2 37	0 71	**10.64**	14 42	30 87	**18.98**	**10.49**	**10.49**	24 40	0 36		Nebraska Gas	0

Comment: Corrupted signal from the modbus caused gas flow data spike to impossible values. Breakdown called to the APCD. - corrected data

PRINT TIME: 7/3/2013 11:44 AM

NOTE: This document is valid for only ONE week after print time

End Date: 7/3/2013 7:00 Start Date: 7/2/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct Burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR Inlet NOx ppm	Ammonia Usage lb/h	NH3 NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska Gas O2 %	Nebraska Gas NOx %	Nebraska Gas Corrected NOx (to 3% O_2)
8:00	-0.01	273.61	636.12	84.58	30.37	0.96	2.29	0.68	10.56	14.61	32.08	19.60	10.49	10.50	24.40	0.28	
9:00	0.37	270.88	634.60	84.25	29.05	0.96	2.20	0.67	10.43	14.72	32.35	19.61	10.45	10.47	24.40	0.27	
10:00	0.07	267.54	634.36	83.56	29.35	0.96	2.14	0.66	10.32	14.74	32.16	19.36	10.49	10.48	24.46	-0.22	
11:00	0.37	272.14	635.44	83.46	30.72	0.97	2.27	0.67	10.63	14.67	33.19	20.42	10.46	10.53	24.43	-0.21	
12:00	3.10	276.08	640.53	79.81	29.63	0.98	2.37	0.70	10.75	14.53	35.18	21.98	10.47	10.54	24.42	-0.17	
13:00	0.43	276.59	637.98	79.97	29.55	0.98	2.43	0.72	10.87	14.58	31.48	19.46	10.48	10.54	24.46	-0.28	
14:00	0.02	276.59	637.83	80.22	29.80	0.99	2.42	0.72	10.67	14.57	30.73	19.07	10.50	10.48	24.50	-0.65	
15:00	-0.01	276.34	637.67	82.02	30.24	0.99	2.42	0.72	10.70	14.56	29.95	18.51	10.54	10.50	24.44	-0.98	
16:00	-0.01	272.92	637.52	85.92	31.64	1.00	2.37	0.71	10.52	14.54	29.34	17.94	10.49	10.51	24.44	-1.43	
17:00	-0.01	276.59	637.36	83.60	30.35	0.96	2.43	0.72	10.68	14.57	29.60	18.37	10.51	10.51	24.48	-1.51	
18:00	-0.01	276.08	637.21	82.78	29.71	0.95	2.40	0.72	10.65	14.50	29.61	18.34	10.49	10.50	24.42	-1.20	
19:00	-0.01	273.61	636.92	82.09	29.26	0.96	2.38	0.71	10.57	14.50	29.65	18.22	10.51	10.50	24.36	-1.29	
20:00	-0.01	272.84	636.30	81.03	28.86	0.96	2.35	0.71	10.52	14.51	30.24	18.42	10.49	10.50	24.43	-0.94	
21:00	-0.01	271.98	635.66	80.78	28.59	0.96	2.34	0.70	10.48	14.50	30.41	18.48	10.49	10.49	24.45	-0.74	
22:00	0.13	271.64	635.14	80.19	28.29	0.96	2.31	0.70	10.46	14.48	30.67	18.63	10.47	10.48	24.42	-0.31	
23:00	0.06	272.92	635.09	80.39	28.39	0.95	2.35	0.70	10.54	14.46	30.68	18.69	10.51	10.49	24.43	-0.16	
0:00	0.00	273.44	635.09	80.78	28.50	0.95	2.35	0.71	10.56	14.45	30.61	18.90	10.50	10.49	24.45	-0.16	
1:00	0.06	273.35	635.09	81.20	28.63	0.95	2.35	0.71	10.54	14.46	30.63	18.76	10.49	10.50	24.46	-0.09	
2:00	0.00	272.84	635.09	80.78	28.44	0.95	2.35	0.70	10.53	14.43	30.63	18.74	10.50	10.50	24.46	0.47	
3:00	0.06	271.98	635.09	80.84	28.44	0.96	2.34	0.70	10.50	14.43	30.80	18.83	10.50	10.49	24.45	0.47	
4:00	0.06	271.72	635.09	80.75	28.32	0.95	2.34	0.70	10.49	14.44	30.83	18.76	10.51	10.50	24.45	0.47	
5:00	0.10	272.07	635.09	80.75	28.32	0.95	2.34	0.70	10.50	14.41	30.43	18.70	10.49	10.50	24.45	0.43	
6:00	0.10	272.84	635.09	81.32	28.43	0.94	2.35	0.70	10.54	14.43	30.88	18.85	10.50	10.50	24.42	0.47	
7:00	-0.03	2747.21	635.09	81.23	28.55	0.94	2.37	0.71	109.44	14.42	30.87	189.45	10.49	10.49	24.40	0.38	

Comment: Corrupted signal from the modbus caused gas flow data spike to impossible values. Breakdown called to the APCD.

Daily Av Cogen NOx lb/h	Daily Av Cog+Neb NOx lb/h
14.55	14.55

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
26.09	26.09

Stack NOx analyzer	
zero value	0.06
zero drift %	0.06
span value	82.81
span drift %	0.09

Stack CO Analyzer	
zero value	-0.66
zero drift %	-0.66
span value	91.38
span drift %	0.38

Stack O2 Analyzer	
zero value	20.95
zero drift%	0.16
span value	-0.04
span drift %	-0.16

Nebraska Gas	0

PRINT TIME: 7/3/2013 11:40 AM

NOTE: This document is valid for only ONE week after print time

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident Turbine Nat Gas, Steam flows- to PI		Incident Date 7/3/2013
Exact Location Incident Cogen		
Reported By C. Wilson	Estimated Start and Stop Times of Incident: @-6:33 AM	Possible Cause: Modbus communication.

Incident Type: ف Spill Internal ف Improper Waste Disposal ف Spill External ف Near miss or below spill release guidelines X Air Emission ف Other_____	Released To ف Storm Water System ف Secondary Containment ف Process Sewer X Air ف Ground (External) ف Ground (Inside Mill Property) ف Near Miss ف Other_____

Detailed Description of Event

On 3 July 2013- HMI stations did not reflect any alarms. Apparent Modbus communication - corrupt data flow from HMI#2 Modbus card to Modbus Card in AC 450 for Node 12 in D MCC. False flow readings for steam and natrual gas recorded into PI.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
ف _____ Gallons ف _____ Pounds ف Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.) APCD @ 2045*
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Lars Gustavson, Rudy Rehbein, Robyn Lebrilla , Victor Kumpera	Any Acute or Chronic Health Risks *(refer to MSDS)N/A*

Describe Any Emergency Response Actions

N/A

Suggestions to Prevent Reoccurrence 1. fund capital project - to upgrade OS system for HMIs to allow direct MKV to PI interface and bypass Modbus communication.	Estimated Completion Date 1. 12/31/2013
2.	2
3.	3.
4.	4.

Root Cause after investigation	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ف 1 ف 2 ف 3 ف 4
Investigated By: Charlie Wilson	Investigated Date 5/15/13

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
_____ Department Manager	_____ Technical Superintendent	_____ Mill Manager

Print Time: 7/5/2013 2:06:12 PM

Note: This document is valid for only ONE week after print time!

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR

DRY SHIFT OPERATOR

NAME: Van Zandt

DATE: 7-2-13

SAFETY IS ALWAYS NO. 1

Hueremo Paper Mill

JCAL PUMPS

	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.0 ml/min		
Polymer 8.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	ATTS
CURRENT	07686389	03836012	64958352	184968	2065	2280800	83857760	397601	5094		14160
PREVIOUS	08684378	05846273	64916243	188462	2135	2277170	80153 60	327264	111110		16540

NEW DEMIN TRAILER: YES / NO — TIME

NEBRASKA ONLINE TIME FROM: — TO:

AMMONIA DELIVERY: YES / NO — % FULL 70-75

NEBRASKA WARM STORAGE CHECK: YES / NO

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%	50.0	49.3		52.1	51.8	52.7	50.3	49.7	51.1	51	49.8	49.9
Inlet Temp	°F	64	63		64	65	65	65	65	66	65	64	64
Humidity	%	66.2	67.2		55.2	52.1	55.1	58.2	54.2	57.1	58.2	62.2	64.2
Vibration (Max)	MILS	.36	.36		.38	.38	.34	.38	.38	.39	.39	.39	.38
Steam Injection	#/SEC	2.30	2.12		2.49	2.45	2.43	2.30	2.28	2.29	2.34	2.27	2.42
Turbine L.O. Level	%	100	100		100	100	100	100	100	98	98	98	98
EXH	°F	1550	1541		1564	1565	1564	1557	1554	1559	1561	1559	1557

ON LINE

BATTERIES 1.35 V — HP RECOUPE 116 FAL

AIR INLET DIFF 7.2 IN/H2O — HP RECOUPE 116 FAR

L.O. DIFFERENTIAL 5 PSI — HP RECOUPE 50 AFT

BATTERIES V — HP RECOUPE FAL

AIR INLET DIFF IN/H2O — HP RECOUPE FAR

L.O. DIFFERENTIAL PSI — HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F	154	154		154	154	154	156	156	156	156	154	154
L.O. Supply	°F	130	130		130	130	130	131	131	131	131	129	129
Gen. Vibration (Max)	IPS	.40	.41		.45	.46	.46	.42	.41	.42	.42	.40	.43
Tie Line	MW	12.89	12.89		12.61	12.50	12.64	12.60	12.59	12.74	12.55	12.60	12.56

COOLING WATER

GEN. 1150 AMPS — GEN VARS 6.70 MEGA VARS

FIELD 210 AMPS — FIELD VOLTS 185 V

COOLING TWR INLET 84 F — COOLING TWR INLET 78 F

GEN. 1130 AMPS — GEN.VARS 6.45 MEGA VARS

FIELD 205 AMPS — FIELD VOLTS 185 V

COOLING TWR INLET 88 F — COOLING TWR INLET 82 F

CODEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F	710	710		710	710	710	710	710	710	710	710	710
HP Drum Level	IN	1.0	1.2		1.0	1.0	1.0	1.1	1	0.9	1	1	1.1
LP Drum Level	IN	0.9	0.9		1.0	0.9	0.8	0.9	0.9	1.1	1	1	1
HP Drum Pressure	PSI	485	485		485	485	485	485	485	485	485	485	485
LP Drum Pressure	PSI	144	146		149	146	149	149	149	145	149	149	148
CO	PPM	32.4	32.2		30.3	29.5	29.6	30.4	30.6	31	31.3	30.8	30.8
NOX	PPM	10.4	10.5		10.7	10.5	10.6	10.5	10.4	10.5	10.5	10.4	10.4
O2	%	14.65	14.75		14.59	14.50	14.49	14.48	14.45	14.43	14.48	14.41	14.41
Hot Well Level	%	159	157		150	154	140	145	134	159	156	134	152

SAVAGE

1150 SET POINT 449 — 1103 B SET POINT 444

SCANNER BLOWER (ON) — DUCT BURNER 442 SP

1150 SET POINT 449 — 1103 B SET POINT 444

SCANNER BLOWER ON (ON) — DUCT BURNER S.P. 442

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI	237	237		235	235	235	235	235	239	243	243	241
Gas Receiver	PSI	420	420		420	420	420	420	419	420	420	420	420

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity MHOS													

W.O. #44712

ON LINE TURBINE WATER WASH: YES / NO — CONDUCTIVITY MHOS

BOILER FEED WATER PUMP OPERATION: NO 1 / (YES) NO / NO 2 / YES / NO

GAS & ELECTRIC READING

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 - 9.5	9.01	9.1
Conductivity <5mmhos	7.52	7.6
Silica < 20 ppb	12	14
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)	7.31	7.1
CONDENSATE		
HP-pH 8.5 - 9.5	8.64	8.8
Conductivity<20mmhos	8.96	9.2
LP-pH 8.5-9.5	8.70	8.5
Conductivity<20mmhos	26.73	27.2
HP		
pH 9.5 - 10.5	9.09	9.2
Conductivity 75-150	56.91	57.3
Phosphate 5-15 ppm	11.39	12.1
Silica < 5 ppm	.214	.208
Iron ppm	.01	
LP		
pH 9.5 - 10.5	8.73	8.9
Conductivity 75 - 150	87.02	88.1
Phosphate 5-15 ppm	17.44	16.8
Silica <5 ppm	.487	.503
Iron ppm	.16	
MIXED BED		
pH 6.0 - 7.5	8.48	8.3
Conductivity< 1mmhos	.159	.161
Silica <10 ppb	-30 M. RANGE	W/R
HP Steam Test		
Silica <20 ppb	-8 M. RANGE	W/R
SOFTNER		
Hardness < 1.0 ppm	.143	
Running (1 or 2)	1	2
NEBRASKA		
pH 9.5 - 10.5		
Conductivity 75 - 200		
Silica		
Phosphate 5-25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2	~~11.5~~	
Molybdate >200 ppm	7.5	

NOTES:

- Coupln, failed 9:31-(2:3) Stean water tank pump.
- P 392 - turbine air filter panel has high 7/2 @ 0150 AM
- hi main water fr ADDED 5 GAL BL. 180 PV.
- Hardness at 35 to 32 ppm

NEW INDY
CONTAINERBOARD

September 26, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Nebraska Maintenance Start up Notification

Dear Mr. Olson:

This letter is a follow up on the notification call made by Charlie Wilson to the VCAPCD Breakdown Center Hotline on September 25, 2013 at about 7:30 pm.

The Nebraska boiler was fired for maintenance check after undergoing boiler tube repairs. It ran on low fire from 7:07 pm to 7:24 pm, a total of 17 minutes. The Nebraska CEMS was successfully calibrated prior to start-up. The mill plans to operate the standby boiler on October 15-19 to allow for the switch from the lease turbine to the mill's turbine.

The Daily Emission Sheet, Nebraska graph, PI and DCS trends and cogen logs have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

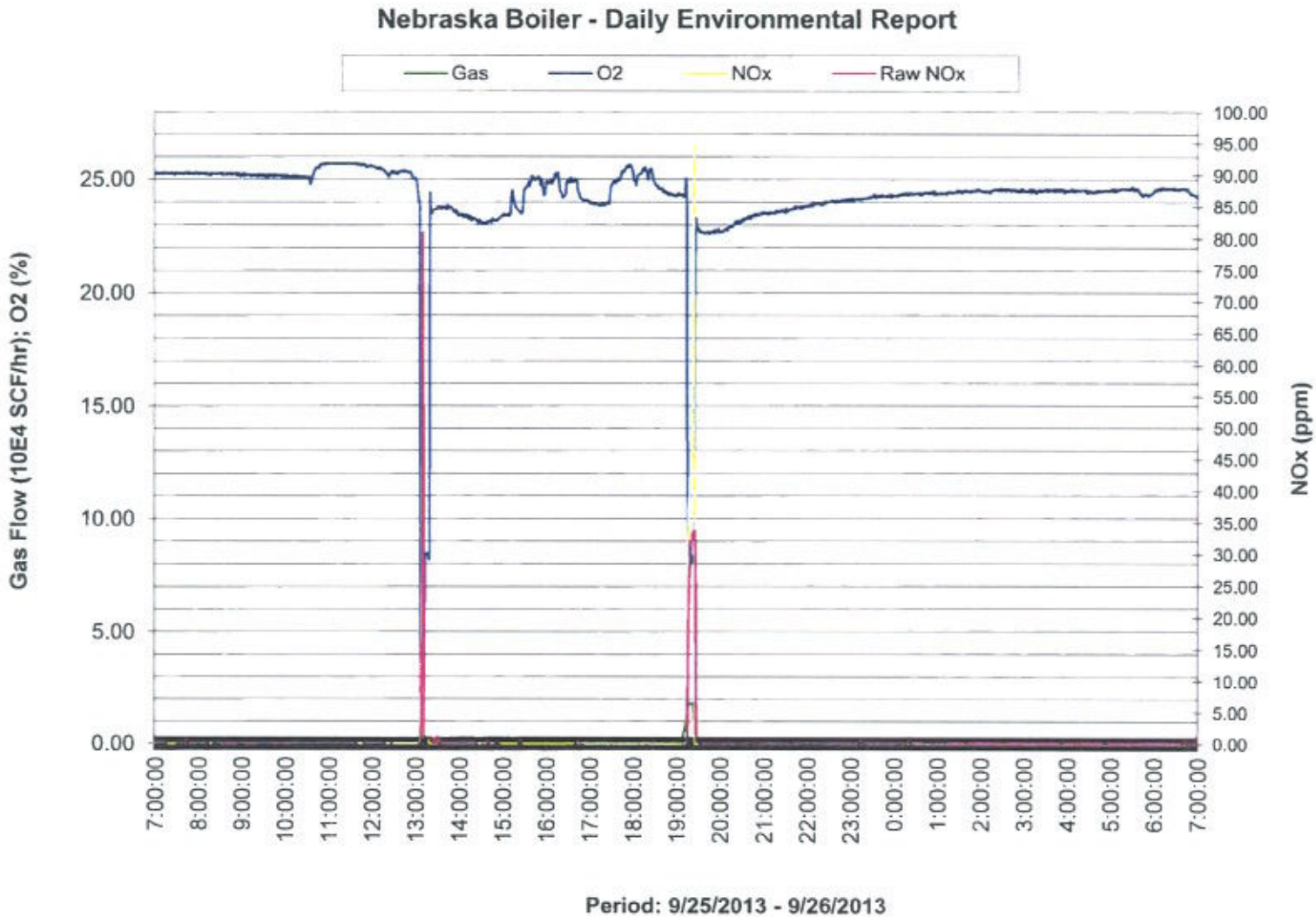
Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: Judy Gellen	9/24/2013
Title: Mill Manager	


Nebraska Boiler - Daily Environmental Report
Gas
O2
NOx
Raw NOx
Gas Flow (10E4 SCF/hr); O2 (%)
NOx (ppm)
25.00
20.00
15.00
10.00
5.00
0.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
7:00:00
8:00:00
9:00:00
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11:00:00
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21:00:00
22:00:00
23:00:00
0:00:00
1:00:00
2:00:00
3:00:00
4:00:00
5:00:00
6:00:00
7:00:00
Period: 9/25/2013 - 9/26/2013

End Time 9/26/2013 7:00 Start Time 9/25/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3/NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2)
8:00	8.36	286.84	639.35	65.03	23.93	0.92	2.74	0.79	11.51	14.44	50.62	33.86	10.54	10.50	25.26	-0.10	
9:00	7.02	287.01	637.94	66.00	24.33	0.92	2.79	0.80	11.28	14.42	46.03	30.40	10.38	10.43	25.24	-0.06	
10:00	7.00	287.60	638.19	64.79	23.80	0.91	2.88	0.82	11.38	14.43	46.01	30.46	10.44	10.46	25.17	-0.03	
11:00	8.55	288.80	639.90	61.42	23.22	0.96	2.87	0.82	11.75	14.45	59.16	39.71	10.66	10.50	25.27	-0.03	
12:00	9.25	287.69	642.18	62.50	23.46	0.92	2.86	0.81	11.72	14.45	54.40	36.47	10.59	10.60	25.67	-0.09	
13:00	7.57	287.86	641.55	63.45	24.06	0.92	2.86	0.81	11.45	14.42	47.94	31.94	10.45	10.60	25.34	-0.47	
14:00	10.11	288.79	642.18	61.81	23.40	0.92	2.88	0.82	11.53	14.34	57.19	38.44	10.45	10.53	19.79	3.15	
15:00	7.04	291.10	641.38	61.88	23.24	0.92	2.96	0.84	11.47	14.34	46.13	31.00	10.43	10.44	23.25	-0.18	
16:00	7.38	290.42	640.78	61.66	23.20	0.91	2.95	0.84	11.47	14.33	47.94	32.07	10.42	10.43	24.28	-0.61	
17:00	7.02	291.79	639.44	61.79	23.27	0.92	2.98	0.84	11.50	14.32	48.32	31.19	10.42	10.42	24.85	-0.72	
18:00	7.01	287.61	639.31	64.11	24.12	0.93	2.85	0.81	11.46	14.32	45.69	30.20	10.50	10.44	24.61	-0.08	
19:00	7.30	287.86	639.24	64.26	24.31	0.94	2.84	0.81	11.47	14.32	47.32	31.30	10.53	10.48	24.84	-0.81	
20:00	7.42	287.86	639.25	63.13	23.79	0.93	2.87	0.82	11.55	14.30	47.84	31.79	10.56	10.53	20.60	5.39	
21:00	6.91	290.08	639.11	62.02	23.16	0.91	2.93	0.83	11.46	14.32	46.06	30.69	10.44	10.51	23.16	0.00	
22:00	6.96	287.86	638.97	63.57	23.75	0.93	2.85	0.81	11.57	14.39	45.27	29.95	10.60	10.53	23.65	0.00	
23:00	6.95	288.03	638.89	63.32	23.32	0.89	2.86	0.81	11.31	14.39	46.96	31.14	10.39	10.48	23.99	0.00	
0:00	7.04	288.71	638.86	62.73	22.92	0.91	2.87	0.81	11.54	14.38	47.85	31.98	10.56	10.52	24.21	0.04	
1:00	6.98	287.18	638.74	63.72	23.43	0.92	2.81	0.80	11.36	14.35	47.79	31.67	10.42	10.46	24.37	0.13	
2:00	7.05	287.01	637.82	63.53	23.32	0.92	2.80	0.80	11.50	14.38	48.04	31.77	10.58	10.52	24.46	0.13	
3:00	6.95	289.40	637.82	61.72	22.66	0.91	2.87	0.82	11.45	14.36	48.36	32.24	10.47	10.49	24.52	0.13	
4:00	6.97	286.66	637.74	63.38	23.34	0.92	2.78	0.79	11.48	14.39	48.12	31.63	10.56	10.54	24.52	0.13	
5:00	7.00	286.66	637.66	64.03	23.49	0.92	2.76	0.79	11.34	14.42	47.72	31.49	10.44	10.49	24.50	0.13	
6:00	7.05	287.01	637.72	64.43	23.69	0.92	2.77	0.79	11.38	14.46	47.65	31.51	10.50	10.50	24.50	0.13	
7:00	8.02	286.84	637.83	64.45	24.02	0.93	2.76	0.79	11.57	14.47	49.84	33.07	10.61	10.51	24.54	0.17	

Comment:

Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
lb/h	lb/h
11.48	11.48

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
32.33	32.33

Stack NOx analyzer	
zero value	0.09
zero drift %	0.09
span value	82.09
span drift %	-1.28

Stack CO Analyzer	
zero value	-0.34
zero drift %	-0.34
span value	90.78
span drift %	-0.27

Stack O2 Analyzer	
zero value	20.86
zero drift%	-0.29
span value	-0.05
span drift %	-0.19

Nebraska Gas	793

PRINT TIME: 9/26/2013 8:39 AM

NOTE: This document is valid for only ONE week after print time


COGEN
2013-09-26 09:58
33M
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 09:02 2013-09-25 66.88 62.82 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 09:02 2013-09-25 50.09 51.84 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 09:02 2013-09-25 14.42 14.55 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 09:02 2013-09-25 11.48 11.25 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 09:02 2013-09-25 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 09:02 2013-09-25 1 0
< > << >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR — NAME: [illegible]

DRY SHIFT OPERATOR — NAME: [illegible]

DATE: 9-25-13

Hueneme Paper Mill

SAFETY IS ALWAYS NO. 1

CHEMICAL PUMPS	Level	Feed Rate ml/min
Steamate 3.3 ml/min		
Control 5.3 ml/min		
Polymer 4.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H2O	CONCENTRATE H2O	LP	HP	SCG LP	TURBINE
CURRENT	087903690	68936952	64386635	197586	2128	2524090	02484 10
PREVIOUS	087897746	6358/46711	64345746	203836	2131	2509060	9543590

NEW DEMIN TRAILER: YES / NO — TIME:

AMMONIA DELIVERY: YES / NO — % FULL:

NEBRASKA ONLINE TIME — FROM: — TO:

NEBRASKA WARM STORAGE CHECK: YES / NO

GAS & ELECTRIC READING

	MAXON	BURNER	NEBRASKA	MEGAWATTS
CURRENT	493317	179 186		69180
PREVIOUS	573006	212299		68483

TURBINE

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR %	67.5		64	70.5			66.7	65.5	73.2	67.4	72.1	58.4
Inlet Temp °F	56		58	59			56	56	55	56	55	55
Humidity %	51		41	29			30	35	51	53	51	50
Vibration (Max) MILS	3.1		3.1	3.0			3.1	3.1	3.1	3.1	3.1	3.1
Steam Injection #/SEC	2.7		2.8	2.8			2.88	2.81	2.94	2.81	2.88	2.62
Turbine L.O. Level %	100		100	100			100	100	100	100	100	100
T4B °F	1531		1534	1534			1537	1533	1533	1531	1532	1522

BATTERIES 135 V — HP RECOUPE 112 FAL — BATTERIES 135 V — HP RECOUPE FAL

AIR INLET DIFF 2.6 IN/H2O — HP RECOUPE 116 FAR — AIR INLET DIFF 2.8 IN/H2O — HP RECOUPE FAR

L.O. DIFFERENTIAL 6 PSI — HP RECOUPE 52 AFT — L.O. DIFFERENTIAL 6 PSI — HP RECOUPE AFT

GENERATOR

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain °F	155		157	157			159	159	159	159	158	158
L.O. Supply °F	130		132	133			129	129	129	128	128	128
Gen. Vibration (Max) IPS	33		38	38			35	35	33	33	34	34
Tie Line MW	15.7		13.6	13.5			13.75	13.78	13.92	13.81	13.72	13.81

GEN. 1250 AMPS — GEN VARS MEGA VARS — GEN. 1250 AMPS — GEN VARS 4.98 MEGA VARS

FIELD 205 AMPS — FIELD VOLTS 184 V — FIELD 205 AMPS — FIELD VOLTS V

COOLING TWR INLET 54 F — COOLING TWR INLET 50 F — COOLING TWR INLET F — COOLING TWR INLET F

COGEN BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp °F	711		710	710			711	710	710	711	710	710
HP Drum Level IN	1.2		.9	.8			1.1	1.6	1.0	1.0	0.9	1.0
LP Drum Level IN	1		1.2	.9			1.1	1.1	1.0	0.9	1.1	1.0
HP Drum Pressure PSI	450		483	483			483	483	483	483	483	483
LP Drum Pressure PSI	152		150	150			150	150	150	150	152	152
CO PPM	45		66	95			460	456	476	478	480	531
NOX PPM	10.6		9.9	10.4			11.8	9.6	10.3	9.3	10.1	10.1
O2 %	14.4		14.3	14.3			14.32	14.37	14.35	14.38	14.39	14.44
Hot Well Level %	154		124	135			134	145	158	147	166	150

1150 SET POINT 449 — 1103 B SET POINT 444 — 1150 SET POINT 449 — 1103 B SET POINT 440

SCANNER BLOWER (ON) ON — DUCT BURNER 42% SP — SCANNER BLOWER ON Y/N — DUCT BURNER S.P. 441

COMPRESSORS

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator PSI	231		231	251			231	231	233	233	233	229
Gas Receiver PSI	424		425	425			425	425	425	425	425	425

NEBRASKA BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level IN												
Drum Pressure PSI												
Steam Flow #/HR												
Steam Temp °F												
NOX PPM												
O2 %												
Blow Down Conductivity MHOS												

ON LINE TURBINE WATER WASH: YES / NO — CODUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION: NO. 1 YES / NO — NO. 2 YES / NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 - 9.5		8.79
Conductivity <5mmhos		6.79
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		598
Permeate TDS<10 ppm		6.96
pH (Feed 7.5)		
CONDENSATE		
HP-pH 8.5 -9.5		8.95
Conductivity<20mmhos		28.16
LP-pH 8.5-9.5		
Conductivity<20mmhos		
HP		
pH 9.5 - 10.5	9.6	9.51
Conductivity 75-150		1461
Phosphate 5-15 ppm		2201
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 - 10.5	9.4	9.01
Conductivity 75 - 150		16.49
Phosphate 5-15 ppm		10.19
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 - 7.5		7.96
Conductivity< 1mmhos		666
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		79
Running (1 or 2)		2
NEBRASKA		
pH 9.5 - 10.5		
Conductivity 75 - 200		
Silica		
Phosphate 5-25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:

ACAD# 0000-3011 - REV.E — WCSE 10000

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident Preparation- startup Neb boiler- check out- for Turbine exchange in Oct	Incident Date 9/25/13
Exact Location Incident Cogen	

Reported By C. Wilson	Estimated Start and Stop Times of Incident: @1930	Possible Cause: start up Nebraska Blr

Incident Type: ☐ Spill Internal ☐ Improper Waste Disposal ☐ Spill External ☐ Near miss or below spill release guidelines X Air Emission ☐ Other_____	Released To ☐ Storm Water System ☐ Secondary Containment ☐ Process Sewer X Air ☐ Ground (External) ☐ Ground (Inside Mill Property) ☐ Near Miss ☐ Other_____

Detailed Description of Event

From 9 Sep- to 25 Sep - tube boiler repairs of the Nebraska boiler. needed to check if COEN panel controls operational- was troubleshooting from @1430-1900 on various issues- till finally cleared to light up the Nebraska boiler.

APCD was contacted @1930 9/25/13 on start-up of Nebraska boiler. message left by C. Wilson.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
☐ _____ Gallons ☐ _____ Pounds ☐ Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.) APCD*
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Lars Gustavson, Rudy Rehbein, Robyn Lebrilla , Victor Kumpera	Any Acute or Chronic Health Risks *(refer to MSDS)N/A*

Describe Any Emergency Response Actions
N/A

Suggestions to Prevent Reoccurrence	Estimated Completion Date
1.	1.
2.	2
3.	3.
4.	4.

Root Cause after investigation Maintenance issue- reported to APCD- start up of Nebraska Boiler.	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ☐ 1 ☐ 2 ☐ 3 ☐ 4
Investigated By: Charlie Wilson	Investigated Date 9/25/13

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
C. Wilson		Rudy Rehbein
Department Manager 9/20/13	Technical Superintendent 9/26/13	Mill Manager 9/26/2013

Print Time: 9/26/2013 8:42:16 AM

Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

October 10, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Low Inlet NOx Emissions

Dear Mr. Olson:

This letter is a follow up on the call I made to the VCAPCD Breakdown Center Hotline on October 9, 2013 at about 10:20 AM.

During emission review on October 9, 2013, it was noticed that there was low inlet NOx emissions. All other emission parameters were at normal level and stable. Troubleshooting then proceeded to check for possible flow restrictions in the sample line. After replacing the inlet NOx sample valve, the emissions reverted to expected level. The inlet NOx emission data were abnormal from October 8, 2013 10:30 AM to October 9, 2013 3:00 PM, a total of 28.5 hours.

The Daily Emission Sheets, PI trends, DCS trends, Cogen Reports and Environmental Incident Report have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: [signature]	10/10/2013
Title: Mill Manager	

End Time 10/9/2013 7:00 Start Time 10/8/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3 NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2)
8:00	8.42	267.37	628.24	64.99	22.87	0.95	2.38	0.73	**10.64**	14.46	28.09	**17.33**	**10.52**	**10.51**	25.31	-4.06	
9:00	5.74	267.54	628.26	65.20	23.01	0.94	2.37	0.73	**10.58**	14.47	27.14	**16.77**	**10.48**	**10.51**	25.35	-3.88	
10:00	-0.01	270.70	624.14	68.01	23.65	0.94	2.41	0.73	**10.50**	14.52	20.94	**12.75**	**10.49**	**10.49**	25.26	-3.72	
11:00	-0.01	270.62	624.33	47.53	23.17	1.32	2.45	0.73	**9.79**	14.55	19.32	**11.78**	**10.20**	**10.39**	25.24	-4.03	
12:00	-0.01	273.69	624.65	47.53	24.23	1.37	2.50	0.75	**10.63**	14.52	19.15	**11.80**	**10.51**	**10.40**	25.17	-4.09	
13:00	-0.01	275.82	625.82	47.88	24.41	1.36	2.51	0.75	**10.69**	14.48	18.88	**11.74**	**10.58**	**10.40**	25.28	-3.86	
14:00	0.78	272.75	626.01	47.34	24.23	1.35	2.47	0.74	**10.58**	14.47	20.00	**12.22**	**10.47**	**10.49**	25.35	-4.25	
15:00	1.75	272.68	630.28	46.21	24.29	1.42	2.48	0.74	**10.65**	14.45	22.85	**14.17**	**10.49**	**10.49**	25.25	-4.37	
16:00	0.07	271.81	627.73	43.72	24.15	1.48	2.45	0.74	**10.50**	14.49	19.10	**11.71**	**10.46**	**10.47**	25.57	-4.53	
17:00	0.07	272.49	627.91	42.53	24.08	1.51	2.46	0.74	**10.59**	14.46	19.43	**11.88**	**10.51**	**10.49**	25.70	-4.21	
18:00	2.72	273.89	630.26	39.59	23.54	1.56	2.49	0.75	**10.72**	14.37	25.05	**15.52**	**10.58**	**10.49**	25.70	-3.83	
19:00	0.07	272.32	627.74	34.49	23.70	1.83	2.47	0.74	**10.55**	14.41	19.94	**12.23**	**10.48**	**10.50**	25.70	-3.89	
20:00	0.07	271.47	625.85	32.58	23.63	1.98	2.44	0.74	**10.56**	14.50	20.19	**12.23**	**10.52**	**10.50**	25.70	-3.89	
21:00	2.75	271.30	627.54	29.96	23.32	2.07	2.42	0.73	**10.60**	14.46	24.95	**15.47**	**10.47**	**10.49**	25.70	-3.89	
22:00	0.09	271.64	625.28	31.23	23.72	2.05	2.44	0.74	**10.53**	14.51	19.78	**12.02**	**10.49**	**10.49**	25.69	-3.89	
23:00	0.05	271.81	625.42	31.54	23.70	2.02	2.46	0.74	**10.54**	14.45	19.94	**12.15**	**10.50**	**10.48**	25.68	-3.89	
0:00	0.06	271.64	625.38	30.30	23.65	2.08	2.45	0.74	**10.54**	14.46	20.62	**12.53**	**10.49**	**10.49**	25.67	-3.89	
1:00	0.34	271.47	625.44	28.23	23.57	2.23	2.45	0.74	**10.54**	14.46	21.28	**12.87**	**10.50**	**10.50**	25.68	-3.77	
2:00	4.34	269.93	628.26	26.60	23.05	2.34	2.40	0.73	**10.67**	14.42	27.02	**16.74**	**10.53**	**10.51**	25.69	-3.84	
3:00	3.41	269.00	627.29	27.71	22.90	2.24	2.38	0.73	**10.57**	14.44	26.23	**16.06**	**10.50**	**10.51**	25.67	-3.68	
4:00	6.88	268.74	630.68	26.97	22.72	2.25	2.38	0.73	**10.71**	14.39	28.12	**17.45**	**10.52**	**10.52**	25.63	-3.76	
5:00	6.43	269.76	631.88	26.80	22.86	2.11	2.39	0.73	**10.70**	14.42	27.40	**16.98**	**10.48**	**10.50**	25.62	-3.81	
6:00	6.45	269.25	631.79	29.59	22.86	2.03	2.38	0.73	**10.70**	14.45	27.06	**16.83**	**10.50**	**10.50**	25.61	-3.53	
7:00	5.28	268.85	631.04	28.54	23.05	2.15	2.39	0.73	**10.63**	14.39	25.93	**15.96**	**10.50**	**10.49**	25.58	-3.88	

Comment: Low inlet Nox emission data after auto calibration on 10/8/13. R. Labrita called APCD breakdown on 10/9/13 at 10:20 AM. Under investigation.

Daily Av Cogen NOx lb/h	Daily Av Cog+Neb NOx lb/h
10.57	10.57

Daily Av Cogen CO lb/h	Daily Av Cog+Neb CO lb/h
14.05	14.05

Stack NOx analyzer	
zero value	-0.06
zero drift %	-0.06
span value	82.47
span drift %	0.87

Stack CO Analyzer	
zero value	-0.31
zero drift %	-0.31
span value	90.56
span drift %	-0.51

Stack O2 Analyzer	
zero value	20.90
zero drift%	-0.10
span value	-0.04
span drift %	-0.16

Nebraska Gas	0

PRINT TIME: 10/9/2013 2:46 PM

NOTE: This document is valid for only ONE week after print time

End Time 10/10/2013 7:00 Start Time 10/9/2013 7:00

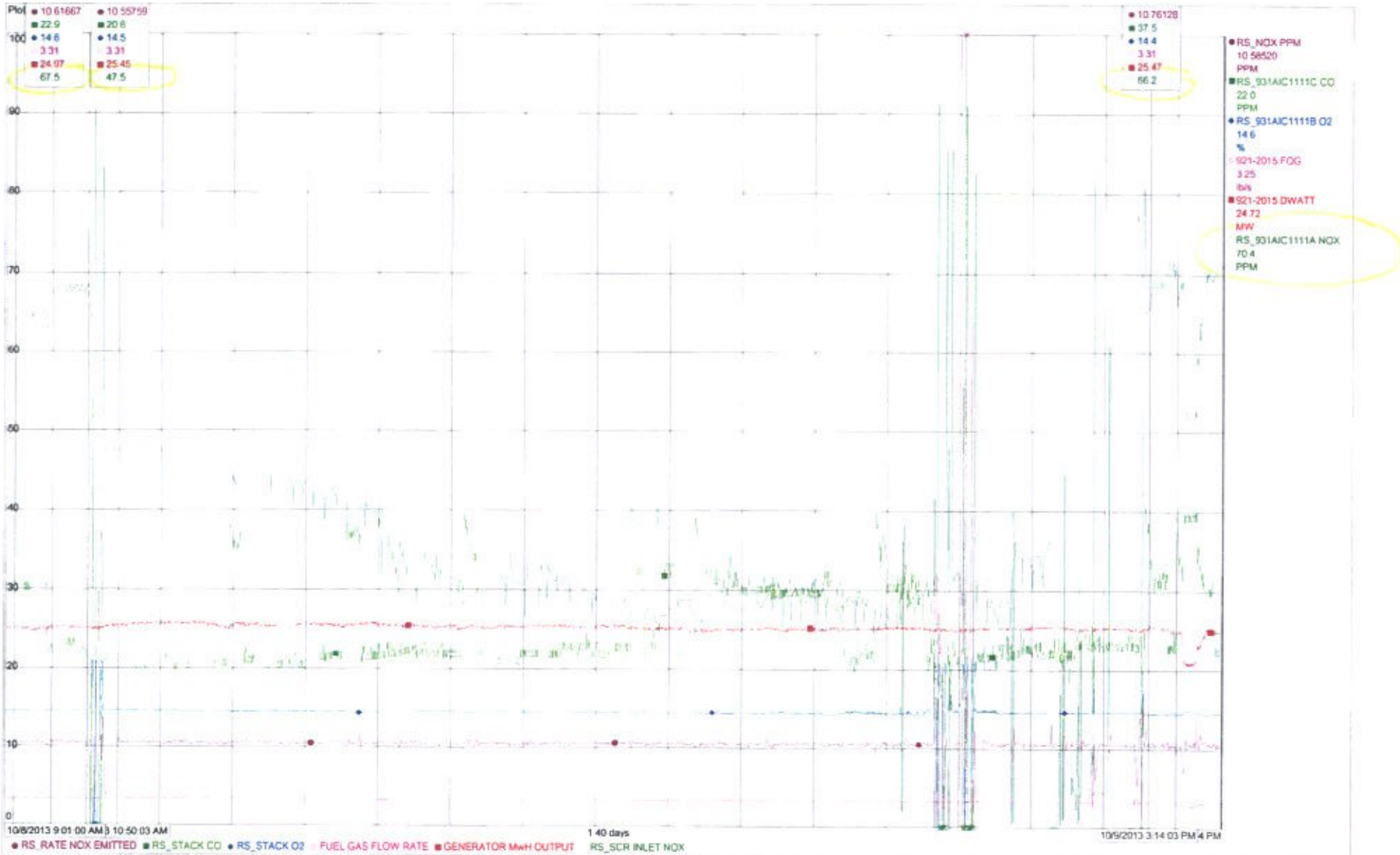
DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2) lb/h	Daily Av Cogen NOx lb/h 10.40	Daily Av Cog+Neb NOx lb/h 10.40
8:00	2.04	270.27	626.22	27.40	23.40	2.28	2.40	0.73	**10.56**	14.52	23.87	**14.62**	10.51	**10.50**	25.59	-3.87			
9:00	8.61	271.47	630.75	27.95	23.43	2.46	2.42	0.73	**10.77**	14.41	27.49	**17.27**	10.47	**10.49**	25.58	-3.88		Daily Av Cogen	Daily Av Cog+Neb
10:00	0.15	269.17	625.90	28.44	24.70	30.75	2.38	0.73	**11.42**	14.06	16.85	**10.49**	11.46	**10.81**	25.51	-3.77		CO	CO
11:00	-0.01	269.84	625.24	28.98	23.05	2.16	2.40	0.73	**9.78**	14.75	20.57	**12.59**	10.23	**10.72**	25.52	-3.88		lb/h	lb/h
12:00	-0.01	271.13	625.24	30.26	23.98	2.18	2.41	0.73	**10.55**	14.57	20.84	**12.70**	10.54	**10.74**	25.68	-3.66		13.82	13.82
13:00	-0.01	271.47	625.34	22.30	24.28	237.92	2.44	0.74	**10.67**	14.53	20.49	**12.40**	10.63	**10.47**	25.59	-3.73		**Stack NOx analyzer**	
14:00	-0.01	269.59	624.36	7.80	24.32	69.18	2.39	0.73	**9.98**	14.64	21.70	**13.20**	10.81	**10.39**	25.66	-3.81		zero value	-1.53
15:00	-0.01	270.88	624.18	11.06	24.55	131.94	2.41	0.73	**10.28**	14.61	21.57	**13.10**	10.33	**10.32**	25.57	-3.81		zero drift %	-1.53
16:00	4.23	270.10	626.95	66.67	24.04	1.05	2.41	0.73	**10.80**	14.58	27.25	**16.84**	10.57	**10.30**	25.64	-4.56		span value	82.47
17:00	6.67	250.64	622.57	61.66	20.06	0.93	2.18	0.71	**9.95**	14.60	32.72	**18.84**	10.48	**10.46**	25.66	-4.88		span drift %	0.87
18:00	0.16	266.16	623.66	70.78	23.52	0.90	2.33	0.72	**10.30**	14.54	20.80	**12.32**	10.46	**10.50**	25.64	-4.09			
19:00	1.40	265.84	623.35	69.48	23.23	0.91	2.33	0.72	**10.32**	14.49	23.63	**14.40**	10.46	**10.46**	25.58	-4.03		**Stack CO Analyzer**	
20:00	0.77	265.24	623.24	69.62	23.05	0.92	2.31	0.72	**10.34**	14.51	22.59	**13.56**	10.50	**10.47**	25.51	-4.03		zero value	-0.84
21:00	0.00	265.57	621.46	70.44	23.19	0.93	2.32	0.72	**10.29**	14.52	21.11	**12.40**	10.49	**10.48**	25.49	-4.03		zero drift %	-0.84
22:00	0.99	265.66	621.79	69.45	23.19	0.92	2.32	0.72	**10.31**	14.51	23.06	**13.63**	10.48	**10.49**	25.47	-4.03		span value	90.97
23:00	2.68	266.01	624.50	68.84	22.98	0.91	2.31	0.72	**10.46**	14.51	24.43	**14.84**	10.52	**10.50**	25.47	-4.03		span drift %	-0.07
0:00	-0.01	266.35	621.22	69.29	23.06	0.91	2.34	0.72	**10.31**	14.59	20.77	**12.45**	10.48	**10.49**	25.44	-4.03			
1:00	-0.01	266.35	620.64	68.07	22.76	0.92	2.33	0.72	**10.33**	14.60	21.53	**12.86**	10.50	**10.50**	25.46	-4.03		**Stack O2 Analyzer**	
2:00	-0.01	266.52	619.97	67.21	22.67	0.93	2.34	0.72	**10.34**	14.61	21.56	**12.95**	10.50	**10.49**	25.49	-4.03		zero value	20.89
3:00	2.41	265.15	622.27	66.08	22.36	0.94	2.33	0.72	**10.36**	14.59	25.32	**15.50**	10.47	**10.49**	25.53	-4.03		zero drift%	-0.14
4:00	-0.03	266.35	620.53	67.68	22.63	0.92	2.34	0.72	**10.33**	14.63	21.80	**13.10**	10.51	**10.49**	25.56	-4.14		span value	-0.05
5:00	-0.03	266.35	619.85	67.65	22.60	0.93	2.33	0.72	**10.36**	14.63	21.73	**12.99**	10.52	**10.50**	25.57	-4.16		span drift %	-0.19
6:00	0.00	266.35	619.87	67.65	22.63	0.92	2.34	0.72	**10.37**	14.63	21.85	**13.08**	10.53	**10.52**	25.56	-4.43			
7:00	2.53	265.32	620.87	66.01	22.30	0.92	2.31	0.71	**10.36**	14.64	25.63	**15.51**	10.48	**10.51**	25.59	-4.37		**Nebraska Gas**	0

Comment: Low Inlet Nox emission data after auto calibration on 10/8/13. Sample line valve was replaced. Inlet NOx has restricted flow from 10/8/13 10:30 AM to 10/9/13 3:00 PM, a total of 28.5 hrs.

PRINT TIME: 10/10/2013 8:03 AM

NOTE: This document is valid for only ONE week after print time


Plot
10.61667
22.9
14.6
3.31
24.97
67.5
10.55759
20.6
14.5
3.31
25.45
47.5
10.76128
37.5
14.4
3.31
25.47
66.2
RS_NOX PPM
10.58520
PPM
RS_931AIC1111C CO
22.0
PPM
RS_931AIC1111B O2
14.6
%
921-2015 FOG
3.25
lb/s
921-2015 DWATT
24.72
MW
RS_931AIC1111A NOX
70.4
PPM
100
90
80
70
60
50
40
30
20
10
0
10/8/2013 9:01:00 AM
10:50:03 AM
1.40 days
10/9/2013 3:14:03 PM
4 PM
RS_RATE NOX EMITTED
RS_STACK CO
RS_STACK O2
FUEL GAS FLOW RATE
GENERATOR MwH OUTPUT
RS_SCR INLET NOX


COGEN
2013-10-10 10:51
23M
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 11:30 2013-10-08 47.53 70.81 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 11:30 2013-10-08 20.72 21.44 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 11:30 2013-10-08 14.51 14.63 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 11:30 2013-10-08 11.52 11.18 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 11:30 2013-10-08 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 11:30 2013-10-08 0 0
< >
<< >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB


COGEN
2013-10-10 10:53
23M
RSMT_4-20MA_ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 15:22 2013-10-09 68.25 70.81 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 15:22 2013-10-09 32.36 21.44 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 15:22 2013-10-09 14.46 14.63 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 15:22 2013-10-09 11.20 11.14 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 15:22 2013-10-09 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 15:22 2013-10-09 0 0
< >
<< >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR — NAME: Vaughn Sanders

DRY SHIFT OPERATOR — NAME:

SAFETY IS ALWAYS NO. 1

Huhtamaki Paper Mill

DATE: 12-8-13

CHEMICAL PUMPS

	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 8.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP
CURRENT	088283477	70391237	70050105	195878	1835	25891180
PREVIOUS	088243382	70261550	69946757	196454	1820	25861750

NEW DEMIN TRAILER: YES / NO — TIME

AMMONIA DELIVERY: YES / NO — % FULL

NEBRASKA ONLINE TIME — FROM: — TO:

NEBRASKA WARM STORAGE CHECK: YES / NO

GAS & ELECTRIC READING

	TURBINE	MAXON	BURNER	NEBRASKA	McDONOUGH WATTS
CURRENT	542784	542784	54003		76670
PREVIOUS	442840 0	541930	54745		76655

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%	50.2	52.5	53.1	C	52.9	50.7	51.3	50.3	53.2	51.9	49.1	50.6
Inlet Temp	°F	53	56	58	O	60	59	59	56	56	56	56	56
Humidity	%	52	46	38	M	37	44	46	48	47	43	51	45
Vibration (Max)	MILS	.40	41	.40	E	40	40	.40	.40	.40	.40	.40	.40
Steam Injection	#/SEC	2.38	2.44	2.42	N	2.44	2.50	2.54	2.44	2.39	2.47	2.29	2.28
Turbine L.O. Level	%	100	100	100	T	100	100	100	100	100	100	100	100
T48	°F	1483	1493	1507	S	1511	1513	1500	1496	1505	1500	1491	1496

BATTERIES V — HP RECOUPE FAL — BATTERIES 135 V — HP RECOUPE 120 FAL

AIR INLET DIFF IN/H20 — HP RECOUPE FAR — AIR INLET DIFF 2.6 IN/H20 — HP RECOUPE 120 FAR

L.O. DIFFERENTIAL PSI — HP RECOUPE AFT — L.O. DIFFERENTIAL 55 PSI — HP RECOUPE 52 AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F	110	160	160	B	160		162	162	162	162	160	162
L.O. Supply	°F	130	120	120	O	130		128	126	128	128	128	128
Gen. Vibration (Max)	IPS	.37	.38	.45	X	.42	.42	.40	.39	.41	.41	41	.39
Tie Line	MW	12.52	12.48	12.48	S	12.56	12.48	12.39	12.44	12.39	12.48	12.52	12.56

GEN. AMPS — GEN.VARS 3.45 MEGA VARS — GEN. 1175 AMPS — GEN.VARS 5.89 MEGA VARS

FIELD AMPS — FIELD VOLTS V — FIELD 205 AMPS — FIELD VOLTS 182 V

COOLING TWR INLET F — COOLING TWR INLET F — COOLING TWR INLET 86 F — COOLING TWR INLET 820 F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F	711	704	710	C	716	710	711	710	710	720	710	711
HP Drum Level	IN	0.9	1.4	1.0	O	1.0	0.9	1.0	1.0	0.9	0.8	1.3	1.0
LP Drum Level	IN	0.9	0.6	0.8	G	1.1	0.3	0.9	1.4	0.9	2.0	1.8	0.9
HP Drum Pressure	PSI	484	484	484	E	484	484	484	484	484	434	484	484
LP Drum Pressure	PSI	145	146	147	N	146	148	147	146	146	145	147	149
CO	PPM	231	203	212	E	197	203	214	200	195	346	295	273
NOX	PPM	106	105	106	R	105	103	104	105	106	108	106	109
O2	%	14.42	14.53	14.52	A	14.4	14.46	14.46	14.54	1444	14.39	14.36	14.49
Hot Well Level	%	157	137	142	T	140	119	158	156	146	129	144	158

1150 SET POINT — 1103 B SET POINT — 1150 SET POINT 449 — 1103 B SET POINT 444

SCANNER BLOWER (ON) Y/N — DUCT BURNER SP — SCANNER BLOWER ON Y/N — DUCT BURNER S.P. 447

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI	234	236	234	D	234	234	237	239	236	236	236	234
Gas Receiver	PSI	420	420	420	E	420	420	420	419	420	420	420	420

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN				C								
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity	MHOS												

ON LINE TURBINE WATER WASH: YES / NO — CONDUCTIVITY MHOS

BOILER FEED WATER PUMP OPERATION — NO. 1: YES / NO — NO. 2: YES / NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 - 9.5		
Conductivity <5mmhos		6.95
Silica < 20 ppb		4
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP-pH 8.5 -9.5		
Conductivity<20mmhos		2.32
LP-pH 8.5-9.5		
Conductivity<20mmhos		
HP		
pH 9.5 - 10.5		
Conductivity 75-150		24.51
Phosphate 5-15 ppm		10.70
Silica < 5 ppm		.340
Iron ppm		0.11
LP		
pH 9.5 - 10.5		
Conductivity 75 - 150		94.26
Phosphate 5-15 ppm		16.22
Silica <5 ppm		.300
Iron ppm		0.25
MIXED BED		
pH 6.0 - 7.5		
Conductivity< 1mmhos		.76
Silica <10 ppb		13
HP Steam Test		
Silica <20 ppb		- 35 u RANGE
SOFTNER		
Hardness < 1.0 ppm		1.74
Running (1 or 2)		2
NEBRASKA		
pH 9.5 - 10.5		
Conductivity 75 - 200		
Silica		
Phosphate 5-25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm	(NL)	1350 (CL)

NOTES:

ACAD# 000-3011 - REV.E — WOK 10340

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR NAME: VanZandt

DRY SHIFT OPERATOR NAME: M. A.

DATE: 10-9-13

SAFETY IS ALWAYS NO. 1

Hueneme Paper Mill

CAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	KILOWATTS
CURRENT	08832487	70509169	70050814	194210	1804	2680770	5172430	543099	30873		77260
PREVIOUS	08828347	70341237	70000105	195878	1835	2589180	4800700	542784	54003		76670

NEW DEMIN TRAILER: YES / NO — TIME:

AMMONIA DELIVERY: YES / NO — % FULL:

NEBRASKA ONLINE TIME — FROM: — TO:

NEBRASKA WARM STORAGE CHECK: YES / NO

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%	50.4	51.2	H	51.6	N	49.2	48.3	49.2	48.1	49.4	50.1	48.9
Inlet Temp	°F	57	58	C	56	E	56	55	55	53	52	51	51
Humidity	%	42.4	40	F	32	E	27	32	33	35	50	52	53
Vibration (Max)	MILS	.40	45		.40	R	.39	.34	.39	.39	.39	.39	.39
Steam Injection	#/SEC	244	255	H	234	P	225	2.36	2.28	2.42	2.41	2.36	2.39
Turbine L.O. Level	%	100	100	2	100	A	100	100	100	100	100	100	100
T48	°F	1500	1501		1502	S	1494	1487	1488	1482	1479	1475	1470
		BATTERIES V			HP RECOUPE	K	FAL	BATTERIES 135 V			HP RECOUPE 120		FAL
		AIR INLET DIFF IN/H20			HP RECOUPE	A	FAR	AIR INLET DIFF 2.5 IN/H20			HP RECOUPE 120		FAR
		L.O. DIFFERENTIAL PSI			HP RECOUPE		AFT	L.O. DIFFERENTIAL 5.5 PSI			HP RECOUPE 48		AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F	160	160		160			160	158	1586	150	150	150
L.O. Supply	°F	130	130	T	130			126	126	128	130	130	130
Gen. Vibration (Max)	IPS	40	40		40		.41	.40	.40	.41	.38	.38	.37
Tie Line	MW	1245	1256		1253		1256	1248	12.52	1244	12.59	12.50	12.56
		GEN. AMPS	GEN.VARS 6.19 MEGA VARS					GEN. 1225 AMPS			GEN.VARS 5.34 MEGA VARS		
		FIELD AMPS	FIELD VOLTS V					FIELD 200 AMPS			FIELD VOLTS 175 V		
		COOLING TWR INLET F	COOLING TWR INLET F					COOLING TWR INLET 80 F			COOLING TWR INLET 75 F		

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F	715	711	P	698	H	710	709	710	710	710	710	710
HP Drum Level	IN	1.3	1.1	L	0.9	E	1.2	1.1	0.9	1.0	1.0	1.0	1.1
LP Drum Level	IN	0.7	1.0		1.1	E	0.1	0.8	0.9	1.1	1.2	1.0	1.0
HP Drum Pressure	PSI	477	477	C	477	L	484	484	484	484	484	484	484
LP Drum Pressure	PSI	147	146		146	P	145	147	147	147	147	147	147
CO	PPM	278	214	C	212		277	21.3	20.9	20.9	21.0	20.9	21.8
NOX	PPM	105	105	T	101		107	10.6	10.5	10.4	10.6	10.8	10.4
O2	%	14.37	14.50	L	14.69		14.42	14.52	14.52	14.63	14.63	14.63	14.63
Hot Well Level	%	149	142	S	147		134	156	140	158	141	152	158
		1150 SET POINT			1103 B SET POINT			1150 SET POINT 449			1103 B SET POINT 444		
		SCANNER BLOWER (ON) Y/N			DUCT BURNER		SP	SCANNER BLOWER ON ON			DUCT BURNER S.P. 442		

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI	232	232		232		234	232	232	236	236	236	234
Gas Receiver	PSI	420	420		420		420	420	420	420	420	420	419

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity MHOS													

ON LINE TURBINE WATER WASH: YES / NO — CONDUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION: NO. 4 / YES / NO. 2 — YES / NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5	9.00	9.07 ~~9.35~~
Conductivity <5mmhos	7.38	6.75 ~~8.44~~
Silica < 20 ppb		5
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		7.18
CONDENSATE		
HP–pH 8.5 –9.5	8.92	9.01
Conductivity<20mmhos	11.26	10.8
LP–pH 8.5–9.5	8.72	8.80
Conductivity<20mmhos	26.20	25.40
HP		
pH 9.5 – 10.5	9.13	9.03
Conductivity 75–150	83.96	85.34
Phosphate 5–15 ppm	14.50	12.60
Silica < 5 ppm		.320
Iron ppm		
LP		
pH 9.5 – 10.5	9.15	8.13
Conductivity 75 – 150	98.02	100.4
Phosphate 5–15 ppm	18.21	16.90
Silica <5 ppm		.310
Iron ppm		
MIXED BED		
pH 6.0 – 7.5	8.11	8.58
Conductivity< 1mmhos	72	.65
Silica <10 ppb		12
HP Steam Test		
Silica <20 ppb		11
SOFTNER		
Hardness < 1.0 ppm	0.9	
Running (1 or 2)	1	
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		(illegible)

NOTES: 781-2247 - APAM SKID ALARM - 6:58A

#1 & #2 [illegible]

CHILLER OFF - 9:AM. - D.V

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident: Low inlet NOx emissions		Incident Date: 10/9/13
Exact Location Incident: Cogen		
Reported By: J. Majaraj	Estimated Start and Stop Times of Incident: 10/8-10:30AM to 10/9-3:00 PM	Possible Cause: restricted flow

Incident Type: ☐ Spill Internal ☐ Improper Waste Disposal ☐ Spill External ☐ Near miss or below spill release guidelines X Air Emission ☐ Other_____	Released To ☐ Storm Water System ☐ Secondary Containment ☐ Process Sewer X Air ☐ Ground (External) ☐ Ground (Inside Mill Property) ☐ Near Miss ☐ Other_____

Detailed Description of Event

Daily check of emissions on 10/9/13 @ 8:30AM showed low inlet NOx. E&I Tech troubleshooting followed. The sample line was checked for moisture, filter and sample pump were replaced. The flow was still restricted after these efforts. The 3-way sample valve was then replaced, which corrected back the inlet emissions to expected level. Successful manual cal was completed at about 3:07PM on 10/9/13.

APCD was contacted @10:20 10/9/13 by Robyn Lebrilla.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
☐ _____ Gallons ☐ _____ Pounds ☐ Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.)* APCD
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Robyn Lebrilla, Charlie Wilson	Any Acute or Chronic Health Risks *(refer to MSDS)* N/A

Describe Any Emergency Response Actions
N/A

Suggestions to Prevent Reoccurrence	Estimated Completion Date
1.	1.
2.	2
3.	3.
4.	4.

Root Cause after investigation The 3-way sample valve was restricted.	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ☐ 1 ☐ 2 ☐ 3 ☐ 4
Investigated By: Jay Maharaj	Investigated Date 10/9/13

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
10/10/13	for VKumpera 10/10/13	10/10/13
Department Manager	Technical Superintendent	Mill Manager

Print Time: 10/10/2013 9:51:36 AM

Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

October 16, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Nebraska Start up – October 15, 2013

Dear Mr. Olson:

This letter is a follow up on the notification call made by Charlie Wilson to the VCAPCD Breakdown Center Hotline on October 15, 2013 at about 4:30 AM.

On May 15, 2013, the mil's turbine was sent offsite to repair the damage section of the turbine. The cogen ran on a lease turbine for the past four months. To allow the switch from the lease turbine to the mill's turbine and for continued supply of steam for paper production, the Nebraska boiler was fired on October 15, 2013 at 4:17AM. The Nebraska CEMS was successfully calibrated prior to start-up. The standby boiler is expected to run for several days until the turbine installation is complete.

The Daily Emission Sheet, PI and DCS trends and cogen logs have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

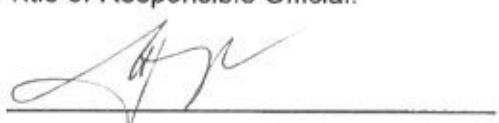
Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: 	10/16/17
Title: Technical Manager	

End Time 10/15/2013 7:00 Start Time 10/14/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR Inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (to 3% O_2)
8:00	13.64	270.87	637.38	66.56	23.43	0.91	2.41	0.73	11.03	14.30	25.78	16.54	10.50	10.50	25.69	1.41	
9:00	12.81	268.74	637.19	67.70	23.71	0.92	2.38	0.73	10.97	14.31	25.96	16.44	10.54	10.52	25.69	1.50	
10:00	9.84	271.47	636.87	69.48	24.24	0.91	2.44	0.74	10.95	14.35	26.74	16.90	10.54	10.52	25.69	1.50	
11:00	10.31	274.79	638.35	67.40	23.92	0.90	2.53	0.75	11.40	14.27	25.89	16.98	10.67	10.58	25.69	1.44	
12:00	13.12	276.25	642.15	67.57	24.13	0.91	2.53	0.75	11.21	14.30	26.27	17.17	10.48	10.56	25.70	1.75	
13:00	7.51	276.59	635.41	63.11	24.04	0.92	2.54	0.76	11.17	14.26	27.52	18.76	10.63	10.59	25.54	2.01	
14:00	7.42	276.59	634.76	67.50	23.83	0.91	2.55	0.76	10.99	14.40	29.14	18.54	10.47	10.53	21.11	6.85	
15:00	7.55	276.59	634.87	67.34	23.85	0.92	2.57	0.76	11.06	14.36	28.99	18.66	10.53	10.55	25.69	0.23	
16:00	8.59	277.10	634.72	67.44	23.91	0.92	2.57	0.76	11.02	14.34	28.91	18.43	10.51	10.51	25.69	-0.06	
17:00	8.72	277.10	634.67	67.13	23.91	0.92	2.56	0.76	11.00	14.39	28.97	18.48	10.49	10.51	25.66	-0.28	
18:00	8.45	276.93	634.60	67.30	23.99	0.93	2.57	0.76	11.00	14.45	28.99	18.56	10.51	10.50	25.49	-0.18	
19:00	8.47	276.59	634.48	66.95	23.77	0.92	2.56	0.76	10.95	14.45	29.69	18.99	10.50	10.50	25.48	0.14	
20:00	8.47	275.05	633.15	66.09	23.18	0.91	2.51	0.75	10.87	14.46	29.96	19.04	10.45	10.49	25.57	0.53	
21:00	8.46	276.08	633.15	66.02	23.08	0.91	2.52	0.75	10.95	14.44	30.58	19.44	10.49	10.48	25.48	0.53	
22:00	8.46	276.76	633.26	66.47	23.45	0.92	2.54	0.75	11.00	14.43	29.95	18.47	10.51	10.48	25.55	0.49	
23:00	8.45	276.42	633.24	65.86	23.34	0.92	2.54	0.75	10.98	14.45	29.45	18.75	10.50	10.50	25.53	0.03	
0:00	8.49	276.59	633.17	65.58	22.99	0.91	2.54	0.75	10.97	14.43	30.07	19.02	10.49	10.50	25.47	-0.06	
1:00	8.39	276.08	632.98	65.35	22.92	0.91	2.53	0.76	10.94	14.44	30.67	19.46	10.48	10.48	25.40	-0.30	
2:00	8.14	273.01	636.73	71.73	25.15	0.93	2.48	0.74	11.05	14.35	27.11	17.10	10.63	10.53	25.57	-0.86	
3:00	1.61	262.89	630.61	80.01	27.52	0.94	2.27	0.71	10.29	14.53	19.85	11.89	10.48	10.53	25.71	-1.11	
4:00	0.04	253.28	623.15	77.33	26.04	0.97	2.16	0.70	9.87	14.64	19.32	10.95	10.56	10.56	25.71	-1.57	
5:00	0.04	241.10	618.21	70.36	23.04	0.96	2.08	0.71	9.21	14.79	22.51	12.11	10.29	10.45	13.20	20.54	47.68
6:00	0.04	192.78	602.17	51.75	15.05	0.84	1.86	0.64	7.58	15.53	38.78	14.50	9.51	10.12	5.17	26.43	30.07
7:00	0.04	0.00	500.45	0.00	0.00	-44731.48	0.00	0.00	0.00	20.34	47.64	0.00	3.02	7.61	2.35	24.47	23.61

Daily Av Cogen NOx lb/h	Daily Av Cog+Neb NOx lb/h
10.27	11.47

Daily Av Cogen CO lb/h	Daily Av Cog+Neb CO lb/h
16.47	16.62

Stack NOx analyzer	
zero value	0.00
zero drift %	0.00
span value	83.67
span drift %	2.34

Stack CO Analyzer	
zero value	-0.56
zero drift %	-0.56
span value	91.41
span drift %	0.41

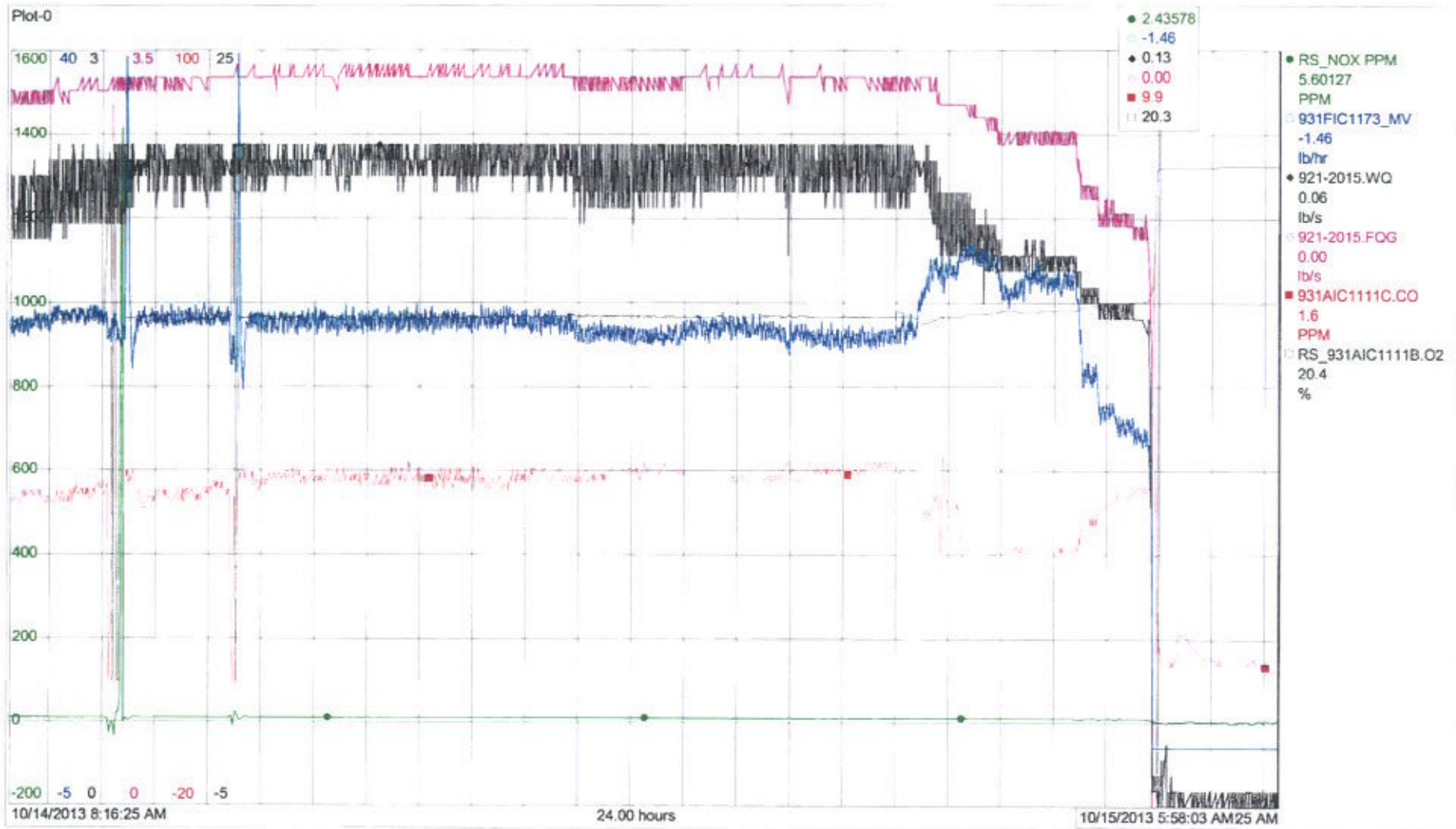
Stack O2 Analyzer	
zero value	20.94
zero drift%	0.08
span value	-0.05
span drift %	-0.19

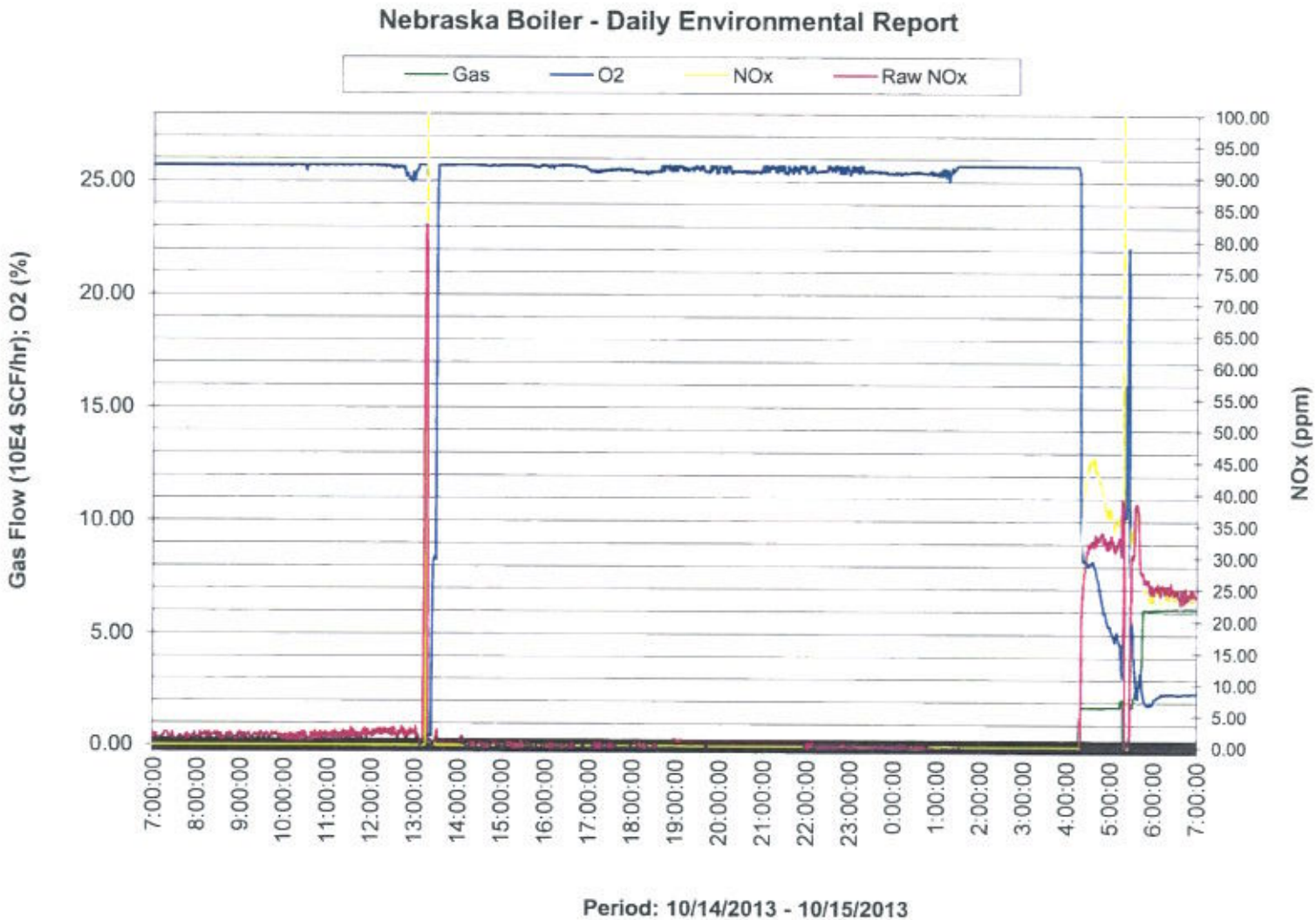
Nebraska Gas	78,445

Comment: Lease turbine down on 10/15/13 from 6:00 AM - 7:00 AM to install the rail's turbine (after offsite repair), a total of 1 hr. Nebraska is up from 4:17 AM - 7:00 AM. Calibration completed on Nebraska CEMS prior to operation.

PRINT TIME: 10/15/2013 8:36 AM

NOTE: This document is valid for only ONE week after print time


Plot-0
1600 40 3 3.5 100 25
1400
1000
800
600
400
200
0
-200 -5 0 0 -20 -5
2.43578
-1.46
0.13
0.00
9.9
20.3
RS_NOX PPM
5.60127
PPM
931FIC1173_MV
-1.46
lb/hr
921-2015.WQ
0.06
lb/s
921-2015.FQG
0.00
lb/s
931AIC1111C.CO
1.6
PPM
RS_931AIC1111B.O2
20.4
%
10/14/2013 8:16:25 AM
24.00 hours
10/15/2013 5:58:03 AM25 AM


Nebraska Boiler - Daily Environmental Report
Gas
O2
NOx
Raw NOx
Gas Flow (10E4 SCF/hr); O2 (%)
NOx (ppm)
25.00
20.00
15.00
10.00
5.00
0.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
18:00:00
19:00:00
20:00:00
21:00:00
22:00:00
23:00:00
0:00:00
1:00:00
2:00:00
3:00:00
4:00:00
5:00:00
6:00:00
7:00:00
Period: 10/14/2013 - 10/15/2013


COGEN
2013-10-16 15:09
23ME
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name
Description
Attribute
Treatment
Ruler Time
Ruler Value
Current Value
Unit
Filter
Time Offset
Form
931AIC1111A.NOX
B&W SCR INLET NOX
MV
Mom
06:02 2013-10-15
4.34
0.75
PPM
931AIC1111C.CO
B&W BLR STACK RAW CO
MV
Mom
06:02 2013-10-15
6.73
0.16
PPM
931AIC1111B.O2
B&W BLR RAW O2%
MV
Mean
06:02 2013-10-15
20.27
20.37
%
931AIC1111D.NOX
B&W BLR STACK NOX
MV
Mean
06:02 2013-10-15
0.28
-0.21
PPM
931-AIC-1111.INCAL
RSMT CEMS IN CAL
MV
Mom
06:02 2013-10-15
0
0
931-aic-1111.trb
RSMT CEMS TROUBLE
MV
Mom
06:02 2013-10-15
1
0
<
>
<<
>>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

NIGHT SHIFT OPERATOR

NAME: RDS

DRY SHIFT OPERATOR

NAME: [illegible]

Hueneme Paper Mill

SAFETY IS ALWAYS NO. 1

DATE: 10-14-13

OFFICIAL DAILY COGENERATION LOG

CAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP
CURRENT	08891975	71066997	70291699	188892
PREVIOUS	08880382	70952375	70243020	194886

NEW DEMIN TRAILER YES NO TIME:

AMMONIA DELIVERY YES NO % FULL:

GAS & ELECTRIC READING

	HP	SCC LP	TURBINE	MAXON	BURNER	NEBRASKA	KILOWATTS
CURRENT	1872	26366650	7002450	650224	157623		80300
PREVIOUS	2036	26206000	6654450	605615	215794		79720

NEBRASKA ONLINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK YES NO

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%	50.5	51.6	54.6	56.6	56.0	54.7	53.3	55.3	55			
Inlet Temp	°F	53	51	58	58	58	58	56	56	56			
Humidity	%	45	30	33	36	35	36	51	60	45			
Vibration (Max)	MILS	40	.40	.39	.40	.40	.40	40	40	40			
Steam Injection	#/SEC	2.38	2.31	2.56	2.62	2.62	2.50	2.50	2.62	2.62			
Turbine L.O. Level	%	95	95	95	95	95	95	90	90	90			
T48	°F	1485	1499	1510	1519	1515	1510	1504	1504	1502			

BATTERIES 135 V HP RECOUPE FAL

AIR INLET DIFF 7.9 IN/H20 HP RECOUPE FAR

L.O. DIFFERENTIAL 5 PSI HP RECOUPE AFT

BATTERIES 135 V HP RECOUPE 121 FAL

AIR INLET DIFF 7.8 IN/H20 HP RECOUPE 121 FAR

L.O. DIFFERENTIAL 5 PSI HP RECOUPE 51 AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F	158	158	158	156	156	156	154	168	155			
L.O. Supply	°F	130	130	130	129	129	129	129	128	127			
Gen. Vibration (Max)	IPS	.38	.42	.43	.42	.42	41	42	44	40			
Tie Line	MW	12.38	1500	12.59	1256	12.52	1253	12.5	12.4	12.6			

GEN. 1175 AMPS GEN.VARS 6.59 MEGA VARS

FIELD 208 AMPS FIELD VOLTS 180 V

COOLING TWR INLET F

GEN. 1175 AMPS GEN.VARS MEGA VARS

FIELD 200 AMPS FIELD VOLTS 180 V

COOLING TWR INLET 87 F COOLING TWR INLET 84 F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F	710	710	709	711	710	711	711	711	710			
HP Drum Level	IN	1.1	0.9	2.0	0.9	0.8	0.7	1	1	1			
LP Drum Level	IN	1.0	0.9	1.3	1.0	1.0	1.0	1	1	.8			
HP Drum Pressure	PSI	483	483	483	483	483	483	483	483	483			
LP Drum Pressure	PSI	149	149	149	149	149	147	147	147	147	-		
CO	PPM	26.1	26.1	27.6	28.6	28.6	28.7	29.2	28.8	29.1			
NOX	PPM	10.5	10.6	10.3	10.5	10.3	10.5	10.7	10.5	10.2			
O2	%	14.36	14.30	14.29	14.34	14.34	14.38	14.4	14.4	14.5			
Hot Well Level	%	143	148	132	150	138	143	157	163	148			

1150 SET POINT 449 1103 B SET POINT 449

SCANNER BLOWER (ON) Y/N DUCT BURNER 492 SP

1150 SET POINT 499 1103 B SET POINT 494

SCANNER BLOWER ON ON DUCT BURNER S.P 492

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI	232	232	232	232	232	234	234	234	136			
Gas Receiver	PSI	420	420	420	420	420	420	420	420	420			

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity MHOS													

ON LINE TURBINE WATER WASH YES NO CODUCTIVITY MHOS

BOILER FEED WATER PUMP OPERATION NO. 1 YES NO NO. 2 YES NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 - 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP-pH 8.5 -9.5		
Conductivity<20mmhos		
LP-pH 8.5-9.5		
Conductivity<20mmhos		
HP		
pH 9.5 - 10.5		
Conductivity 75-150		
Phosphate 5-15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 - 10.5		
Conductivity 75 - 150		
Phosphate 5-15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 - 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 - 10.5		
Conductivity 75 - 200		
Silica		
Phosphate 5-25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm	LW 0132 hr	

NOTES: The A/C in Cab is not working

Very well - R.O.

called APCD 2427 AM.

APCD on Lab 3AM.

NCG 2, 5:21AM restrict 520 AM cleared

Delivered 6K bbl oil 41,200 gal @

Cap 7AM 5:57AM Alarm

Crank wash 1 X 3 Gal Soap

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident Preparation- startup Neb boiler- check out- for Turbine exchange in Oct		Incident Date 10/15/13
Exact Location Incident Cogen		
Reported By C. Wilson	Estimated Start and Stop Times of Incident: @430 AM	Possible Cause: start up Nebraska Blr

Incident Type: ☐ Spill Internal ☐ Improper Waste Disposal ☐ Spill External ☐ Near miss or below spill release guidelines X Air Emission ☐ Other_____	Released To ☐ Storm Water System ☐ Secondary Containment ☐ Process Sewer X Air ☐ Ground (External) ☐ Ground (Inside Mill Property) ☐ Near Miss ☐ Other_____

Detailed Description of Event

Started up Nebraska Boiler- in preparation of Cogen plant coming offline to remove lease LM 2500+ and Install the Mill's LM2500+ back from depot.

APCD was contacted @430 AM , 10/15/13 on start-up of Nebraska boiler. message left by C. Wilson.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
☐ _____ Gallons ☐ _____ Pounds ☐ Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.) APCD*
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Lars Gustavson, Rudy Rehbein, Robyn Lebrilla , Victor Kumpera	Any Acute or Chronic Health Risks *(refer to MSDS)N/A*
Describe Any Emergency Response Actions N/A	

Suggestions to Prevent Reoccurrence	Estimated Completion Date
1. N/A	1.
2.	2
3.	3.
4.	4.

Root Cause after investigation Maintenance issue- reported to APCD- start up of Nebraska Boiler.	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ☐ 1 ☐ 2 ☐ 3 ☐ 4
Investigated By: Charlie Wilson	Investigated Date 10/15/13

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
C. Wilson 10/16/13 Department Manager	Technical Superintendent 10/16/13	Mill Manager 10/16/2013

Print Time: 10/16/2013 12:31:51 PM

Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

October 17, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Nebraska CEMS failed O2 calibration

Dear Mr. Olson:

This letter is a follow up on the call made by Charlie Wilson to the VCAPCD Breakdown Center Hotline on October 15, 2013 at about 6:00 PM.

The Nebraska CEMS manual O2 calibration failed at 11:22 AM on October 15, 2013. During troubleshooting, it was found that the O2 sample probe was affected by high temperature in the area it was located. Additional cooling in the area had resolved the issue. A passing manual calibration was completed at about 6:07 PM on October 15, 2013. There was no excess emission during the 6.75-hr duration of CEMS O2 monitor malfunction. The Nebraska boiler was shutdown on October 17, 2013 at about 11:00 AM since the mill's turbine was back in service.

The Daily Emission Sheet, PI trends, DCS trends, Cogen Report and Environmental Incident Report have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

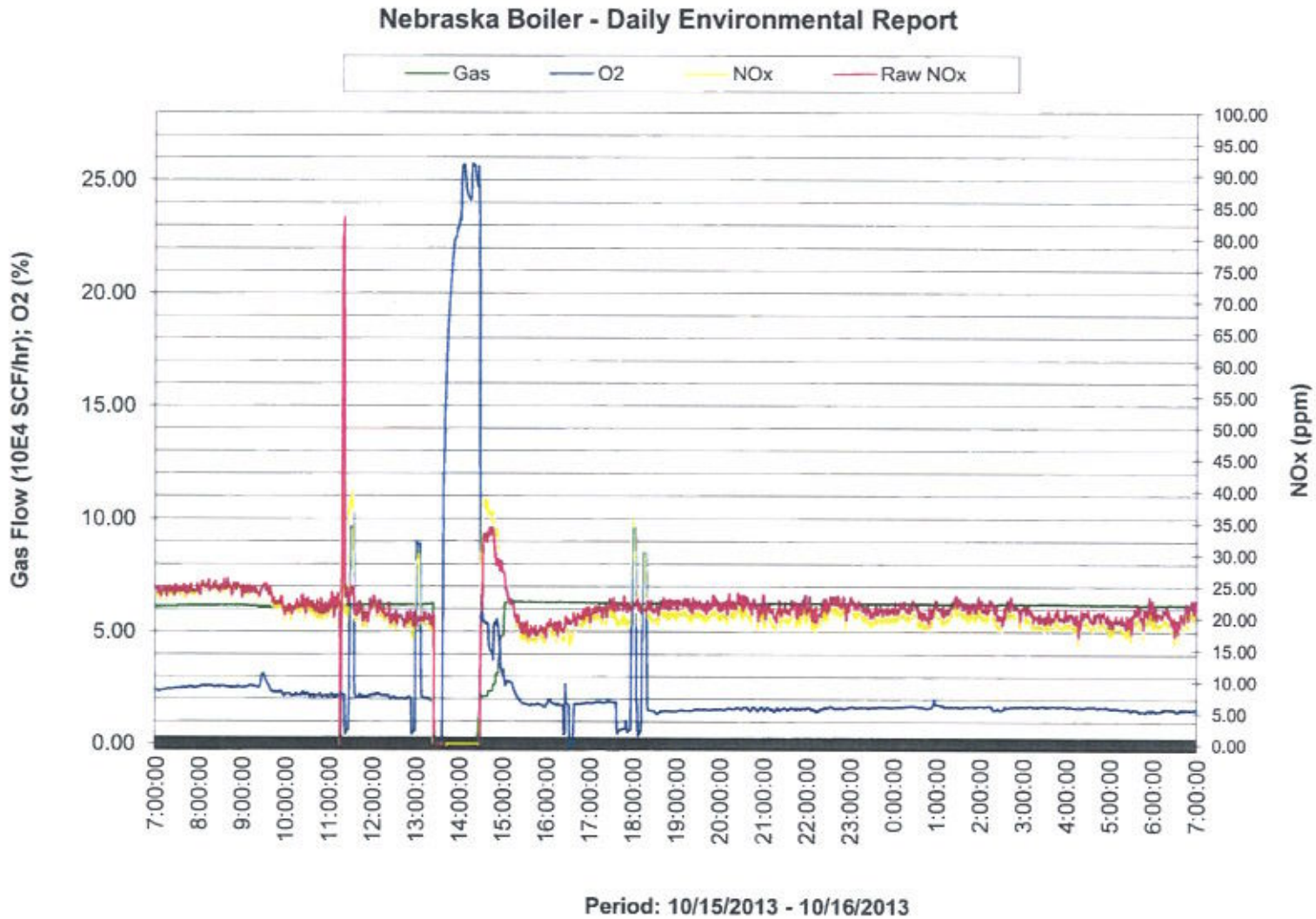
Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: 	10/18/2013
Title: Technical Manager	


Nebraska Boiler - Daily Environmental Report
Gas
O2
NOx
Raw NOx
Gas Flow (10E4 SCF/hr); O2 (%)
NOx (ppm)
25.00
20.00
15.00
10.00
5.00
0.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
18:00:00
19:00:00
20:00:00
21:00:00
22:00:00
23:00:00
0:00:00
1:00:00
2:00:00
3:00:00
4:00:00
5:00:00
6:00:00
7:00:00
Period: 10/15/2013 - 10/16/2013

DAILY ENVIRONMENTAL REPORT

End Time: 10/16/2013 7:00 Start Time: 10/15/2013 7:00

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) (3% O_2)
8:00	0.04	0.00	498.55	0.56	-1.46	-53093.74	0.03	0.00	0.00	20.40	32.06	0.00	2.84	5.12	2.46	24.52	23.81
9:00	0.04	0.00	498.54	0.56	-1.46	-53093.74	0.03	0.00	0.00	20.41	20.84	0.00	4.90	3.59	2.56	24.96	24.38
10:00	0.04	0.00	498.54	0.56	-1.46	-53093.74	0.03	0.00	0.00	20.41	19.02	0.00	2.07	3.27	2.53	23.73	23.12
11:00	0.04	0.00	498.55	0.47	-1.46	-63712.49	0.03	0.00	0.00	20.37	-2.08	0.00	-2.20	1.59	2.18	22.00	21.04
12:00	0.04	0.00	498.54	0.47	-1.46	-63712.49	0.03	0.00	0.00	20.37	-2.08	0.00	-1.39	-0.51	2.77	24.91	24.59
13:00	0.04	0.00	498.55	0.47	-1.46	-63712.49	0.03	0.00	0.00	20.37	-2.08	0.00	-1.82	-1.80	1.97	20.52	19.41
14:00	0.01	0.00	496.31	0.38	-1.40	51626.14	0.03	0.00	0.00	20.36	-2.06	0.00	-2.72	-1.98	11.37	8.62	16.16
15:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.00	0.00	0.00	20.36	-2.05	0.00	-3.02	-2.52	14.47	13.98	38.81
16:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	-2.05	0.00	-2.32	-2.69	2.09	19.83	18.87
17:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.02	0.00	0.00	20.36	-2.05	0.00	-2.79	-2.71	1.55	19.54	18.08
18:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	-2.05	0.00	-2.94	-2.68	1.74	21.73	20.30
19:00	-0.02	0.00	497.27	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	-2.05	0.00	-2.99	-2.91	2.71	21.88	21.53
20:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	-0.70	0.00	-2.89	-2.94	1.53	22.10	20.42
21:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	6.72	0.00	-3.49	-3.12	1.58	22.07	20.45
22:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	6.82	0.00	-3.76	-3.38	1.57	21.29	19.71
23:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	6.82	0.00	-3.67	-3.64	1.59	21.85	20.25
0:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	6.82	0.00	-4.18	-3.87	1.85	21.36	19.87
1:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	5.39	0.00	-4.18	-4.01	1.88	21.23	19.78
2:00	-0.02	0.00	497.27	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	5.46	0.00	-4.22	-4.19	1.89	22.00	20.50
3:00	-0.02	0.00	497.27	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	4.36	0.00	-4.65	-4.35	1.85	21.38	19.86
4:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.36	-4.14	0.00	-4.41	-4.43	1.89	20.36	18.97
5:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.41	-5.29	0.00	-4.99	-4.68	1.66	20.09	18.70
6:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.42	-5.40	0.00	-5.09	-5.03	1.55	20.13	18.62
7:00	-0.02	0.00	497.27	0.28	-1.34	219011.72	0.03	0.00	0.00	20.42	-4.89	0.00	-5.55	-5.41	1.54	20.59	19.04

Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
lb/h	lb/h
0.00	9.21

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
0.00	1.15

Stack NOx analyzer	
zero value	-0.47
zero drift %	-0.47
span value	82.59
span drift %	1.02

Stack CO Analyzer	
zero value	-0.47
zero drift %	-0.47
span value	92.44
span drift %	1.55

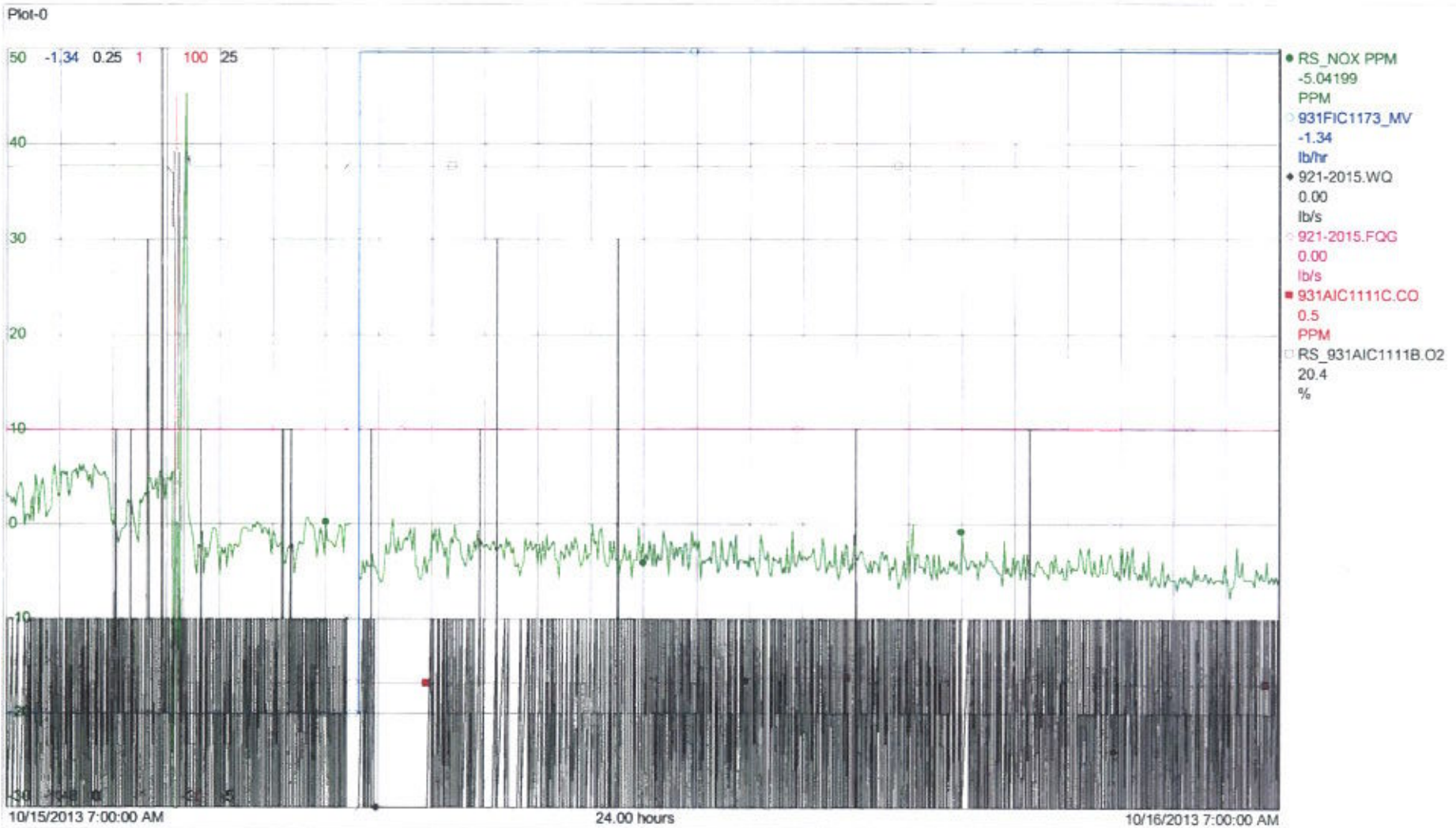
Stack O2 Analyzer	
zero value	20.99
zero drift%	0.35
span value	-0.01
span drift %	-0.03

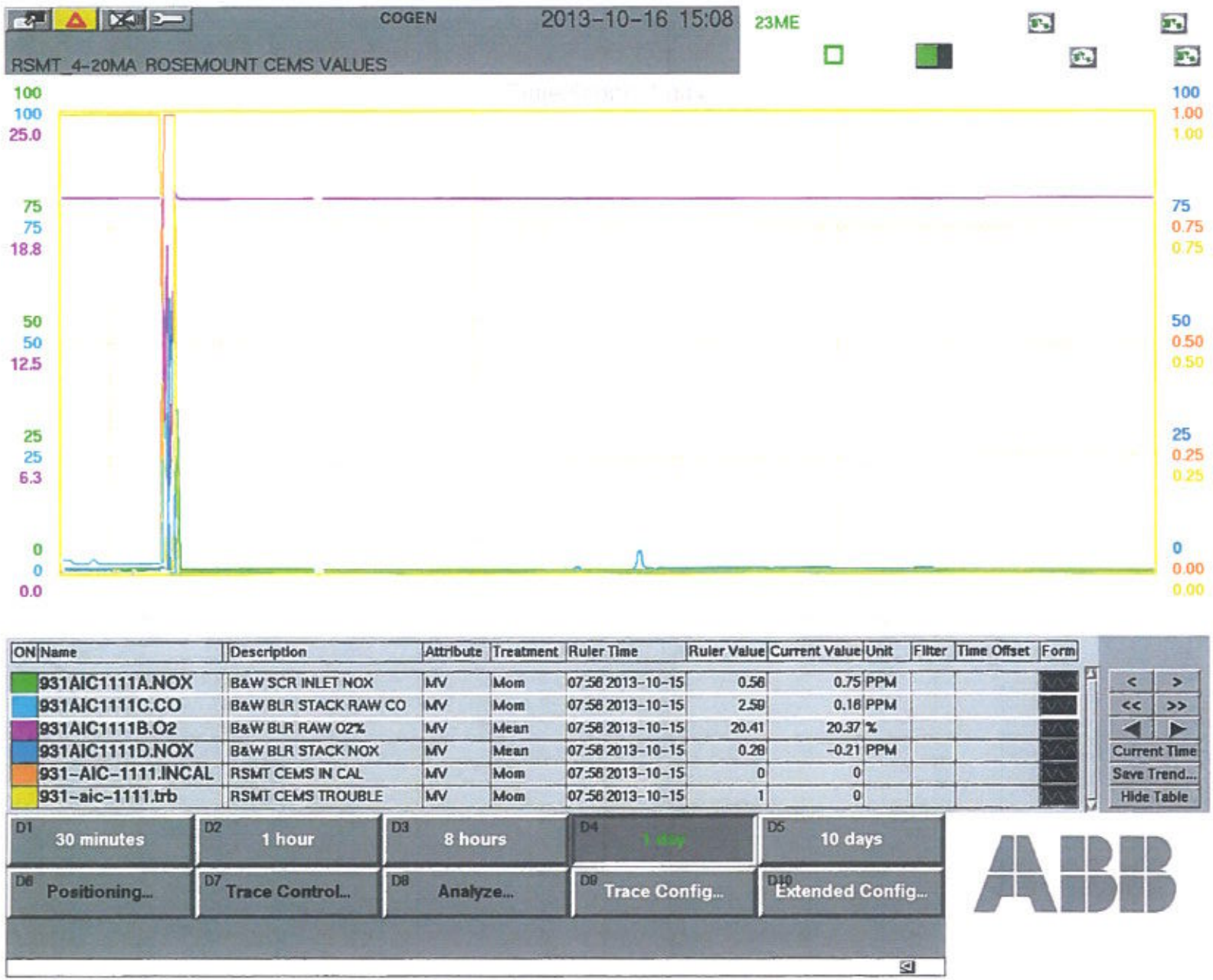
Nebraska Gas	1,290,766

Comment: Lease turbine down from 10/15/13 7:00 AM to 10/16/13 7:00 AM to install the mill's turbine (after offsite repair), a total of 24 hrs. Nebraska was running the entire time except from 1:25 PM - 2:25 PM (1 hr) due to power bump. Calibration on Nebraska CEMS failed on O2 - troubleshooting. APCD notified by C.Wilson on 10/15/13 at about 6:00 PM.

PRINT TIME: 10/16/2013 7:58 AM

NOTE: This document is valid for only ONE week after print time


Plot-0
50 -1.34 0.25 1 100 25
40
30
20
10
0
10
10/15/2013 7:00:00 AM
24.00 hours
10/16/2013 7:00:00 AM
RS_NOX PPM
-5.04199
PPM
931FIC1173_MV
-1.34
lb/hr
921-2015.WQ
0.00
lb/s
921-2015.FQG
0.00
lb/s
931AIC1111C.CO
0.5
PPM
RS_931AIC1111B.O2
20.4
%


COGEN
2013-10-16 15:08
23ME
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 07:56 2013-10-15 0.56 0.75 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 07:56 2013-10-15 2.59 0.18 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 07:56 2013-10-15 20.41 20.37 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 07:56 2013-10-15 0.28 -0.21 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 07:56 2013-10-15 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 07:56 2013-10-15 1 0
< >
<< >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR NAME: Cox

DRY SHIFT OPERATOR NAME: Van Zandt

Hueneme Paper Mill

SAFETY IS ALWAYS NO. 1

DATE: 10-15-13

CHEMICAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCC LP	TURBINE	MAXON	BURNER	NEBRASKA	KILOWATTS
CURRENT	08197573	71195390	70347440	0	0	27760 80	70021460	73658	0	/	80300
PREVIOUS	08891975	71066797	70291699	188892	1872	26366 50	70024 50	65022 4	157623	/	80300

NEW DEMIN TRAILER: YES / NO TIME:

AMMONIA DELIVERY: YES / NO % FULL:

NEBRASKA ONLINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK: YES / NO

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%												
Inlet Temp	°F												
Humidity	%												
Vibration (Max)	MILS												
Steam Injection	#/SEC												
Turbine L.O. Level	%												
T48	°F												

BATTERIES V | HP RECOUPE FAL
AIR INLET DIFF IN/H20 | HP RECOUPE FAR
L.O. DIFFERENTIAL PSI | HP RECOUPE AFT

BATTERIES V | HP RECOUPE FAL
AIR INLET DIFF IN/H20 | HP RECOUPE FAR
L.O. DIFFERENTIAL PSI | HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F												
L.O. Supply	°F												
Gen. Vibration (Max)	IPS												
Tie Line	MW												

GEN. AMPS | GEN.VARS MEGA VARS
FIELD AMPS | FIELD VOLTS V
COOLING TWR INLET F | COOLING TWR INLET F

GEN. AMPS | GEN.VARS MEGA VARS
FIELD AMPS | FIELD VOLTS V
COOLING TWR INLET F | COOLING TWR INLET F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F												
HP Drum Level	IN												
LP Drum Level	IN												
HP Drum Pressure	PSI												
LP Drum Pressure	PSI												
CO	PPM												
NOX	PPM												
O2	%												
Hot Well Level	%												

1150 SET POINT | 1103 B SET POINT
SCANNER BLOWER (ON) Y/N | DUCT BURNER SP

1150 SET POINT | 1103 B SET POINT
SCANNER BLOWER ON Y/N | DUCT BURNER S.P.

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI												
Gas Receiver	PSI												

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN		6.5"	50%				50%	50	50	50	50	50
Drum Pressure	PSI		280	285				290	285	285	285	285	285
Steam Flow Last	#/HR												
Steam Temp Last	°F			700				700	700	700	700	700	700
NOX	PPM		25	~~23~~ 23				22	23	22	22	20	20
O2	%		2.5	2.1				1.4	1.6	1.7	1.7	1.7	1.5

ON LINE TURBINE WATER WASH: YES / NO | CODUCTIVITY MHOS

BOILER FEED WATER PUMP OPERATION: NO. 1 YES / NO | NO. 2 YES / NO

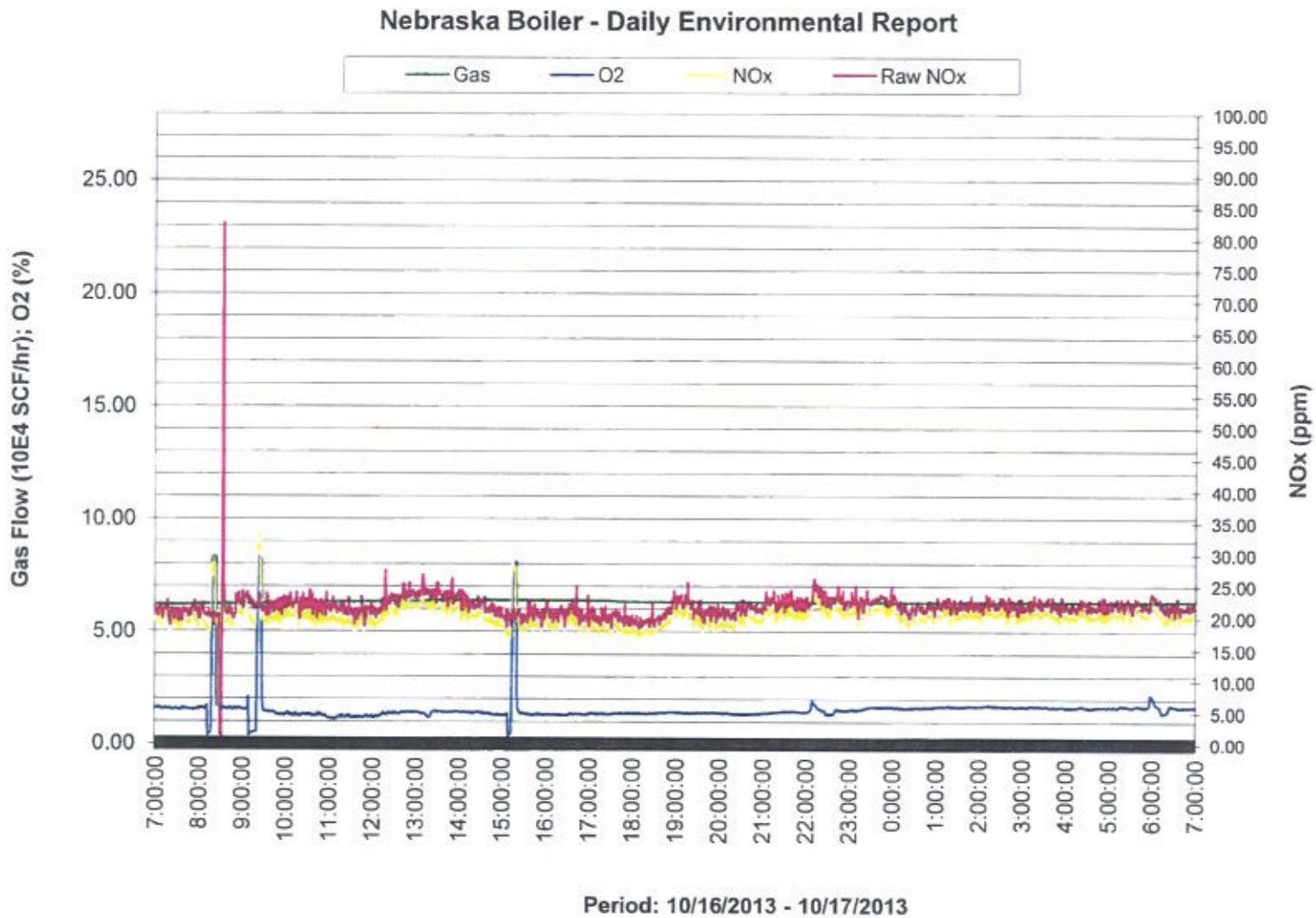
BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP–pH 8.5 –9.5		
Conductivity<20mmhos		
LP–pH 8.5–9.5		
Conductivity<20mmhos		
HP		
pH 9.5 – 10.5		
Conductivity 75–150		
Phosphate 5–15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 – 10.5		
Conductivity 75 – 150		
Phosphate 5–15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 – 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:

ADD LIT EDTA BEG MIDLE MONTH
REDUCED 13%
MIDDLE OVER FIRED 1PM MONTH
AM - TURBINE WAS SHUT DOWN RESTARTED.

ACAD# 000-3011 – REV E WGA 102(D)


Nebraska Boiler - Daily Environmental Report
Gas
O2
NOx
Raw NOx
Gas Flow (10E4 SCF/hr); O2 (%)
NOx (ppm)
25.00
20.00
15.00
10.00
5.00
0.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
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5:00:00
6:00:00
7:00:00
Period: 10/16/2013 - 10/17/2013

End Time 10/17/2013 7:00 Start Time 10/16/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) (3% O_2)
8:00	-0.02	0.00	497.27	0.28	-1.34	219011.72	0.03	0.00	0.00	20.42	-4.40	0.00	-5.90	-5.71	1.55	21.09	19.51
9:00	-0.02	0.00	497.26	0.28	-1.34	219011.72	0.03	0.00	0.00	20.42	-4.19	0.00	-5.64	-5.66	2.18	22.83	21.64
10:00	-0.02	0.00	497.26	0.29	-1.34	219011.72	0.03	0.00	0.00	20.44	-4.82	0.00	-5.97	-5.50	1.98	22.02	20.83
11:00	-0.02	0.00	497.27	1.03	-1.34	59730.46	0.03	0.00	0.00	20.37	1.38	0.00	-3.67	-4.76	1.29	22.16	20.23
12:00	-0.02	0.00	497.26	1.03	-1.34	59730.46	0.03	0.00	0.00	20.37	1.38	0.00	-3.58	-4.11	1.20	21.18	19.24
13:00	-0.02	0.00	497.26	0.99	-1.34	59730.46	0.03	0.00	0.00	20.37	1.79	0.00	-3.71	-3.85	1.34	22.90	20.96
14:00	-0.02	0.00	497.26	0.75	-1.34	81737.41	0.03	0.00	0.00	20.37	2.48	0.00	-3.26	-3.52	1.39	23.78	21.82
15:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	4.24	0.00	-2.78	-3.25	1.37	22.03	20.20
16:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	1.73	0.00	-2.74	-2.93	1.98	20.42	19.32
17:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	1.73	0.00	-2.19	-2.57	1.32	20.75	18.97
18:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	5.19	0.00	-2.54	-2.49	1.36	19.91	18.24
19:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	2.36	0.00	-4.03	-2.94	1.36	20.12	18.46
20:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	3.91	0.00	-4.86	-3.83	1.40	21.83	19.86
21:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	2.08	0.00	-4.68	-4.34	1.36	21.23	19.46
22:00	-0.02	0.00	497.25	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	2.08	0.00	-3.58	-4.27	1.43	22.41	20.61
23:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	2.08	0.00	-3.78	-3.91	1.52	23.10	21.33
0:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	2.77	0.00	-3.52	-3.72	1.80	22.78	21.14
1:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	2.82	0.00	-4.47	-3.92	1.62	21.73	20.18
2:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	2.08	0.00	-5.67	-4.55	1.58	22.07	20.56
3:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	2.08	0.00	-5.42	-5.19	1.89	22.01	20.51
4:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.02	0.00	0.00	20.37	2.08	0.00	-5.53	-5.51	1.67	22.05	20.53
5:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	2.08	0.00	-5.16	-5.37	1.65	21.86	20.32
6:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	2.08	0.00	-4.10	-4.96	1.70	22.12	20.62
7:00	-0.02	0.00	497.26	0.75	-1.34	82129.39	0.03	0.00	0.00	20.37	10.51	0.00	-3.49	-4.61	1.66	21.89	20.37

Comment: **Lease turbine down from 10/16/13 8:00 AM to 10/17/13 7:00 AM to install the mill's turbine (after offsite repair), a total of 24 hrs. Nebraska operating for 24 hrs.**

Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
lb/h	lb/h
0.00	9.21

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
0.00	1.16

Stack NOx analyzer	
zero value	-0.50
zero drift %	-0.50
span value	82.44
span drift %	0.83

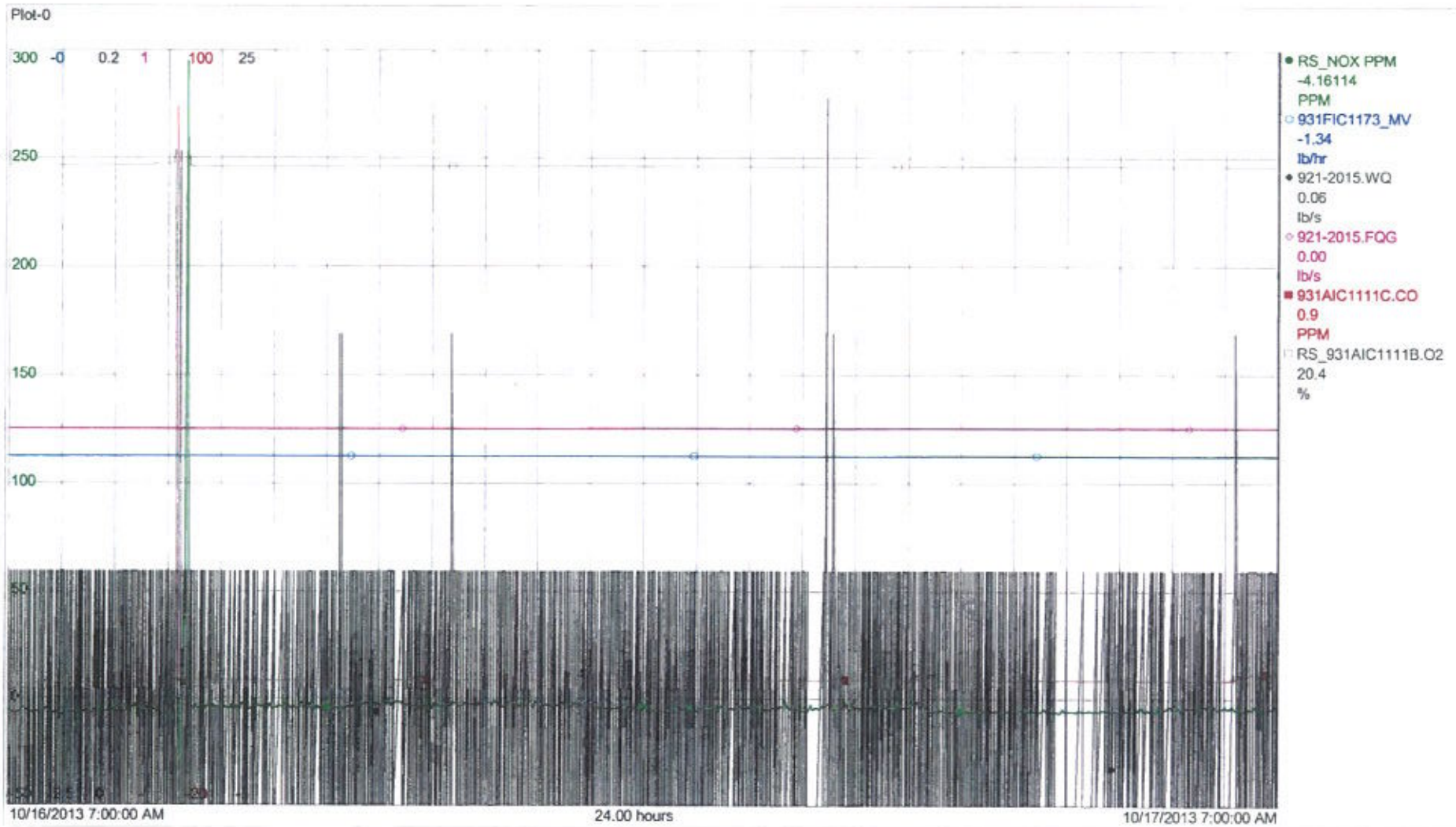
Stack CO Analyzer	
zero value	-0.81
zero drift %	-0.81
span value	91.05
span drift %	0.04

Stack O2 Analyzer	
zero value	21.03
zero drift%	0.53
span value	-0.05
span drift %	-0.19

Nebraska Gas	1,392,422

PRINT TIME: 10/17/2013 8:25 AM

NOTE: This document is valid for only ONE week after print time


Plot-0
300 -0 0.2 1 100 25
250
200
150
100
50
0
-50
RS_NOX PPM
-4.16114
PPM
931FIC1173_MV
-1.34
lb/hr
921-2015.WQ
0.06
lb/s
921-2015.FQG
0.00
lb/s
931AIC1111C.CO
0.9
PPM
RS_931AIC1111B.O2
20.4
%
10/16/2013 7:00:00 AM
24.00 hours
10/17/2013 7:00:00 AM


COGEN
2013-10-18 08:55
23M
93-HWTR.ALRM
COGEN HARD WATER
Value
08:41:11
RSMT_4-20MA_ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name
Description
Attribute
Treatment
Ruler Time
Ruler Value
Current Value
Unit
Filter
Time Offset
Form
931AIC1111A.NOX
B&W SCR INLET NOX
MV
Mom
07:14 2013-10-16
0.28
54.38
PPM
931AIC1111C.CO
B&W BLR STACK RAW CO
MV
Mom
07:14 2013-10-16
-0.41
33.25
PPM
931AIC1111B.O2
B&W BLR RAW O2%
MV
Mean
07:14 2013-10-16
20.42
14.83
%
931AIC1111D.NOX
B&W BLR STACK NOX
MV
Mean
07:14 2013-10-16
-0.50
10.58
PPM
931-AIC-1111.INCAL
RSMT CEMS IN CAL
MV
Mom
07:14 2013-10-16
0
0
931-aic-1111.trb
RSMT CEMS TROUBLE
MV
Mom
07:14 2013-10-16
0
0
<
>
<<
>>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR

DRY SHIFT OPERATOR

NAME: Van Zandt

NAME:

Huenome Paper Mill

SAFETY IS ALWAYS NO. 1

DATE: 10-16-13

CAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP
CURRENT	08749570	71331779	70406318	5
PREVIOUS	08197515	71195340	70341440	0

NEW DEMIN TRAILER YES NO TIME:

AMMONIA DELIVERY YES NO % FULL:

GAS & ELECTRIC READING

	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	MEGAWATTS
CURRENT	0	28024420	7002440	840032	0		80303
PREVIOUS	0	27760800	7002460	731658	0		80300

NEBRASKA ONLINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK YES NO

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
TURBINE	FSR %												
	Inlet Temp °F												
	Humidity %												
	Vibration (Max) MILS												
	Steam Injection #/SEC												
	Turbine L.O. Level %												
	T48 °F												
	BATTERIES V / HP RECOUPE FAL												
	AIR INLET DIFF IN/H20 / HP RECOUPE FAR												
	L.O. DIFFERENTIAL PSI / HP RECOUPE AFT												
GENERATOR	Gen. Bearing Drain °F												
	L.O. Supply °F												
	Gen. Vibration (Max) IPS												
	Tie Line MW												
	GEN. AMPS / GEN.VARS MEGA VARS												
	FIELD AMPS / FIELD VOLTS V												
	COOLING TWR INLET F												
COGEN BOILER	450 Header Temp °F												
	HP Drum Level IN												
	LP Drum Level IN												
	HP Drum Pressure PSI												
	LP Drum Pressure PSI												
	CO PPM												
	NOX PPM												
	O2 %												
	Hot Well Level %												
	1150 SET POINT / 1103 B SET POINT												
	SCANNER BLOWER (ON) Y/N / DUCT BURNER SP												
COMPRESSORS	Filter Separator PSI												
	Gas Receiver PSI												
NEBRASKA BOILER	Drum Level IN	50%	50%	50%	50%	50%	50%	50	50	50			
	Drum Pressure PSI	280	280	285	285	285	285	285	285	285			
	Steam Flow #/HR					7c							
	Steam Temp °F	700	700	700	700	700	700	700	700	700			
	NOX PPM	21.0	18.0	19.6	22.0	19.4	18.5	23	23	23			
	O2 %	1.5	0.5	1.1	1.4	1.3	1.3	1.9	1.7	1.5			
	Blow Down Conductivity MHOS												

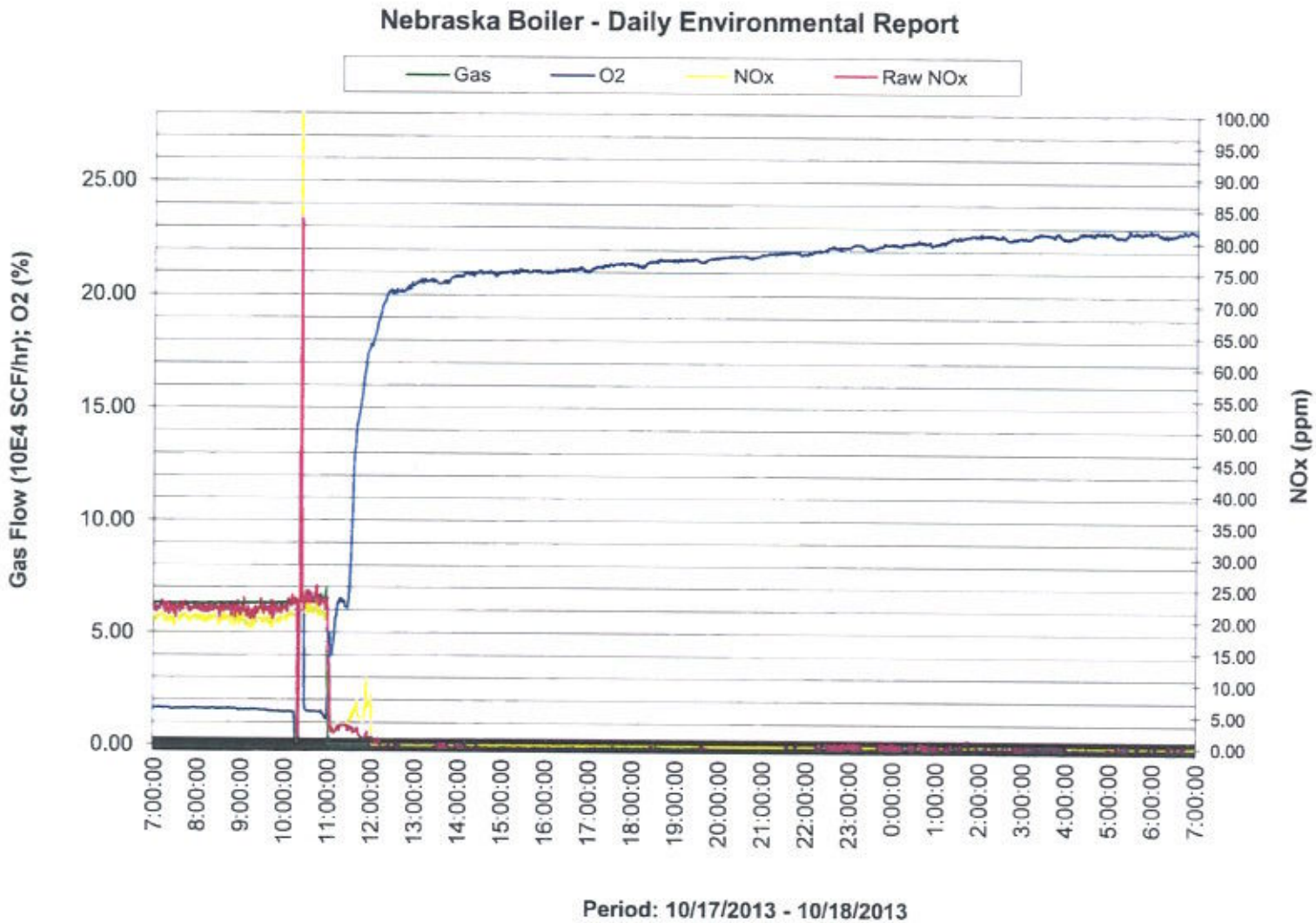
ON LINE TURBINE WATER WASH YES NO CODUCTIVITY MHOS

BOILER FEED WATER PUMP OPERATION NO. 1 YES NO NO 2 YES NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 - 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP-pH 8.5 -9.5		
Conductivity<20mmhos		
LP-pH 8.5-9.5		
Conductivity<20mmhos		
HP		
pH 9.5 - 10.5		
Conductivity 75-150		
Phosphate 5-15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 - 10.5		
Conductivity 75 - 150		
Phosphate 5-15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 - 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 - 10.5		
Conductivity 75 - 200		
Silica		
Phosphate 5-25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:


Nebraska Boiler - Daily Environmental Report
Gas
O2
NOx
Raw NOx
Gas Flow (10E4 SCF/hr); O2 (%)
NOx (ppm)
25.00
20.00
15.00
10.00
5.00
0.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
18:00:00
19:00:00
20:00:00
21:00:00
22:00:00
23:00:00
0:00:00
1:00:00
2:00:00
3:00:00
4:00:00
5:00:00
6:00:00
7:00:00
Period: 10/17/2013 - 10/18/2013

End Time 10/18/2013 7:00 Start Time 10/17/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR Inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) (3% O_2)
8:00	-0.02	0.00	497.27	0.75	-1.29	82129.39	0.03	0.00	0.00	20.37	10.82	0.00	-4.43	-4.37	1.84	21.80	20.27
9:00	-0.02	0.00	497.27	3.81	-1.26	140636.65	0.03	0.00	0.00	17.78	-7.08	0.00	-0.62	-3.18	1.83	21.73	20.19
10:00	-0.02	0.00	497.26	0.22	-1.37	287966.00	0.03	0.00	0.00	20.40	3.41	0.00	1.00	-1.35	1.56	21.57	19.96
11:00	4.48	82.28	507.92	41.00	-1.37	-2.06	0.06	0.09	27.45	16.45	104.64	22.46	65.79	22.06	2.06	24.10	22.91
12:00	16.77	202.68	611.72	55.76	16.15	1.17	1.50	0.58	19.64	14.99	30.02	14.38	22.66	29.82	10.01	2.70	4.44
13:00	5.89	244.31	616.86	61.08	26.09	1.27	2.13	0.71	9.75	14.83	22.12	12.54	10.53	32.99	19.78	-0.28	
14:00	1.99	254.98	613.36	56.06	23.86	1.20	2.23	0.72	9.95	14.84	20.49	11.79	10.51	14.57	20.82	-0.58	
15:00	3.79	259.27	612.43	53.66	23.17	1.20	2.28	0.72	10.22	14.79	24.33	14.47	10.51	10.51	20.95	-0.50	
16:00	2.32	259.60	611.87	54.03	23.31	1.21	2.28	0.72	10.14	14.80	22.25	13.22	10.49	10.50	21.04	-0.94	
17:00	1.77	258.86	610.65	53.84	23.26	1.21	2.28	0.72	10.08	14.77	22.33	13.12	10.47	10.49	21.09	-0.88	
18:00	-0.01	258.24	608.04	54.62	23.33	1.22	2.28	0.72	10.01	14.80	19.24	11.23	10.49	10.48	21.32	-0.86	
19:00	0.32	256.96	607.92	53.79	23.12	1.20	2.26	0.72	9.95	14.80	20.09	11.55	10.46	10.47	21.46	-0.68	
20:00	3.45	255.93	610.54	52.68	22.78	1.23	2.23	0.72	10.04	14.80	24.44	14.55	10.47	10.47	21.58	-0.59	
21:00	-0.01	256.10	607.65	53.56	22.94	1.23	2.24	0.72	9.94	14.87	19.77	11.40	10.50	10.48	21.73	-0.41	
22:00	0.05	256.27	606.64	53.41	22.82	1.22	2.24	0.72	9.93	14.87	19.81	11.41	10.48	10.49	21.89	-0.38	
23:00	2.96	256.10	609.45	52.71	22.56	1.21	2.24	0.72	10.08	14.81	24.08	14.08	10.53	10.51	22.07	-0.10	
0:00	5.16	256.79	611.03	51.78	22.62	1.22	2.25	0.72	10.14	14.75	27.54	16.29	10.49	10.50	22.23	-0.05	
1:00	4.52	256.10	611.41	52.45	22.51	1.20	2.23	0.72	10.11	14.78	24.28	14.35	10.49	10.50	22.34	0.00	
2:00	6.01	255.76	611.15	51.75	22.42	1.21	2.23	0.71	10.13	14.76	27.77	16.42	10.48	10.48	22.55	-0.07	
3:00	4.99	254.74	609.38	51.18	22.17	1.21	2.21	0.71	10.08	14.83	27.12	15.88	10.50	10.49	22.61	-0.40	
4:00	6.44	255.85	609.98	51.49	22.22	1.19	2.22	0.71	10.18	14.80	27.75	16.29	10.50	10.49	22.66	-0.03	
5:00	6.40	255.50	609.79	51.82	22.34	1.22	2.21	0.71	10.13	14.80	27.49	16.15	10.47	10.49	22.75	-0.66	
6:00	9.82	231.54	604.00	43.17	17.53	1.18	2.02	0.72	9.26	14.95	33.85	18.27	10.35	10.44	22.77	-0.41	
7:00	11.13	228.61	603.04	42.40	17.10	1.24	1.99	0.72	9.29	14.97	34.61	18.79	10.48	10.43	22.80	-0.31	

Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
ppm	lb/h
9.85	11.86

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
12.85	13.10

Stack NOx analyzer	
zero value	-0.59
zero drift %	-0.56
span value	82.44
span drift %	0.83

Stack CO Analyzer	
zero value	-1.22
zero drift %	-1.22
span value	91.53
span drift %	0.55

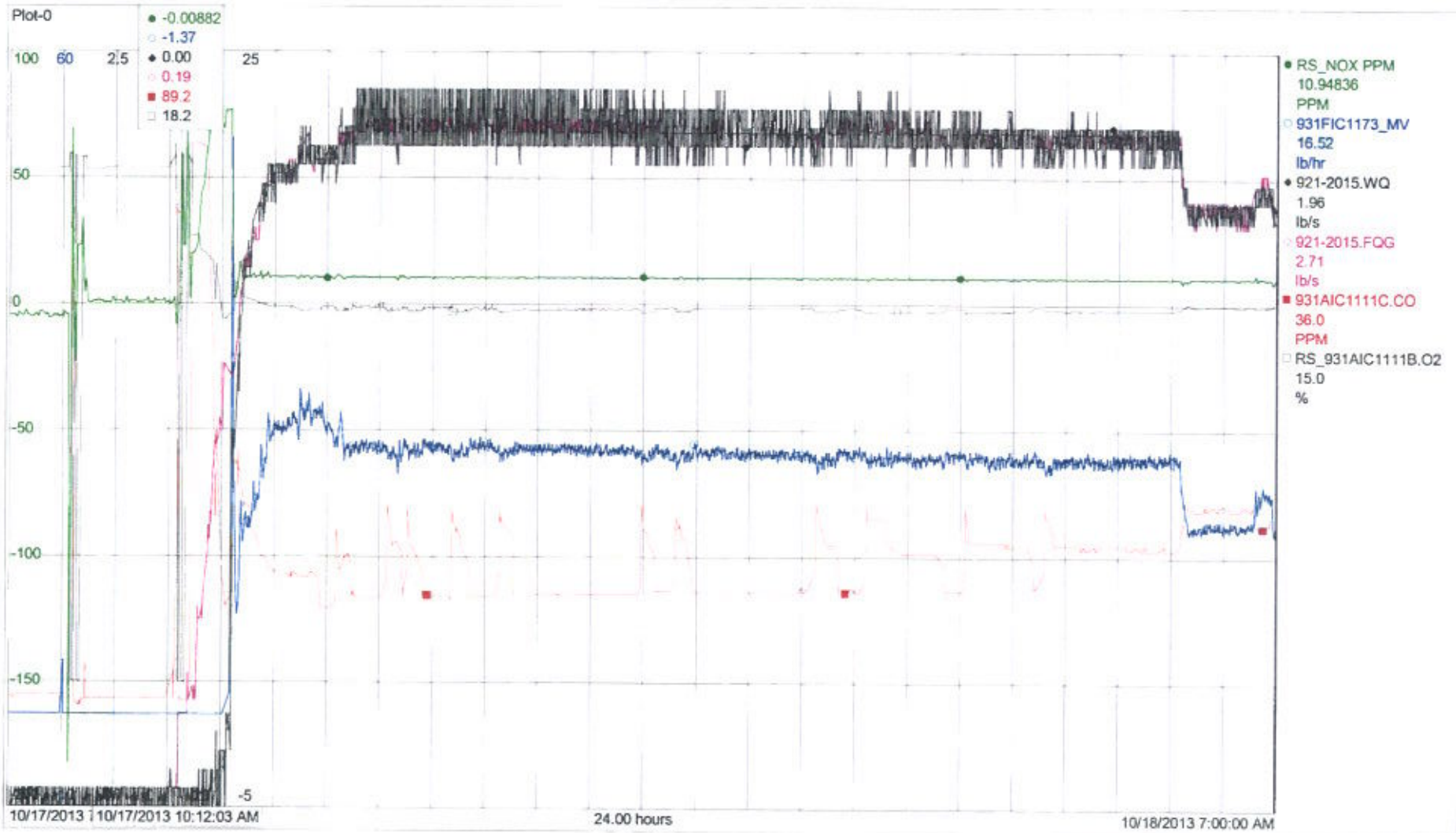
Stack O2 Analyzer	
zero value	20.98
zero drift%	0.31
span value	-0.03
span drift %	-0.13

Nebraska Gas	242,488

Comment: Turbine down from 10/17/13 7:00 AM to 10:12 AM (completion of turbine installation), a total of 3.2 hrs. Nebraska operates from 7:00 AM to 11:00 AM, a total of 4 hrs. Turbine's CEMS calibrated prior to start-up (8:25AM).

PRINT TIME: 10/18/2013 9:19 AM

NOTE: This document is valid for only ONE week after print time


Plot-0
-0.00882
-1.37
0.00
0.19
89.2
18.2
100
60
2.5
25
50
0
-50
-100
-150
-5
RS_NOX PPM
10.94836
PPM
931FIC1173_MV
16.52
lb/hr
921-2015.WQ
1.96
lb/s
921-2015.FQG
2.71
lb/s
931AIC1111C.CO
36.0
PPM
RS_931AIC1111B.O2
15.0
%
10/17/2013 10/17/2013 10:12:03 AM
24.00 hours
10/18/2013 7:00:00 AM


COGEN
2013-10-18 08:53
23M
93-HWTR.ALRM
COGEN HARD WATER
Value
08:41:11
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 07:00 2013-10-17 0.75 54.38 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 07:00 2013-10-17 1.16 33.25 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 07:00 2013-10-17 20.37 14.93 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 07:00 2013-10-17 -0.37 10.56 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 07:00 2013-10-17 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 07:00 2013-10-17 0 0
< > << >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR — NAME: Dan Cornett

DRY SHIFT OPERATOR — NAME: MH

Hueneme Paper Mill

SAFETY IS ALWAYS NO. 1

DATE: 10-17-13

CAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	MEGAWATTS
CURRENT	08978057	11450704	7C956837	164535	1537	28210330	7294890	846928	98164		8C777
PREVIOUS	08948970	7133779	70406318	5	0	28024220	7002440	840032	0		80303

NEW DEMIN TRAILER: YES / NO — TIME:

NEBRASKA ONLINE TIME: FROM: — TO:

AMMONIA DELIVERY: YES / NO — % FULL:

NEBRASKA WARM STORAGE CHECK: YES / NO

TURBINE

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR %				45.6		47.2	49.6	49.2		47.2	49.0	42.8
Inlet Temp °F				53		56	55	55		54	53	51
Humidity %				24.3		24.3	45.6	49.8		48.6	55.6	44.6
Vibration (Max) MILS				.23		.22	.22	.21		.22	.22	18
Steam Injection #/SEC				2.19		2.21	2.29	2.22		2.24	2.27	2.02
Turbine L.O. Level %				85		81	100	100		100	100	100
T48 °F				1452		1420	1412	1412		1409	1401	1340

BATTERIES V — HP RECOUPE FAL — BATTERIES 135 V — HP RECOUPE 30 FAL

AIR INLET DIFF IN/H20 — HP RECOUPE FAR — AIR INLET DIFF 2.2 IN/H20 — HP RECOUPE 20 FAR

L.O. DIFFERENTIAL PSI — HP RECOUPE AFT — L.O. DIFFERENTIAL 5 PSI — HP RECOUPE 48 AFT

GENERATOR

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain °F				157		158	156	156	1470 RPM	156	154	152
L.O. Supply °F				126		128	128	128		128	128	120
Gen. Vibration (Max) IPS				.33		.41	.39	.40		.38	.39	43
Tie Line MW				12.30		12.49	12.50	1249		12.50	1255	1248

GEN. AMPS — GEN.VARS 1.88 MEGA VARS — GEN. 1150 AMPS — GEN.VARS 2.02 MEGA VARS

FIELD AMPS — FIELD VOLTS V — FIELD 180 AMPS — FIELD VOLTS 160 V

COOLING TWR INLET F — COOLING TWR INLET F — COOLING TWR INLET 82 F — COOLING TWR INLET 82 F

COGEN BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp °F				713		716	712	705		705	708	711
HP Drum Level IN				0.9		1	1.1	0.8		1.0	1.2	0.6
LP Drum Level IN				1.7		1.1	0.9	1.0		1.3	1.2	1.2
HP Drum Pressure PSI				479		479	479	479		479	479	477
LP Drum Pressure PSI				146		147	145	145		146	146	146
CO PPM				24		19.8	19.9	19.8		20.0	28.0	34.0
NOX PPM				11		10.2	10.6	10.5		10.6	10.5	10.5
O2 %				14.67		14.89	14.84	14.89		14.89	14.80	14.93
Hot Well Level %				162		146	162	146		146	140	152

1150 SET POINT — 1103 B SET POINT — 1150 SET POINT 449 — 1103 B SET POINT 444

SCANNER BLOWER (ON) Y/N — DUCT BURNER SP — SCANNER BLOWER ON Y/N — DUCT BURNER S.P. 442

COMPRESSORS

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator PSI				236		236	236	236		238	238	238
Gas Receiver PSI				420		420	420	420		421	420	420

NEBRASKA BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level IN	50%	50%										
Drum Pressure PSI	290	290										
Steam Flow #/HR												
Steam Temp °F	580	590										
NOX PPM	19.2	20.3										
O2 %	1.68	1.60										
Blow Down Conductivity MHOS												

ON LINE TURBINE WATER WASH: YES / NO — CODUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION: NO. 1 / YES / NO. 2 / NO

GAS & ELECTRIC READING

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 - 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP-pH 8.5 -9.5		
Conductivity<20mmhos		
LP-pH 8.5-9.5		
Conductivity<20mmhos		
HP		
pH 9.5 - 10.5		
Conductivity 75-150		
Phosphate 5-15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 - 10.5		
Conductivity 75 - 150		
Phosphate 5-15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 - 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 - 10.5		
Conductivity 75 - 200		
Silica		
Phosphate 5-25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES: IDLE: 10:12
AUTO: 10:28
ONLINE: 10:33
FILLED Turbine L.OIL from 20% TO 100% B.V.
K-TREC SEP. Pump P. BELTS IN THE KIT WO # 1410144

ALC LIFT

NO LIGHTS Shut TS

Possible

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident 2013 10-15 Nebraska Boiler Oxygen Analyzer Calibration Error		Incident Date 10/15/13
Exact Location Incident Cogen		
Reported By L. Gustavson	Estimated Start and Stop Times of Incident: 11:22 AM – 6:07 PM	Possible Cause:

Incident Type: ☐ Spill Internal ☐ Improper Waste Disposal ☐ Spill External ☐ Near miss or below spill release guidelines X Air Emission ☐ Other_____	Released To ☐ Storm Water System ☐ Secondary Containment ☐ Process Sewer X Air ☐ Ground (External) ☐ Ground (Inside Mill Property) ☐ Near Miss ☐ Other_____

Detailed Description of Event

Running Nebraska Boiler as Cogen plant was offline for removal of lease LM 2500+ and installation of Mill's LM2500+ that was repaired by GE.

During 10/15/2013 daily calibration O2 analyzer faulted at 1122 as calibration value did not match expected value. During troubleshooting found heat from the Nebraska Boiler was very high at the sample probe, added cooling air via a blower and duct from a cool area, recalibrated and calibration passed at 1807.

APCD was contacted @ 1800 10/15/13. Message left by C. Wilson.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
☐ _____ Gallons ☐ _____ Pounds ☐ Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.)* *APCD @ 1800.*
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Charlie Wilson, Rudy Rehbein, Robyn Lebrilla, Victor Kumpera	Any Acute or Chronic Health Risks *(refer to MSDS)N/A*

Describe Any Emergency Response Actions

N/A

Suggestions to Prevent Reoccurrence	Estimated Completion Date
1. Added cooling air via blower to analyzer probe.	1. 10/15/2013
2. Conduct two calibrations on 10/16/13 to verify proper calibration and analyzer operation.	2. 10/16/2013
3.	3.
4.	4.

Root Cause after investigation Excessive heat at sample probe.	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ☐ 1 ☐ 2 ☐ 3 ☐ 4
Investigated By: Lars Gustavson	Investigated Date 10/15/2013

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
10/18/13 Department Manager	Technical Superintendent 10/18/13	for Mill Manager 10/18/13

Print Time: 10/17/2013 3:36:39 PM

Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

November 25, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Nebraska Start up – November 22, 2013

Dear Mr. Olson:

This letter is a follow up on the notification call made by Rudy Rehbein to the VCAPCD Breakdown Center Hotline on November 22, 2013 at about 3:30 PM.

On November 22, 2013, the Nebraska boiler was fired to repair the cogen boiler tube leak on the economizer. The Nebraska CEMS was successfully calibrated and in operation from 3:35 PM to 8:08 PM, a total of 4.72 hours. The cogen was down from 6:00 AM to 7:45 PM, a total of 13.75 hrs.

The Daily Emission Sheet, PI and DCS trends and cogen logs have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7279.

Sincerely,

Victor Kumpera
Technical Manager

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: [signature]	11/25/13
Title: Technical Manager	

End Time 11/23/2013 7:00 Start Time 11/22/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3 NOx mole ratio	Ammonia Steam flow lb/h	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) @ 3% O_2
8:00	-0.03	0.00	497.89	0.22	0.00	-0.11	0.02	0.00	0.00	20.38	-8.56	0.00	3.94	6.13	25.53	-1.44	
9:00	-0.03	0.00	497.89	0.22	0.00	-0.11	0.00	0.00	0.00	20.38	-8.56	0.00	3.92	4.00	25.66	-1.44	
10:00	-0.03	0.00	497.89	0.22	0.00	-0.11	0.00	0.00	0.00	20.38	-8.56	0.00	3.64	3.83	25.66	-1.44	
11:00	-0.03	0.00	497.89	0.53	0.00	-0.04	0.00	0.00	0.00	20.41	-4.48	0.00	1.81	3.12	25.68	-1.64	
12:00	-0.03	0.00	497.89	0.53	0.00	-0.04	0.00	0.00	0.00	20.41	-4.48	0.00	1.56	2.34	25.67	-2.39	
13:00	-0.03	0.00	497.89	0.53	0.00	-0.04	0.00	0.00	0.00	20.41	-2.66	0.00	2.45	1.94	25.70	-2.41	
14:00	-0.03	0.00	497.89	0.53	0.00	-0.04	0.00	0.00	0.00	20.41	-4.11	0.00	1.40	1.80	25.66	-2.41	
15:00	-0.03	0.00	497.89	0.53	0.00	-0.04	0.00	0.00	0.00	20.41	-4.11	0.00	1.18	1.68	25.63	-2.35	
16:00	0.16	0.00	497.89	0.53	0.00	-0.01	0.00	0.00	0.00	20.41	-4.11	0.00	1.25	1.27	16.81	15.52	64.51
17:00	0.24	0.00	497.89	0.53	0.00	0.02	0.01	0.00	0.00	20.41	-1.65	0.00	8.88	3.77	8.00	27.48	38.38
18:00	-0.02	0.00	497.89	0.53	0.00	-0.07	0.03	0.00	0.00	20.41	-5.23	0.00	1.58	3.90	3.92	26.84	28.30
19:00	0.07	0.00	497.89	0.53	0.00	-0.07	0.03	0.00	0.00	20.41	-5.23	0.00	1.35	3.94	4.63	22.16	24.36
20:00	0.03	17.50	497.89	3.98	-0.94	-259.39	0.03	0.02	0.72	19.63	68.97	6.19	5.39	2.74	3.93	26.04	27.47
21:00	1.61	210.82	558.31	90.29	32.66	0.35	0.65	0.22	34.59	15.48	28.76	10.55	48.51	18.39	12.35	4.22	8.82
22:00	2.41	266.84	616.90	82.01	31.07	1.04	2.44	0.75	10.45	14.52	18.38	11.19	10.55	21.46	18.97	-0.74	
23:00	7.27	271.47	628.94	81.14	31.58	1.02	2.52	0.76	10.81	14.70	24.55	15.28	10.51	22.19	21.59	-1.40	
0:00	7.24	272.75	629.33	82.03	32.19	1.02	2.54	0.77	10.88	14.68	24.16	15.25	10.54	10.53	22.04	-1.72	
1:00	7.33	276.25	630.30	81.74	32.18	1.01	2.59	0.77	10.96	14.69	24.32	15.38	10.49	10.51	22.29	-1.72	
2:00	8.27	272.41	631.61	81.28	31.95	1.02	2.55	0.77	10.90	14.69	24.05	15.16	10.52	10.52	22.42	-1.66	
3:00	7.28	272.40	631.01	80.59	31.73	1.03	2.53	0.76	10.80	14.72	24.87	15.64	10.48	10.50	22.46	-1.49	
4:00	7.31	272.92	630.95	80.42	31.63	1.04	2.54	0.77	10.86	14.70	24.76	15.73	10.50	10.50	22.61	-1.70	
5:00	7.32	273.89	630.96	79.48	31.43	1.03	2.56	0.77	10.85	14.71	25.04	15.85	10.47	10.48	22.77	-1.72	
6:00	7.24	274.62	631.05	79.47	31.45	1.03	2.58	0.77	10.90	14.73	25.17	15.82	10.50	10.49	22.81	-1.50	
7:00	7.35	275.40	631.04	79.35	31.35	1.03	2.59	0.77	10.98	14.70	25.06	15.87	10.53	10.50	22.90	-1.86	

Comment: Cogen down for boiler tube leak on economizer - 11/22/13 from 7:00 AM - 7:45 PM, a total of 12.75 hrs. Nebraska up from 3:35 PM - 8:08 PM, a total of 4.72 hrs. APCD notified.

Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
lb/h	lb/h
6.99	8.39

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
6.99	7.29

Stack NOx analyzer	
zero value	-0.03
zero drift %	-0.03
span value	82.34
span drift %	0.71

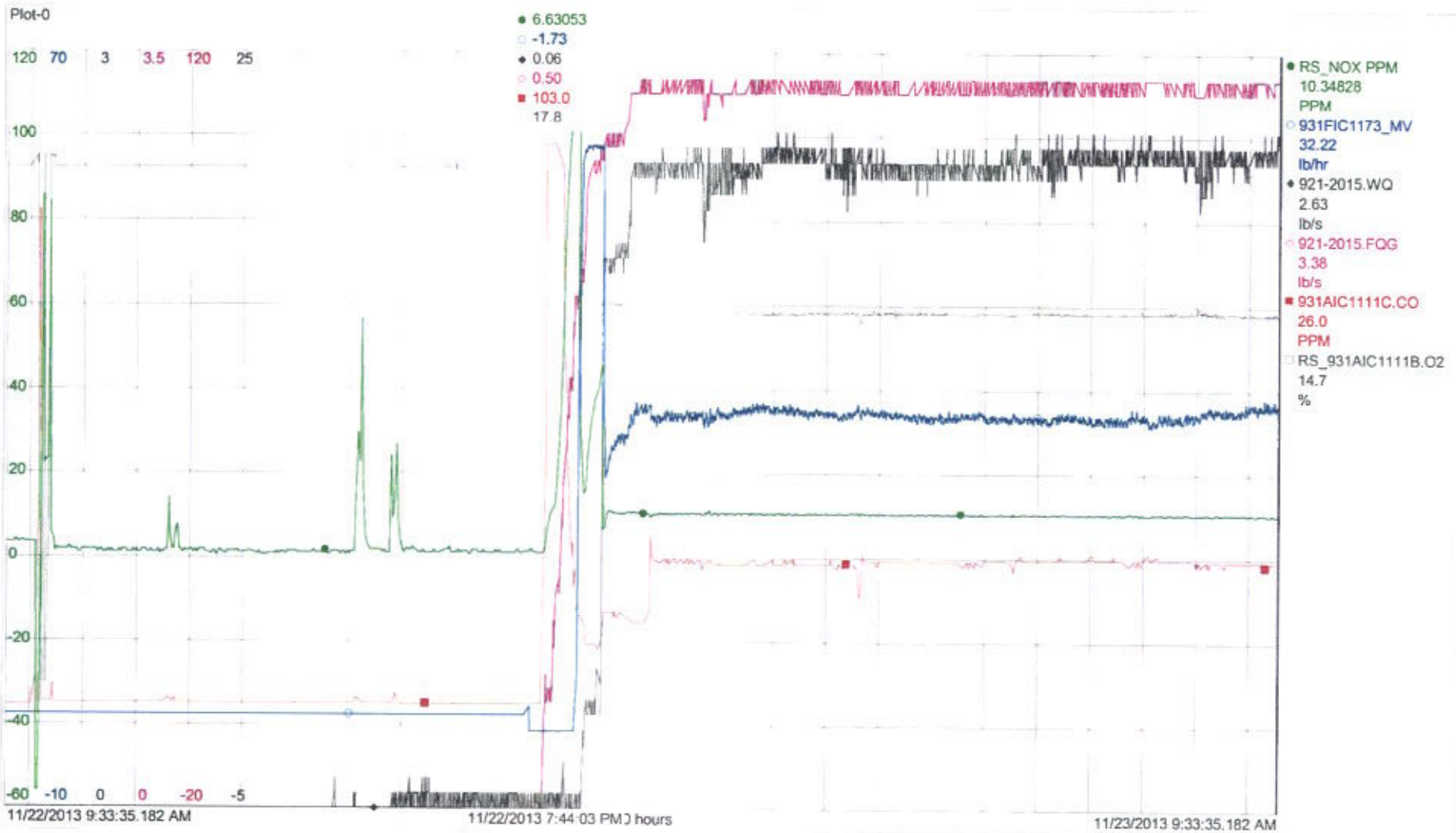
Stack CO Analyzer	
zero value	-0.75
zero drift %	-0.75
span value	90.84
span drift %	-0.20

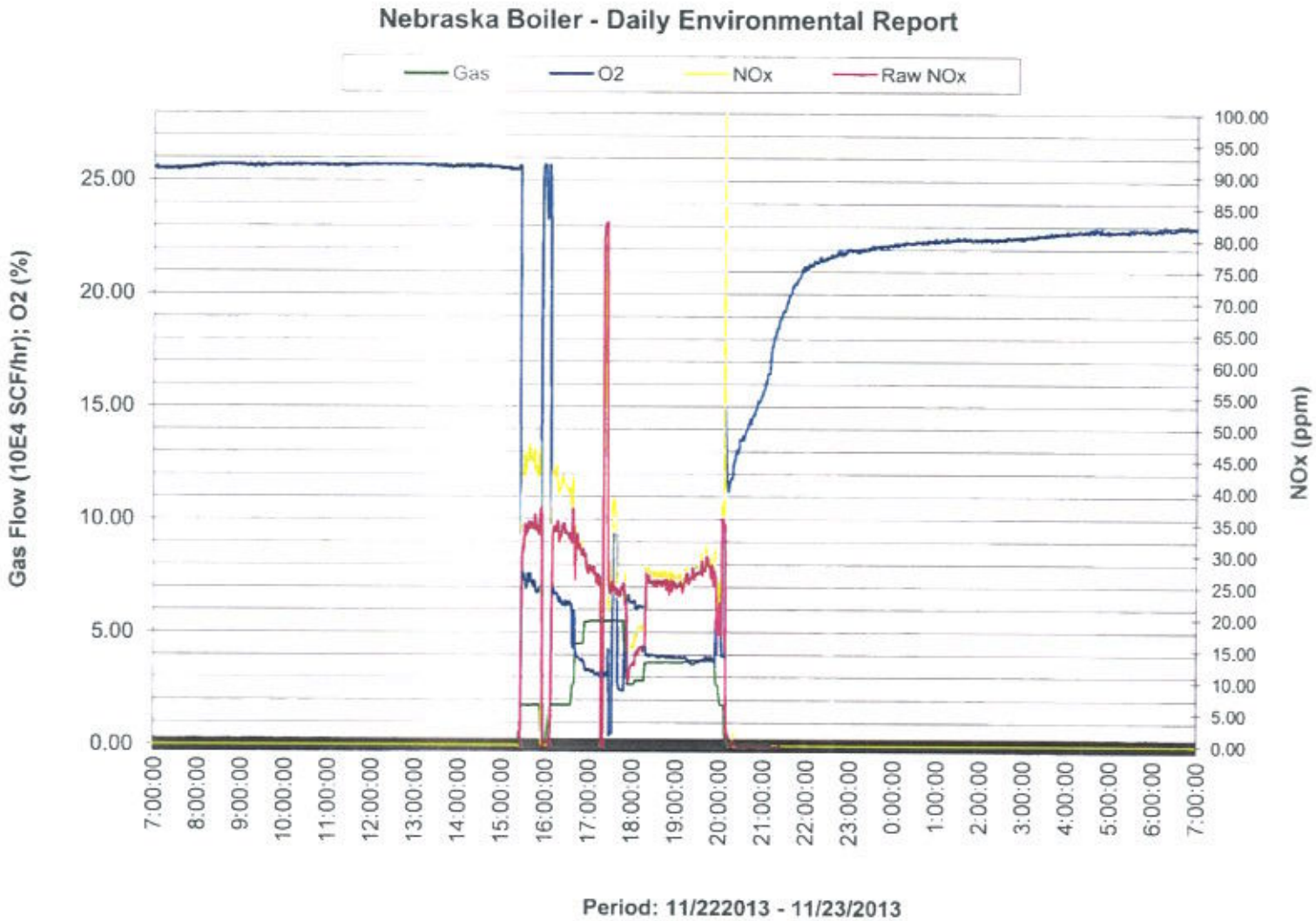
Stack O2 Analyzer	
zero value	20.95
zero drift%	0.12
span value	-0.02
span drift %	-0.06

Nebraska Gas	129,180

PRINT TIME: 11/23/2013 9:59 AM

NOTE: This document is valid for only ONE week after print time


Plot-0
120 70 3 3.5 120 25
100
80
60
40
20
0
-20
-40
-60 -10 0 0 -20 -5
6.63053
-1.73
0.06
0.50
103.0
17.8
RS_NOX PPM
10.34828
PPM
931FIC1173_MV
32.22
lb/hr
921-2015.WQ
2.63
lb/s
921-2015.FQG
3.38
lb/s
931AIC1111C.CO
26.0
PPM
RS_931AIC1111B.O2
14.7
%
11/22/2013 9:33:35.182 AM
11/22/2013 7:44:03 PM
hours
11/23/2013 9:33:35.182 AM


Nebraska Boiler - Daily Environmental Report
Gas
O2
NOx
Raw NOx
Gas Flow (10E4 SCF/hr); O2 (%)
NOx (ppm)
25.00
20.00
15.00
10.00
5.00
0.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
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20:00:00
21:00:00
22:00:00
23:00:00
0:00:00
1:00:00
2:00:00
3:00:00
4:00:00
5:00:00
6:00:00
7:00:00
Period: 11/222013 - 11/23/2013


COGEN
2013-11-23 11:27
33MF
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 23:04 2013-11-22 80.94 75.19 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 23:04 2013-11-22 25.47 27.52 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 23:04 2013-11-22 14.68 14.74 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 23:04 2013-11-22 11.00 11.01 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 23:04 2013-11-22 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 23:04 2013-11-22 0 0
< > << >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace ControL..
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident startup Neb boiler- B&W boiler leak repair	Incident Date 11/22/13
Exact Location Incident Cogen	
Reported By C. Wilson	Estimated Start and Stop Times of Incident: @3:35 PM – 8:08 PM
	Possible Cause: B&W boiler leak

Incident Type: ☐ Spill Internal ☐ Improper Waste Disposal ☐ Spill External ☐ Near miss or below spill release guidelines X Air Emission ☐ Other_____	Released To ☐ Storm Water System ☐ Secondary Containment ☐ Process Sewer X Air ☐ Ground (External) ☐ Ground (Inside Mill Property) ☐ Near Miss ☐ Other_____

Detailed Description of Event
Fired up Nebraska Boiler @3:35 PM – 8:08 PM to accommodate tube leak repair on economizer of B&W boiler.

APCD was contacted @330 PM..

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
☐ _____ Gallons ☐ _____ Pounds ☐ Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.)* *APCD*
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Lars Gustavson, Rudy Rehbein, Robyn Lebrilla , Victor Kumpera	Any Acute or Chronic Health Risks *(refer to MSDS)N/A*
Describe Any Emergency Response Actions N/A	

Suggestions to Prevent Reoccurrence 1. N/A	Estimated Completion Date 1.
2.	2
3.	3.
4.	4.

Root Cause after investigation Maintenance issue- reported to APCD- start up of Nebraska Boiler.	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ☐ 1 ☐ 2 ☐ 3 ☐ 4
Investigated By: Charlie Wilson	Investigated Date 11/22/13

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
Department Manager CURTAIN OUT OF MILL 11/25/13	Technical Superintendent 11/25/13	Mill Manager 11/25/2013

Print Time: 11/24/2013 8:54:52 AM
Note: This document is valid for only ONE week after print time!

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR NAME: Ron B

DRY SHIFT OPERATOR NAME: MH PJ MH

Hudsonville Paper Mill

SAFETY IS ALWAYS NO. 1

DATE: 11-22-13

CAL PUMPS

	Level	Flow Rate ml/min
Antiscale 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP
CURRENT	10234382	75334833	72165424	88711
PREVIOUS	10197771	75251330	72128474	199986

NEW DEMIN TRAILER: YES / NO — TIME:

AMMONIA DELIVERY: YES / (NO) — % FULL: 57-53

GAS & ELECTRIC READING

	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	ATTS
CURRENT	889	31397530	01862260	482696	70357		02840
PREVIOUS	1859	31245590	00123350	477274	178872		02561

NEBRASKA ONLINE TIME: FROM: TO:

NEBRASKA WARM STORAGE CHECK: YES / NO

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%								93.5	55.4	58	57	58
Inlet Temp	°F								59	60	60	60	60
Humidity	%								22	22.2	23	23	23
Vibration (Max)	MILS								58	35	37	37	35
Steam Injection	#/SEC								2.12	2.54	2.5	2.5	2.5
Turbine L.O. Level	%								95	95	95	95	95
T48	°F								1435	1471	1472	1472	1473

BATTERIES V — HP RECOUPE FAL
AIR INLET DIFF IN/H20 — HP RECOUPE FAR
L.O. DIFFERENTIAL PSI — HP RECOUPE AFT

BATTERIES V — HP RECOUPE FAL
AIR INLET DIFF IN/H20 — HP RECOUPE FAR
L.O. DIFFERENTIAL PSI — HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F										152	152	152
L.O. Supply	°F										122	122	122
Gen. Vibration (Max)	IPS								35	40	36	36	36
Tie Line	MW								12.02	12.5	12.5	13.4	13.5

GEN. AMPS — GEN.VARS MEGA VARS
FIELD AMPS — FIELD VOLTS V
COOLING TWR INLET F — COOLING TWR INLET F

GEN. AMPS — GEN.VARS MEGA VARS
FIELD AMPS — FIELD VOLTS V
COOLING TWR INLET F — COOLING TWR INLET F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F								710	710	708	710	711
HP Drum Level	IN								.8	.8	.7	.8	.1
LP Drum Level	IN								2.6	1.2	.6	.5	.9
HP Drum Pressure	PSI								465	486	486	486	486
LP Drum Pressure	PSI								120	149	149	149	149
CO	PPM								16.8	24.2	25.2	25	25.2
NOX	PPM								10.6	10.7	10.6	10.5	10.3
O2	%								13.04	14.6	14.7	14.6	14.7
Hot Well Level	%								193	162	155	142	157

1150 SET POINT — 1103 B SET POINT
SCANNER BLOWER (ON) Y/N — DUCT BURNER SP

1150 SET POINT — 1103 B SET POINT
SCANNER BLOWER ON Y/N — DUCT BURNER S.P.

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI								234	236	234	234	234
Gas Receiver	PSI								419	420	420	420	420

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity	MHOS												

ON LINE TURBINE WATER WASH: YES / NO — CODUCTMTY MHOS

BOILER FEED WATER PUMP OPERATION — NO. 1: YES / NO — NO. 2: YES / NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP–pH 8.5 –9.5		
Conductivity<20mmhos		
LP–pH 8.5–9.5		
Conductivity<20mmhos		
HP		
pH 9.5 – 10.5		
Conductivity 75–150		
Phosphate 5–15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 – 10.5		
Conductivity 75 – 150		
Phosphate 5–15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 – 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:

Called SW & ran: did turn O rpt Siemens Test Box
idle - 1442 std 1452 cntl 1454
Nebraska cntl 1520 cntl 2010

Started up #1 Steam Shut down #2 Test - No Test - Shut down #2

NEW INDY
CONTAINERBOARD

December 2, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: PI emission data loss

Dear Mr. Olson:

This letter is a follow up on the calls made to the VCAPCD Breakdown Center Hotline on Sunday, December 1, 2013 at about 2:30 PM by Victor Kumpera.

During the emission review on December 1 at around 2:00 PM, the weekend call duty member noticed that the emission data did not change for several hours. IT investigation indicated that a power disturbance had brought down the network in the server room. The network connectivity was restored after rebooting the firewalls and servers. The PI emission data was restored after PI tags were moved to a different interface as the original interface was affected by network's residual latency issues. The server room's uninterruptable power supply (UPS) was checked and a UPS support specialist is scheduled for a follow-up inspection. The mill lost PI emission data on December 1, from 6:52 AM – 4:28 PM, a total of 9.6 hours. There was no excess emission based on ABB emission data.

The Daily Emission Sheets, PI trends, DCS trends, Cogen Reports and Environmental Incident Report have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: [signature]	12/4/13
Title: Mill Manager	

End Time 12/2/2013 7:00 Start Time 12/1/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR (-ite) NOx ppm	Ammonia Usage lb/h	NH3/NOx mole ratio	Injection Gram/ lbm	Sorbent to fuel ratio lb/c	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) (3% O_2)
8:00	7.59	271.47	624.68	71.77	30.79	1.13	2.56	0.76	**10.70**	14.74	25.88	**16.20**	**10.39**	**10.45**	24.82	-0.19	
9:00	7.59	271.47	625.06	71.54	30.65	1.13	2.56	0.76	**10.69**	14.74	25.90	**16.20**	**10.39**	**10.42**	24.51	-0.20	
10:00	7.59	271.47	626.24	71.41	30.58	1.13	2.56	0.76	**10.69**	14.74	25.91	**16.20**	**10.39**	**10.39**	24.48	-0.32	
11:00	7.59	271.47	627.33	71.18	30.44	1.13	2.56	0.76	**10.69**	14.74	25.93	**16.20**	**10.39**	**10.39**	24.44	-0.81	
12:00	7.59	271.47	627.41	71.05	30.37	1.13	2.56	0.76	**10.69**	14.74	25.94	**16.20**	**10.39**	**10.39**	24.36	-0.58	
13:00	7.59	271.47	627.56	70.87	30.26	1.13	2.56	0.76	**10.69**	14.74	25.96	**16.20**	**10.39**	**10.39**	24.27	-0.09	
14:00	7.59	271.47	627.65	70.69	30.16	1.13	2.56	0.76	**10.69**	14.74	25.98	**16.20**	**10.39**	**10.39**	24.30	-1.12	
15:00	7.59	271.47	627.69	70.51	30.05	1.13	2.56	0.76	**10.69**	14.74	25.99	**16.20**	**10.39**	**10.39**	24.37	-1.82	
16:00	7.59	271.47	628.35	70.33	29.95	1.13	2.56	0.76	**10.69**	14.74	26.01	**16.20**	**10.39**	**10.39**	24.35	-1.84	
17:00	7.46	272.32	628.31	68.89	29.28	1.12	2.55	0.77	**10.77**	14.70	26.27	**16.48**	**10.44**	**10.41**	24.28	-0.49	
18:00	7.34	274.25	628.29	68.43	29.02	1.14	2.55	0.77	**10.94**	14.75	26.62	**16.80**	**10.53**	**10.45**	24.33	0.34	
19:00	7.37	273.89	627.75	61.77	28.27	1.19	2.55	0.77	**10.85**	14.78	26.96	**16.99**	**10.60**	**10.32**	24.37	0.75	
20:00	7.39	272.27	626.27	61.29	28.13	1.20	2.53	0.76	**10.83**	14.77	27.98	**17.57**	**10.50**	**10.34**	24.46	0.84	
21:00	7.32	271.81	626.00	61.98	28.35	1.21	2.53	0.76	**10.84**	14.75	28.12	**17.62**	**10.53**	**10.34**	24.42	1.07	
22:00	7.33	273.69	626.10	65.46	30.58	1.23	2.55	0.77	**10.93**	14.74	26.19	**16.48**	**10.55**	**10.53**	24.53	0.26	
23:00	7.33	271.81	625.99	67.32	31.48	1.23	2.53	0.76	**10.79**	14.75	25.84	**16.06**	**10.49**	**10.52**	24.60	-0.37	
0:00	7.37	271.47	625.93	67.51	31.64	1.23	2.53	0.76	**10.79**	14.76	25.40	**15.86**	**10.50**	**10.51**	24.57	-0.63	
1:00	7.35	271.47	625.94	67.69	31.65	1.23	2.53	0.76	**10.81**	14.75	25.34	**15.85**	**10.51**	**10.50**	24.63	-0.82	
2:00	0.49	271.47	618.25	69.90	32.30	1.26	2.52	0.76	**10.58**	14.86	15.69	**9.60**	**10.53**	**10.51**	24.58	-0.74	
3:00	0.07	271.81	616.88	70.57	32.49	1.24	2.53	0.76	**10.53**	14.83	14.93	**9.12**	**10.51**	**10.52**	24.58	-0.58	
4:00	0.07	271.59	616.84	70.58	32.49	1.25	2.53	0.76	**10.52**	14.82	14.89	**9.10**	**10.51**	**10.52**	24.60	-0.16	
5:00	0.07	271.35	616.68	70.63	32.40	1.24	2.50	0.76	**10.50**	14.84	14.95	**9.11**	**10.50**	**10.50**	24.57	-0.81	
6:00	0.07	271.47	615.72	69.76	32.01	1.24	2.50	0.76	**10.48**	14.90	15.39	**9.40**	**10.47**	**10.49**	24.83	-0.67	
7:00	0.07	271.47	615.50	69.48	31.92	1.24	2.52	0.76	**10.49**	14.91	15.88	**9.64**	**10.47**	**10.48**	24.71	-0.66	

Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
lb/h	lb/h
10.67	10.67

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
14.85	14.85

Stack NOx analyzer	
zero value	-0.06
zero drift %	-0.06
span value	82.16
span drift %	0.48

Stack CO Analyzer	
zero value	-0.81
zero drift %	-0.81
span value	90.47
span drift %	-0.62

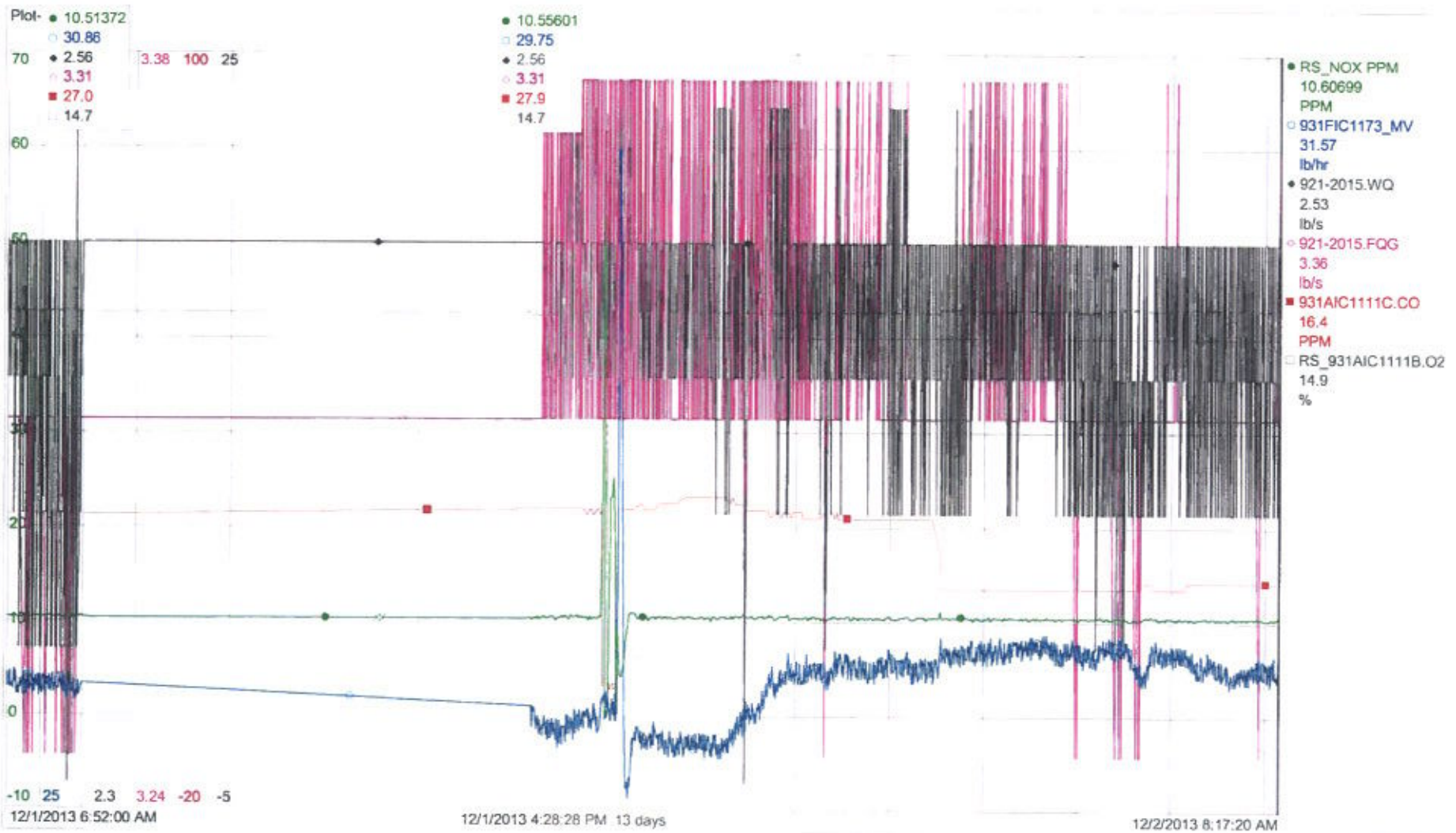
Stack O2 Analyzer	
zero value	21.50
zero drift%	2.77
span value	-0.04
span drift %	-0.16

Nebraska Gas	0

Comment: PI data loss on 12/1/13 from 6:52 AM - 4:28 PM (9.6 hrs) due to power disturbance resulting to network communication issues.

PRINT TIME: 12/2/2013 8:46 AM

NOTE: This document is valid for only ONE week after print time


Plot-
10.51372
30.86
2.56
3.31
27.0
14.7
70
3.38 100 25
60
-10 25 2.3 3.24 -20 -5
0
12/1/2013 6:52:00 AM
10.55601
29.75
2.56
3.31
27.9
14.7
12/1/2013 4:28:28 PM 13 days
RS_NOX PPM
10.60699
PPM
931FIC1173_MV
31.57
lb/hr
921-2015.WQ
2.53
lb/s
921-2015.FQG
3.36
lb/s
931AIC1111C.CO
16.4
PPM
RS_931AIC1111B.O2
14.9
%
12/2/2013 8:17:20 AM


COGEN
2013-12-03 10:48
23M
93-HWTR.ALRM
COGEN HARD WATER
Value
10:28:04
RSMT_4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 14:58 2013-12-01 73.4
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 14:58 2013-12-01 28.13 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 14:58 2013-12-01 14.70 14.77 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 14:58 2013-12-01 10.70 10.92 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 14:58 2013-12-01 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 14:58 2013-12-01 0 0
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR

DRY SHIFT OPERATOR

NAME: Vern Zandt

NAME:

DATE: 12-1-13

Hueneme Paper Mill

SAFETY IS ALWAYS NO. 1

CAL PUMPS	Level	Rate ml/min
Antiscalde 3.9 ml/min		
Control 5.3 ml/min		
Polymer 8.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	ATIS
CURRENT	10587690	76338414	72611273	209606	1859	3207920	3590440	487369	133409		0700
PREVIOUS	10545050	76212956	72555831	208332	1893	3201760	3213670	487369	176380		0800

NEW DEMIN TRAILER: YES / NO — TIME:

NEBRASKA ONLINE TIME: FROM: TO:

AMMONIA DELIVERY: YES / NO — % FULL: 40%

NEBRASKA WARM STORAGE CHECK: YES / NO

GAS & ELECTRIC READINGS

TURBINE

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR %	53.4	55.5	55.1	56.8	56.5	55.3	54.4	54.7		52.6	54.9	52.8
Inlet Temp °F	54	56	56	57	56	56	53	54		53	53	52
Humidity %	14.9	10.0	13.0	10.9	7.9	24.0	36.4	20.7		12.7	12.8	14.8
Vibration (Max) MILS	.21	.21	.21	.21	.27	.20	.38	.33		.37	.32	.39
Steam Injection #/SEC	2.55	2.61	2.62	2.63	2.62	2.61	2.59	2.62		2.57	2.54	2.54
Turbine L.O. Level %	100	100	100	100	100	100	100	100		100	100	100
T48 °F	1452	1463	1464	1468	1466	1462	1450	1561		1453	1454	1446
BATTERIES 135 V — HP RECOUPE FAL							BATTERIES 136 V — HP RECOUPE FAL					
AIR INLET DIFF 3 IN/H20 — HP RECOUPE FAR							AIR INLET DIFF 3.1 IN/H20 — HP RECOUPE FAR					
L.O. DIFFERENTIAL 6 PSI — HP RECOUPE AFT							L.O. DIFFERENTIAL 6 PSI — HP RECOUPE AFT					

GENERATOR

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain °F	154	154	154	155	155	155	158	159		157	157	156
L.O. Supply °F	126	126	126	127	127	127	126	126		122	122	126
Gen. Vibration (Max) IPS	.39	.40	.40	.39	.37	.36	.36	.39		.36	.36	.36
Tie Line MW	1348	13.56	1360	1340	1359	1343	1350	1348		1352	1342	1340
GEN. 1200 AMPS — GEN.VARS 3.98 MEGA VARS							GEN. 1202 AMPS — GEN.VARS 3.98 MEGA VARS					
FIELD 190 AMPS — FIELD VOLTS 163 V							FIELD 260 AMPS — FIELD VOLTS 187 V					
COOLING TWR INLET 85 F — COOLING TWR INLET 79 F							COOLING TWR INLET 86 F — COOLING TWR INLET 80 F					

COGEN BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp °F	711	710	710	710	710	710	710	711		710	707	710
HP Drum Level IN	0.8	1.0	1.0	0.9	1.1	1.1	1	0.9		0.8	0.9	1.1
LP Drum Level IN	0.9	1.0	1.0	1.0	1.4	1.1	1	1.3		1	0.9	1
HP Drum Pressure PSI	480	480	480	480	480	480	480	480		480	480	480
LP Drum Pressure PSI	147	147	147	147	147	147	142	146		148	148	148
CO PPM	26.0	25.6	26.0	25.8	25.8	26.9	27.8	26.7		15	15.1	15.3
NOX PPM	10.5	10.5	10.6	10.6	10.4	10.5	10.4	10.7		10.6	10.5	10.2
O2 %	14.79	14.79	14.76	14.91	14.69	14.96	14.79	14.79		14.86	14.50	14.96
Hot Well Level %	164	130	144	157	142	144	164	128		142	134	145
1150 SET POINT 449 — 1103 B SET POINT 444							1150 SET POINT 449 — 1103 B SET POINT 444					
SCANNER BLOWER (ON) (ON) — DUCT BURNER 442 SP							SCANNER BLOWER ON (ON) — DUCT BURNER S.P. 442					

COMPRESSORS

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator PSI	232	232	234	234	234	232	232	232		236	236	236
Gas Receiver PSI	424	425	425	425	425	425	425	426		426	425	425

NEBRASKA BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level IN												
Drum Pressure PSI												
Steam Flow #/HR												
Steam Temp °F												
NOX PPM												
O2 %												
Blow Down Conductivity MHOS												

ON LINE TURBINE WATER WASH: YES / NO — CONDUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION: NO. 1 (YES) NO / NO. 2 YES / NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 - 9.5	9.04	9.0
Conductivity <5mmhos	5.16	5.8
Silica < 20 ppb	STOPED	6
R.O.		
Feed TDS<1000 ppm	COND. 53	
Permeate TDS<10 ppm	8.08	
ph (Feed 7.5)	6.46	6.3 - COND 12.8
CONDENSATE		
HP-pH 8.5 -9.5	9.04	9.0
Conductivity<20mmhos	8.72	8.7
LP-pH 8.5-9.5	8.92	9.2
Conductivity<20mmhos	17.09	15.2
HP		
pH 9.5 - 10.5	9.50	9.5
Conductivity 75-150	181.9	197
Phosphate 5-15 ppm	30.53	36.91
Silica < 5 ppm	1.499	.967
Iron ppm		
LP		
pH 9.5 - 10.5	9.08	9.1
Conductivity 75 - 150	133.8	136
Phosphate 5-15 ppm	36.42	31.45
Silica <5 ppm	1.021	.466
Iron ppm		
MIXED BED		
pH 6.0 - 7.5	5.62	5.4
Conductivity< 1mmhos	.53	.54
Silica <10 ppb	STOPED	2
HP Steam Test		
Silica <20 ppb	PH. 8.92 - STOPED	PH. 8.8 - SIL. 3
SOFTNER		
Hardness < 1.0 ppm		.01 - .059
Running (1 or 2)		2
NEBRASKA		
pH 9.5 - 10.5		
Conductivity 75 - 200		
Silica		
Phosphate 5-25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES: opened HP blowdown .5-1.2
opened LP blowdown .0-1 @ 1:30 AM MH
CMV, #2 conveyor WT 142,910 MH
FILLED Turbine OIL FROM 85% TO 100% D.V.
Dumped oil Buckets by GAS COMP. D.V.
Dumped oil Bucket by North SIDE @ GEN D.V.
GEN Lube oil 108%- 8AM. D.V.

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident Emission Data Loss		Incident 12/1/13
Exact Location Incident Cogen		
Reported By Victor Kumpera	Estimated Start and Stop Times of Incident: 6:52 AM – 4:28 PM	Possible Cause: power disturbance

Incident Type: ف Spill Internal ف Improper Waste Disposal ف Spill External ف Near miss or below spill release guidelines X Air Emission ف Other_____	Released To ف Storm Water System ف Secondary Containment ف Process Sewer X Air ف Ground (External) ف Ground (Inside Mill Property) ف Near Miss ف Other_____

Detailed Description of Event

A power disturbance on Sunday, 12/1/13, brought down the network. The network connectivity was restored after rebooting the firewalls and servers. PI emission data was restored after tags were moved to a different interface that is connected to the Cogen process area. The original interface was affected due to residual latency issues with the network.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
ف _____ Gallons ف _____ Pounds ف Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.) APCD 12/1/13 @ 2:30 pm*
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Victor Kumpera, Sandy Robin	Any Acute or Chronic Health Risks *(refer to MSDS)N/A*
Describe Any Emergency Response Actions Called IT support to troubleshoot issues	

Suggestions to Prevent Reoccurrence 1. Checking Server Room UPS – checking on batteries for possible replacement and UPS logs for any additional maintenance requirements, scheduling to bring on-site UPS support specialist to follow up.	Estimated Completion Date 1. 12/15/13
2. Checking natural gas generator – tested OK	2. 12/2/13
3.	3.
4.	4.

Root Cause after investigation Initial investigation – UPS failed to failover to generator after power interruption. Will get additional information after UPS support on site.	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ف 1 ف 2 ف 3 ف 4
Investigated By: Sandy Robin	Investigated Date 12/1/13

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
Department Manager 12/2/2013	Technical Superintendent 12/3/2013	Mill Manager 12/4/13

Print Time: 12/2/2013 2:10:04 PM

Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

December 12, 2013

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Emission data loss due to power outage

Dear Mr. Olson:

This letter is a follow up on the call made to the VCAPCD Breakdown Center Hotline on December 11, 2013 at about 8:50 AM.

The mill had total electrical power outage on December 11, 2013 at about 6:06 AM. The cogen and breaker both tripped. This incident resulted to network connection loss including DCS and PI interface. The mill lost emission data from 6:06 AM – 7:15 AM and from 8:00 AM – 8:10 AM, a total of 1.32 hrs. Cogen was down from 6:06 AM – 9:07 AM on 12/11/13, a total of 3.02 hrs. There was no excess emission since cogen was down.

The Daily Emission Sheets, PI trends, DCS trends, Cogen Reports and Environmental Incident Report have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution
Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: Rudy Gehlsen Title: Mill Manager	12/13/2013

End Time: 12/11/2013 7:00 Start Time: 12/10/2013 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3 NOx molar ratio	Injection Steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) (3% O_2)
8:00	8.63	273.23	628.50	78.70	34.35	1.13	2.54	0.76	**10.97**	14.70	22.67	**14.25**	**10.55**	**10.51**	24.53	-1.02	
9:00	8.52	275.90	628.47	80.68	35.89	1.15	2.58	0.77	**10.96**	14.68	23.50	**14.91**	**10.53**	**10.52**	24.50	-1.07	
10:00	8.49	275.01	628.93	83.19	37.02	1.16	2.57	0.77	**10.96**	14.71	22.51	**14.28**	**10.55**	**10.54**	24.40	-0.89	
11:00	8.38	273.35	631.43	88.92	39.09	1.19	2.51	0.76	**10.73**	14.67	20.91	**13.66**	**10.51**	**10.56**	24.38	-1.38	
12:00	8.51	275.27	629.61	82.74	37.10	1.16	2.57	0.77	**10.83**	14.70	22.91	**14.56**	**10.43**	**10.53**	24.41	-1.63	
13:00	8.38	276.76	628.57	81.58	36.70	1.17	2.62	0.78	**10.98**	14.73	23.63	**15.05**	**10.53**	**10.52**	24.27	-1.40	
14:00	8.40	276.59	629.37	77.82	34.74	1.15	2.61	0.78	**10.85**	14.69	24.44	**15.52**	**10.39**	**10.45**	24.15	-1.49	
15:00	8.86	278.42	627.35	74.89	32.34	1.13	2.60	0.77	**10.95**	14.67	25.19	**16.12**	**10.48**	**10.47**	24.15	-0.76	
16:00	8.48	276.25	627.03	73.98	31.79	1.11	2.61	0.77	**10.91**	14.66	25.92	**16.44**	**10.48**	**10.45**	24.15	-0.04	
17:00	8.65	278.59	626.87	71.63	30.57	1.10	2.61	0.77	**10.90**	14.67	26.41	**16.77**	**10.45**	**10.46**	24.15	0.39	
18:00	7.11	278.59	626.49	69.51	29.26	1.09	2.60	0.77	**10.96**	14.64	27.25	**17.30**	**10.48**	**10.46**	24.17	1.01	
19:00	7.94	276.25	625.93	68.51	28.74	1.08	2.59	0.77	**11.00**	14.66	27.63	**17.60**	**10.49**	**10.47**	24.17	1.26	
20:00	8.82	275.05	626.00	72.03	30.47	1.11	2.57	0.77	**11.11**	14.65	25.80	**16.38**	**10.62**	**10.53**	24.28	0.54	
21:00	8.06	275.16	625.97	76.59	33.03	1.12	2.58	0.77	**10.98**	14.66	24.70	**15.69**	**10.51**	**10.54**	24.46	-0.28	
22:00	9.56	271.84	626.10	76.21	32.63	1.12	2.53	0.76	**10.90**	14.67	23.58	**14.89**	**10.50**	**10.54**	24.43	-0.78	
23:00	8.78	274.03	625.95	76.48	33.19	1.12	2.56	0.77	**10.96**	14.69	23.82	**15.19**	**10.51**	**10.51**	24.58	-0.88	
0:00	8.62	274.59	626.02	76.62	33.12	1.13	2.55	0.77	**10.93**	14.67	23.98	**15.23**	**10.48**	**10.50**	24.48	-0.95	
1:00	8.75	274.16	626.06	76.72	33.02	1.12	2.56	0.77	**10.96**	14.65	23.91	**15.12**	**10.58**	**10.49**	24.55	-1.02	
2:00	8.64	272.84	625.84	76.18	32.68	1.11	2.54	0.77	**10.88**	14.66	24.06	**15.27**	**10.49**	**10.49**	24.56	-1.12	
3:00	10.00	272.15	625.95	75.40	32.28	1.11	2.53	0.76	**10.91**	14.67	23.58	**15.00**	**10.48**	**10.49**	24.43	-1.06	
4:00	10.00	272.15	625.94	75.52	32.25	1.11	2.53	0.76	**10.88**	14.65	23.77	**14.98**	**10.46**	**10.48**	24.54	-0.95	
5:00	8.20	272.68	625.40	75.58	32.29	1.12	2.53	0.76	**10.84**	14.67	24.56	**15.50**	**10.47**	**10.47**	24.46	-1.02	
6:00	8.89	273.01	625.32	76.09	32.70	1.12	2.53	0.76	**10.94**	14.66	24.14	**15.36**	**10.53**	**10.48**	24.53	-1.13	
7:00	10.40	271.47	626.20	75.81	32.45	1.09	2.34	0.72	**10.86**	14.64	22.24	**14.10**	**10.48**	**10.49**	24.32	-1.13	

Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
lb/h	lb/h
10.92	10.92

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
15.36	15.36

Stack NOx analyzer	
zero value	-0.16
zero drift %	-0.16
span value	82.28
span drift %	1.28

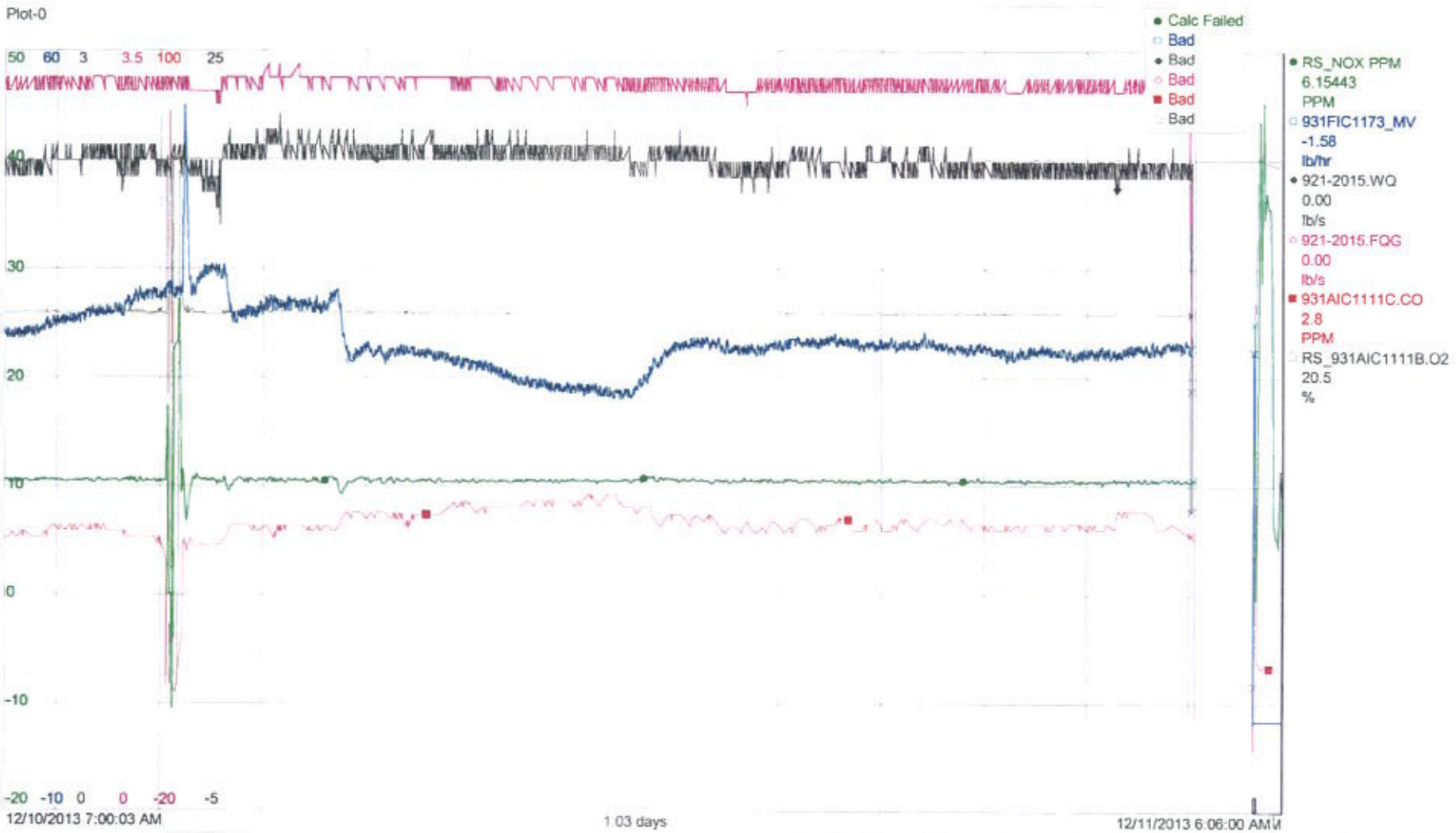
Stack CO Analyzer	
zero value	-1.16
zero drift %	-1.16
span value	90.47
span drift %	-0.62

Stack O2 Analyzer	
zero value	20.85
zero drift%	-0.33
span value	-0.05
span drift %	-0.22

Nebraska Gas	0

Comment: **PI emission data loss on 12/11/13 from 6:06 AM - 7:15 AM due to mill wide power outage/network connection loss, a total of 1.15 hrs - refer to attached PI trends . R Lebrilla called APCD breakdown hotline @ 8:50 AM.**
Cogen down on 12/11/13 from 6:06 AM - 7:00 AM, a total of 0.9 hr.

PRINT TIME: 12/11/2013 11:14 AM
NOTE: This document is valid for only ONE week after print time


Plot-0
Calc Failed
Bad
Bad
Bad
Bad
Bad
50 60 3 3.5 100 25
40
30
20
10
0
-10
-20 -10 0 0 -20 -5
RS_NOX PPM
6.15443
PPM
931FIC1173_MV
-1.58
lb/hr
921-2015.WQ
0.00
lb/s
921-2015.FQG
0.00
lb/s
931AIC1111C.CO
2.8
PPM
RS_931AIC1111B.O2
20.5
%
12/10/2013 7:00:03 AM
1.03 days
12/11/2013 6:06:00 AM


DCSROOM AS115 ND 15
2013-12-11 10:17
33MF
811MC401.PS3
HYD UNT CLG FLTR2 CL
Value
10:17:38
RSMT_4-20MA ROSEMOUNT CEMS VALUES
Time Scope: 8 hours
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
04:00
2013-12-11
10:00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 06:06 --- 0.86 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 06:06 --- 0.12 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 06:06 --- 0.11 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 06:06 --- 80.78 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 06:06 --- 1
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 06:06 --- 0
< > << >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR — NAME: Neff

DRY SHIFT OPERATOR — NAME: Van Zandt

SAFETY IS ALWAYS NO. 1

Hudnene Paper Mill

DATE: 12-10-13

CAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Cortrol 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H2O	CONCENTRATE H2O	LP	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	TTS
CURRENT	11010746	77304814	73040294	?	?	3286950	6943650	5358643	?		14355
PREVIOUS	10958262	77206041	72944764	207949	1999	3278060	6582570	4911182	191086		13740

NEW DEMIN TRAILER: YES / NO — TIME:

AMMONIA DELIVERY: YES / NO — % FULL: 75%

NEBRASKA ONLINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK: YES / NO

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%	56.6	57.2	51.9		69.1	59.0	57		55.4	54.3	55	56.5
Inlet Temp	°F	54	59	69		54	53	51		51	51	51	50
Humidity	%	1.2	1.2	0.3		12.1	26.2	37.F		7.0	8.8	8.8	8.4
Vibration (Max)	MILS	.19	.20	.19		.20	.19	.32		.33	.32	.33	.30
Steam Injection	#/SEC	2.57	2.62	2.38		2.69	2.66	2.62		2.57	2.58	2.61	2.60
Turbine L.O. Level	%	100	100	100		100	100	100		100	100	100	100
T48	°F	1456	1473	1485		1463	1460	1451		1447	1479	1477	1498

BATTERIES 134 V — HP RECOUPE FAL — AIR INLET DIFF 3.2 IN/H2O — HP RECOUPE FAR — L.O. DIFFERENTIAL 6 PSI — HP RECOUPE AFT

BATTERIES 13.5 V — HP RECOUPE FAL — AIR INLET DIFF 3.4 IN/H2O — HP RECOUPE FAR — L.O. DIFFERENTIAL 5.9 PSI — HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F	152	152	156		156	156	154		153	153	152	151
L.O. Supply	°F	122	122	126		126	126	124		123	123	122	122
Gen. Vibration (Max)	IPS	.34	.38	.42		.36	.36	.36		.37	.34	.33	.34
Tie Line	MW	13.43	13.51	12.77		13.50	13.66	13.48		13.46	13.47	13.50	13.48

GEN. 1200 AMPS — GEN VARS 5.08 MEGA VARS — FIELD 205 AMPS — FIELD VOLTS 178 V — COOLING TWR INLET 76 F — COOLING TWR INLET 70 F

GEN. 1215 AMPS — GEN VARS 4.81 MEGA VARS — FIELD 204 AMPS — FIELD VOLTS 180 V — COOLING TWR INLET 79 F — COOLING TWR INLET 73 F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F	709	710	711		711	711	710		710	711	710	711
HP Drum Level	IN	1.0	1.1	1.3		1.0	1.1	0.9		0.9	1		0.9
LP Drum Level	IN	1.1	0.9	0.9		1.1	1.1	1.1		1.1	1.1	1	0.7
HP Drum Pressure	PSI	485	485	485		485	485	485		485	485	485	479
LP Drum Pressure	PSI	147	147	147		147	147	147		147	142	147	147
CO	PPM	22.9	23.1	20.8		25.4	26.4	26.5		34.1	23.8	29.3	26.2
NOX	PPM	10.7	10.5	10.9		10.3	10.7	10.5		10.4	10.4	10.5	10.6
O2	%	14.67	14.62	14.90		14.66	14.62	14.64		14.76	14.64	14.46	14.70
Hot Well Level	%	156	138	142		160	138	157		154	154	160	123

1150 SET POINT 449 — 1103 B SET POINT 444 — SCANNER BLOWER (ON (OFF) — DUCT BURNER 442 SP

1150 SET POINT 449 — 1103 B SET POINT 444 — SCANNER BLOWER ON (OFF) — DUCT BURNER SP 442

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI	222	226	228		230	228	224		228	230	226	230
Gas Receiver	PSI	424	425	426		425	425	425		425	425	425	426

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity MHOS													

ON LINE TURBINE WATER WASH: YES / NO — CODUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION: NO1 / (NO2) YES / NO — NO. 2 YES / NO

GAS & ELECTRIC READING

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5	9.27	9.4
Conductivity <5mmhos	1.73	2.0
Silica < 20 ppb	STORED	4
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm	COND. 12.53	
ph (Feed 7.5)	5.48	6.1 - COND. 13.9
CONDENSATE		
HP-pH 8.5 – 9.5	8.94	9.0
Conductivity<20mmhos	7.45	8.2
LP-pH 8.5–9.5	8.80	8.7
Conductivity<20mmhos	15.22	17.5
HP		
pH 9.5 – 10.5	9.79	9.7
Conductivity 75–150	1608	161
Phosphate 5–15 ppm	3315	36.02
Silica < 5 ppm	.586	.261
Iron ppm		
LP		
pH 9.5 – 10.5	9.27	9.2
Conductivity 75 – 150	3493	39.8
Phosphate 5–15 ppm	767	7.86
Silica <5 ppm	.1068	.080
Iron ppm		
MIXED BED		
pH 6.0 – 7.5	5.57	5.5
Conductivity< 1mmhos	.48	.52
Silica <10 ppb	STORED	2
HP Steam Test		
Silica <20 ppb	LH: 2.58 LVM: 567 PH: 8.4 - SI: 3	
SOFTNER		
Hardness < 1.0 ppm	MAG: 0.15	H: - 0.26 C: 0.72
Running (1) or 2)	CA. - 0.23	2
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES: Dumped Buckets by GAS COMPRESSER
FILLED GAS COMPRESSER OIL 2296 TO 90% FULL DV
SHEET break 9:10 TILL 9:35 A.M. DV.
HEATER ROOM OPEN up LINES For Maintnter.
9:35 T.L.L 10:30 A.M. LOW WATER ENUNCIATOR
Aped. START CHILLER AT 11:10 A.M. D.V.

T.O. 6:04 A.M. 527C #11 Bucket

End Time 12/12/2013 7:00 Start Time 12/11/2013 7:00

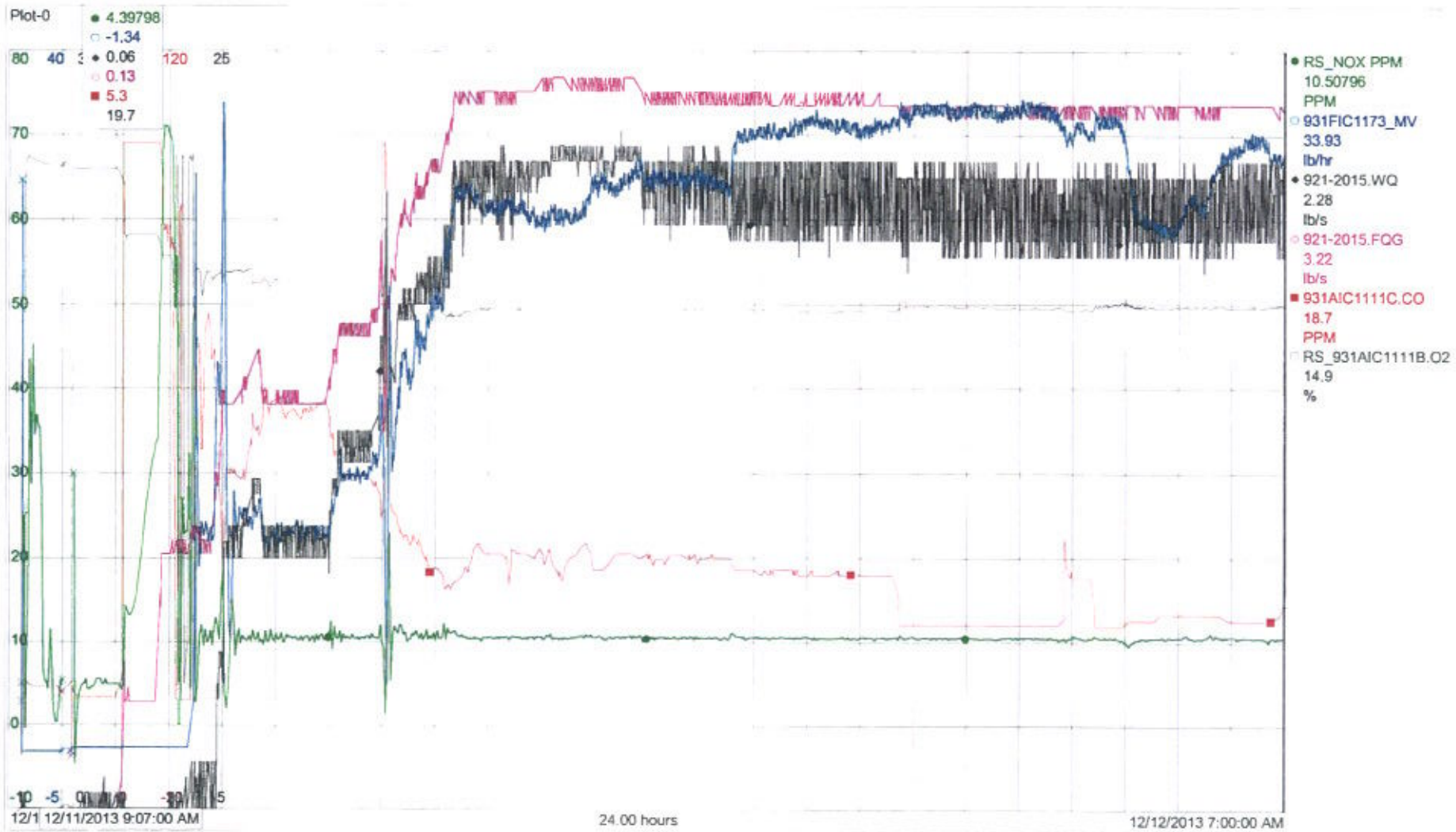
DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	[NH3 NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) (3% O_2)	Daily Av Cogen NOx lb/h	Daily Av Cog+Neb NOx lb/h
																		8.75	9.55
8:00	-0.03	0.00	496.31	-0.85	-1.52	-49677.60	0.00	0.00	0.00	20.21	64.01	0.00	16.97	12.69	1.16	1.06			
9:00	-0.03	0.00	496.41	0.02	-1.34	68241.02	0.02	0.00	0.00	20.30	8.36	0.00	4.82	10.76	11.00	2.91		Daily Av Cogen	Daily Av Cog+Neb
10:00	-0.03	46.62	497.26	9.38	-1.34	25452.94	0.01	0.02	5.91	17.93	161.34	16.61	28.23	16.67	24.56	2.90		CO	CO
11:00	33.37	105.52	592.94	55.51	15.24	6.18	0.23	0.11	5.48	16.65	88.02	20.46	11.56	14.87	24.56	2.35		lb/h	lb/h
12:00	8.27	158.43	581.33	43.97	12.80	1.30	1.11	0.58	6.37	16.11	57.86	21.40	10.16	16.65	24.56	2.18		13.29	13.39
13:00	10.75	154.17	579.72	38.76	11.53	1.32	1.07	0.57	6.38	15.91	84.04	23.62	10.51	10.74	24.50	2.13		Stack NOx analyzer	
14:00	6.85	181.09	583.91	46.38	14.87	1.35	1.43	0.65	7.30	15.65	47.96	20.10	10.65	10.44	24.35	1.33		zero value	0.09
15:00	10.52	220.22	602.33	55.77	20.29	2.04	1.95	0.73	9.14	15.16	35.96	17.58	10.79	10.65	24.18	0.87		zero drift %	0.09
16:00	15.29	263.21	631.99	72.49	29.81	3.10	2.37	0.74	11.00	14.69	23.55	14.62	10.72	10.72	24.21	1.00		span value	82.34
17:00	7.28	271.13	626.74	72.80	30.50	3.10	2.49	0.76	10.79	14.80	26.35	16.51	10.52	10.68	24.21	2.07		span drift %	1.36
18:00	10.70	275.44	630.39	72.62	30.43	3.08	2.58	0.77	11.13	14.68	25.08	16.02	10.55	10.60	24.21	2.83			
19:00	7.61	275.18	628.20	75.20	32.27	3.11	2.56	0.77	11.01	14.74	25.30	16.06	10.54	10.54	24.31	2.30		Stack CO Analyzer	
20:00	7.08	270.82	624.41	75.56	32.35	3.13	2.47	0.75	10.75	14.80	25.79	15.99	10.58	10.53	24.33	1.89		zero value	0.13
21:00	8.46	268.86	624.53	78.13	33.25	3.14	2.44	0.75	10.71	14.81	24.99	15.41	10.55	10.53	24.40	1.97		zero drift %	0.13
22:00	6.42	266.86	625.09	82.85	35.26	3.15	2.42	0.74	10.62	14.77	23.22	14.38	10.54	10.53	24.44	2.26		span value	91.38
23:00	6.39	266.86	625.20	83.12	35.60	3.15	2.43	0.74	10.56	14.75	22.67	13.82	10.47	10.52	24.48	2.50		span drift %	0.38
0:00	4.61	266.35	624.15	83.96	35.70	3.15	2.40	0.74	10.53	14.82	20.18	12.38	10.54	10.52	24.44	2.36			
1:00	0.33	266.35	620.14	85.66	36.46	3.18	2.39	0.74	10.34	14.90	14.08	8.44	10.52	10.51	24.45	2.58		Stack O2 Analyzer	
2:00	1.07	266.30	620.10	85.70	36.40	3.17	2.38	0.74	10.35	14.88	14.04	8.43	10.49	10.52	24.42	2.59		zero value	20.87
3:00	1.42	264.86	619.78	85.20	36.10	3.16	2.35	0.73	10.29	14.85	15.01	9.20	10.49	10.50	24.41	2.59		zero drift%	-0.25
4:00	2.49	265.84	621.31	83.48	35.51	3.16	2.37	0.73	10.41	14.91	17.38	10.45	10.50	10.50	24.44	2.59		span value	-0.02
5:00	-0.01	266.18	618.69	75.40	30.17	3.09	2.37	0.73	10.15	14.90	15.26	9.06	10.35	10.45	24.15	3.86		span drift %	-0.06
6:00	-0.01	265.49	618.34	77.59	31.79	3.15	2.38	0.73	10.38	14.90	15.79	9.46	10.61	10.49	24.29	3.86			
7:00	-0.01	266.18	618.71	81.58	34.22	3.15	2.40	0.74	10.31	14.90	15.14	8.95	10.50	10.49	24.36	2.72		Nebraska Gas	0

Comment: PI emission data loss on 12/11/13 from 8:00 AM - 8:10 AM due to mill wide power outage/network connection loss, a total of 0.17 hr - refer to attached PI trends. R Labrilla called APCD breakdown hotline @ 8:50 AM.
Cogen down on 12/11/13 from 7:00 AM - 9:07 AM, a total of 2.12 hrs.

PRINT TIME: 12/12/2013 8:24 AM

NOTE: This document is valid for only ONE week after print time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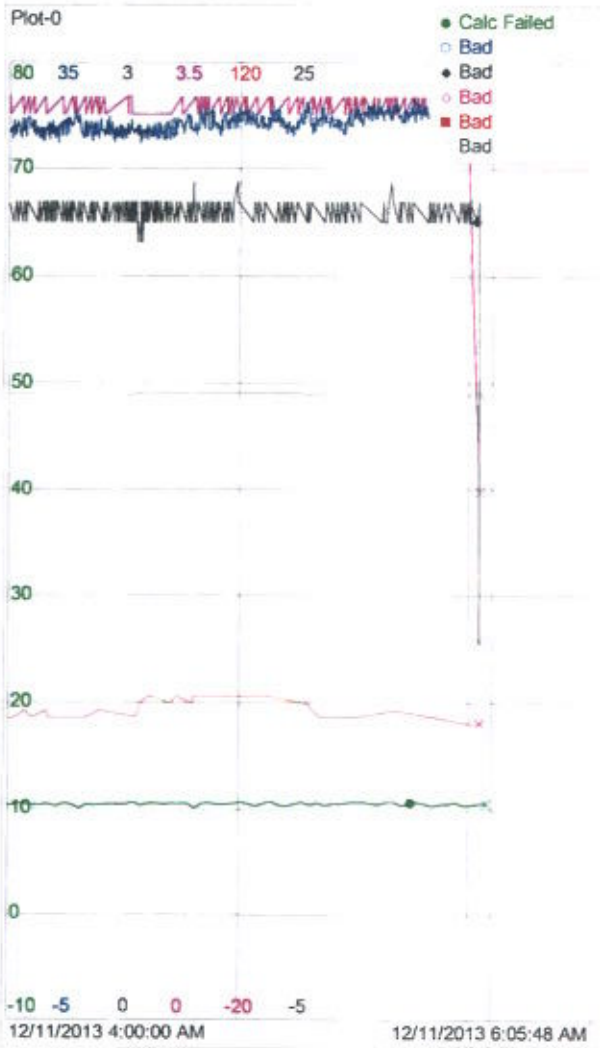
0.06
0.13
5.3
19.7
80 40
120 25
70
60
50
40
30
20
10
0
-10 -5
12/1 12/11/2013 9:07:00 AM
24.00 hours
12/12/2013 7:00:00 AM
RS_NOX PPM
10.50796
PPM
931FIC1173_MV
33.93
lb/hr
921-2015.WQ
2.28
lb/s
921-2015.FQG
3.22
lb/s
931AIC1111C.CO
18.7
PPM
RS_931AIC1111B.O2
14.9
%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Bad
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70
60
50
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20
10
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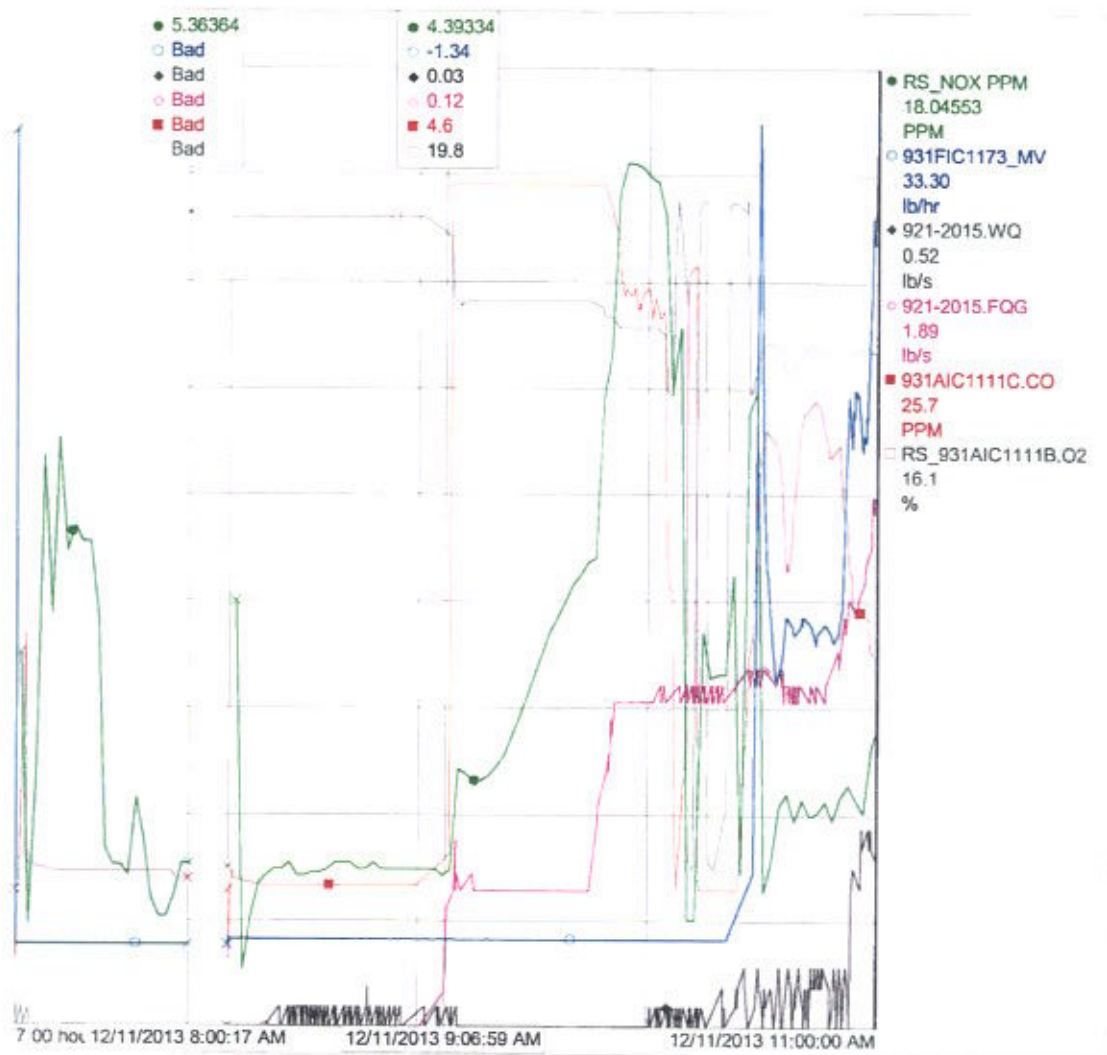
12/11/2013 6:05:48 AM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0.12
4.6
19.8
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PPM
931FIC1173_MV
33.30
lb/hr
921-2015.WQ
0.52
lb/s
921-2015.FQG
1.89
lb/s
931AIC1111C.CO
25.7
PPM
RS_931AIC1111B.O2
16.1
%
7 00 hox 12/11/2013 8:00:17 AM
12/11/2013 9:06:59 AM
12/11/2013 11:00:00 AM

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR — NAME: Van Zandt

DRY SHIFT OPERATOR — NAME:

SAFETY IS ALWAYS NO. 1

Hueneme Paper Mill

DATE: 12-11-13

CAL PUMPS

	Level	1000 Note ml/min
Stearnate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	HRS
CURRENT	11062967	77413888	73088713	16239	1497	3294200	7238150	585940	146439		14844
PREVIOUS	11010746	77304814	73040294	—	—	3286950	6943650	585863	—		14355

NEW DEMIN TRAILER: YES / NO — TIME

AMMONIA DELIVERY: YES / NO — % FULL

NEBRASKA ONLINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK: YES / NO

TURBINE

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR %				34.7	42.1	57.0	52.1	50.9	49.7	49.5	48.9	48.7
Inlet Temp °F				58	56	54	54	62	62	62	60	58
Humidity %				-05	8.7	1.7	7.7	6.7	6.9	6.7	6.7	26.4
Vibration (Max) MILS				16	15	16	.17	.16	.16	.16	.16	.18
Steam Injection #/SEC				1.56	2.19	756	2.40	2.58	2.55	2.32	2.54	2.41
Turbine L.O. Level %				100	100	100	100	100	100	100	100	100
T4B °F				1280	1398	1460	1447	1465	1465	1461	1455	1440

BATTERIES V — HP RECOUPE FAL

AIR INLET DIFF IN/H20 — HP RECOUPE FAR

L.O. DIFFERENTIAL PSI — HP RECOUPE AFT

BATTERIES 134 V — HP RECOUPE FAL

AIR INLET DIFF 2.8 IN/H20 — HP RECOUPE FAR

L.O. DIFFERENTIAL 6 PSI — HP RECOUPE AFT

GENERATOR

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain °F							156	156	156	156	156	154
L.O. Supply °F							126	126	126	126	126	124
Gen. Vibration (Max) IPS				48	.35	30	.33	.33	.33	.37	.38	.36
Tie Line MW				12.92	13.55	1344	12.89	12.96	13.03	13.08	12.96	12.96

GEN. AMPS — GEN.VARS 3.54 MEGA VARS

FIELD AMPS — FIELD VOLTS V

COOLING TWR INLET F — COOLING TWR INLET F

GEN. 1200 AMPS — GEN.VARS 1.08 MEGA VARS

FIELD 182 AMPS — FIELD VOLTS 156 V

COOLING TWR INLET 84 F — COOLING TWR INLET 78 F

COGEN BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp °F				709	705	710	710	711	711	710	711	710
HP Drum Level IN				0.4	0.7	1.0	0.9	1.0	0.9	1.0	1.0	1.0
LP Drum Level IN				0.6	2.1	1.0	1.2	1.0	0.6	0.9	0.5	1.0
HP Drum Pressure PSI				465	479	485	478	478	478	478	485	480
LP Drum Pressure PSI				148	147	149	148	148	149	146	149	147
CO PPM				440	243	271	26.9	23.6	22.7	14.1	13.5	16.0
NOX PPM				10.5	10.4	10.4	10.6	10.4	10.6	10.6	10.4	10.6
O2 %				15.59	14.84	14.71	14.84	14.97	14.98	14.91	14.84	14.93
Hot Well Level %				130	158	158	135	140	148	148	139	157

1150 SET POINT — 1103 B SET POINT

SCANNER BLOWER (ON) Y/N — DUCT BURNER SP

1150 SET POINT 449 — 1103 B SET POINT 444

SCANNER BLOWER ON (Y)N — DUCT BURNER S.P. 442

COMPRESSORS

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator PSI				240	235	229	231	231	233	235	235	233
Gas Receiver PSI				425	425	425	426	426	425	425	415	425

NEBRASKA BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level IN												
Drum Pressure PSI												
Steam Flow #/HR												
Steam Temp °F												
NOX PPM												
O2 %												
Blow Down Conductivity MHOS												

ON LINE TURBINE WATER WASH: YES / NO — CONDUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION: NO ✓ / YES — NO — NO. 2 — YES / NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP–pH 8.5 –9.5		
Conductivity<20mmhos		
LP–pH 8.5–9.5		
Conductivity<20mmhos		
HP		
pH 9.5 – 10.5		
Conductivity 75–150		
Phosphate 5–15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 – 10.5		
Conductivity 75 – 150		
Phosphate 5–15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 – 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES: NEW DEMIN TRAILER
M - 57272700
C - 73045888
P - 77317202
COGEN TRIP 6:04 AM
IDLE 9:10 AUTO 9:18 JL
10:10
1407 Gx Combustion Trip

ADAM 000-3011 - REV E — WPDX 102(D)

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident PI emission data loss due to power outage		Incident Date 12/11/13
Exact Location Incident Cogen		
Reported By R Lebrilla	Estimated Start and Stop Times of Incident: 6:06 AM – 7:15 AM & 8:00 AM – 8:10 AM	Possible Cause: mill power outage

Incident Type: ☐ Spill Internal ☐ Improper Waste Disposal ☐ Spill External ☐ Near miss or below spill release guidelines X Air Emission ☐ Other_____	Released To ☐ Storm Water System ☐ Secondary Containment ☐ Process Sewer X Air ☐ Ground (External) ☐ Ground (Inside Mill Property) ☐ Near Miss ☐ Other_____

Detailed Description of Event

Mill power outage on 12/11/13 at about 6:06 AM resulted to losing network connections including DCS and PI interface. Mill lost PI emission data from 6:06 AM – 7:15 AM and from 8:00 AM – 8:10 AM. Cogen was down from 6:06 AM – 9:07 AM on 12/11/13.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
☐ _____ Gallons ☐ _____ Pounds ☐ Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.) APCD @ 8:50 AM by R Lebrilla*
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Charlie Wilson, Lars Gustavson, Rudy Rehbein	Any Acute or Chronic Health Risks *(refer to MSDS)N/A*

Describe Any Emergency Response Actions:
Investigated cause of outage. Potential low voltage.

Suggestions to Prevent Reoccurrence	Estimated Completion Date
1.	1.
2.	2
3.	3.
4.	4.

Root Cause after investigation	Severity Level *(level 1 and 2 must be tracked through SHMS)* ☐ 1 ☐ 2 ☐ 3 ☐ 4
Investigated By: Lars Gustavson/Charlie Wilson	Investigated Date 12/11/13

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
Department Manager	Technical Superintendent 12/12/2013	Mill Manager 12/13/2013

12/12/13

Print Time: 12/12/2013 10:27:30 AM

Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

January 13, 2014

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Low Inlet NOx Emissions

Dear Mr. Olson:

This letter is a follow up on the call I made to the VCAPCD Breakdown Center Hotline on January 8, 2014 at about 2:30 PM.

During CEMS inspection on January 8, 2014 at 12:40 PM, it was observed that the air flow for inlet NOx sample was below the normal range. All other emission parameters were at normal level and stable. Troubleshooting was immediately initiated. A loose fitting connection at the pressure side of the inlet NOx sample line was discovered. After replacing the fitting, the inlet NOx emission reverted to expected level. The inlet NOx emission data were low from 12:40 PM to 3:10 PM, a total of 2.5 hours. A passing calibration was completed at about 3:30 PM.

The Daily Emission Sheets, PI trends, DCS trends, Cogen Reports and Environmental Incident Report have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: Rudy Gilbert	1/13/2014
Title: Mill Manager	

DAILY ENVIRONMENTAL REPORT

End Time: 1/9/2014 7:00 Start Time: 1/8/2014 7:00

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3 NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) (3% O_2)
8:00	17.19	233.62	614.71	69.14	22.24	1.01	2.03	0.71	9.07	14.92	29.15	15.37	10.51	10.52	25.40	-2.51	
9:00	17.94	233.22	620.61	69.72	22.36	1.00	2.03	0.72	9.08	14.89	28.06	14.73	10.54	10.53	25.35	-2.59	
10:00	12.31	234.25	615.19	73.77	23.40	0.99	2.03	0.72	9.06	14.95	27.72	14.61	10.46	10.50	25.36	-2.30	
11:00	14.64	235.27	621.83	71.58	22.57	0.98	2.03	0.72	9.30	14.85	25.45	13.49	10.63	10.54	25.32	-1.89	
12:00	11.36	235.27	615.90	71.37	22.34	0.97	2.04	0.72	9.13	14.88	26.04	13.79	10.50	10.53	25.32	-1.59	
13:00	7.60	234.08	609.75	54.21	22.75	64.03	2.03	0.72	8.60	14.94	27.72	14.61	9.97	10.37	25.32	-1.47	
14:00	7.60	234.20	609.94	29.63	23.31	12.53	2.04	0.72	7.98	15.16	27.68	14.47	9.18	9.88	25.36	-1.73	
15:00	7.57	233.74	610.14	30.63	23.66	-231.67	2.04	0.72	7.72	15.27	29.73	15.65	8.86	9.34	25.39	-2.09	
16:00	7.59	232.20	609.78	52.92	22.30	144.58	2.03	0.72	7.55	15.36	32.19	16.87	8.86	8.97	25.35	-1.83	
17:00	7.60	234.47	609.83	75.90	22.06	0.92	2.03	0.72	8.67	15.20	31.12	16.40	10.02	9.25	25.27	-1.76	
18:00	7.57	235.10	609.56	74.76	21.63	0.90	2.03	0.72	8.68	15.15	31.74	16.73	9.99	9.62	25.26	-2.14	
19:00	7.61	234.42	607.67	72.54	20.75	0.90	2.03	0.72	8.65	15.13	33.13	17.39	9.98	10.00	25.28	-1.86	
20:00	7.60	232.32	606.51	71.06	20.11	0.89	2.03	0.72	8.56	15.21	34.39	17.93	9.98	9.98	25.32	-1.71	
21:00	8.55	232.55	606.27	71.84	20.40	0.90	2.03	0.72	8.63	15.17	33.54	17.57	10.02	9.99	25.32	-1.01	
22:00	8.08	231.66	607.09	71.24	20.12	0.90	2.03	0.72	8.54	15.16	34.02	17.77	10.01	10.01	25.23	-1.40	
23:00	9.18	233.68	607.47	72.61	20.80	0.91	2.03	0.72	8.67	15.12	32.50	17.14	10.04	10.03	25.28	-0.97	
0:00	7.59	234.25	606.13	72.68	20.98	0.90	2.04	0.72	8.66	15.17	34.43	18.29	9.99	10.01	25.35	-0.53	
1:00	7.59	232.76	605.77	72.72	20.82	0.90	2.03	0.72	8.65	15.17	33.95	17.69	10.06	10.03	25.32	-0.53	
2:00	7.58	232.15	605.54	71.94	20.66	0.90	2.03	0.72	8.59	15.18	34.60	17.97	10.06	10.02	25.41	-0.94	
3:00	7.65	231.23	604.47	71.99	20.51	0.90	2.03	0.72	8.51	15.18	34.68	17.93	9.96	10.01	25.40	-0.89	
4:00	9.12	231.47	605.23	71.64	20.33	0.90	2.03	0.72	8.57	15.17	34.30	17.74	10.02	9.99	25.43	-1.34	
5:00	7.63	230.66	603.30	71.72	20.36	0.91	2.03	0.72	8.51	15.19	35.37	18.40	9.98	9.99	25.36	-1.36	
6:00	7.75	230.66	601.97	70.24	19.80	0.89	2.03	0.72	8.50	15.23	37.05	19.12	9.99	9.99	25.47	-1.41	
7:00	8.73	230.66	602.72	71.95	20.37	0.91	2.03	0.72	8.55	15.18	33.94	17.48	10.03	10.00	25.46	-1.28	

Comment: Troubleshooting for low inlet NOx emission data on 1/8/14 from 12:40 PM to 3:10 PM - loose fitting connection issue on sample line. Passing cal at 3:30 PM. APCD notified at 2:30 PM.

Daily Av Cogen NOx lb/h	Daily Av Cog+Neb NOx lb/h
8.60	8.60

Daily Av Cogen CO lb/h	Daily Av Cog+Neb CO lb/h
16.63	16.63

Stack NOx analyzer	
zero value	0.03
zero drift %	0.03
span value	82.59
span drift %	2.08

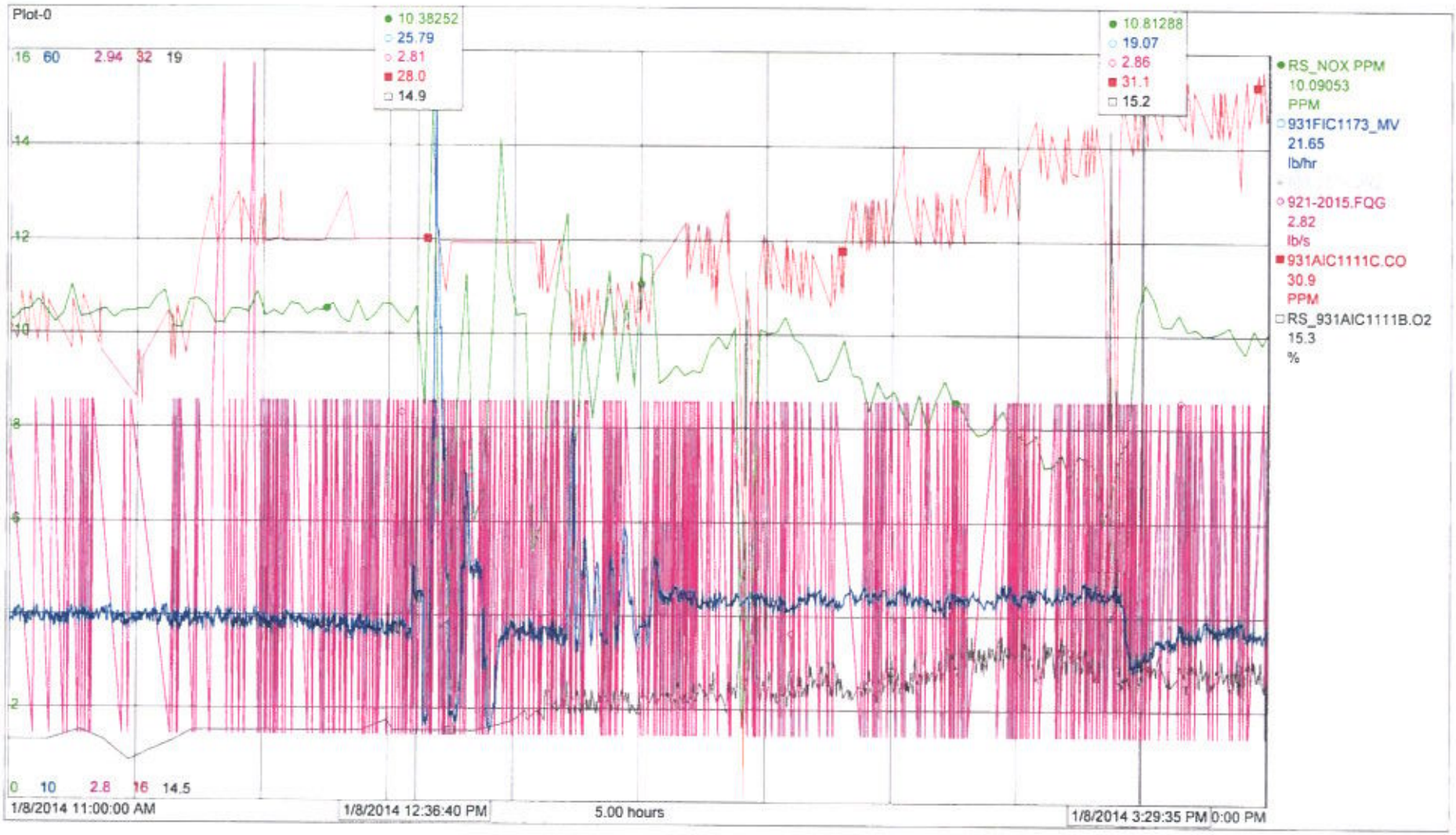
Stack CO Analyzer	
zero value	-0.53
zero drift %	-0.53
span value	90.50
span drift %	0.27

Stack O2 Analyzer	
zero value	20.87
zero drift%	-0.25
span value	-0.07
span drift %	-0.28

Nebraska Gas	0

PRINT TIME: 1/9/2014 11:40 AM

NOTE: This document is valid for only ONE week after print time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28.0
14.9
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19.07
2.86
31.1
15.2
16 60 2.94 32 19
14
12
10
8
6
2
0 10 2.8 16 14.5
RS_NOX PPM
10.09053
PPM
931FIC1173_MV
21.65
lb/hr
921-2015.FQG
2.82
lb/s
931AIC1111C.CO
30.9
PPM
RS_931AIC1111B.O2
15.3
%
1/8/2014 11:00:00 AM
1/8/2014 12:36:40 PM
5.00 hours
1/8/2014 3:29:35 PM 0:00 PM


COGEN
2014-01-08 15:55
23M
RSMT 4-20MA ROSEMOUNT CEMS VALUES
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
in let NOx
stack CO
stack NOx
12:40 pm
3:30pm
931AIC1111A NOX
931AIC1111C CO
931AIC1111B O2
931AIC1111D NOX
931_AIC-1111 INCAL
931_aic-1111trb
D1 30 minutes
D2 1 hour
D3
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

NIGHT SHIFT OPERATOR NAME: CDB

DRY SHIFT OPERATOR NAME: VEE

CHEMICAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	M	IS
CURRENT	13171123	01313026	74263860	189914	1613	3500450	5831550	648536	0		29	113
PREVIOUS	13084654	01219624	74222611	190462	1563	3500300	5532600	648152	0		29	80

NEW DEMIN TRAILER YES NO TIME:

AMMONIA DELIVERY YES NO % FULL 80/78

NEBRASKA ONLINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK YES NO

GAS & ELECTRIC READING

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%	41.19	41.18	40.62	40.51	40.31	40.5	40.5		40.8	40	41	40
Inlet Temp	°F	50	54	62	64	64	62	58		55	53	52	50
Humidity	%	25.0	21.9	32.1	30.6	41.0	59	59		56	56	56	56
Vibration (Max)	MILS	12	12	.12	.12	.12	13	13		12	12	13	12
Steam Injection	#/SEC	2.00	2.08	2.06	2.04	2.00	2.06	2.06		2.04	2.04	2.04	2.06
Turbine L.O. Level	%	95		95	95	95	95	95		95	95	95	95
T48	°F	1358		1390	1392	1389	1375	1377		1371	1365	1360	1353

BATTERIES 135 V HP RECOUPE FAL

AIR INLET DIFF 2 IN/H20 HP RECOUPE FAR

L.O. DIFFERENTIAL 7 PSI HP RECOUPE AFT

BATTERIES V HP RECOUPE FAL

AIR INLET DIFF IN/H20 HP RECOUPE FAR

L.O. DIFFERENTIAL PSI HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F	146	145	150	152	152	151	150		150	149	147	146
L.O. Supply	°F	126	126	126	124	124	123	121		123	121	119	116
Gen. Vibration (Max)	IPS	.32	.34	.32	.40	.42	35	35		35	40	35	40
Tie Line	MW	9.97	10.1	10.06	10.11	9.88	9.9	10		10	10	10.1	9.9

GEN. 1105 AMPS GEN.VARS 5 MEGA VARS

FIELD 180 AMPS FIELD VOLTS 155 V

COOLING TWR INLET 68 F COOLING TWR INLET 62 F

GEN. 1000 AMPS GEN.VARS 3 MEGA VARS

FIELD 180 AMPS FIELD VOLTS 153 V

COOLING TWR INLET 79 F COOLING TWR INLET 75 F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F	711	709	710	709	712	709	710		710	706	709	710
HP Drum Level	IN	-.5	-.5	1.2	1.0	1.0	1	1		1	.9	1	1.1
LP Drum Level	IN	.3	.5	1.6	1.8	1.1	1	1		1.1	1	1	.9
HP Drum Pressure	PSI	473	480	480	480	480	473	480		473	473	475	480
LP Drum Pressure	PSI	145	147	146	146	146	146	144		147	152	152	152
CO	PPM	27.2	22.6	26.1	28.0	32.5	34.2	35		34.6	37.1	37	33.1
NOX	PPM	10.2	10.4	10.2	9.3	7.2	10.1	10.3		10	10.2	10	10.1
O2	%	14.77	14.9	14.87	15.16	15.35	15.1	15.1		15.18	15.2	15.3	15
Hot Well Level	%	159	143	156	155	138	141	152		136	132	147	157

1150 SET POINT 449 1103 B SET POINT 444

SCANNER BLOWER (ON) Y/N DUCT BURNER 442 SP

1150 SET POINT 449 1103 B SET POINT 444

SCANNER BLOWER ON Y/N DUCT BURNER S.P. 442

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI	229	233	237	237	237	235	235		239	255	235	235
Gas Receiver	PSI	420	425	425	425	425	425	425		425	425	425	425

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity	MHOS												

ON LINE TURBINE WATER WASH YES NO CONDUCTIVITY MHOS BOILER FEED WATER PUMP OPERATION NO 1 YES NO NO 2 YES NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75- 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP-pH 8.5 -9.5		
Conductivity<20mmhos		
LP-pH 8.5-9.5		
Conductivity<20mmhos		
HP		
pH 9.5 - 10.5		
Conductivity 75-150		
Phosphate 5-15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 - 10.5		
Conductivity 75 - 150		
Phosphate 5-15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 - 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 - 10.5		
Conductivity 75 - 200		
Silica		
Phosphate 5-25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES: Switch BFW from #2 to #1 8:02 AM

Gas Comp. from 420 PSI to 425 PSI 7:56 AM

DATE: 1/8/14

OFFICIAL DAILY COGENERATION LOG

SAFETY IS ALWAYS NO. 1

Hueneme Paper Mill

ACADIA 008-3011 - REV.E WOR 10320

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident: Inlet NOx low sample gas flow	Incident Date: 1/8/2014
Exact Location Incident: Cogen	
Reported By: R Lebrilla	Estimated Start and Stop Times of Incident: 12:40 PM to 3:30 PM
	Possible Cause: Leak in sample

Incident Type:
- ☐ Spill Internal
- ☐ Improper Waste Disposal
- ☐ Spill External
- ☐ Near miss or below spill release guidelines
- X Air Emission
- ☐ Other _____

Released To
- ☐ Storm Water System
- ☐ Secondary Containment
- ☐ Process Sewer
- X Air
- ☐ Ground (External)
- ☐ Ground (Inside Mill Property)
- ☐ Near Miss
- ☐ Other _____

Detailed Description of Event

During daily inspection the air flow for inlet NOx sample was below normal range, automatic daily calibration was good and unit was reading proper inlet NOx values. Troubleshooting of cause was initiated. During troubleshooting flows were interrupted therefore breakdown call was made to APCD. Stack measurements were not affected, only inlet.
Cause of low flow was a leaky fitting on pressure side, the fitting was replaced. Flows are back to normal and unit passed calibrated at 3:30 PM.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
☐ _____ Gallons ☐ _____ Pounds ☐ Other _____			

List Any External Emergency Clean Up Personnel Contacted: N/A	List Any External Agencies Contacted *(Agency, person and time of call.)* APCD @ 2:300 PM by R Lebrilla
List Hueneme Personnel Contacted *(Foreman, Mill Manager, etc.)* Charlie Wilson, Lars Gustavson, Robyn Lebrilla	Any Acute or Chronic Health Risks *(refer to MSDS)N/A*
Describe Any Emergency Response Actions	

Suggestions to Prevent Reoccurrence	Estimated Completion Date
1. Replace leaky fitting and leak check all other lines for sample handling. Completed on 1/8/2014.	1. 1/8/2014
2.	2
3.	3.

Root Cause after investigation	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ☐ 1 ☐ 2 ☐ 3 ☐ 4
Investigated By: Lars Gustavson/Charlie Wilson	Investigated Date: 12/11/13

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
1/14/14	for J Kemp 1/13/14	1/13/2014
Department Manager	Technical Superintendent	Mill Manager

Print Time: 1/13/2014 8:28:45 AM

Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

February 19, 2014

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Fuel data loss

Dear Mr. Olson:

This letter is a follow up on the call made by Steve Chuhaloff to the VCAPCD Breakdown Center Hotline on February 17, 2014 at about 3:10 PM.

On February 17, 2014, there was a momentary data communication loss between Mark V turbine control system and the distributed control system (DCS). DCS showed a modbus data collection failure alarm, which includes the turbine fuel data, from 2:53 PM to 3:00 PM. Investigation showed that the voltage drop in the mill was due to SCE power issue. There was insignificant impact on PI data as reflected on the daily emission sheet since the data communication loss happened for 7 minutes only.

The Daily Emission Sheets, PI trends, DCS trends, Cogen Reports and Environmental Incident Report have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3991 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: Judy Gallea	2/20/2014
Title: Mill Manager	

End Time 2/18/2014 7:00 Start Time 2/17/2014 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3 NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) (3% O_2)
8:00	2.21	261.23	608.32	83.56	28.49	0.96	2.22	0.70	10.14	15.55	19.74	11.57	10.50	10.52	25.43	1.45	
9:00	2.21	261.40	608.58	83.96	28.59	0.95	2.24	0.70	10.12	15.55	19.18	11.23	10.48	10.51	25.40	1.67	
10:00	2.21	261.73	608.69	83.65	28.63	0.96	2.25	0.70	10.17	15.55	18.80	11.03	10.51	10.50	25.36	1.61	
11:00	3.69	261.58	612.86	83.30	27.41	0.92	2.25	0.70	10.32	15.52	27.26	16.38	10.65	10.55	25.38	1.55	
12:00	3.91	262.10	612.72	83.06	28.24	0.95	2.25	0.70	10.23	15.57	21.96	13.01	10.50	10.55	25.39	1.56	
13:00	4.74	266.01	614.43	83.76	28.43	0.93	2.28	0.71	10.44	15.55	23.66	14.38	10.50	10.55	25.45	1.26	
14:00	6.20	266.52	617.00	83.53	27.96	0.90	2.32	0.72	10.50	15.48	28.06	17.18	10.48	10.49	25.50	0.97	
15:00	4.86	267.06	618.01	83.50	28.28	0.91	2.35	0.72	10.54	15.50	24.56	15.01	10.54	10.51	25.54	0.53	
16:00	2.19	266.48	614.40	83.91	28.92	0.95	2.35	0.72	10.34	15.50	17.39	10.40	10.49	10.50	25.51	0.50	
17:00	2.19	266.35	613.26	83.91	28.90	0.95	2.33	0.72	10.33	15.52	17.44	10.43	10.49	10.51	25.48	0.50	
18:00	2.19	266.35	612.05	83.85	28.78	0.94	2.31	0.71	10.30	15.54	17.56	10.50	10.46	10.48	25.46	0.84	
19:00	2.19	266.35	611.97	83.91	28.96	0.95	2.30	0.71	10.36	15.51	17.34	10.46	10.53	10.49	25.41	1.04	
20:00	2.19	264.98	611.89	83.91	29.13	0.95	2.28	0.71	10.25	15.51	17.45	10.48	10.47	10.49	25.40	1.06	
21:00	2.19	266.01	611.92	83.89	29.14	0.96	2.30	0.71	10.29	15.49	17.95	10.74	10.47	10.49	25.38	1.08	
22:00	4.16	265.66	613.70	83.15	28.57	0.94	2.29	0.71	10.40	15.44	23.04	13.60	10.51	10.48	25.44	1.40	
23:00	4.30	265.66	613.15	82.76	28.30	0.94	2.29	0.71	10.39	15.47	23.87	14.47	10.49	10.49	25.44	1.37	
0:00	6.75	265.66	614.60	82.74	27.93	0.92	2.29	0.71	10.50	15.45	29.13	17.68	10.50	10.50	25.53	1.53	
1:00	7.69	264.31	616.35	82.38	27.61	0.91	2.27	0.71	10.49	15.46	31.05	18.98	10.49	10.50	25.49	1.61	
2:00	7.70	264.97	616.20	81.62	27.30	0.90	2.27	0.71	10.52	15.48	31.00	18.90	10.51	10.50	25.54	1.41	
3:00	7.70	266.01	616.23	81.41	27.17	0.90	2.29	0.71	10.54	15.42	32.41	19.82	10.48	10.49	25.51	1.56	
4:00	9.25	266.18	619.02	81.36	27.16	0.89	2.30	0.71	10.51	15.36	30.81	18.80	10.48	10.49	25.48	1.75	
5:00	7.95	266.18	617.61	80.83	27.10	0.90	2.31	0.71	10.51	15.41	32.39	19.86	10.53	10.50	25.48	1.39	
6:00	7.76	266.18	615.98	80.14	26.67	0.90	2.31	0.71	10.56	15.44	33.37	20.46	10.50	10.50	25.48	1.12	
7:00	8.78	266.25	616.76	79.06	26.15	0.88	2.36	0.72	10.72	15.42	33.67	20.80	10.53	10.52	25.49	1.06	

Comment:

Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
lb/h	lb/h
10.40	10.40

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
14.84	14.84

Stack NOx analyzer	
zero value	0.03
zero drift %	0.03
span value	81.44
span drift %	0.65

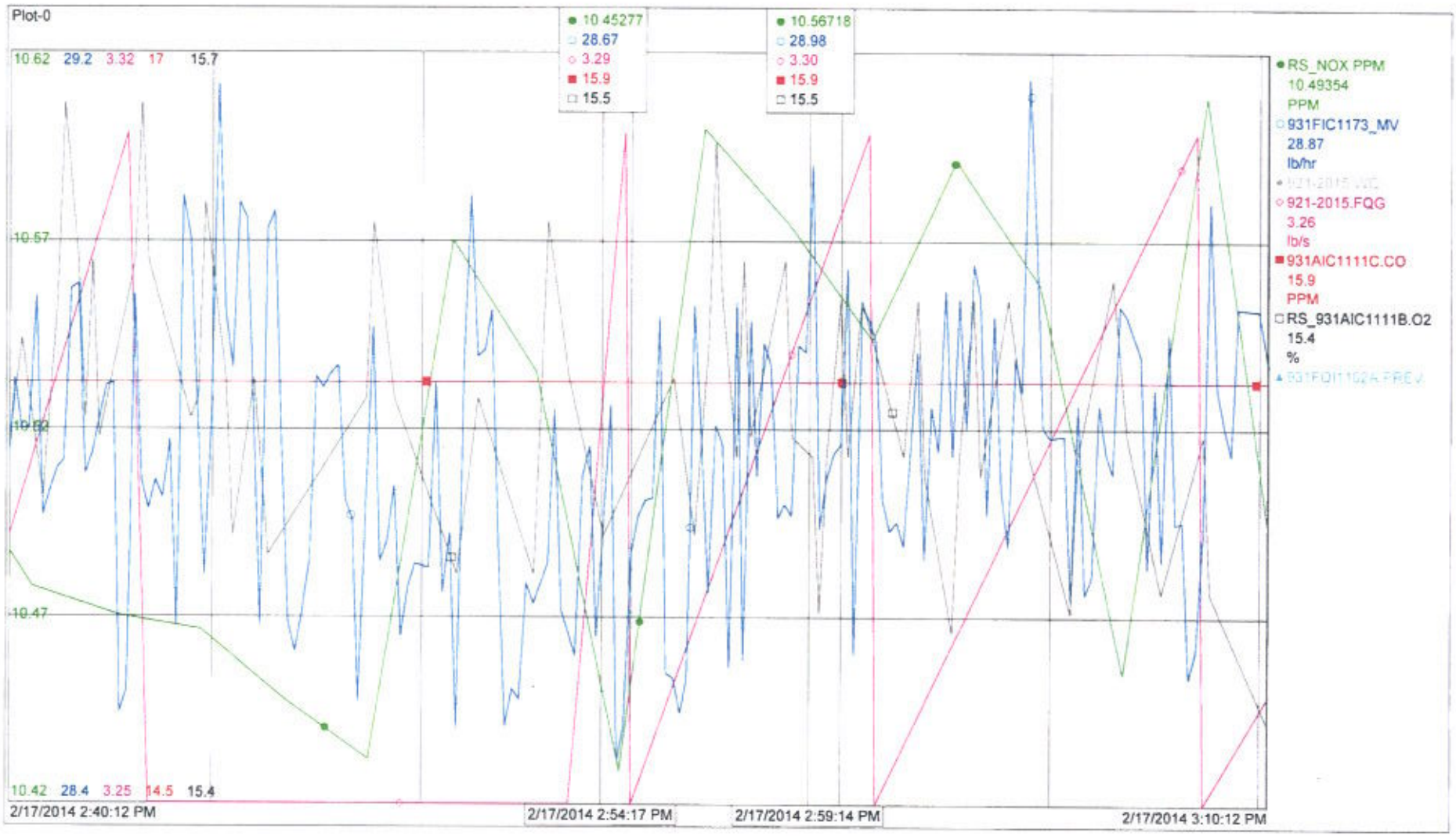
Stack CO Analyzer	
zero value	-1.03
zero drift %	-1.03
span value	89.63
span drift %	-0.70

Stack O2 Analyzer	
zero value	21.10
zero drift%	0.87
span value	-0.04
span drift %	-0.18

Nebraska Gas	0

PRINT TIME: 2/18/2014 8:08 AM

NOTE: This document is valid for only ONE week after print time


Plot-0
10.45277
28.67
3.29
15.9
15.5
10.56718
28.98
3.30
15.9
15.5
10.62 29.2 3.32 17 15.7
10.57
10.52
10.47
10.42 28.4 3.25 14.5 15.4
RS_NOX PPM
10.49354
PPM
931FIC1173_MV
28.87
lb/hr
921-2015.FQG
3.26
lb/s
931AIC1111C.CO
15.9
PPM
RS_931AIC1111B.O2
15.4
%
2/17/2014 2:40:12 PM
2/17/2014 2:54:17 PM
2/17/2014 2:59:14 PM
2/17/2014 3:10:12 PM


node 20
2014-02-20 13:53
26ME
782-GRPALARM_1
SEC FIBER GRP ALM
Disturb.
13:51:12
RSMT_4-20MA ROSEMOUNT CEMS VALUES
Time Scope: 10 days
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
2014-02-13
2014-02-20
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 15:00 2014-02-17 83.48 87.03 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 15:00 2014-02-17 23.12 24.44 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 15:00 2014-02-17 15.49 15.20 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 15:00 2014-02-17 9.85 10.15 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 15:00 2014-02-17 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 15:00 2014-02-17 0 0
<
>
<<
>>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

NIGHT SHIFT OPERATOR

NAME 2013

DRY SHIFT OPERATOR

NAME: MK

OFFICIAL DAILY COGENERATION LOG

CHEM PUMPS	Level	Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE
CURRENT	162827.75	25/143286	11455096	206317	1718	3788300	8537520
PREVIOUS	162414.2	24/137627	10996636	205688	1696	3784610	8190560

NEW DEMIN TRAILER YES NO TIME:

AMMONIA DELIVERY YES NO % FULL 85-85

NEBRASKA OILINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK YES NO

GAS & ELECTRIC READING

	MAXON	BURNER	NEBRASKA	M	TS
CURRENT	693169	68877			52017
PREVIOUS	693168	43358			51402

TURBINE

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR %	48.2	49.5	49.6	50.7	51.7	50.5	50.19	49	50	48.8	52	52
Inlet Temp °F	52	54	54	55	55	54	54	52	52	50	49	49
Humidity %	56.8	56.8	56.7	42.6	37.4	44.5	50	54	54	54	55	55
Vibration (Max) MILS	.14	.15	.16	.14	.16	.12	20	20	20	20	20	20
Steam Injection #/SEC	2.23	2.23	2.23	2.41	2.38	2.41	2.31	2.2	2.3	2.25	2.34	2.32
Turbine L.O. Level %	100	100	100	100	100	100	95	95	95	95	95	95
T48 °F	1427	1433	1436	1439	1444	1439	1438	1429	1430	1426	1426	1426

BATTERIES 136 V HP RECOUPE FAL — BATTERIES 135 V HP RECOUPE FAL

AIR INLET DIFF 2.6 IN/H2O HP RECOUPE FAR — AIR INLET DIFF 2.5 IN/H2O HP RECOUPE FAR

L.O. DIFFERENTIAL 6 PSI HP RECOUPE AFT — L.O. DIFFERENTIAL 6 PSI HP RECOUPE AFT

GENERATOR

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain °F	152	152	152	153	154	154	154	153	153	152	152	152
L.O. Supply °F	123	123	123	124	125	125	125	124	124	123	125	125
Gen. Vibration (Max) IPS	.31	.32	.37	.37	.38	.37	37	34	34	33	33	33
Tie Line MW	13.06	13.00	13.01	12.90	12.90	13.01	13	13	12.9	12.9	12.9	13

GEN. 115.2 AMPS GEN.VARS 4.72 MEGA VARS — GEN. AMPS GEN.VARS MEGA VARS

FIELD 195 AMPS FIELD VOLTS 170 V — FIELD AMPS FIELD VOLTS V

COOLING TWR INLET 76 F COOLING TWR INLET 70 F — COOLING TWR INLET F COOLING TWR INLET F

COGEN BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp °F	702	708	708	709	708	710	709	709	710	709	706	709
HP Drum Level IN	1.1	0.9	0.6	0.6	0.8	1.2	1.1	.8	.1	-.1	1.1	1
LP Drum Level IN	1	1	1.2	1	1.0	0.9	1	.7	.1	1.1	.9	1
HP Drum Pressure PSI	477	477	477	477	477	477	477	477	477	477	477	477
LP Drum Pressure PSI	148	146	146	146	146	146	146	147	147	147	147	147
CO PPM	18.5	18.6	18.6	20.9	17.5	17.4	17.1	21	122	31	33.5	33
NOX PPM	10.4	10.7	10.6	10.6	10.5	10.5	10.60	10.60	10.3	10.7	10.4	10.7
O2 %	15.59	15.53	15.55	15.45	15.55	15.49	15.4	15.4	16.3	15.5	15.4	15.3
Hot Well Level %	139	142	135	139	13.5	164	160	146	157	135	149	159

1150 SET POINT 449 — 1103 B SET POINT 444 — 1150 SET POINT — 1103 B SET POINT

SCANNER BLOWER (ON (X) N DUCT BURNER 442 SP — SCANNER BLOWER ON Y/N DUCT BURNER S.P.

COMPRESSORS

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator PSI	233	233	235	235	235	235	235	237	237	239	231	231
Gas Receiver PSI	420	420	420	420	420	420	420	420	420	420	420	420

NEBRASKA BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level IN												
Drum Pressure PSI												
Steam Flow #/HR												
Steam Temp °F												
NOX PPM												
O2 %												
Blow Down Conductivity MHOS												

ON LINE TURBINE WATER WASH YES NO — CODUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION NO. 1 YES NO NO. 2 YES NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75- 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP-pH 8.5 -9.5		
Conductivity<20mmhos		
LP-pH 8.5-9.5		
Conductivity<20mmhos		
HP		
pH 9.5 - 10.5		
Conductivity 75-150		
Phosphate 5-15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 - 10.5		
Conductivity 75 - 150		
Phosphate 5-15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 - 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 - 10.5		
Conductivity 75 - 200		
Silica		
Phosphate 5-25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:

DATE: 3-12-14

Hueneme Paper Mill

SAFETY IS ALWAYS NO. 1

ACADF 000-3011 REV.C WQA 1855D

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident Modbus data communication failure	Incident Date February 17, 2014
Exact Location Incident: Cogen	
Reported By Steve Chuhaloff	Estimated Start and Stop Times of Incident: 02/17/2014 14:53 to 02/17/2014 15:00
Root Cause: under investigation	

Incident Type:
- ☐ Spill Internal
- ☐ Spill External
- X Air Emission
- ☐ Other_____
- ☐ Improper Waste Disposal
- ☐ Near miss or below spill release guidelines

Released To
- ☐ Storm Water System
- ☐ Process Sewer
- ☐ Ground (External)
- X Near Miss
- ☐ Other_____
- ☐ Secondary Containment
- ☐ Air
- ☐ Ground (Inside Mill Property)

Detailed Description of Event
At 3:05 p.m. on Feb.17,2014, Todd Royer paged me to let me know that we had a "mod buss failure " in cogen. I proceeded to call APCD, left a message as to the nature of the call, and then emailed the people for the mill that I thought should know. The duration of the incident was 7 minutes.
(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
☐ _____ Gallons ☐ _____ Pounds ☐ Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.) . APCD left phone message as per recording.*
List Hueneme Personnel Contacted Rudy Rehbein, Charlie Wilson, Jim Grimme, Robyn Lebrilla, Victor Kumpera	Any Acute or Chronic Health Risks *(refer to MSDS) N/A*

Describe Any Emergency Response Actions:

Suggestions to Prevent Reoccurrence 1. N/A – outside mill control	Estimated Completion Date 1.
2.	2.

Root Cause after investigation Investigation showed that the voltage drop in the mill was due to SCE power issue. On 2/17 at 14:51, a vehicle damaged a pole causing cross arm to break and conductors to wrap together.	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ☐ 1 ☐ 2 ☐ 3 ☐ 4
Investigated By Jim Grimme	Investigated Date 2/18/14

Follow Up	By When	Completion Date	By Whom
N/A			

Issued by	Reviewed by	Approved by
2/19/14 Department Manager	2/20/14 Technical Superintendent	Mill Manager 2/20/2014

Print Time: 2/19/2014 12:26:05 PM
Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

March 5, 2014

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: Fuel data loss

Dear Mr. Olson:

This letter is a follow up on the call made by Howard Gastelum to the VCAPCD Breakdown Center Hotline on February 27, 2014 at about 3:00 AM.

On February 27, 2014, there was a momentary data communication loss between Mark V turbine control system and the distributed control system (DCS). DCS showed a modbus data collection failure alarm, which includes the turbine fuel data, at about 1:20 AM. This incident was a modbus system-related issue. The mill is exploring on upgrading the system. There was insignificant impact on PI data as reflected on the daily emission sheet due to the short duration of data communication loss (less than 15 minutes).

The Daily Emission Sheets, PI trends, Cogen Reports and Environmental Incident Report have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution

Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: Judy Gelbar	3/5/2014
Title: Mill Manager	

Start Time: 2/27/2014 7:00 End Time: 2/26/2014 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/h	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) (3% O_2)
8:00	0.02	269.52	612.35	71.15	29.72	1.14	2.33	0.72	**10.32**	15.52	17.21	**10.23**	10.48	10.48	25.29	2.85	
9:00	-0.02	267.54	612.31	69.91	28.81	1.13	2.36	0.72	**10.40**	15.50	17.97	**10.85**	10.48	10.48	25.22	2.53	
10:00	1.43	269.27	613.49	69.70	28.89	1.13	2.39	0.73	**10.49**	15.51	21.62	**12.87**	10.51	10.49	25.25	2.05	
11:00	1.61	267.35	614.47	71.43	29.79	1.15	2.35	0.72	**9.84**	15.59	17.70	**10.61**	10.31	10.43	25.28	2.06	
12:00	0.05	266.52	614.45	72.39	30.65	1.16	2.34	0.72	**10.34**	15.64	17.45	**10.55**	10.50	10.44	25.32	1.35	
13:00	0.05	266.35	614.52	72.41	30.71	1.16	2.34	0.72	**10.33**	15.59	17.40	**10.41**	10.49	10.43	25.34	1.21	
14:00	0.05	266.69	614.63	72.41	30.45	1.16	2.35	0.72	**10.33**	15.59	17.21	**10.29**	10.48	10.49	25.36	1.29	
15:00	2.46	251.53	610.58	65.78	26.71	1.13	2.16	0.70	**9.72**	15.63	24.42	**13.77**	10.30	10.42	25.31	1.41	
16:00	3.51	236.46	602.73	58.64	22.33	1.16	1.98	0.69	**9.29**	15.77	30.61	**16.48**	10.48	10.42	25.30	1.71	
17:00	5.96	238.46	604.80	59.24	22.71	1.16	1.98	0.69	**9.44**	15.72	33.06	**18.16**	10.52	10.43	25.33	1.78	
18:00	5.95	236.63	605.68	59.03	22.63	1.16	1.98	0.69	**9.40**	15.72	33.13	**18.06**	10.50	10.50	25.32	1.87	
19:00	5.96	238.02	606.88	58.65	22.51	1.14	2.01	0.69	**9.43**	15.73	33.54	**18.43**	10.46	10.49	25.32	2.20	
20:00	5.45	237.65	606.87	58.37	22.03	1.15	1.99	0.69	**9.46**	15.69	32.43	**17.70**	10.53	10.50	25.26	2.85	
21:00	6.06	236.14	607.95	58.29	22.05	1.13	1.98	0.69	**9.38**	15.66	33.42	**18.35**	10.47	10.49	25.27	2.74	
22:00	5.51	254.87	614.27	66.34	26.64	1.17	2.20	0.71	**10.26**	15.51	29.04	**16.88**	10.68	10.56	25.24	3.38	
23:00	0.12	266.35	615.83	73.66	30.53	1.14	2.31	0.71	**10.32**	15.56	16.53	**9.91**	10.47	10.54	25.25	3.50	
0:00	0.18	266.01	615.89	74.35	31.01	1.15	2.32	0.72	**10.31**	15.58	16.71	**9.93**	10.47	10.54	25.33	3.60	
1:00	2.22	266.35	619.48	74.56	31.06	1.14	2.32	0.72	**10.45**	15.48	19.91	**12.18**	10.53	10.49	25.36	3.76	
2:00	0.05	266.35	617.35	76.43	32.06	1.16	2.34	0.72	**10.37**	15.38	15.08	**9.09**	10.53	10.51	25.29	3.85	
3:00	4.69	233.57	606.98	59.70	22.73	1.21	2.02	0.71	**9.26**	15.62	31.77	**16.62**	10.58	10.52	25.34	3.71	
4:00	5.35	266.35	623.54	74.34	31.32	1.13	2.34	0.72	**10.57**	15.26	25.08	**15.37**	10.51	10.51	25.27	3.65	
5:00	0.14	266.35	617.55	75.87	31.83	1.14	2.31	0.72	**10.36**	15.35	16.15	**9.73**	10.51	10.51	25.09	3.51	
6:00	0.03	266.86	616.19	75.01	31.11	1.14	2.35	0.72	**10.36**	15.35	15.99	**9.62**	10.51	10.51	25.04	3.57	
7:00	-0.03	268.90	616.18	73.96	30.62	1.12	2.37	0.72	**10.39**	15.41	16.21	**9.69**	10.46	10.49	25.05	3.51	

Comment:

Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
lb/h	lb/h
10.03	10.03

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
13.16	13.16

Stack NOx analyzer	
zero value	0.09
zero drift %	0.09
span value	81.28
span drift %	-0.79

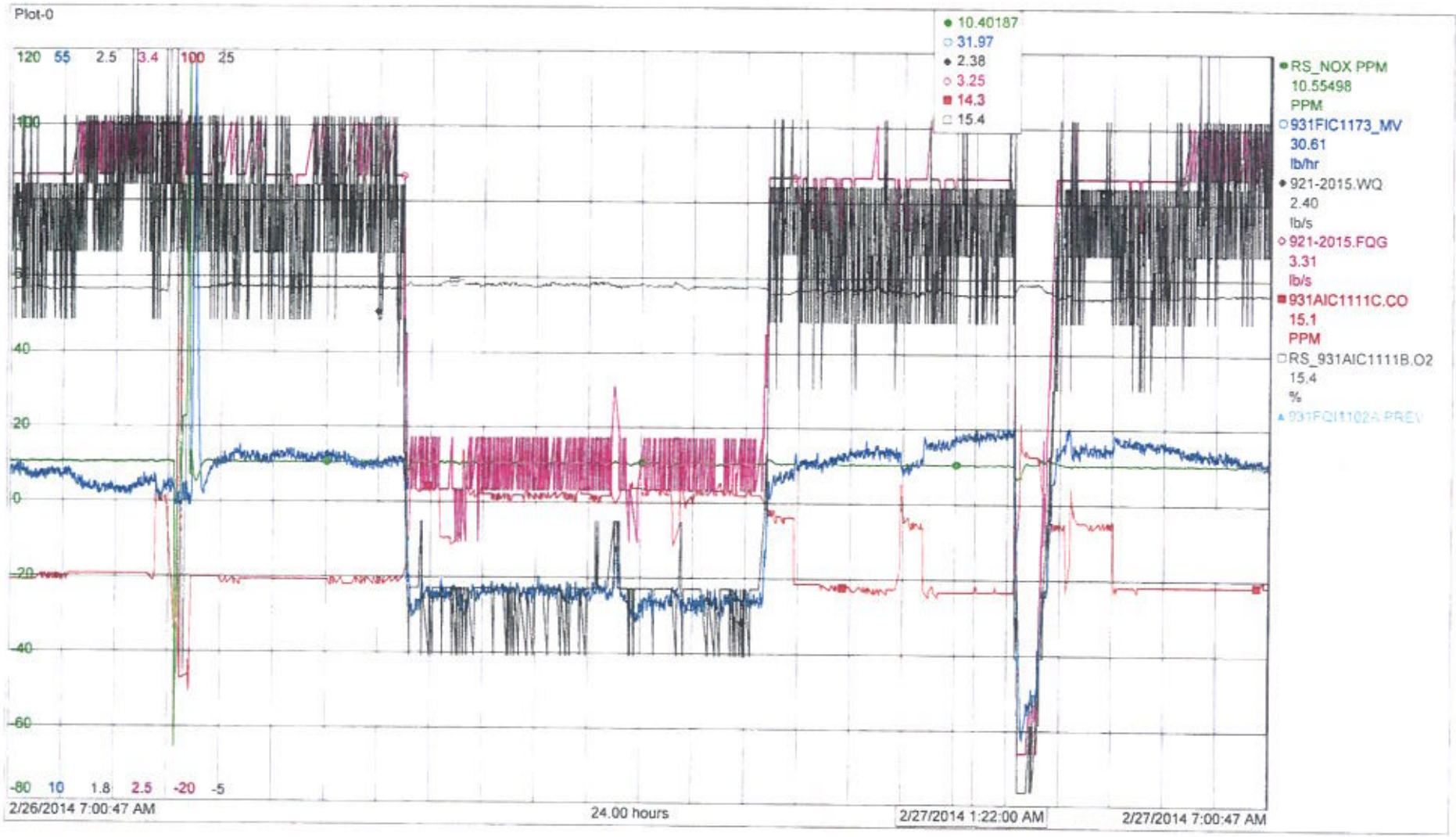
Stack CO Analyzer	
zero value	-0.66
zero drift %	-0.66
span value	90.34
span drift %	0.09

Stack O2 Analyzer	
zero value	21.05
zero drift%	0.64
span value	-0.05
span drift %	-0.19

Nebraska Gas	0

PRINT TIME: 2/27/2014 11:30 AM

NOTE: This document is valid for only ONE week after print time


Plot-0
10.40187
31.97
2.38
3.25
14.3
15.4
120 55 2.5 3.4 100 25
-80 10 1.8 2.5 -20 -5
RS_NOX PPM
10.55498
PPM
931FIC1173_MV
30.61
lb/hr
921-2015.WQ
2.40
lb/s
921-2015.FQG
3.31
lb/s
931AIC1111C.CO
15.1
PPM
RS_931AIC1111B.O2
15.4
%
2/26/2014 7:00:47 AM
24.00 hours
2/27/2014 1:22:00 AM
2/27/2014 7:00:47 AM


COGEN
2014-03-04 00:49
36MF
R 931FQI374A.BRSTP
NEBRASKA BRNR STOP'D
Value
13:23:48
RSMT_4-20MA ROSEMOUNT CEMS VALUES
Time Scope: 10 days
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
75
0.75
50
0.50
25
0.25
0
0.00
3/3/14 - 3/6/14
shutdown -
power switch gear
maintenance
ON Name
Description
Attribute
Treatment
Ruler Time
Ruler Value
Current Value
Unit
Filter
Time Offset
Form
931AIC1111A.NOX
B&W SCR INLET NOX
MV
Mom
01:00 2014-02-28
74.50
67.77
PPM
931AIC1111C.CO
B&W BLR STACK RAW CO
MV
Mom
01:00 2014-02-28
14.62
25.54
PPM
931AIC1111B.O2
B&W BLR RAW O2%
MV
Mean
01:00 2014-02-28
15.21
15.37
%
931AIC1111D.NOX
B&W BLR STACK NOX
MV
Mean
01:00 2014-02-28
10.12
9.84
PPM
931-AIC-1111.INCAL
RSMT CEMS IN CAL
MV
Mom
01:00 2014-02-28
0
0
931-aic-1111.trb
RSMT CEMS TROUBLE
MV
Mom
01:00 2014-02-28
0
0
<
>
<<
>>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR

DRY SHIFT OPERATOR

NAME: KOB

TIME: 0621

DATE: 2/26/14

SAFETY IS ALWAYS NO. 1

Hueneme Pasar Mill

CHEMICAL PUMPS

	Level	Rate ml/min
Rate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H2O	CONCENTRATE H2O	LI	HP	SCC LP	TURBINE	MAXON	BURNER	NEBRASKA	ATTS
CURRENT	16650427	34611692	15888554	19493	1706	38446710	17062520	787137	56875		2963
PREVIOUS	16608880	33554964	15444576	20036O	1684	38411710	13611180	787133	12600		56980

NEW DEMIN TRAILER: YES / NO — TIME

AMMONIA DELIVERY: YES / NO — % FULL: 70/72

NEBRASKA ONLINE TIME: FROM: TO:

NEBRASKA WARM STORAGE CHECK: YES / NO

GAS & ELECTRIC READING

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%	50.75	53.50	54.62	52.38	42.0	42.0	91.8	50.7	51	51	51.5	52
Inlet Temp	°F	54	53	55	55	55	55	55	54	54	54	54	55
Humidity	%	46.7	34.7	28.5	36.5	43	49	53	60	60.5	60	60	59
Vibration (Max)	MILS	0.75	.15	.15	.16	13	13	12	16	14	17	17	16
Steam Injection	#/SEC	2.38	2.38	2.38	2.38	2.00	700	2	2.3	2.3	2.3	2.3	2.3
Turbine L.O. Level	%	90	90	90	90	90	90	90	90	90	90	90	90
148	°F	1440	1439	1442	1448	1383	1387	1387	1957	1951	1960	1959	1962

BATTERIES 135 V — HP RECOUPE FAL — AIR INLET DIFF 2.4 IN/H20 — HP RECOUPE FAR — L.O. DIFFERENTIAL 7 PSI — HP RECOUPE AFT

BATTERIES 135 V — HP RECOUPE FAL — AIR INLET DIFF 3 IN/H20 — HP RECOUPE FAR — L.O. DIFFERENTIAL 7 PSI — HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F	152	152	152	152	152	152	154	153	153	153	153	152
L.O. Supply	°F	124	124	124	124	124	124	124	122	122	122	122	123
Gen. Vibration (Max)	IPS	.33	.34	36	.34	.34	.37	36	37	37	37	36	37
Tie Line	MW	18.05	13.09	13.05	13.00	13.06	702	13	13.1	129	13.1	12.9	13

GEN. 1200 AMPS — GEN.VARS 603 MEGA VARS — FIELD 205 AMPS — FIELD VOLTS 180 V — COOLING TWR INLET 80 F — COOLING TWR INLET 72 F

GEN. AMPS — GEN.VARS MEGA VARS — FIELD AMPS — FIELD VOLTS V — COOLING TWR INLET F — COOLING TWR INLET F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F	710	710	709	712	712	711	708	704	707	709	711	710
HP Drum Level	IN	1.2	1.1	1.0	1.1	1.4	1.0	.5	1.1	1	1.1	.9	1.1
LP Drum Level	IN	.8	.9	.8	.5	04	1.0	1	1	1	.9	1	1.1
HP Drum Pressure	PSI	485	484	484	484	477	477	477	477	477	478	477	478
LP Drum Pressure	PSI	147	147	148	148	147	146	144	148	194	194	149	147
CO	PPM	17.1	17.9	17.0	17.5	332	332	34.5	16.4	17.1	16.1	16.3	16.1
NOX	PPM	10.4	10.5	10.5	10.5	10.6	10.7	10.7	10.3	10.4	10.4	10.3	10.4
O2	%	15.55	15.55	15.73	15.62	15.65	15.73	15.7	15.6	15.2	15.3	15.4	15.3
Hot Well Level	%	162	155	162	139	157	153	137	144	152	152	162	143

1150 SET POINT 449 — 1103 B SET POINT 444 — SCANNER BLOWER (ON O/N — DUCT BURNER 447 SP

1150 SET POINT — 1103 B SET POINT — SCANNER BLOWER ON Y/N — DUCT BURNER S.P

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI	231	233	233	235	237	239	237	239	239	233	237	235
Gas Receiver	PSI	419	419	420	420	420	420	420	420	420	421	421	420

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity MHOS													

ON LINE TURBINE WATER WASH: YES / NO — CONDUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION: NO. 1 YES / NO — NO. 2 O / NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5	8.81	
Conductivity <5mmhos	6.95	
Silica < 20 ppb	4	
R.O.		
Feed TDS<1000 ppm	600	
Permeate TDS<10 ppm	9.26	
pH (Feed 7.5)	5.95	
CONDENSATE		
HP–pH 8.5 – 9.5	9.22	
Conductivity<20mmhos	10.55	
LP–pH 8.5–9.5	9.53	
Conductivity<20mmhos	14.72	
HP		
pH 9.5 – 10.5		
Conductivity 75–150		
Phosphate 5–15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 – 10.5	9.22	
Conductivity 75 – 150	60.65	
Phosphate 5–15 ppm	8.91	
Silica <5 ppm	.103	
Iron ppm		
MIXED BED		
pH 6.0 – 7.5	6.85	
Conductivity< 1mmhos	.05	
Silica <10 ppb	1	
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm	.85	
Running (1 or 2)	1	
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES: Lost MODBUS Signal @ 1:20 P.M. HOWARD Called ADCI

Huene...ie Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident Modbus Data Loss		Incident Date February 27, 2014
Exact Location Incident: Cogen		
Reported By Howard Gastelum	Estimated Start and Stop Times of Incident: 02/27/2014 1:20 AM	Root Cause: unknown

Incident Type:	Released To
☐ Spill Internal	☐ Storm Water System
☐ Spill External	☐ Process Sewer
X Air Emission	☐ Ground (External)
☐ Other	X Near Miss
☐ Improper Waste Disposal	☐ Other
☐ Near miss or below spill release guidelines	☐ Secondary Containment
	☐ Air
	☐ Ground (Inside Mill Property)

Detailed Description of Event

DCS showed a modbus data collection failure alarm at about 1:20 AM. This includes turbine operating data (fuel data, etc). This incident was a modbus computer system-related issue. No SCE power-related incident.

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
☐ _____ Gallons ☐ _____ Pounds ☐ Other _____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call. , APCD*
List Hueneme Personnel Contacted Foreman	Any Acute or Chronic Health Risks *(refer to MSDS) N/A*
Describe Any Emergency Response Actions:	

Suggestions to Prevent Reoccurrence	Estimated Completion Date
1.	1.
2.	2.

Root Cause after investigation	Severity Level *(level 1 and 2 must be tracked through SHIMS)*
modbus computer system-related issue	☐ 1 ☐ 2 ☐ 3 ☐ 4
Investigated By	Investigated Date 2/28/14

Follow Up	By When	Completion Date	By Whom

Issued by	Reviewed by	Approved by
Department Manager	Technical Superintendent	Mill Manager 3/5/2014

4/4/14

Print Time: 3/4/2014 5:14:25 PM

Note: This document is valid for only ONE week after print time!

NEW INDY
CONTAINERBOARD

March 10, 2014

Lyle Olson
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

Subject: PI data loss – fuel and steam injection data

Dear Mr. Olson:

This letter is a follow up on the call made by Charlie Wilson to the VCAPCD Breakdown Center Hotline on March 6, 2014 at about 11:42 PM.

During the cogen start-up on March 6, it was observed that the Modbus data was not updating at about 11:42 PM. PI lost fuel data and steam injection from March 6 at 10:52 PM to March 7 at 8:35 AM, a total of 9.72 hrs.

The mill had its annual maintenance outage from March 3 to March 6. During this outage, a new HMI (Human Machine Interface) system had been set up for cogen. This new HMI system allows for redundant back up of Modbus signals should primary Modbus connection fail. Since it was a new HMI system, some configuration settings needed to be amended. Contractor continued the verification process of the new system on March 7. No data was lost within the new HMI system. In addition, there was no excess emission during this incident.

The Daily Emission Sheets, PI trends, Cogen Reports and Environmental Incident Report have been provided for your review. If you have any questions or require any additional information, please call me at (805) 271-7284.

Sincerely,

Robyn Lebrilla
Environmental Engineer

NEW INDY OXNARD, LLC
5936 PERKINS ROAD • OXNARD, CALIFORNIA 93033 • WWW.NEWINDYCONTAINERBOARD.COM
PHONE (805) 986-3881 • FAX (805) 488-5186

Ventura County
Air Pollution
Control District

RESPONSIBLE OFFICIAL'S CERTIFICATION FORM

Ventura County APCD Rule 33.9 requires that "*any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official.*" Therefore, this form shall be signed by the company's Responsible Official and submitted with all such reports, including, but not limited to semi-annual reports, deviation and emergency reports and any periodic reports required by a Part 70 permit. However, when submitting your Annual Compliance Certifications, please use the form titled Annual Compliance Certification Signature Cover Form.

Semi-annual reports, deviations and emergency reports and any periodic reports required by your Part 70 permit should be submitted to:

Lyle Olson
Air Quality Engineer
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document is true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: Rudy Gelbrew Title: Mill Manager	3/10/2014

DAILY ENVIRONMENTAL REPORT

End Time: 3/7/2014 7:00 — Start Time: 3/6/2014 7:00

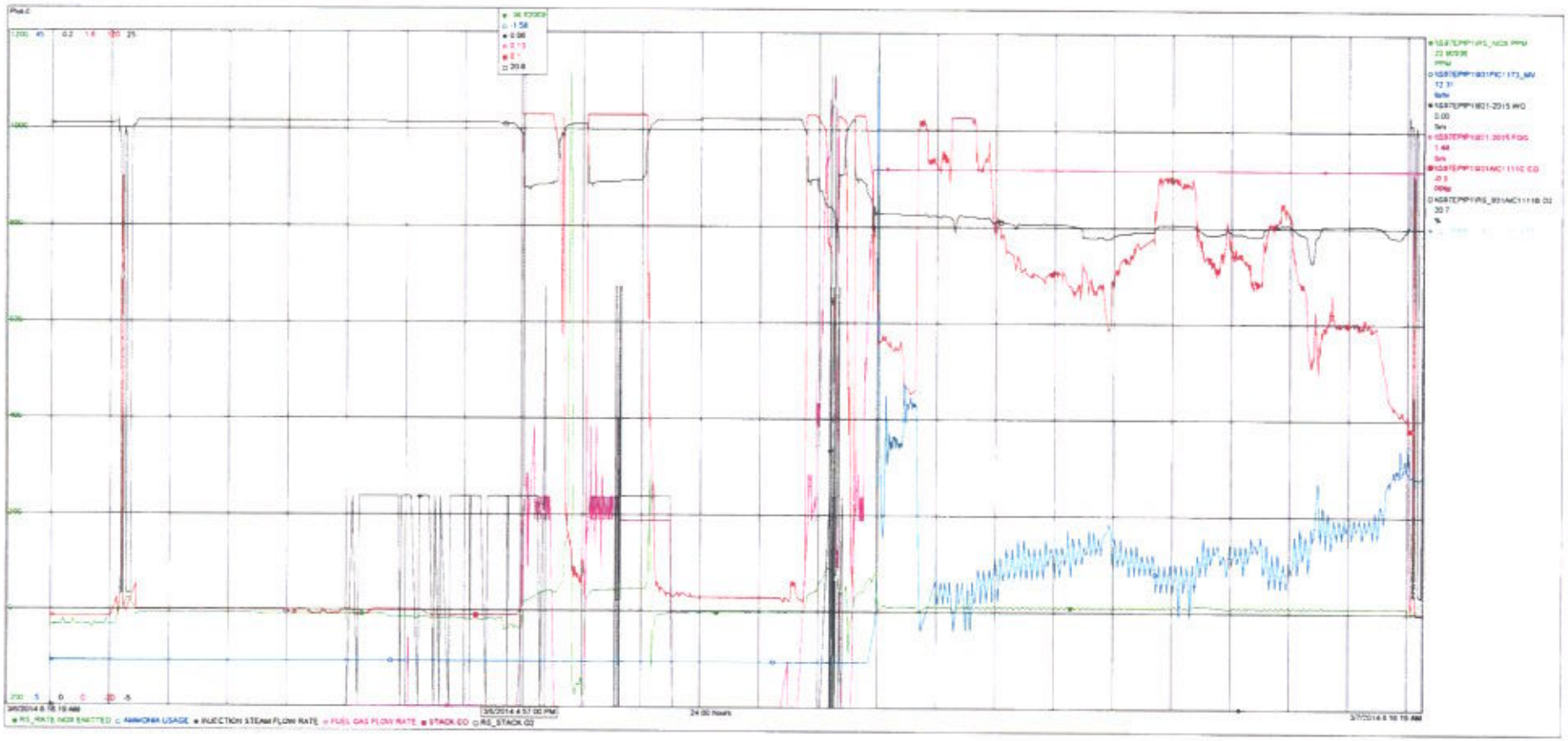
Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR exit NOx ppm	Ammonia Usage lb/h	NH3 NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) (3% O_2)
8:00	Good Data For	No Good Data For Calib	Good Data Fo	No Good Data For Calib	Good Data For	ood Data			Good Data Fo	od Data	ood Data	ood Data	Good Data Fo	#DIV/0!	Good Data For	Good Data For	
9:00	Good Data For	No Good Data For Calib	Good Data Fo	No Good Data For Calib	Good Data For	ood Data			Good Data Fo	od Data	ood Data	ood Data	Good Data Fo	#DIV/0!	Good Data For	Good Data For	
10:00	0.05	0.00	497.26	0.09	-1.58	-269622.53	0.00	0.00	0.00	20.93	260.84	0.03	29.75	-29.75	25.22	-3.30	
11:00	0.05	0.00	497.27	0.34	-1.58	-74024.37	0.00	0.00	0.00	21.07	-5.41	0.00	5.36	-17.55	25.27	-3.02	
12:00	0.05	0.00	497.26	0.34	-1.58	-73533.42	0.00	0.00	0.00	21.07	-5.41	0.00	5.34	-13.48	25.38	-3.42	
13:00	0.05	0.00	497.26	0.34	-1.58	-73533.42	0.00	0.00	0.00	21.07	-4.96	0.00	-6.10	-5.62	25.46	-3.56	
14:00	0.05	0.00	497.26	0.34	-1.58	-73533.42	0.00	0.15	0.00	21.07	13.71	0.00	5.99	5.81	25.57	-3.78	
15:00	0.05	0.00	497.26	0.34	-1.58	-73533.42	0.05	-104.48	0.00	21.05	3.30	0.00	-8.45	-6.84	25.56	-3.98	
16:00	0.05	0.00	497.26	0.34	-1.58	-73533.42	0.05	-87.89	0.00	21.01	27.97	0.00	-14.48	-9.64	25.48	-4.28	
17:00	0.05	1.35	497.27	0.35	-1.58	-73533.42	0.06	-109.32	0.04	20.90	67.04	0.12	-22.48	-15.13	25.49	-4.52	
18:00	0.05	22.04	497.26	2.80	-1.58	-14900.98	0.02	0.05	2.55	19.33	938.38	11.95	79.18	14.07	25.51	-4.83	
19:00	0.05	39.45	497.26	3.28	-1.58	-4422.23	0.03	0.05	6.16	18.61	287.87	20.93	34.80	30.50	25.41	-4.27	
20:00	0.05	21.67	497.27	1.28	-1.58	-9098.51	0.03	0.06	1.58	20.91	84.28	19.72	7.76	40.58	25.31	-3.90	
21:00	0.05	0.00	497.27	1.13	-1.58	-22468.54	0.00	0.00	0.00	21.19	-58.38	-0.01	-0.57	13.86	25.25	-3.59	
22:00	0.05	9.48	497.27	1.32	-1.58	-20872.37	0.00	0.00	1.04	20.56	9.03	4.05	7.67	4.82	25.31	-3.59	
23:00	3.14	58.90	510.46	21.74	-0.58	-5473.24	0.02	0.01	18.32	18.30	440.58	24.70	50.99	19.21	25.31	-3.59	
0:00	5.95	117.81	562.86	47.90	11.49	1.41	0.00	0.00	5.21	16.98	101.74	28.36	9.62	22.74	25.35	-3.59	
1:00	8.19	117.81	571.27	16.29	3.46	1.39	0.00	0.00	4.62	16.84	140.00	39.73	10.04	23.55	25.44	-3.59	
2:00	6.62	117.81	581.89	23.50	5.75	1.52	0.00	0.00	4.87	16.58	99.38	27.96	10.48	19.05	25.53	-3.59	
3:00	6.02	117.81	589.12	26.50	6.86	1.57	0.00	0.00	4.81	16.23	85.88	23.77	10.50	18.34	25.64	-3.30	
4:00	6.02	117.81	586.30	22.80	5.67	1.39	0.00	0.00	4.76	16.31	101.72	28.26	10.42	18.47	25.62	-3.80	
5:00	6.03	117.81	580.59	22.69	5.45	1.31	0.00	0.00	5.37	16.35	104.92	30.39	11.70	18.87	25.56	-3.49	
6:00	6.04	117.81	585.59	24.29	6.00	1.43	0.00	0.00	4.77	16.28	97.43	27.09	10.51	18.88	25.51	-3.56	
7:00	11.36	117.81	591.38	30.97	7.82	1.53	0.00	0.00	5.06	16.23	79.34	22.78	10.57	19.52	25.50	-4.31	

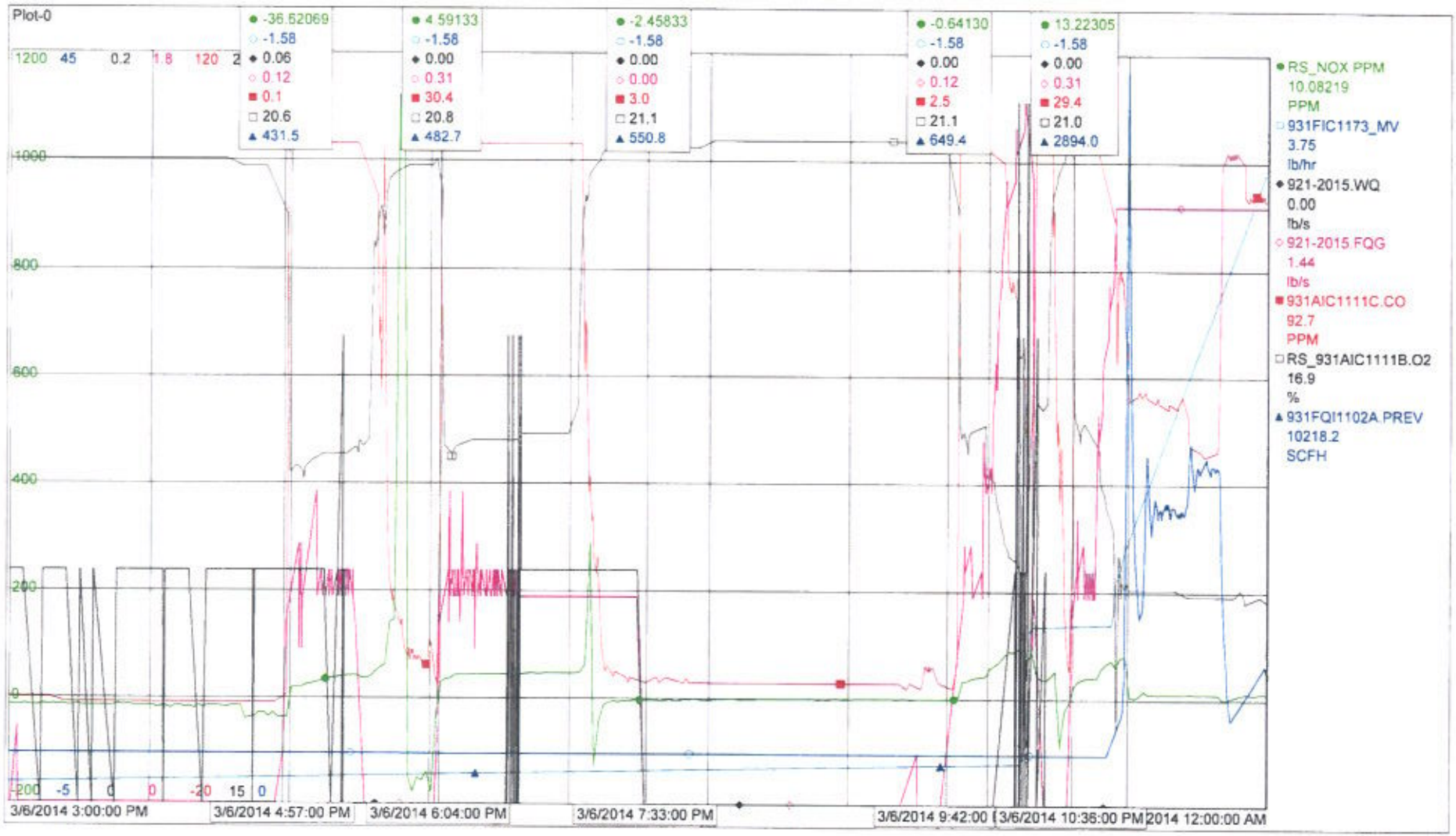
Daily Av Cogen	Daily Av Cog+Neb
NOx	NOx
lb/h	lb/h
3.14	3.14

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
14.08	14.08
Stack NOx analyzer	
zero value	-0.03
zero drift %	-0.03
span value	82.88
span drift %	1.15
Stack CO Analyzer	
zero value	-1.59
zero drift %	-1.59
span value	90.19
span drift %	-0.08
Stack O2 Analyzer	
zero value	21.21
zero drift%	1.39
span value	-0.02
span drift %	-0.09
Nebraska Gas	0

Comment: Turbine down on 3/6/14 (last day of 4-day annual maintenance outage) from 7:00 AM - 4:57 PM. Cogen tripped as follows during start-up, 5:33 PM - 6:04 PM; 7:33 PM - 9:42 PM & 10:25 PM - 10:36 PM. Total downtime of 12.8 hrs.
APCD notified by CWilson on 3/6/14 at 11:42 PM for modbus signal loss resulting to PI data loss of turbine fuel & steam injection from 3/6/14 @10:52 PM to 3/6/14 @ 8:35 AM (9.72 hrs)

PRINT TIME: 3/7/2014 3:00 PM
NOTE: This document is valid for only ONE week after print time




Plot-0
1200 45 0.2 1.8 120 2
-36.52069
-1.58
0.06
0.12
0.1
20.6
431.5
4.59133
-1.58
0.00
0.31
30.4
20.8
482.7
-2.45833
-1.58
0.00
0.00
3.0
21.1
550.8
-0.64130
-1.58
0.00
0.12
2.5
21.1
649.4
13.22305
-1.58
0.00
0.31
29.4
21.0
2894.0
1000
800
600
400
200
0
-200 -5 0 0 -20 15 0
3/6/2014 3:00:00 PM
3/6/2014 4:57:00 PM
3/6/2014 6:04:00 PM
3/6/2014 7:33:00 PM
3/6/2014 9:42:00
3/6/2014 10:36:00 PM
2014 12:00:00 AM
RS_NOX PPM
10.08219
PPM
931FIC1173_MV
3.75
lb/hr
921-2015.WQ
0.00
lb/s
921-2015.FQG
1.44
lb/s
931AIC1111C.CO
92.7
PPM
RS_931AIC1111B.O2
16.9
%
931FQI1102A.PREV
10218.2
SCFH


COGEN
2014-03-07 16:02
36M
931-2934.CS
RO CONDUCTIVTY < 16% Value
16:01:20
RSMT_4-20MA ROSEMOUNT CEMS VALUES
Time Scope: 1 day
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
08:00
2014-03-06
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 16:46 2014-03-06 0.34 56.97 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 16:46 2014-03-06 -0.91 28.77 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 16:46 2014-03-06 20.95 15.29 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 16:46 2014-03-06 0.24 10.03 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 16:46 2014-03-06 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 16:46 2014-03-06 0 0
< >
<< >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

End Time 3/8/2014 7:00 Start Time 3/7/2014 7:00

DAILY ENVIRONMENTAL REPORT

Time	Duct burner gas flow MSCFH	Turbine gas flow MSCFH	SCR Temperature °F	SCR inlet NOx ppm	Ammonia Usage lb/h	NH3:NOx mole ratio	Injection steam rate lb/s	Steam to fuel ratio lb/lb	NOx lb/h	Stack O2 %	Stack CO 15% O2 ppm	CO lb/h	Stack NOx 15% O2 ppm	3h Running Average NOx	Nebraska O2 %	Nebraska NOx %	Nebraska Corrected NOx (ppm) ($3\% O_2$)
8:00	6.10	117.81	583.48	39.27	10.10	1.58	0.00	0.00	4.86	16.36	68.31	19.20	10.60	10.56	25.52	-4.21	
9:00	20.45	147.85	638.21	48.77	15.75	1.54	1.71	0.21	8.47	15.12	27.50	13.46	10.62	10.59	25.52	-4.32	
10:00	16.28	260.21	629.26	84.21	22.77	0.96	2.57	0.75	10.84	15.38	28.14	17.70	10.57	10.62	25.50	-4.14	
11:00	8.44	272.02	631.30	87.30	23.44	0.90	2.59	0.77	9.88	15.26	26.00	16.63	9.94	10.40	25.49	-4.37	
12:00	7.32	274.73	630.55	87.05	23.96	0.93	2.65	0.79	11.00	15.33	27.02	17.26	10.48	10.35	21.34	8.41	
13:00	6.99	271.78	624.18	87.52	20.31	2.35	2.71	0.80	10.65	15.48	30.85	19.09	10.39	10.27	25.85	-0.09	
14:00	7.78	259.45	616.38	82.79	17.62	0.92	2.42	0.76	10.40	15.60	35.12	20.97	10.52	10.46	25.85	-0.17	
15:00	8.01	272.57	620.01	87.67	19.95	0.91	2.56	0.77	10.95	15.45	31.57	19.93	10.56	10.49	25.70	-0.58	
16:00	7.54	265.82	621.35	87.05	19.65	1.53	2.55	0.78	10.61	15.41	30.48	18.78	10.51	10.53	25.70	-0.24	
17:00	7.20	279.00	624.10	86.28	19.48	0.93	2.73	0.80	11.16	15.39	31.88	20.50	10.56	10.54	25.70	0.22	
18:00	7.34	110.92	623.66	86.47	19.43	20.73	1.16	0.34	4.89	15.36	31.63	9.17	10.46	10.51	25.70	0.43	
19:00	6.87	231.72	623.62	87.30	19.57	7.42	2.40	0.71	8.89	15.36	31.76	16.36	10.50	10.50	25.71	0.78	
20:00	6.26	278.59	622.13	87.20	19.56	0.89	2.65	0.79	10.97	15.39	31.91	20.34	10.50	10.49	25.68	1.10	
21:00	6.37	275.23	621.94	81.59	19.43	0.83	2.62	0.78	10.94	15.41	32.15	20.40	10.51	10.50	25.64	1.06	
22:00	6.08	276.25	621.89	82.18	19.38	0.81	2.64	0.78	10.95	15.41	32.13	20.41	10.49	10.50	25.61	1.26	
23:00	6.08	276.59	621.95	81.75	19.32	0.81	2.66	0.79	10.99	15.40	32.10	20.40	10.52	10.51	25.62	1.21	
0:00	6.12	276.60	621.84	80.82	19.11	0.81	2.65	0.79	11.01	15.40	32.93	21.09	10.54	10.52	25.60	1.26	
1:00	6.12	276.58	621.16	80.51	19.00	0.81	2.65	0.78	10.95	15.42	33.61	21.37	10.47	10.51	25.65	1.02	
2:00	6.08	276.42	619.41	81.02	19.04	0.81	2.64	0.78	10.97	15.41	33.54	21.33	10.52	10.51	25.70	0.73	
3:00	6.13	276.42	619.44	81.99	19.37	0.81	2.65	0.78	11.03	15.40	33.39	21.21	10.55	10.51	25.70	0.38	
4:00	6.14	276.42	619.68	85.62	20.82	0.83	2.64	0.78	10.97	15.41	31.79	20.26	10.50	10.52	25.71	-0.11	
5:00	6.14	275.74	619.61	88.22	22.17	0.85	2.64	0.78	10.95	15.47	31.51	20.02	10.50	10.52	25.71	-0.84	
6:00	6.08	275.07	619.61	88.37	22.12	0.84	2.63	0.78	10.86	15.56	31.11	19.70	10.46	10.49	25.71	-0.75	
7:00	7.73	274.84	621.80	88.69	22.27	0.85	2.62	0.78	10.96	15.48	30.60	19.45	10.50	10.49	25.71	-1.22	

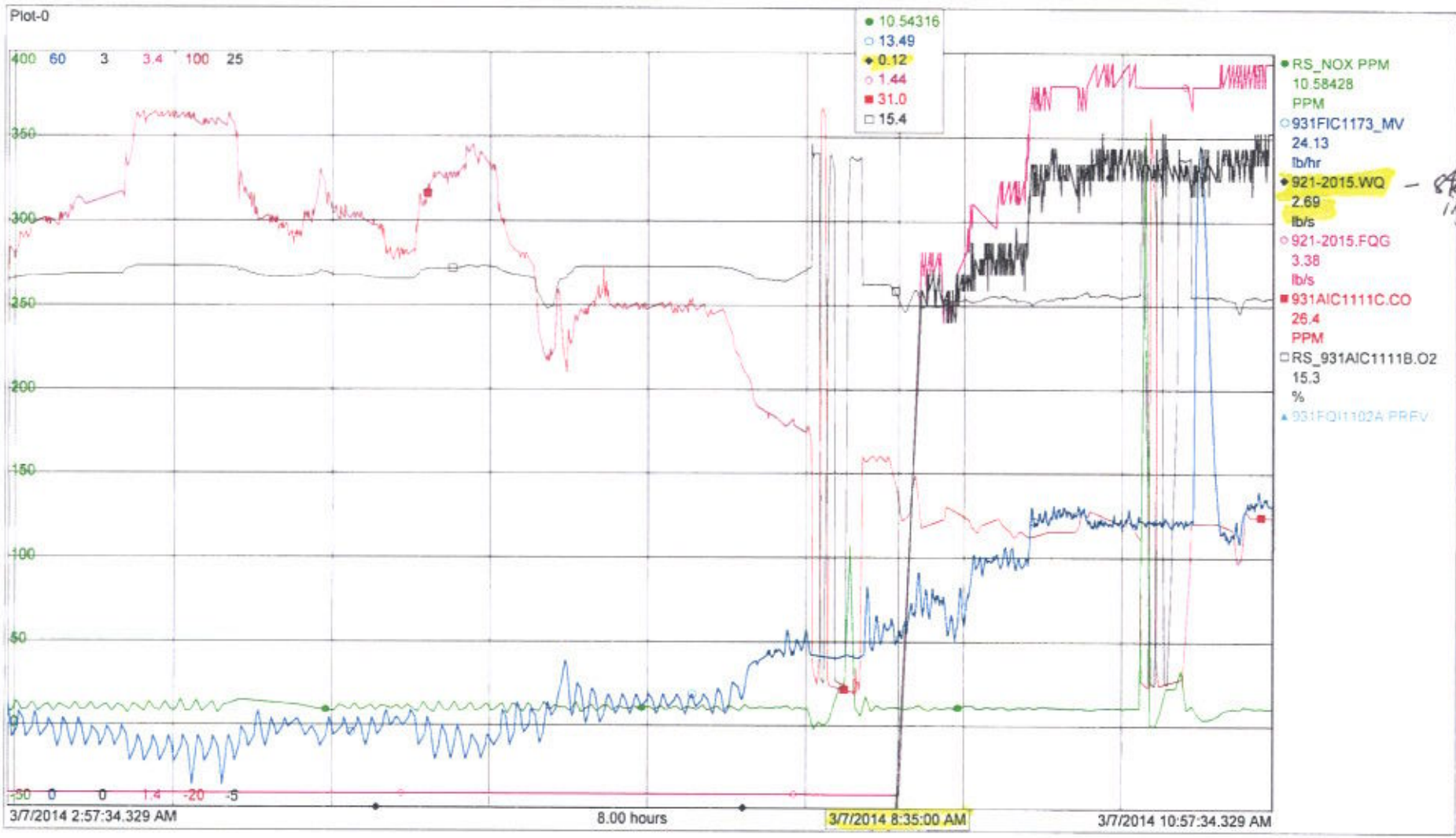
Comment:

Daily Av Cogen NOx	Daily Av Cog+Neb NOx
lb/h	lb/h
10.17	10.17

Daily Av Cogen	Daily Av Cog+Neb
CO	CO
lb/h	lb/h
18.96	18.96
Stack NOx analyzer	
zero value	0.09
zero drift %	0.09
span value	81.31
span drift %	-0.75
Stack CO Analyzer	
zero value	-0.56
zero drift %	-0.56
span value	90.00
span drift %	-0.29
Stack O2 Analyzer	
zero value	21.20
zero drift%	1.35
span value	-0.05
span drift %	-0.19
Nebraska Gas	0

PRINT TIME: 3/10/2014 9:50 AM

NOTE: This document is valid for only ONE week after print time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13.49
0.12
1.44
31.0
15.4
400 60 3 3.4 100 25
350
300
250
200
150
100
50
0
-50 0 0 1.4 -20 -5
RS_NOX PPM
10.58428
PPM
931FIC1173_MV
24.13
lb/hr
921-2015.WQ
2.69
lb/s
921-2015.FQG
3.38
lb/s
931AIC1111C.CO
26.4
PPM
RS_931AIC1111B.O2
15.3
%
3/7/2014 2:57:34.329 AM
8.00 hours
3/7/2014 8:35:00 AM
3/7/2014 10:57:34.329 AM

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR: RDS NAME:

DRY SHIFT OPERATOR: MH NAME:

DATE: 3-6-14

Huntsman Paper Mill

SAFETY IS ALWAYS NO. 1

CHEMICAL PUMPS

	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE
CURRENT	16411423	3879808	1771762	52298	385	3884490	30125 40
PREVIOUS	16886364	0	0	0	0	3881480	2925330

NEW DEMIN TRAILER: YES / NO TIME:

AMMONIA DELIVERY: YES / NO % FULL

NEBRASKA ONLINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK: YES / NO

GAS & ELECTRIC READING

	MAXON	BURNER	NEBRASKA	MEGAWATTS
CURRENT	906769	60913		59727
PREVIOUS	906479	0		59664

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%											28.4	28.7
Inlet Temp	°F											63	63
Humidity	%											49.5	49.5
Vibration (Max)	MILS											17	17
Steam Injection	#/SEC												
Turbine L.O. Level	%											100	100
148	°F												

BATTERIES V | HP RECOUPE FAL

AIR INLET DIFF IN/H2O | HP RECOUPE FAR

L.O. DIFFERENTIAL PSI | HP RECOUPE AFT

BATTERIES V | HP RECOUPE FAL

AIR INLET DIFF IN/H2O | HP RECOUPE FAR

L.O. DIFFERENTIAL PSI | HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F												
L.O. Supply	°F												
Gen. Vibration (Max)	IPS											37	28
Tie Line	MW											11	11

GEN. AMPS | GEN.VARS MEGA VARS

FIELD AMPS | FIELD VOLTS V

COOLING TWR INLET F | COOLING TWR INLET F

GEN. AMPS | GEN.VARS MEGA VARS

FIELD AMPS | FIELD VOLTS V

COOLING TWR INLET F | COOLING TWR INLET F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F											690	687
HP Drum Level	IN											.4	.3
LP Drum Level	IN											1.5	2.2
HP Drum Pressure	PSI											447	450
LP Drum Pressure	PSI											467	459
CO	PPM											97	110
NOX	PPM											9.6	9.3
O2	%											16.5	16.5
Hot Well Level	%											135	140

1150 SET POINT | 1103 B SET POINT

SCANNER BLOWER (ON) Y/N | DUCT BURNER SP

1150 SET POINT | 1103 B SET POINT

SCANNER BLOWER ON Y/N | DUCT BURNER S.P.

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI											242	242
Gas Receiver	PSI											420	420

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity	MHOS												

ON LINE TURBINE WATER WASH: YES / NO CONDUCTIVITY MHOS BOILER FEED WATER PUMP OPERATION: NO. 1 YES / NO NO. 2 YES / NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75 – 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
pH (Feed 7.5)		
CONDENSATE		
HP-pH 8.5 -9.5		
Conductivity<20mmhos		
LP-pH 8.5-9.5		
Conductivity<20mmhos		
HP		
pH 9.5 – 10.5		
Conductivity 75–150		
Phosphate 5–15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 – 10.5		
Conductivity 75 – 150		
Phosphate 5–15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 – 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:

0 July 1807 Auto 1816 cold nd synfuels
from last fill and stop HV
0 Tripped Line al temp had to fill under cools low
2 July 2003 Fill Light
6 July 21:49 Auto 21:57 online 21:55
Tripped 22:16 high HP drum level
0 July 22:33 Auto 22:41 online 22:37

ACADE 000-3011 – REV.2 WPDX 10200

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR NAME: MH

DRY SHIFT OPERATOR NAME: BL

Hueneme Paper Mill

SAFETY IS ALWAYS NO. 1

DATE: 3-2-14

CAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H_2O	CONCENTRATE H_2O	LP	HP	SCG LP	TURBINE
CURRENT	16945045	3985501	18198 21	203690	1870	3779250	33 35280
PREVIOUS	16911473	3879808	1771762	52298	385	3884490	3012540

NEW DEMIN TRAILER YES NO TIME

AMMONIA DELIVERY YES NO % FULL:

NEBRASKA ONLINE TIME FROM: TO:

NEBRASKA WARM STORAGE CHECK YES NO

GAS & ELECTRIC READING

	MAXON	BURNER	NEBRASKA	ITTS
CURRENT	15353	186023		60492
PREVIOUS	906769	60913		59727

TURBINE

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR %	28.62	53.62	6-38	60-69	56 31	61.66	58.9	55.8	56.6	57.3	56.0	55.6
Inlet Temp °F	63	68	70	59	58	57	57	56	56	52	55	55
Humidity %	30 2	23.5	22.2	26 2	17.2	31.0	42.2	47.5	50.6	51.6	16.8	8.7
Vibration (Max) MILS	.14	.23	.22	.22	.22	.23	.24	.22	.23	.21	.23	.22
Steam Injection #/SEC	—	2.62	2.49	2.64	2.62	2.69	2.70	2.75	2.68	2.63	2.63	2.68
Turbine L.O. Level %	100	100	100	100	100	100	100	100	100	100	100	100
T49 °F	1087	1465	1475	1450	1444	1451	1446	1446	1442	1434	1440	1440

BATTERIES V HP RECOUPE FAL

AIR INLET DIFF IN/H20 HP RECOUPE FAR

L.O. DIFFERENTIAL PSI HP RECOUPE AFT

BATTERIES 13.4 V HP RECOUPE FAL

AIR INLET DIFF 2.8 IN/H20 HP RECOUPE FAR

L.O. DIFFERENTIAL 6.1 PSI HP RECOUPE AFT

GENERATOR

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain °F	152	155	155	156	156	155	157	157	156	155	155	154
L.O. Supply °F	123	123	123	125	125	125	124	124	123	123	122	122
Gen. Vibration (Max) IPS	.28	.30	.28	.28	.31	.28	.29	.34	.28	.30	.29	.29
Tie Line MW	3.05	13 58	13.48	13.52	13.53	13.53	13.44	13.41	13.48	13.50	13.37	13.44

GEN. AMPS GEN.VARS MEGA VARS

FIELD AMPS FIELD VOLTS V

COOLING TWR INLET F COOLING TWR INLET F

GEN. 1200 AMPS GEN.VARS 2.89 MEGA VARS

FIELD 190 AMPS FIELD VOLTS 168 V

COOLING TWR INLET 84 F COOLING TWR INLET 78 F

COGEN BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp °F	698	709	709	710	710	710	710	710	710	710	710	710
HP Drum Level IN	0.8	1.4	0.9	1.2	1.1	0.8	/	1.1	/	/	/	/
LP Drum Level IN	2.5	1.2	1.2	0.5	1.8	0.9	/	/	1.1	/	0.9	/
HP Drum Pressure PSI	467	485	482	482	482	482	482	482	482	482	482	482
LP Drum Pressure PSI	151	152	148	148	147	148	148	148	148	148	144	148
CO PPM	25.9	29.3	27.1	30.7	31.6	32.2	32.1	32.4	33.2	33.9	31.3	32
NOX PPM	10.9	10.7	10.5	10.6	10.4	10.5	10.5	10.7	10.6	10.3	10.6	10.4
O2 %	16.54	15.43	15.27	15.68	15.48	15.34	15.40	15.40	15.40	15.46	15.40	15.52
Hot Well Level %	148	149	148	139	146	133	144	149	164	151	151	151

1150 SET POINT 1103 B SET POINT

SCANNER BLOWER (ON) Y/N DUCT BURNER SP

1150 SET POINT 449 1103 B SET POINT 444

SCANNER BLOWER ON (Y) N DUCT BURNER S.P. 442

COMPRESSORS

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator PSI	240	236	236	236	236	236	234	234	236	236	234	236
Gas Receiver PSI	420	420	420	420	420	420	420	420	420	420	430	420

NEBRASKA BOILER

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level IN												
Drum Pressure PSI												
Steam Flow #/HR												
Steam Temp °F												
NOX PPM												
O2 %												
Blow Down Conductivity MHOS												

ON LINE TURBINE WATER WASH YES NO COODUCTIVITY MHOS

BOILER FEED WATER PUMP OPERATION NO. 1 YES NO (NO. 2) (YES) NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75– 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP–pH 8.5 –9.5		
Conductivity<20mmhos		
LP–pH 8.5–9.5		
Conductivity<20mmhos		
HP		
pH 9.5 – 10.5		
Conductivity 75–150		
Phosphate 5–15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 – 10.5		
Conductivity 75 – 150		
Phosphate 5–15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 – 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:

OFFICIAL DAILY COGENERATION LOG

NIGHT SHIFT OPERATOR — NAME: HK

DRY SHIFT OPERATOR — NAME:

Huenemé Paper Mill

SAFETY IS ALWAYS NO. 1

DATE: 3-13-14

CAL PUMPS	Level	Feed Rate ml/min
Steamate 3.9 ml/min		
Control 5.3 ml/min		
Polymer 6.8 ml/min		
Caustic (as needed)		

STEAM & WATER READINGS

	NEBRASKA	PERMEATE H2O	CONCENTRATE H2O	LP	HP
CURRENT	16981056	40836239	18639618	1950144	18076
PREVIOUS	16945045	39855501	18619E21	203690	18 7C

NEW DEMIN TRAILER: YES / NO — TIME:

AMMONIA DELIVERY: YES / NO — % FULL:

GAS & ELECTRIC READING

SCG LP	TURBINE	MAXON	BURNER	NEBRASKA	(TS)
3909700	3727100	35270	184254		
[illegible]	3375280	13353	186023		

NEBRASKA ONLINE TIME: FROM: 1:22 WEDNESDAY

NEBRASKA WARM STORAGE CHECK: YES / NO

TURBINE

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
FSR	%	58.25	62.54	57.25	69.19	61.25	76.82	62	83.6	43.2	66.9	64.8	69.8
Inlet Temp	°F	58	58	58	57	56	57	55	55	55	54	55	55
Humidity	%	9.7	5.8	3.8	10.4	9.4	18.3	24.3	27.7	29.6	19.8	7.5	6.5
Vibration (Max)	MILS	.22	.23	.21	.20	.21	.22	.86	.17	.17	.22	.22	.22
Steam Injection	#/SEC	2.69	2.75	2.62	2.88	2.75	2.88	2.35	2.20	2.49	2.70	2.78	2.79
Turbine L.O. Level	%	100	100	100	100	100	100	100	100	100	100	100	100
148	°F	1448	1456	1447	1447	1444	1450	1447	1382	1377	1440	1442	1444

BATTERIES V — HP RECOUPE FAL

AIR INLET DIFF IN/H20 — HP RECOUPE FAR

L.O. DIFFERENTIAL PSI — HP RECOUPE AFT

BATTERIES 135 V — HP RECOUPE FAL

AIR INLET DIFF 3.2 IN/H20 — HP RECOUPE FAR

L.O. DIFFERENTIAL 6 PSI — HP RECOUPE AFT

GENERATOR

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Gen. Bearing Drain	°F	154	155	162	165	165	165	165	158	157	157	157	157
L.O. Supply	°F	122	123	129	135	135	135	125	124	124	125	125	125
Gen. Vibration (Max)	IPS	.29	.27	.25	.27	.27	.27	.30	.32	.31	.29	.30	.30
Tie Line	MW	13.64	13.64	13.41	13.53	13.53	13.41	13.46	13.43	13.51	13.47	13.51	13.50

GEN. AMPS — GEN.VARS MEGA VARS

FIELD AMPS — FIELD VOLTS V

COOLING TWR INLET F — COOLING TWR INLET F

GEN. 1225 AMPS — GEN.VARS 4.30 MEGA VARS

FIELD 198 AMPS — FIELD VOLTS 124 V

COOLING TWR INLET 86 F — COOLING TWR INLET 80 F

COGEN BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
450 Header Temp	°F	709	711	710	710	708	709	710	709	709	709	709	710
HP Drum Level	IN	1.0	1.1	0.9	1.0	1.1	1.4	0.5	1	1.2	1	0.5	0.8
LP Drum Level	IN	1.1	1.0	1.0	1.1	1.1	1.2	0.2	1.1	1.2	1	1.1	1.1
HP Drum Pressure	PSI	482	482	482	482	482	483	476	483	483	483	483	483
LP Drum Pressure	PSI	148	150	153	149	150	149	148	148	148	150	126	150
CO	PPM	30.3	31.2	30.0	18.4	19.6	32.1	33.2	35.6	35.7	33	32	31
NOX	PPM	10.8	10.5	11.4	10.8	10.4	9.4	10.3	10.6	9.9	11.1	10.5	10.7
O2	%	15.40	15.34	15.55	15.51	15.55	15.31	15.91	15.48	15.49	15.42	15.51	15.51
Hot Well Level	%	158	104	112	148	142	151	148	140	160	149	164	151

1150 SET POINT — 1103 B SET POINT

SCANNER BLOWER (ON) Y/N — DUCT BURNER SP

1150 SET POINT — 1103 B SET POINT

SCANNER BLOWER ON Y/N — DUCT BURNER S.P.

COMPRESSORS

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Filter Separator	PSI	236	234	236	238	238	236	236	240	240	238	240	240
Gas Receiver	PSI	420	420	421	420	420	420	420	420	420	419	421	420

NEBRASKA BOILER

		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Drum Level	IN												
Drum Pressure	PSI												
Steam Flow	#/HR												
Steam Temp	°F												
NOX	PPM												
O2	%												
Blow Down Conductivity MHOS													

ON LINE TURBINE WATER WASH: YES / NO — CODUCTIVITY MHOS — BOILER FEED WATER PUMP OPERATION — NO. 1 YES / NO — NO. 2 YES / NO

BOILER TEST RESULTS

	DAY SHIFT	NIGHT SHIFT
BOILER FEEDWATER		
pH 8.75– 9.5		
Conductivity <5mmhos		
Silica < 20 ppb		
R.O.		
Feed TDS<1000 ppm		
Permeate TDS<10 ppm		
ph (Feed 7.5)		
CONDENSATE		
HP–pH 8.5 –9.5		
Conductivity<20mmhos		
LP–pH 8.5–9.5		
Conductivity<20mmhos		
HP		
pH 9.5 – 10.5		
Conductivity 75–150		
Phosphate 5–15 ppm		
Silica < 5 ppm		
Iron ppm		
LP		
pH 9.5 – 10.5		
Conductivity 75 – 150		
Phosphate 5–15 ppm		
Silica <5 ppm		
Iron ppm		
MIXED BED		
pH 6.0 – 7.5		
Conductivity< 1mmhos		
Silica <10 ppb		
HP Steam Test		
Silica <20 ppb		
SOFTNER		
Hardness < 1.0 ppm		
Running (1 or 2)		
NEBRASKA		
pH 9.5 – 10.5		
Conductivity 75 – 200		
Silica		
Phosphate 5–25 ppm		
STEAM TEST		
Silica <20 ppb		
PV NO.2		
Molybdate >200 ppm		

NOTES:

ACAD# 000-3011 REV 1 WOK 103/0


COGEN
2014-03-07 16:03
36M
931-2934.CS
RO CONDUCTIVTY < 16% Value
16:01:20
RSMT_4-20MA ROSEMOUNT CEMS VALUES
Time Scope: 8 hours
100
100
25.0
75
75
18.8
50
50
12.5
25
25
6.3
0
0
0.0
100
1.00
1.00
75
0.75
0.75
50
0.50
0.50
25
0.25
0.25
0
0.00
0.00
08:00
2014 03 07
10:00
14:00
ON Name Description Attribute Treatment Ruler Time Ruler Value Current Value Unit Filter Time Offset Form
931AIC1111A.NOX B&W SCR INLET NOX MV Mom 13:00 57.32 56.97 PPM
931AIC1111C.CO B&W BLR STACK RAW CO MV Mom 13:00 27.81 29.69 PPM
931AIC1111B.O2 B&W BLR RAW O2% MV Mean 13:00 15.57 15.37 %
931AIC1111D.NOX B&W BLR STACK NOX MV Mean 13:00 9.49 9.72 PPM
931-AIC-1111.INCAL RSMT CEMS IN CAL MV Mom 13:00 0 0
931-aic-1111.trb RSMT CEMS TROUBLE MV Mom 13:00 0 0
< >
<< >>
Current Time
Save Trend...
Hide Table
D1 30 minutes
D2 1 hour
D3 8 hours
D4 1 day
D5 10 days
D6 Positioning...
D7 Trace Control...
D8 Analyze...
D9 Trace Config...
D10 Extended Config...
ABB

Hueneme Mill Environmental Incident Report

Shaded section to be completed by the EMR

Name of Incident Modbus data communication failure		Incident Date March 6.2014
Exact Location Incident: Cogen		
Reported By Charlie Wilson	Estimated Start and Stop Times of Incident: 3/6/14-@22:52- 3/7/14-08:41	Root Cause: MUXA box settings- new HMI system installed.

Incident Type:		Released To	
ف Spill Internal	ف Improper Waste Disposal	ف Storm Water System	ف Secondary Containment
ف Spill External	ف Near miss or below spill release guidelines	ف Process Sewer	ف Air
		ف Ground (External)	ف Ground (Inside Mill Property)
X Air Emission		X Near Miss	
ف Other_____		ف Other_____	

Detailed Description of Event

At 23:42 on Mar 6 ,2014, Maint Manager- was in cogen control cab during start-up of Cogeneration plant after 4 day annual outage work. Observed that the Modbus data- was not updating. Maintenance manager proceeded to call APCD, left a message as to the nature of the call at 23:42. New HMI systems had been set up during the annual outage- and configuration from past serial communication to Mill DCS is now- a Ethernet/ converted to serial- but now allows for redundant back up of Modbus signals should primary modbus connection fail. Since it was new HMI system set up during annual outage- some configuration settings needed to be amended. On 3/7/14- when contractor came in to continue verification process for new HMIs. .

(if required use additional paper and attach)

Estimated Amount Released	pH	CONSISTENCY (%)	Estimated Monetary Loss
ف _____ Gallons ف _____ Pounds ف Other_____			

List Any External Emergency Clean Up Personnel Contacted N/A	List Any External Agencies Contacted *(Agency, person and time of call.) . APCD left phone message as per recording.*
List Hueneme Personnel Contacted , Charlie Wilson, Jim Grimme, KTR- configuring new HMIs- CSE	Any Acute or Chronic Health Risks *(refer to MSDS) N/A*

Describe Any Emergency Response Actions:

Suggestions to Prevent Reoccurrence 1. N/A – outside mill control	Estimated Completion Date 1.
2.	2.

Root Cause after investigation Investigation showed configuration setting no "MUXA" box had to be amended- done and for past 3 hours- no issues with Modbus.	Severity Level *(level 1 and 2 must be tracked through SHIMS)* ف 1 ف 2 ف 3 ف 4
Investigated By Charlie Wilson	Investigated Date 3/7/14

Follow Up	By When	Completion Date	By Whom
N/A			

Issued by	Reviewed by	Approved by
Department Manager	Technical Superintendent 3/7/14	Mill Manager 3/10/2014

3/7/14

Print Time: 3/7/2014 1:39:25 PM

Note: This document is valid for only ONE week after print time!

NEW INDY OXNARD
5936 Perkins Road,
Oxnard, CA 93033

Attn: Robyn Lebrilla

LM2500 – PK GENERAL ELECTRIC GAS TURBINE ANNUAL COMPLIANCE and RATA EMISSIONS TESTING

PTO #0157
March 25, 2014

Submitted to:
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, California 93003

Attn: Lyle Olson

Prepared by:
AIRx Testing Services, Inc.
2472 Eastman Avenue #34
Ventura, CA 93003

Job No.: 23022

Lab No.: 214-028

Ryan Yanagihara
Test Team Leader

Reviewed by:
Tom Porter

Submitted
April 9, 2014

Table of Contents

SUMMARY OF SOURCE TEST RESULTS

New Indy
Gas Turbine
Rosemount CEM
3/25/2014

CONSTITUENTS	Run 1	Run 2	Run 3	*Average*	*Allowable*
NOx, ppmv:	10.6	9.7	9.8	*10.1*	-
NOx ppmv @ 15 % O2:	11.5	10.5	10.7	*10.9*	*12*
NOx, lb/hr:	11.78	10.81	11.01	*11.20*	-
NOx, lb/MMBtu	0.0014	0.0012	0.0013	*0.0013*	-
CO, ppmv:	25.6	23.7	23.5	*24.3*	-
CO, ppmv @ 15% O2:	27.7	25.6	25.6	*26.3*	-
CO, lb/hr:	17.23	16.05	16.00	*16.43*	*59.65*
CO, lb/MMBtu	0.0020	0.0018	0.0018	*0.0019*	-
O2, %:	15.5	15.4	15.5	*15.5*	-
NH3, ppmv:	2.9	3.1	3.4	*3.1*	-
NH3, ppmv @ 15% O2:	3.1	3.4	3.7	*3.4*	*20*
Stack Flow:	154671	155356	156507	*155511*	-
Ammonia Injection Rate, lb/hr (avg):	20.13	20.52	21.11	*20.59*	-
Fuel Usage (Turbine & Duct), dscfm:	4403.6	4450.4	4421.3	*4425.1*	-
Turbine Load, MWh (avg):	23.81	23.83	23.81	*23.82*	-

New Indy
Turbine
3/25/2014

CEMS RATA
Calculations

Run	AIRx Testing - Reference Method		
	NOx ppmv @ 15% O2	O2 Dry %	CO ppmv @ 15% O2
1	11.3	15.5	28.2
2	11.7	15.5	28.0
3	11.9	15.5	27.6
4	10.2	15.4	26.0
5	10.1	15.4	25.6
6	11.1	15.4	25.0
7	10.5	15.5	26.4
8	10.4	15.5	26.3
9	11.1	15.4	24.3

Run	New Indy CEMS		
	NOx ppmv @ 15%	O2 Dry %	CO ppmv @ 15%
1	10.5	15.6	29.9
2	10.5	15.6	29.6
3	10.6	15.5	29.3
4	10.4	15.5	28.0
5	10.4	15.5	27.6
6	10.5	15.5	26.8
7	10.5	15.5	28.3
8	10.6	15.5	28.1
9	10.5	15.4	26.3

Run	Reference Method - CEM, Difference		
	NOx ppmv @ 15%	O2 Dry %	CO ppmv @ 15%
1	0.7	-0.1	-1.8
2	1.2	-0.1	-1.6
3	1.4	0.0	-1.6
4	-0.2	-0.1	-2.1
5	-0.3	-0.1	-1.9
6	0.5	-0.1	-1.8
7	0.0	0.0	-1.9
8	-0.2	0.0	-1.8
9	0.5	0.0	-2.0
			28.2

Arithmetic Mean, d	0.4	0.0	1.2
Standard Deviation, Sd	0.6	0.0	0.2
Confidence Coefficient, CC	0.5	0.0	0.1
Avg Reference Method, RM	10.9	15.5	26.4
Relative Accuracy, RA	**8.1**	**0.4**	**5.0**

NOTE: Calculations based on "Code of Federal Regulations 40", 1988, Part 60, Appendix B, Specification 2, p. 939.

INTRODUCTION

1.0 INTRODUCTION

On March 25, 2014 AIRx Testing Services conducted the annual compliance/RATA source test on a natural gas fired General Electric LM2500-PK Gas Turbine. The unit is located at the New Indy Plant on Perkins Road, in Oxnard. The turbine is used for the generation of electrical power and process heat for the facility operations. The tests were required to satisfy requirements detailed in PTO #0157.

The objective of the testing was to determine NOx, CO and NH3 emissions from the unit at one (1) operating load of approximately 100% capacity. Additionally, data taken from the compliance tests was used to determine the relative accuracy (RATA) of the facility CEM (Rosemont) equipment. Operational data reported by New Indy personnel was turbine and duct burner fuel usage (mscfh), Ammonia injection rate (lb/hr) and turbine load (KW).

PROCESS DETAILS: The LM2500-PK is rated for 290 MMBtu/hr heat input and exhausts into an HRSG with a COEN duct burner. The duct burner is rated at 50.8 MMBtu/hr. Emissions are controlled with a Babcock-Hitachi Selective Catalytic Converter (SCR). The SCR uses ammonia injection for NOx reduction. The duct dimensions at the sample location are 54" x 125". An integrated sampling probe has been installed by the facility. All sampling was performed from the integrated sampling probe. The sample port locations are located zero diameters upstream and one (1) equivalent diameter downstream from a disturbance; consequently velocity traverses could not be accurately performed.

CEM DATA: CEM data was recorded by the Data Acquisition System (DAS) during the test program in the form of one (1) minute averages. The one (1) minute data averages were then printed out and averaged to obtain CEM data for comparison to the RM data. The CEM data was obtained by plant personnel during the test program and provided to the test team. The CEM data monitored NOx and CO concentrations corrected to 15% oxygen, oxygen concentrations. NOx, CO and O2 response times were conducted prior to the start of the testing.

CONTINUOUS MONITORS: NOx, CO, and O2 sampling utilized a stainless steel multi-point sampling probe connected with a Teflon sampling line to a sample conditioner. The dry gases were then transported through a Teflon line to the sample gas flow panel for distribution to the individual analyzers. Triplicate 96 minute sampling for NOx, CO and O2 was performed in accordance with CARB Method 100 and EPA Method 20. NOx measurements were made utilizing an API 200EH chemiluminescent analyzer. CO concentrations were determined with an API 300EM NDIR w/GFC analyzer. Oxygen concentration was measured utilizing a Servomex Model 1400 paramagnetic analyzer. Initial three (3) point calibrations were performed at the analyzers. Subsequent calibrations were performed through the sample system probe tip (Bias checks). All initial bias checks correlated with the initial instrument calibrations to within 2% of analyzer range. Bias calibrations were performed before and after each test run and used to correct the emissions data for any analyzer drift. All monitor calibrations were performed with EPA Protocol 1 calibration gases.

During all tests, the NOx and O2 RM analyzers were operated on the 25 ppmv and 25% scales, respectively. The CO monitor was setup and calibrated for operation on the 50 ppmv scale.

There were no deviations from CARB Method 100 or EPA Method 20 methodology during the test.

1.0 INTRODUCTION (cont)

All monitored data was continuously recorded on a 10" analog chart recorder. Chart speed was maintained at 10 cm/hr. Analyzer output was also recorded with a PC based Data Acquisition System (DAS) and imported into spreadsheets for determination of average run concentrations.

FLOWRATE: Stack flow calculations were performed using fuel consumption data provided by plant personnel (turbine and duct burner fuel usages added together) and the stack oxygen, in accordance with EPA Method 19.

AMMONIA: Exhaust duct ammonia samples were collected and analyzed in accordance with BAAQMD Method ST-1B. The sample train consists of four (4) iced impingers, the first two (2) contained approximately 150 ml 0.1N HCl, the third is empty and the fourth contains silica gel. The sample was collected utilizing an EPA Method 5 sampling console. Each sample was collected for a 96 minute period. Three (3) samples were collected for compliance determination. Samples were collected utilizing stainless a steel sampling probe. Analysis of the collected ammonia samples was performed by the AIRx Testing Services laboratory.

All reporting and calculations have been performed using VCAPCD standard conditions of 68°F and 29.92 inches of Hg. If you have any questions regarding this test program or report, please contact the undersigned at (805) 644-1099.

Respectfully Submitted
AIRx Testing Services, Inc.

Ryan Yanagihara
Senior Engineer

Tom Porter
Vice President of Testing Services

CALCULATIONS

CONTINUOUS EMISSIONS MONITORING - CARB METHOD 1-100

Client : New Indy
Site : Oxnard
Unit : Turbine

Date : 3/25/2014
Job# : 23022
Lab# : 214-028

FIELD DATA

Test Length 96 mins. Points 1 Minute

Standard Temperature: 68 ° *F*

Drift Corrected Emissions Data

	Run #1		*Run #2*		*Run #3*	
Outlet						
NOx	10.6	ppm	9.7	ppm	9.8	ppm
O2	15.5	%	15.4	%	15.5	%
CO	25.6	ppm	23.7	ppm	23.5	ppm

Process Data

Exhaust Flow	154671	dscfm	155356	dscfm	156507	dscfm
F-Factor	8710	dscf/MMBtu	8710	dscf/MMBtu	8710	dscf/MMBtu

Equations used;
Tfact = (10^-6*(29.92/(21.85*(460+Tstd)))*60
lb/hr = [ppmv] * Q * MW * (Tfact)
lb/MM Btu = [lb/hr]/[MMBtu/hr]
ppmv @ 15% O2 = ppm * 5.9(20.9/(20.9-O2))
MW NOx = 46; CO = 28

CALCULATED EMISSIONS

NOx	11.5	ppm @ 15% O2	10.5	ppm @ 15% O2	10.7	ppm @ 15% O2
	11.78	lb/hr	10.81	lb/hr	11.01	lb/hr
	0.0014	lb/MMBtu	0.0012	lb/MMBtu	0.0013	lb/MMBtu
CO	27.7	ppm @ 15% O2	25.6	ppm @ 15% O2	25.6	ppm @ 15% O2
	17.23	lb/hr	16.05	lb/hr	16.00	lb/hr
	0.0020	lb/MMBtu	0.0018	lb/MMBtu	0.0018	lb/MMBtu

Compliance Bias Adjustment

Facility: International Paper
Source: Turbine
Date: 03/25/14

Compliance Testing
Run No. 1

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Bias Zero (ppm.%)	Final Bias Zero (ppm.%)	Average Bias Zero (ppm.%)	Initial Bias Span (ppm.%)	Final Bias Span (ppm.%)	Average Bias Span (ppm.%)	Bias Adjusted Conc. (ppm.%)
NOx	10.4	11.4	-0.1	0.1	0.0	11.1	11.2	11.2	**10.6**
O2	15.5	12.1	-0.2	-0.1	-0.2	12.1	12.1	12.1	**15.5**
CO	25.7	19.6	0.0	-0.2	-0.1	19.9	19.4	19.7	**25.6**

Run No. 2

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Bias Zero (ppm.%)	Final Bias Zero (ppm.%)	Average Bias Zero (ppm.%)	Initial Bias Span (ppm.%)	Final Bias Span (ppm.%)	Average Bias Span (ppm.%)	Bias Adjusted Conc. (ppm.%)
NOx	9.6	11.4	0.1	0.0	0.1	11.2	11.3	11.3	**9.7**
O2	15.5	12.1	-0.1	-0.1	-0.1	12.1	12.1	12.1	**15.4**
CO	23.8	19.6	-0.2	0.4	0.1	19.4	19.9	19.7	**23.7**

Run No. 3

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Bias Zero (ppm.%)	Final Bias Zero (ppm.%)	Average Bias Zero (ppm.%)	Initial Bias Span (ppm.%)	Final Bias Span (ppm.%)	Average Bias Span (ppm.%)	Bias Adjusted Conc. (ppm.%)
NOx	9.8	11.4	0.0	0.0	0.0	11.3	11.4	11.4	**9.8**
O2	15.5	12.1	-0.1	-0.1	-0.1	12.1	12.0	12.1	**15.5**
CO	23.8	19.6	0.4	-0.3	0.1	19.9	19.9	19.9	**23.5**

RATA Bias Adjustmen.

Facility: New Indy
Source: Turbine
Date: 03/25/14

Run No. 1

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	10.1	11.4	-0.1	0.1	0.0	11.1	11.2	11.2	**10.3**
O2	15.5	12.1	-0.2	-0.1	-0.1	12.1	12.1	12.1	**15.5**
CO	25.9	19.6	0.0	-0.2	-0.1	19.9	19.4	19.7	**25.8**

Run No. 2

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	10.5	11.4	-0.1	0.1	0.0	11.1	11.2	11.2	**10.7**
O2	15.5	12.1	-0.2	-0.1	-0.1	12.1	12.1	12.1	**15.5**
CO	25.7	19.6	0.0	-0.2	-0.1	19.9	19.4	19.7	**25.6**

Run No. 3

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	10.6	11.4	0.1	0.1	0.1	11.1	11.2	11.2	**10.9**
O2	15.5	12.1	-0.1	-0.1	-0.1	12.1	12.1	12.1	**15.5**
CO	25.4	19.6	-0.2	-0.2	-0.2	19.9	19.4	19.7	**25.3**

Run No. 4

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	9.4	11.4	0.1	0.0	0.1	11.2	11.3	11.2	**9.5**
O2	15.5	12.1	-0.1	-0.1	-0.1	12.1	12.1	12.1	**15.4**
CO	24.2	19.6	-0.2	0.4	0.1	19.4	19.9	19.6	**24.2**

Run No. 5

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	9.3	11.4	0.0	0.0	0.0	11.2	11.3	11.2	**9.4**
O2	15.5	12.1	-0.1	-0.1	-0.1	12.1	12.1	12.1	**15.49**
CO	23.9	19.6	0.4	0.4	0.4	19.4	19.9	19.6	**23.9**

RATA Bias Adjustmen.

Facility: New Indy
Source: Turbine
Date: 03/25/14

Run No. 6

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	10.1	11.4	0.0	0.0	0.0	11.2	11.3	11.2	**10.3**
O2	15.4	12.1	-0.1	-0.1	-0.1	12.1	12.1	12.1	**15.4**
CO	23.2	19.6	0.4	0.4	0.4	19.4	19.9	19.6	**23.3**

Run No. 7

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	9.5	11.4	0.0	0.0	0.0	11.3	11.4	11.4	**9.6**
O2	15.5	12.1	-0.1	-0.1	-0.1	12.1	12.0	12.1	**15.5**
CO	24.3	19.6	0.4	-0.3	0.1	19.9	19.5	19.7	**24.2**

Run No. 8

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	9.5	11.4	0.0	0.0	0.0	11.3	11.4	11.4	**9.5**
O2	15.5	12.1	-0.1	-0.1	-0.1	12.1	12.0	12.1	**15.5**
CO	24.2	19.6	-0.3	-0.3	-0.3	19.9	19.5	19.7	**24.1**

Run No. 9

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	10.3	11.4	0.0	0.0	0.0	11.3	11.4	11.4	**10.3**
O2	15.4	12.1	-0.1	-0.1	-0.1	12.1	12.0	12.1	**15.4**
CO	23.0	19.6	-0.3	-0.3	-0.3	19.9	19.5	19.7	**22.9**

FIELD DATA & CALCULATIONS SUMMARY

Client: **International Paper**
Site: **Oxnard**
Unit: **Turbine**

Date: **3/25/2014**
Type: ***T std = 68 °F***
Run: **1-NH3**

Vm	Metered Sample Gas Volume	**55.246**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	55.246	dcf		
Y	Dry Gas Meter Calibration Factor	**1.0094**			
Pbar	Barometric Pressure	**30.11**	**in. Hg**		
del H	Dry Gas Meter Press. Differential, Average	**2.0**	**in. H2O**		
Tm	Dry Gas Meter Temperature, Average	70.1	°F	**530.1**	**°R**
Vm(std)	Sample Gas Volume	**56.1675**	**dscf**		
O2	Oxygen, Dry	**15.5**	**%**		
Theta	Sampling Time	**96**	**min.**		

CALCULATED EMISSION RESULTS

Client: **International Paper**
Site: **Oxnard**
Unit: **Turbine**

Date: **3/25/2014**
Type: ***T std = 68 °F***
Run: **1-NH3**

AMMONIA AS NH3

Ws	Ammonia Weight	**0.00329**	g
Cs	Ammonia Emissions	**0.00090**	grain/dscf
	Ammonia Concentration	**2.9**	ppmv
	Ammonia Concentration	**3.1**	ppmv @ 15% O2

FIELD DATA & CALCULATIONS SUMMARY

Client: **New Indy**
Site: **Oxnard**
Unit: **Turbine**

Date: **3/25/2014**
Type: ***T std = 68 °F***
Run: **2-NH3**

Vm	Metered Sample Gas Volume	**54.166**	**dcf**		
Lp	Avg. Leak Rate	0.002	cf		
Vn	Leak Corrected Sample Gas Volume	54.166	dcf		
Y	Dry Gas Meter Calibration Factor	**1.0094**			
Pbar	Barometric Pressure	**30.15**	**in. Hg**		
del H	Dry Gas Meter Press. Differential, Average	**2.0**	**in. H2O**		
Tm	Dry Gas Meter Temperature, Average	74.9	°F	**534.9**	**°R**
Vm(std)	Sample Gas Volume	**54.6483**	**dscf**		
O2	Oxygen, Dry	**15.4**	**%**		
Theta	Sampling Time	**96**	**min.**		

CALCULATED EMISSION RESULTS

Client: **New Indy**
Site: **Oxnard**
Unit: **Turbine**

Date: **3/25/2014**
Type: ***T std = 68 °F***
Run: **2-NH3**

AMMONIA AS NH3

Ws	Ammonia Weight	**0.00348**	g
Cs	Ammonia Emissions	**0.00098**	grain/dscf
	Ammonia Concentration	**3.1**	ppmv
	Ammonia Concentration	**3.4**	ppmv @ 15% O2

"F" FACTOR EXHAUST GAS FLOWRATE CALCULATION

Client : New Indy
Site : Oxnard
Unit : Turbine

Date : 3/25/2014
Job# : 23022
Lab# : 214-028

"F" Factor, Q(std): 8710 dscf/MMBTU

Standard Temperature, T std: 68 deg. F

	Run 1	Run 2	Run 3
Oxygen, % (avg)	15.5	15.4	15.5
Fuel Usage, dscfm (avg)	4403.6	4450.4	4421.3
MMBTU/min	4.6238	4.6729	4.6424
Flowrate ("F" Factor), dscfm	154671	155356	156507

formulae:
MMBTU/min = (Fuel Usage * 1050 Btu/ft3)/10^6
Flowrate ("F" Factor) = "F" Factor * MMBTU/min * (20.0/(20.9-O2))

AIRX TESTING SERVICES Inc.

AMMONIA ANALYSIS
BAAQMD Method ST-1B

Client: New Indy
Site: Oxnard
Unit: Turbine

Analysis Date: 3/25/2014
Lab: 214-028

	Sample Volume (ml)	Aliquot Volume (ml)	Reading ug/ml	Dilution
Run#: R1	610	49	5.5	1
Total NH3 mg/sample			3.29	
Run#: R-2	600	49	5.9	1
Total NH3 mg/sample			3.48	
Run#: R-3	680	49	5.7	1
Total NH3 mg/sample			3.83	
Run #: R1 (Duplicate)	610	49	5.5	1
Total NH3 mg/sample			3.31	
0.1 N HCL Blank	49	49	0.09	1
Run #: R-2	600	48	6.9	1

Spike (1 ug/ml) Theoretical Value = 6.9 (ug/ml)
% Recovery 99.7 %

Analyst: Wesley Hart

AIRX TESTING
A Division of **Justice** & Associates

BAAQMD METHOD ST-1B
AMMONIA

Client: NEW INDY
Site: OXNARD
Unit: TURBINE

Date: 3/25/14
Lab: 214-028

	Sample Volume (ml)	Aliquot Volume (ml)	Reading ug/ml	Dilution
Run#: 1	610	49	5.48	1
Run#: 2	600	49	5.9	1
Run#: 3	680	49	5.72	1
Run #: 1 Duplicate	610	49	5.52	1
0.1 N HCl Blank	49	49	.092	1
Run #: 2	600	48	6.88	1

Spike (1 ug/ml) Theoretical = 6.9 (ug/ml)

Analyst: WESHART WEST Date: 3-31-14

EMISSIONS TEST - CARB 100

Date: 3/25/2014

**** Test Information ****

Client: New Indy
County: Ventura
Site(s): Oxnard
Unit(s): Turbine

**** Personnel ****

AIRx: RY, TP
Client: RL
APCD: LO

Run Length:	96/32	Inlet ( )	Outlet (X)	Fuel ( )	HC ( )	
No. Points:	96/32	S.T. (X)	E.I. ( )	Data ( )	H2S ( )	NH3 ( )

	Time	Baro.	Temp.	Weather.
Arrive:	6:00 AM	30.11	60	Clear
Depart:	2:40 PM	30.15	65	Clear

**** Instrument Information ****

Instrument	"On"	Unit#	Make/Model		
O2:	1	9	Servomex		
CO:	1	1	API 300EM		
NOx:	1	1	API 200EH		
Recorder:			Soltech	10	cm/hr

**** Calibration Information ****

	Units	Zero	Span	Range	Gas Cyl.#	Gas Flow
O2:	%	0	12.1	25	AAL20083	0.8
O2:	%	0	20.0	25	CC259847	0.8
CO:	ppmv	0	19.6	50	CC101401	1
CO:	ppmv	0	40.7	50	ALM022010	1
NOx:	ppmv	0	11.4	25	CC10018	1
NOx:	ppmv	0	19.8	25	AAL2002	1
NO2:	ppmv	0	19.2	25	AAL2432	1

**** Recorder Information ****

		Chanl.	Pen Type	Color
O2:	%	2	Cont.	Green
CO:	ppmv	1	Cont.	Purple
NOx:	ppmv	3	Cont.	Brown

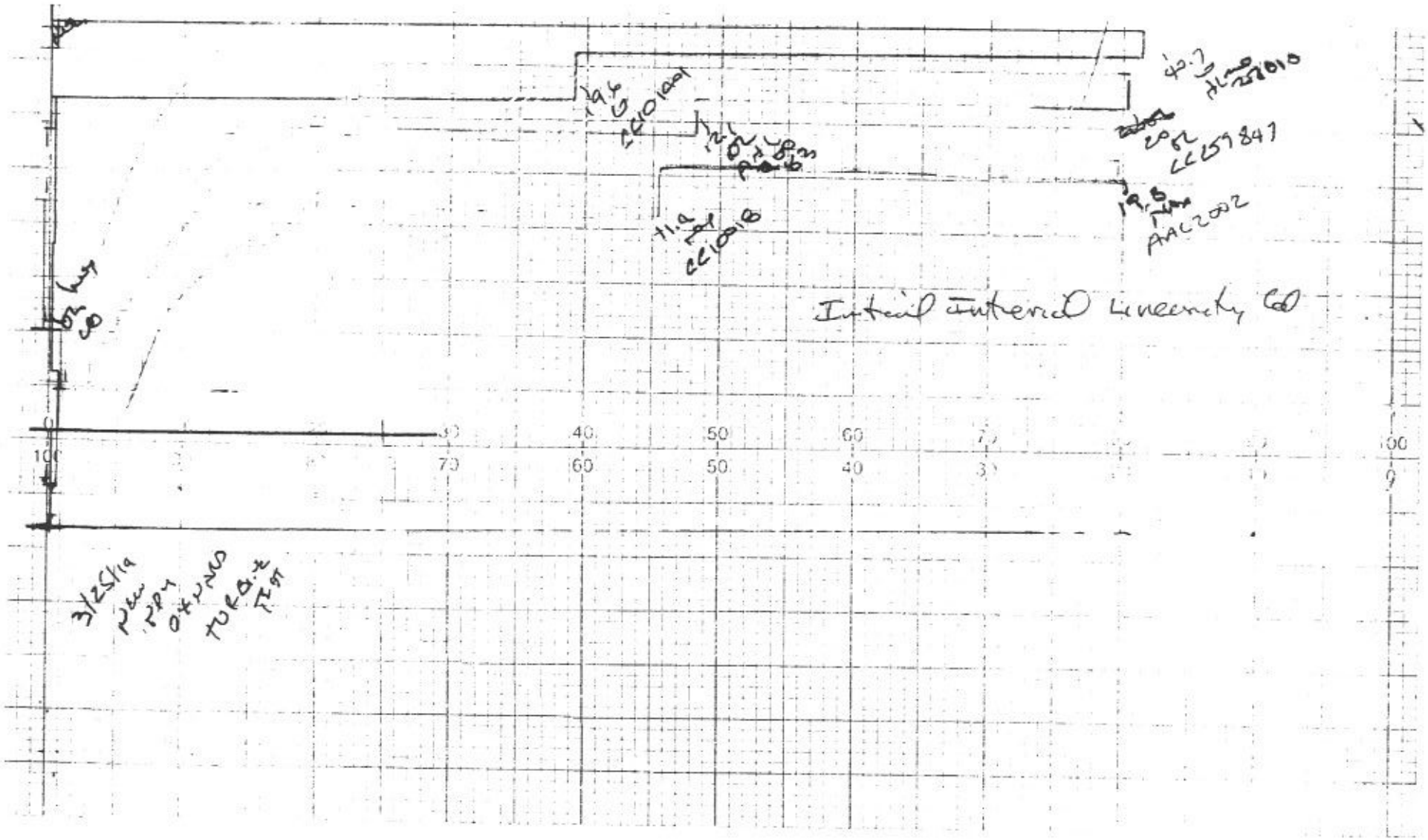
CLIENT:	New Indy	JOB#	214-028		
PLANT:	Oxnard, CA	RUN#	RATA 1		
DATE:	3/25/2014	UNIT ID:	Turbine		
ENGINEER:	RY-TP	RUN START:	8:35 AM		
NOx, ppm	CO, ppm	O2, %	NOx, ppm @ 15% O2	CO, ppm @ 15% O2	TIME
9.3	24.7	15.4	10.0	26.6	8:35:00
9.5	25.2	15.4	10.3	27.2	8:36:00
9.6	25.4	15.4	10.4	27.5	8:37:00
9.8	25.6	15.4	10.5	27.6	8:38:00
10.0	25.5	15.4	10.8	27.5	8:39:00
10.1	25.6	15.5	11.0	27.7	8:40:00
9.9	25.8	15.5	10.7	27.9	8:41:00
9.8	25.7	15.5	10.6	27.9	8:42:00
10.0	25.8	15.4	10.8	27.9	8:43:00
10.2	25.9	15.5	11.0	28.1	8:44:00
10.1	26.0	15.5	10.9	28.2	8:45:00
10.0	26.0	15.5	10.9	28.3	8:46:00
10.0	26.1	15.5	10.9	28.5	8:47:00
10.1	26.1	15.5	11.0	28.4	8:48:00
10.2	26.1	15.5	11.2	28.4	8:49:00
10.2	26.0	15.5	11.1	28.4	8:50:00
10.2	26.1	15.5	11.1	28.5	8:51:00
10.3	26.1	15.5	11.3	28.5	8:52:00
10.3	26.0	15.5	11.2	28.5	8:53:00
10.3	25.9	15.5	11.2	28.3	8:54:00
10.5	26.0	15.5	11.5	28.4	8:55:00
10.5	26.0	15.5	11.5	28.5	8:56:00
10.3	26.0	15.5	11.3	28.4	8:57:00
10.2	26.0	15.5	11.2	28.4	8:58:00
10.3	26.0	15.5	11.2	28.5	8:59:00
10.3	26.1	15.5	11.3	28.6	9:00:00
10.3	26.1	15.5	11.3	28.6	9:01:00
10.2	26.2	15.5	11.2	28.7	9:02:00
10.2	26.2	15.5	11.2	28.8	9:03:00
10.2	26.2	15.5	11.2	28.8	9:04:00
10.3	26.1	15.5	11.4	28.7	9:05:00
10.4	26.1	15.5	11.5	28.7	9:06:00
10.3	26.1	15.5	11.4	28.8	9:07:00
10.1	**25.9**	**15.5**	**11.0**	**28.2**	**Averages**

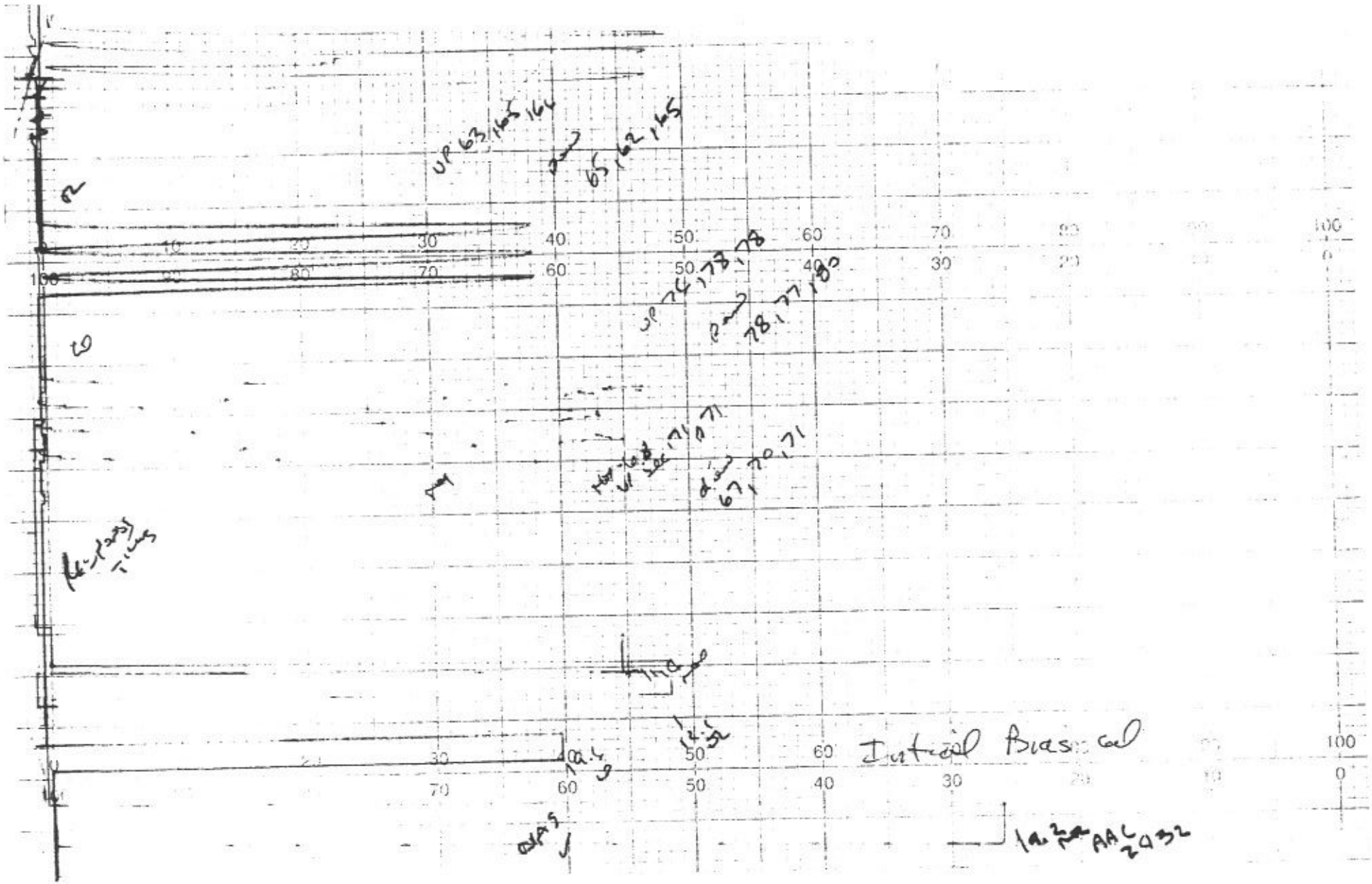
CLIENT:	New Indy	JOB#	214-028		
PLANT:	Oxnard, CA	RUN#	RATA 2		
DATE:	3/25/2014	UNIT ID:	Turbine		
ENGINEER:	RY-TP	RUN START:	9:07 AM		
NOx, ppm	CO, ppm	O2, %	NOx, ppm @ 15% O2	CO, ppm @ 15% O2	TIME
10.3	26.1	15.5	11.4	28.8	9:07:00
10.4	26.1	15.5	11.4	28.8	9:08:00
10.5	26.0	15.5	11.5	28.6	9:09:00
10.5	26.0	15.5	11.5	28.6	9:10:00
10.5	26.0	15.5	11.5	28.5	9:11:00
10.6	26.0	15.5	11.6	28.5	9:12:00
10.4	26.1	15.5	11.4	28.7	9:13:00
10.3	26.0	15.5	11.4	28.6	9:14:00
10.4	25.9	15.5	11.4	28.5	9:15:00
10.6	25.9	15.5	11.6	28.5	9:16:00
10.5	25.9	15.5	11.5	28.4	9:17:00
10.6	25.9	15.5	11.6	28.5	9:18:00
10.7	25.9	15.5	11.7	28.5	9:19:00
10.7	25.9	15.5	11.7	28.5	9:20:00
10.6	25.9	15.5	11.6	28.4	9:21:00
10.4	25.8	15.5	11.4	28.3	9:22:00
10.3	25.8	15.5	11.3	28.3	9:23:00
10.3	25.6	15.5	11.3	28.0	9:24:00
10.6	25.5	15.5	11.6	27.8	9:25:00
10.6	25.3	15.5	11.6	27.6	9:26:00
10.4	25.5	15.5	11.3	27.7	9:27:00
10.4	25.3	15.5	11.3	27.6	9:28:00
10.5	25.3	15.5	11.4	27.5	9:29:00
10.6	25.2	15.5	11.5	27.4	9:30:00
10.7	25.1	15.5	11.6	27.2	9:31:00
10.7	25.1	15.5	11.6	27.3	9:32:00
10.5	25.3	15.5	11.4	27.5	9:33:00
10.3	25.4	15.5	11.2	27.7	9:34:00
10.3	25.4	15.5	11.2	27.7	9:35:00
10.5	25.5	15.5	11.4	27.8	9:36:00
10.7	25.4	15.5	11.7	27.7	9:37:00
10.7	25.6	15.5	11.7	27.9	9:38:00
10.6	25.7	15.5	11.5	28.1	9:39:00
10.6	25.7	15.5	11.5	28.1	9:40:00
10.5	**25.7**	**15.5**	**11.5**	**28.1**	**Averages**

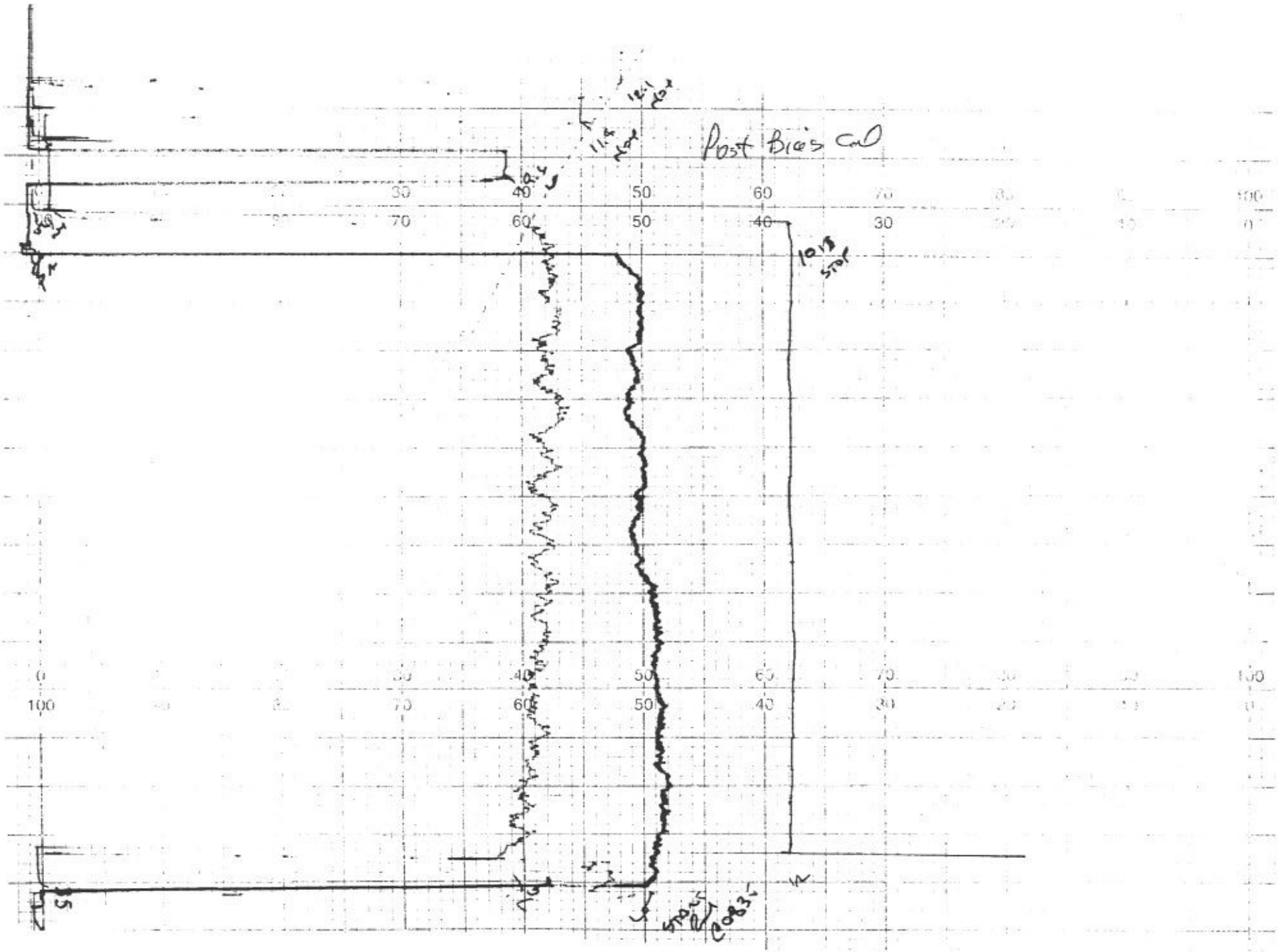
CLIENT:	New Indy	JOB#	214-028		
PLANT:	Oxnard, CA	RUN#	RATA 3		
DATE:	3/25/2014	UNIT ID:	Turbine		
ENGINEER:	RY-TP	RUN START:	9:41 AM		
NOx, ppm	CO, ppm	O2, %	NOx, ppm @ 15% O2	CO, ppm @ 15% O2	Time
10.6	25.7	15.5	11.5	28.1	9:39:00
10.6	25.7	15.5	11.5	28.1	9:40:00
10.5	25.7	15.5	11.5	28.1	9:41:00
10.3	25.7	15.5	11.3	28.1	9:42:00
10.5	25.6	15.5	11.5	28.0	9:43:00
10.7	25.6	15.5	11.8	28.0	9:44:00
10.9	25.6	15.5	11.9	28.0	9:45:00
10.9	25.6	15.5	11.9	28.0	9:46:00
10.8	25.4	15.5	11.8	27.7	9:47:00
10.8	25.1	15.5	11.8	27.4	9:48:00
10.6	25.0	15.5	11.6	27.2	9:49:00
10.4	25.0	15.5	11.3	27.2	9:50:00
10.4	25.1	15.5	11.3	27.3	9:51:00
10.6	25.0	15.5	11.6	27.1	9:52:00
10.6	25.0	15.5	11.6	27.3	9:53:00
10.5	25.3	15.5	11.5	27.6	9:54:00
10.6	25.4	15.5	11.6	27.7	9:55:00
10.4	25.4	15.5	11.4	27.8	9:56:00
10.4	25.4	15.5	11.4	27.8	9:57:00
10.7	25.3	15.5	11.7	27.6	9:58:00
10.8	25.2	15.5	11.8	27.5	9:59:00
10.8	25.4	15.5	11.8	27.8	10:00:00
10.8	25.6	15.5	11.9	28.1	10:01:00
10.8	25.6	15.5	11.9	28.1	10:02:00
10.6	25.6	15.5	11.6	28.1	10:03:00
10.5	25.6	15.5	11.6	28.1	10:04:00
10.6	25.5	15.5	11.7	28.1	10:05:00
10.7	25.5	15.5	11.7	28.1	10:06:00
10.7	25.7	15.5	11.7	28.2	10:07:00
10.6	25.6	15.5	11.7	28.1	10:08:00
10.6	25.5	15.5	11.6	28.0	10:09:00
10.6	25.5	15.5	11.7	28.0	10:10:00
10.6	25.3	15.5	11.6	27.7	10:11:00
10.6	**25.4**	**15.5**	**11.6**	**27.8**	**Averages**

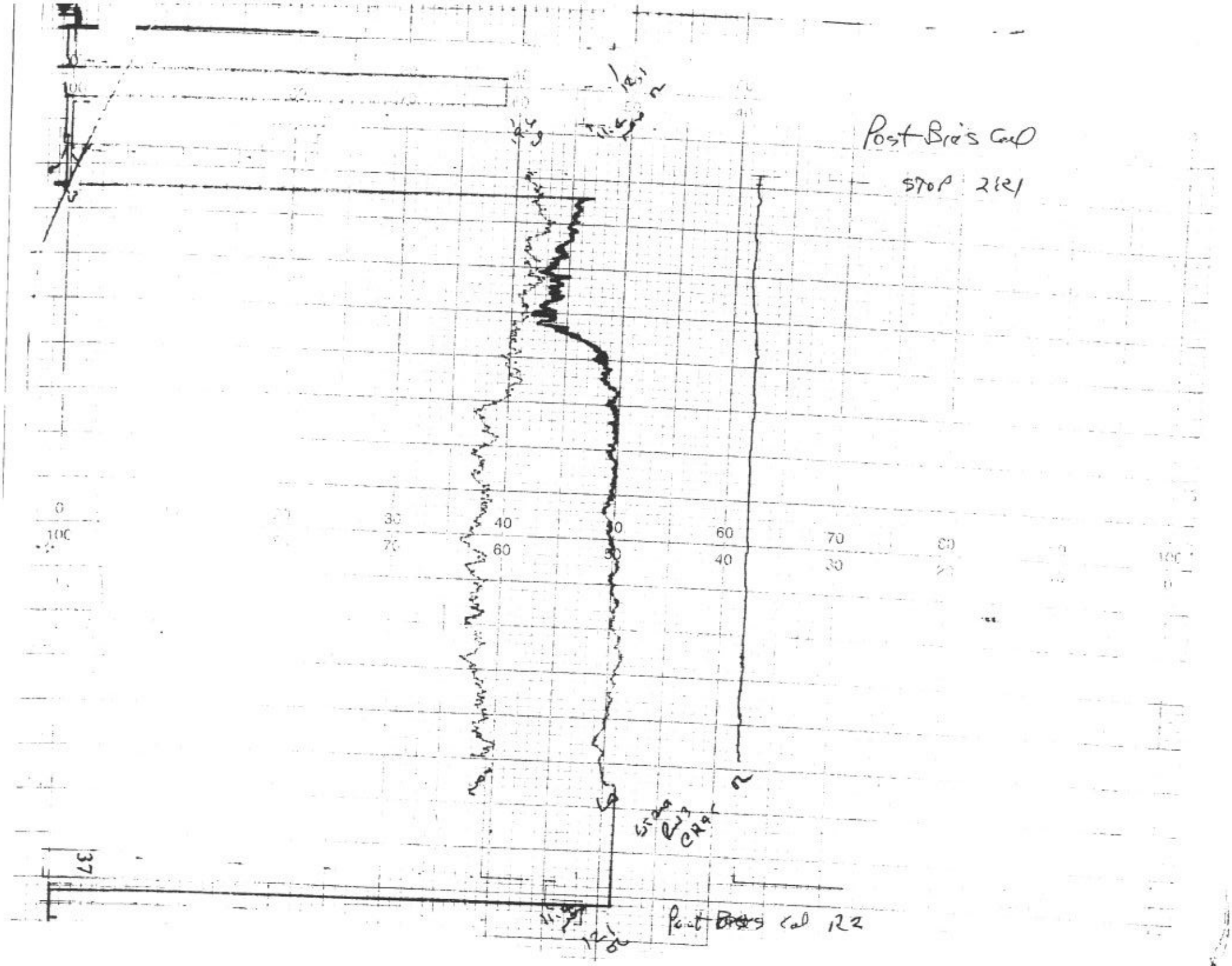
10.5	22.8	15.4	11.2	24.5	12:04:00
10.4	22.9	15.4	11.1	24.7	12:05:00
10.2	23.0	15.4	11.0	24.8	12:06:00
10.2	23.2	15.4	11.0	25.0	12:07:00
10.2	23.3	15.4	11.0	25.1	12:08:00
10.2	23.4	15.4	11.0	25.2	12:09:00
10.2	23.5	15.4	10.9	25.3	12:10:00
10.3	23.5	15.4	11.1	25.4	12:11:00
10.3	23.6	15.4	11.1	25.5	12:12:00
10.3	23.6	15.5	11.1	25.6	12:13:00
10.2	23.7	15.5	11.1	25.7	12:14:00
10.3	23.8	15.5	11.2	25.8	12:15:00
10.4	23.8	15.5	11.3	25.8	12:16:00
10.1	**23.2**	**15.4**	**10.9**	**25.1**	**Averages**

CLIENT:	New Indy	JOB#	214-028		
PLANT:	Oxnard, CA	RUN#	RATA 7		
DATE:	3/25/2014	UNIT ID:	Turbine		
ENGINEER:	RY-TP	RUN START:	12:45 PM		
NOx, ppm	CO, ppm	O2, %	NOx, ppm @ 15% O2	CO, ppm @ 15% O2	TIME
9.7	24.5	15.5	10.7	26.9	12:45:00
9.6	24.3	15.5	10.5	26.6	12:46:00
9.8	24.1	15.5	10.8	26.5	12:47:00
10.0	24.1	15.5	10.8	26.2	12:48:00
9.7	24.0	15.5	10.6	26.1	12:49:00
9.6	23.9	15.5	10.5	26.1	12:50:00
9.6	24.0	15.5	10.4	26.2	12:51:00
9.7	23.9	15.5	10.6	26.2	12:52:00
9.8	23.7	15.5	10.7	25.9	12:53:00
9.7	23.8	15.5	10.5	25.9	12:54:00
9.6	24.0	15.5	10.5	26.0	12:55:00
9.6	24.1	15.5	10.5	26.1	12:56:00
9.7	24.1	15.5	10.5	26.2	12:57:00
9.6	24.3	15.5	10.5	26.4	12:58:00
9.6	24.3	15.5	10.4	26.4	12:59:00
9.5	24.3	15.5	10.4	26.6	13:00:00
9.4	24.3	15.5	10.3	26.6	13:01:00
9.3	24.3	15.5	10.2	26.6	13:02:00
9.4	24.4	15.5	10.2	26.7	13:03:00
9.5	24.4	15.5	10.4	26.6	13:04:00
9.6	24.5	15.5	10.5	26.7	13:05:00
9.5	24.6	15.5	10.4	26.8	13:06:00
9.5	24.7	15.5	10.3	27.0	13:07:00
9.3	24.7	15.5	10.2	27.0	13:08:00
9.3	24.5	15.5	10.2	26.8	13:09:00
9.5	24.5	15.5	10.4	26.8	13:10:00
9.4	24.6	15.5	10.3	26.9	13:11:00
9.4	24.4	15.5	10.3	26.7	13:12:00
9.4	24.3	15.5	10.3	26.6	13:13:00
9.5	24.4	15.5	10.4	26.6	13:14:00
9.6	24.4	15.5	10.4	26.6	13:15:00
9.4	24.5	15.5	10.2	26.7	13:16:00
9.3	24.4	15.5	10.1	26.6	13:17:00
9.5	**24.3**	**15.5**	**10.4**	**26.5**	**Averages**


Initial Intercal Linearity Cal
100
70
60
50
40
30
9


Intrigal Bias


Post Bias Cal
100
70
60
50
40
30

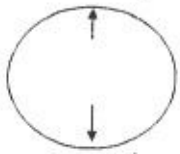

Post Bra's Cal
STOP 2121
Post Bras cal 122

AIR Testing Services, Inc.

Plant: New Indy	Amb. Temp: 60	Nozzel: 3/8"
Location: Oxnard	Pbar: 30.11	Prob Heat:
Unit: Turbine	Pitot: —	Wind Vel.: Calm
Date: 3/25/14	Pyro: —	Static Press.: —
Run #: 1 - NH3	Mag Δ P:	O2:
Cold Box: 3	Mag Δ H: manno	CO2:
Meter #: G	% H2O: —	Engineer: RY
Meter Factor: 1.0094	Box Heat: —	Technician: TT

Stack Dia.:
"A":
"B":
Port Size:
Offset:
M / F:

Stack Sample Port Location



Imp.	Gross	Tare	Total
1		620.0	
2		598.7	
3		476.0	
4		672.5	

START TIME: 9:35 END TIME: 10:11 "K" FACTOR:

Filter 1:
Filter 2:

Point No.	Traverse Distance	Time Minutes	Stack °F	Δ P	√Δ P	Dry Gas Meter Volume	Δ H In H2O	Inlet ° F	Outlet ° F	Impinger Exit° F	Meter Vacuum	Filter Temp.°F	Cyl. Flow
1		0				577.157	2.0	65	64		6		
2	43	8				581.5	2.0	67	63		6		
3	51	16				586.4	2.0	71	64		6		
4	59	24				590.5	2.0	73	64		6		
5	9:07	32				594.0	2.0	76	64		6		
6	15	40				602.0	2.0	76	66		6		
7	23	48				604.7	2.0	76	66		6		
8	31	56				609.3	2.0	77	67		6		
9	39	64				613.9	2.0	77	68		6		
10	47	72				620.15	2.0	77	68		6		
11	55	80				624.3	2.0	77	69		6		
12	10:03	88				627.9	2.0	77	69		6		
	:11	96				632.403							
Average:													

Leak Checks: Pitots

Pre	Top	Bottom
ΔP		

Post	Top	Bottom
ΔP		

Sample Train Leak Check

CFM:	4.0/8	In. HG:	20	
CFM:		In. HG:	12	

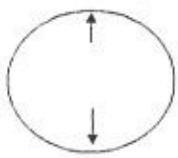
Rotation
-1 NH4Cl

AIR Testing Services, Inc.

Plant :	New Indy	Amb. Temp :	62	Nozzel :	3/16
Location :	Ohio	Pbar :	30.15	Prob Heat :	
Unit :	Turbine	Pitot :		Wind Vel. :	Calm
Date :	8/2-11/14	Pyro :		Static Press. :	
Run # :	2 - NH_3	Mag Δ P :		O2 :	
Cold Box :	5	Mag Δ H :	Mano	CO2 :	
Meter # :	6	% H2O :		Engineer :	BY
Meter Factor :	1.0094	Box Heat :		Technician :	TP

Stack Dia. :
"A" :
"B" :
Port Size :
Offset :
M / F :

Stack Sample Port Location



Imp.	Gross	Tare	Total
1		590.6	
2		619.1	
3		454.1	
4		749.3	

Filter 1 :

START TIME: 10:40 END TIME: 12:16 "K" FACTOR: Filter 2 :

Point No.	Traverse Distance	Time Minutes	Stack °F	Δ P	√Δ P	Dry Gas Meter Volume	Δ H In H2O	Inlet ° F	Outlet ° F	Impinger Exit° F	Meter Vacuum	Filter Temp.°F	Cyl. Flow
1		0				632.436	2.0	72	70		3		
2		4 8				638.5	2.0	79	69		3		
3		8 16				642.5	2.0	80	69		3		
4		12 24				644.5	2.0	80	70		3		
5		16 32				651.7	2.0	80	70		3		
6		20 40				656.2	2.0	80	71		3		
7		24 48				663.2	2.0	80	71		3		
8		28 56				665.7	2.0	80	71		3		
9		32 64				670.7	2.0	80	71		3		
10		36 72				675.5	2.0	80	72		3		
11		40 80				679.1	2.0	80	72		3		
12		44 88				683.7	2.0	79	72		3		
		48 96				688.602							

Average:

Leak Checks : Pitots

Pre	Top	Bottom
ΔP		

Post	Top	Bottom
ΔP		

Sample Train Leak Check

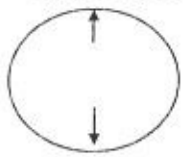
CFM :	0	In. HG :	17	
CFM :	0.12	In. HG :	5	

AIR X TESTING

Plant :	New Tyler	Amb. Temp :	65	Nozzel :	S/S
Location :	Oxnard	Pbar :	30.05	Prob Heat :	~
Unit :	Turbine	Pitot :	~	Wind Vel. :	~
Date :	8/25/14	Pyro :	~	Static Press. :	~
Run # :	3-NH3	Mag Δ P :	~	O2 :	~
Cold Box :	3	Mag Δ H :	Manu	CO2 :	~
Meter # :	C	% H2O :	~	Engineer :	RY
Meter Factor :	1.0094	Box Heat :	~	Technician :	JP

Stack Dia. :
"A" :
"B" :
Port Size :
Offset :
M / F :

Stack Sample Port Location



Imp.	Gross	Tare	Total
1			
2			
3			
4			

Filter 1 :

START TIME: 12:45 END TIME: 2321 "K" FACTOR: Filter 2 :

Point No.	Traverse Distance	Time Minutes	Stack °F	Δ P	√Δ P	Dry Gas Meter Volume	Δ H In H2O	Inlet ° F	Outlet ° F	Impinger Exit° F	Meter Vacuum	Filter Temp.°F	Cyl. Flow
1		0				689.308	2.0	75	72		6		
2	5	3 8				694.3	2.0	76	72		4		
3	13	01 16				699.0	2.0	79	72		6		
4	09	24				703.0	2.0	80	72		6		
5	17	32				708.7	2.0	80	72		4		
6	25	40				712.7	2.0	80	72		6		
7	33	48				717.3	2.0	80	73		6		
8	41	56				722.7	2.0	80	73		4		
9	49	64				727.9	2.0	80	73		6		
10	57	72				730.0	2.0	80	74		4		
11	2095	80				735.5	2.0	80	74		6		
12	13	88				240.3	2.0	80	74		6		
	21	96				744.508							

Average:

Leak Checks : Pitots

Pre	Top	Bottom
ΔP		

Post	Top	Bottom
ΔP		

Sample Train Leak Check

CFM :	.010	In. HG :	12	
CFM :	0	In. HG :	12	

New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST
March 25, 2014

3/25/2014 8:35 3/25/2014 9:07 1 m

Run 1

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RS_NOX.PPM		RS_931AC1111C.CCO		RS_931AC1111B.O2		DBGASFLOW_A		GTGASFLOW		921-2015.WQ		931FIC1173_MV		921-2015.DWATT	
25-Mar-14 08:35:00	10.23	25-Mar-14 08:35:00	29.16	41723.36	15.54	25-Mar-14 08:35:00	10.47	25-Mar-14 08:35:00	256.10	25-Mar-14 08:35:00	2.16	25-Mar-14 08:35:00	19.79	25-Mar-14 08:36:00	23.74
25-Mar-14 08:36:00	10.25	25-Mar-14 08:36:00	29.16	25-Mar-14 08:36:00	15.54	25-Mar-14 08:36:00	10.19	25-Mar-14 08:36:00	256.10	25-Mar-14 08:36:00	2.14	25-Mar-14 08:36:00	19.56	25-Mar-14 08:36:00	23.78
25-Mar-14 08:37:00	10.43	25-Mar-14 08:37:00	29.16	25-Mar-14 08:37:00	15.54	25-Mar-14 08:37:00	9.90	25-Mar-14 08:37:00	256.10	25-Mar-14 08:37:00	2.16	25-Mar-14 08:37:00	20.08	25-Mar-14 08:37:00	23.86
25-Mar-14 08:38:00	10.66	25-Mar-14 08:38:00	29.17	25-Mar-14 08:38:00	15.54	25-Mar-14 08:38:00	9.62	25-Mar-14 08:38:00	256.10	25-Mar-14 08:38:00	2.16	25-Mar-14 08:38:00	20.08	25-Mar-14 08:38:00	23.94
25-Mar-14 08:39:00	10.64	25-Mar-14 08:39:00	29.24	25-Mar-14 08:39:00	15.54	25-Mar-14 08:39:00	9.35	25-Mar-14 08:39:00	256.10	25-Mar-14 08:39:00	2.16	25-Mar-14 08:39:00	20.26	25-Mar-14 08:39:00	23.88
25-Mar-14 08:40:00	10.52	25-Mar-14 08:40:00	29.33	25-Mar-14 08:40:00	15.54	25-Mar-14 08:40:00	9.09	25-Mar-14 08:40:00	256.10	25-Mar-14 08:40:00	2.17	25-Mar-14 08:40:00	19.86	25-Mar-14 08:40:00	23.92
25-Mar-14 08:41:00	10.49	25-Mar-14 08:41:00	29.67	25-Mar-14 08:41:00	15.54	25-Mar-14 08:41:00	8.68	25-Mar-14 08:41:00	256.10	25-Mar-14 08:41:00	2.15	25-Mar-14 08:41:00	20.57	25-Mar-14 08:41:00	23.86
25-Mar-14 08:42:00	10.49	25-Mar-14 08:42:00	30.23	25-Mar-14 08:42:00	15.54	25-Mar-14 08:42:00	8.21	25-Mar-14 08:42:00	256.10	25-Mar-14 08:42:00	2.15	25-Mar-14 08:42:00	20.34	25-Mar-14 08:42:00	23.89
25-Mar-14 08:43:00	10.58	25-Mar-14 08:43:00	29.96	25-Mar-14 08:43:00	15.54	25-Mar-14 08:43:00	7.89	25-Mar-14 08:43:00	256.10	25-Mar-14 08:43:00	2.16	25-Mar-14 08:43:00	20.15	25-Mar-14 08:43:00	23.88
25-Mar-14 08:44:00	10.69	25-Mar-14 08:44:00	29.54	25-Mar-14 08:44:00	15.54	25-Mar-14 08:44:00	7.64	25-Mar-14 08:44:00	256.10	25-Mar-14 08:44:00	2.15	25-Mar-14 08:44:00	20.14	25-Mar-14 08:44:00	23.88
25-Mar-14 08:45:00	10.51	25-Mar-14 08:45:00	30.33	25-Mar-14 08:45:00	15.54	25-Mar-14 08:45:00	7.56	25-Mar-14 08:45:00	256.10	25-Mar-14 08:45:00	2.16	25-Mar-14 08:45:00	20.16	25-Mar-14 08:45:00	23.83
25-Mar-14 08:46:00	10.23	25-Mar-14 08:46:00	30.29	25-Mar-14 08:46:00	15.54	25-Mar-14 08:46:00	7.59	25-Mar-14 08:46:00	256.10	25-Mar-14 08:46:00	2.16	25-Mar-14 08:46:00	20.06	25-Mar-14 08:46:00	23.85
25-Mar-14 08:47:00	10.30	25-Mar-14 08:47:00	30.15	25-Mar-14 08:47:00	15.54	25-Mar-14 08:47:00	7.64	25-Mar-14 08:47:00	256.10	25-Mar-14 08:47:00	2.16	25-Mar-14 08:47:00	20.06	25-Mar-14 08:47:00	23.82
25-Mar-14 08:48:00	10.50	25-Mar-14 08:48:00	30.01	25-Mar-14 08:48:00	15.54	25-Mar-14 08:48:00	7.72	25-Mar-14 08:48:00	256.10	25-Mar-14 08:48:00	2.16	25-Mar-14 08:48:00	20.05	25-Mar-14 08:48:00	23.83
25-Mar-14 08:49:00	10.60	25-Mar-14 08:49:00	29.87	25-Mar-14 08:49:00	15.54	25-Mar-14 08:49:00	7.76	25-Mar-14 08:49:00	256.10	25-Mar-14 08:49:00	2.15	25-Mar-14 08:49:00	20.00	25-Mar-14 08:49:00	23.84
25-Mar-14 08:50:00	10.65	25-Mar-14 08:50:00	29.73	25-Mar-14 08:50:00	15.54	25-Mar-14 08:50:00	7.77	25-Mar-14 08:50:00	256.10	25-Mar-14 08:50:00	2.16	25-Mar-14 08:50:00	19.94	25-Mar-14 08:50:00	23.82
25-Mar-14 08:51:00	10.78	25-Mar-14 08:51:00	29.60	25-Mar-14 08:51:00	15.54	25-Mar-14 08:51:00	7.59	25-Mar-14 08:51:00	256.10	25-Mar-14 08:51:00	2.16	25-Mar-14 08:51:00	19.99	25-Mar-14 08:51:00	23.91
25-Mar-14 08:52:00	10.92	25-Mar-14 08:52:00	29.46	25-Mar-14 08:52:00	15.54	25-Mar-14 08:52:00	7.32	25-Mar-14 08:52:00	256.10	25-Mar-14 08:52:00	2.15	25-Mar-14 08:52:00	20.26	25-Mar-14 08:52:00	23.87
25-Mar-14 08:53:00	10.73	25-Mar-14 08:53:00	29.42	25-Mar-14 08:53:00	15.54	25-Mar-14 08:53:00	6.97	25-Mar-14 08:53:00	256.10	25-Mar-14 08:53:00	2.16	25-Mar-14 08:53:00	20.08	25-Mar-14 08:53:00	23.83
25-Mar-14 08:54:00	10.44	25-Mar-14 08:54:00	29.86	25-Mar-14 08:54:00	15.54	25-Mar-14 08:54:00	6.82	25-Mar-14 08:54:00	256.10	25-Mar-14 08:54:00	2.16	25-Mar-14 08:54:00	20.17	25-Mar-14 08:54:00	23.81
25-Mar-14 08:55:00	10.44	25-Mar-14 08:55:00	29.53	25-Mar-14 08:55:00	15.54	25-Mar-14 08:55:00	6.88	25-Mar-14 08:55:00	256.10	25-Mar-14 08:55:00	2.15	25-Mar-14 08:55:00	20.12	25-Mar-14 08:55:00	23.77
25-Mar-14 08:56:00	10.55	25-Mar-14 08:56:00	29.70	25-Mar-14 08:56:00	15.54	25-Mar-14 08:56:00	6.89	25-Mar-14 08:56:00	256.10	25-Mar-14 08:56:00	2.16	25-Mar-14 08:56:00	20.15	25-Mar-14 08:56:00	23.90
25-Mar-14 08:57:00	10.42	25-Mar-14 08:57:00	29.88	25-Mar-14 08:57:00	15.54	25-Mar-14 08:57:00	7.03	25-Mar-14 08:57:00	256.10	25-Mar-14 08:57:00	2.15	25-Mar-14 08:57:00	20.14	25-Mar-14 08:57:00	23.77
25-Mar-14 08:58:00	10.21	25-Mar-14 08:58:00	30.06	25-Mar-14 08:58:00	15.55	25-Mar-14 08:58:00	7.12	25-Mar-14 08:58:00	256.10	25-Mar-14 08:58:00	2.16	25-Mar-14 08:58:00	19.96	25-Mar-14 08:56:00	23.68
25-Mar-14 08:59:00	10.30	25-Mar-14 08:59:00	30.24	25-Mar-14 08:59:00	15.57	25-Mar-14 08:59:00	6.87	25-Mar-14 08:59:00	256.10	25-Mar-14 08:59:00	2.16	25-Mar-14 08:59:00	19.88	25-Mar-14 08:59:00	23.83
25-Mar-14 09:00:00	10.50	25-Mar-14 09:00:00	30.42	25-Mar-14 09:00:00	15.58	25-Mar-14 09:00:00	6.04	25-Mar-14 09:00:00	256.10	25-Mar-14 09:00:00	2.15	25-Mar-14 09:00:00	20.03	25-Mar-14 09:00:00	23.73
25-Mar-14 09:01:00	10.58	25-Mar-14 09:01:00	30.62	25-Mar-14 09:01:00	15.59	25-Mar-14 09:01:00	5.91	25-Mar-14 09:01:00	256.10	25-Mar-14 09:01:00	2.17	25-Mar-14 09:01:00	19.79	25-Mar-14 09:01:00	23.86
25-Mar-14 09:02:00	10.61	25-Mar-14 09:02:00	30.82	25-Mar-14 09:02:00	15.60	25-Mar-14 09:02:00	5.96	25-Mar-14 09:02:00	256.10	25-Mar-14 09:02:00	2.11	25-Mar-14 09:02:00	19.98	25-Mar-14 09:02:00	23.92
25-Mar-14 09:03:00	10.75	25-Mar-14 09:03:00	30.87	25-Mar-14 09:03:00	15.60	25-Mar-14 09:03:00	6.01	25-Mar-14 09:03:00	256.10	25-Mar-14 09:03:00	2.13	25-Mar-14 09:03:00	19.94	25-Mar-14 09:03:00	23.74
25-Mar-14 09:04:00	10.90	25-Mar-14 09:04:00	30.87	25-Mar-14 09:04:00	15.60	25-Mar-14 09:04:00	6.03	25-Mar-14 09:04:00	256.10	25-Mar-14 09:04:00	2.16	25-Mar-14 09:04:00	20.29	25-Mar-14 09:04:00	23.73
25-Mar-14 09:05:00	10.69	25-Mar-14 09:05:00	30.87	25-Mar-14 09:05:00	15.60	25-Mar-14 09:05:00	5.84	25-Mar-14 09:05:00	256.10	25-Mar-14 09:05:00	2.16	25-Mar-14 09:05:00	20.17	25-Mar-14 09:05:00	23.81
25-Mar-14 09:06:00	10.36	25-Mar-14 09:06:00	30.87	25-Mar-14 09:06:00	15.60	25-Mar-14 09:06:00	5.81	25-Mar-14 09:06:00	256.10	25-Mar-14 09:06:00	2.16	25-Mar-14 09:06:00	20.15	25-Mar-14 09:06:00	23.83
Average Stack NOx, ppm (15% O2)	**10.53**	**Average Stack CO, ppm (15% O2)**	**29.94**	**Average Stack O2 (%)**	**15.56**	**Average Duct Burner Gas Flow (MSCFH)**	**7.54**	**Average Turbine Gas Flow (MSCFH)**	**256.10**	**Ave. Steam Injection Rate (lb/s)**	**2.15**	**Ave. Ammonia Injection (lb/hr)**	**20.07**	**Ave. Turbine Load (MWh)**	**23.83**

New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST
March 25, 2014

3/25/2014 9:06 3/25/2014 9:40 1 m

Run 2

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RS_NOX PPM		RS_931AIC1111C.CCO		RS_931AIC1111B.O2		DBGASFLOW_A		GTGASFLOW		921-2015.WQ		931FIC1173_MV		921-2015.DWATT	
25-Mar-14 09:08:00	10.27	25-Mar-14 09:08:00	30.06	41723.38	15.60	25-Mar-14 09:08:00	6.78	25-Mar-14 09:08:00	256.10	25-Mar-14 09:08:00	2.15	25-Mar-14 09:08:00	20.14	25-Mar-14 09:08:00	23.82
25-Mar-14 09:09:00	10.29	25-Mar-14 09:09:00	29.92	25-Mar-14 09:09:00	15.60	25-Mar-14 09:09:00	6.96	25-Mar-14 09:09:00	256.10	25-Mar-14 09:09:00	2.14	25-Mar-14 09:09:00	20.16	25-Mar-14 09:09:00	23.86
25-Mar-14 09:10:00	10.32	25-Mar-14 09:10:00	29.76	25-Mar-14 09:10:00	15.60	25-Mar-14 09:10:00	6.97	25-Mar-14 09:10:00	256.10	25-Mar-14 09:10:00	2.15	25-Mar-14 09:10:00	20.06	25-Mar-14 09:10:00	23.75
25-Mar-14 09:11:00	10.29	25-Mar-14 09:11:00	30.51	25-Mar-14 09:11:00	15.60	25-Mar-14 09:11:00	6.93	25-Mar-14 09:11:00	256.10	25-Mar-14 09:11:00	2.16	25-Mar-14 09:11:00	20.08	25-Mar-14 09:11:00	23.72
25-Mar-14 09:12:00	10.25	25-Mar-14 09:12:00	30.60	25-Mar-14 09:12:00	15.60	25-Mar-14 09:12:00	6.19	25-Mar-14 09:12:00	256.10	25-Mar-14 09:12:00	2.16	25-Mar-14 09:12:00	19.78	25-Mar-14 09:12:00	23.74
25-Mar-14 09:13:00	10.35	25-Mar-14 09:13:00	30.24	25-Mar-14 09:13:00	15.58	25-Mar-14 09:13:00	6.19	25-Mar-14 09:13:00	256.10	25-Mar-14 09:13:00	2.22	25-Mar-14 09:13:00	20.01	25-Mar-14 09:13:00	23.86
25-Mar-14 09:14:00	10.50	25-Mar-14 09:14:00	29.88	25-Mar-14 09:14:00	15.56	25-Mar-14 09:14:00	6.37	25-Mar-14 09:14:00	256.01	25-Mar-14 09:14:00	2.15	25-Mar-14 09:14:00	20.21	25-Mar-14 09:14:00	23.94
25-Mar-14 09:15:00	10.58	25-Mar-14 09:15:00	29.79	25-Mar-14 09:15:00	15.55	25-Mar-14 09:15:00	6.62	25-Mar-14 09:15:00	254.14	25-Mar-14 09:15:00	2.15	25-Mar-14 09:15:00	20.36	25-Mar-14 09:15:00	23.70
25-Mar-14 09:16:00	10.62	25-Mar-14 09:16:00	29.96	25-Mar-14 09:16:00	15.57	25-Mar-14 09:16:00	6.87	25-Mar-14 09:16:00	251.76	25-Mar-14 09:16:00	2.16	25-Mar-14 09:16:00	19.93	25-Mar-14 09:16:00	23.80
25-Mar-14 09:17:00	10.66	25-Mar-14 09:17:00	30.44	25-Mar-14 09:17:00	15.59	25-Mar-14 09:17:00	6.80	25-Mar-14 09:17:00	252.94	25-Mar-14 09:17:00	2.15	25-Mar-14 09:17:00	19.98	25-Mar-14 09:17:00	23.58
25-Mar-14 09:18:00	10.70	25-Mar-14 09:18:00	29.92	25-Mar-14 09:18:00	15.57	25-Mar-14 09:18:00	6.83	25-Mar-14 09:18:00	256.41	25-Mar-14 09:18:00	2.16	25-Mar-14 09:18:00	20.20	25-Mar-14 09:18:00	23.92
25-Mar-14 09:19:00	10.64	25-Mar-14 09:19:00	29.51	25-Mar-14 09:19:00	15.54	25-Mar-14 09:19:00	6.79	25-Mar-14 09:19:00	256.10	25-Mar-14 09:19:00	2.16	25-Mar-14 09:19:00	20.08	25-Mar-14 09:19:00	23.92
25-Mar-14 09:20:00	10.56	25-Mar-14 09:20:00	29.28	25-Mar-14 09:20:00	15.54	25-Mar-14 09:20:00	7.10	25-Mar-14 09:20:00	256.10	25-Mar-14 09:20:00	2.16	25-Mar-14 09:20:00	20.09	25-Mar-14 09:20:00	23.82
25-Mar-14 09:21:00	10.75	25-Mar-14 09:21:00	29.05	25-Mar-14 09:21:00	15.54	25-Mar-14 09:21:00	7.54	25-Mar-14 09:21:00	256.10	25-Mar-14 09:21:00	2.15	25-Mar-14 09:21:00	19.96	25-Mar-14 09:21:00	23.87
25-Mar-14 09:22:00	11.02	25-Mar-14 09:22:00	28.83	25-Mar-14 09:22:00	15.54	25-Mar-14 09:22:00	8.03	25-Mar-14 09:22:00	256.10	25-Mar-14 09:22:00	2.17	25-Mar-14 09:22:00	20.57	25-Mar-14 09:22:00	23.92
25-Mar-14 09:23:00	10.88	25-Mar-14 09:23:00	28.60	25-Mar-14 09:23:00	15.54	25-Mar-14 09:23:00	8.71	25-Mar-14 09:23:00	256.10	25-Mar-14 09:23:00	2.16	25-Mar-14 09:23:00	20.24	25-Mar-14 09:23:00	23.96
25-Mar-14 09:24:00	10.80	25-Mar-14 09:24:00	28.44	25-Mar-14 09:24:00	15.54	25-Mar-14 09:24:00	9.44	25-Mar-14 09:24:00	256.10	25-Mar-14 09:24:00	2.15	25-Mar-14 09:24:00	20.32	25-Mar-14 09:24:00	23.84
25-Mar-14 09:25:00	10.55	25-Mar-14 09:25:00	29.37	25-Mar-14 09:25:00	15.54	25-Mar-14 09:25:00	9.97	25-Mar-14 09:25:00	256.10	25-Mar-14 09:25:00	2.16	25-Mar-14 09:25:00	20.11	25-Mar-14 09:25:00	23.92
25-Mar-14 09:26:00	10.58	25-Mar-14 09:26:00	29.41	25-Mar-14 09:26:00	15.54	25-Mar-14 09:26:00	10.39	25-Mar-14 09:26:00	256.10	25-Mar-14 09:26:00	2.15	25-Mar-14 09:26:00	19.81	25-Mar-14 09:26:00	23.79
25-Mar-14 09:27:00	10.47	25-Mar-14 09:27:00	29.41	25-Mar-14 09:27:00	15.54	25-Mar-14 09:27:00	10.25	25-Mar-14 09:27:00	256.10	25-Mar-14 09:27:00	2.16	25-Mar-14 09:27:00	19.95	25-Mar-14 09:27:00	23.79
25-Mar-14 09:28:00	10.32	25-Mar-14 09:28:00	29.41	25-Mar-14 09:28:00	15.54	25-Mar-14 09:28:00	9.92	25-Mar-14 09:28:00	256.10	25-Mar-14 09:28:00	2.16	25-Mar-14 09:28:00	19.99	25-Mar-14 09:28:00	23.82
25-Mar-14 09:29:00	10.23	25-Mar-14 09:29:00	29.41	25-Mar-14 09:29:00	15.54	25-Mar-14 09:29:00	9.95	25-Mar-14 09:29:00	256.10	25-Mar-14 09:29:00	2.16	25-Mar-14 09:29:00	20.35	25-Mar-14 09:29:00	23.78
25-Mar-14 09:30:00	10.17	25-Mar-14 09:30:00	29.41	25-Mar-14 09:30:00	15.54	25-Mar-14 09:30:00	10.10	25-Mar-14 09:30:00	256.10	25-Mar-14 09:30:00	2.16	25-Mar-14 09:30:00	20.13	25-Mar-14 09:30:00	23.83
25-Mar-14 09:31:00	10.20	25-Mar-14 09:31:00	29.41	25-Mar-14 09:31:00	15.54	25-Mar-14 09:31:00	10.08	25-Mar-14 09:31:00	256.10	25-Mar-14 09:31:00	2.16	25-Mar-14 09:31:00	20.19	25-Mar-14 09:31:00	23.84
25-Mar-14 09:32:00	10.27	25-Mar-14 09:32:00	29.41	25-Mar-14 09:32:00	15.54	25-Mar-14 09:32:00	9.99	25-Mar-14 09:32:00	256.10	25-Mar-14 09:32:00	2.16	25-Mar-14 09:32:00	19.99	25-Mar-14 09:32:00	23.73
25-Mar-14 09:33:00	10.45	25-Mar-14 09:33:00	29.41	25-Mar-14 09:33:00	15.54	25-Mar-14 09:33:00	9.81	25-Mar-14 09:33:00	256.10	25-Mar-14 09:33:00	2.16	25-Mar-14 09:33:00	19.74	25-Mar-14 09:33:00	23.82
25-Mar-14 09:34:00	10.67	25-Mar-14 09:34:00	29.41	25-Mar-14 09:34:00	15.54	25-Mar-14 09:34:00	9.58	25-Mar-14 09:34:00	256.10	25-Mar-14 09:34:00	2.15	25-Mar-14 09:34:00	20.16	25-Mar-14 09:34:00	23.94
25-Mar-14 09:35:00	10.65	25-Mar-14 09:35:00	29.41	25-Mar-14 09:35:00	15.54	25-Mar-14 09:35:00	9.32	25-Mar-14 09:35:00	256.10	25-Mar-14 09:35:00	2.16	25-Mar-14 09:35:00	20.07	25-Mar-14 09:35:00	23.84
25-Mar-14 09:36:00	10.55	25-Mar-14 09:36:00	29.41	25-Mar-14 09:36:00	15.54	25-Mar-14 09:36:00	9.03	25-Mar-14 09:36:00	256.10	25-Mar-14 09:36:00	2.13	25-Mar-14 09:36:00	20.01	25-Mar-14 09:36:00	23.79
25-Mar-14 09:37:00	10.48	25-Mar-14 09:37:00	29.41	25-Mar-14 09:37:00	15.54	25-Mar-14 09:37:00	8.78	25-Mar-14 09:37:00	256.10	25-Mar-14 09:37:00	2.15	25-Mar-14 09:37:00	19.96	25-Mar-14 09:37:00	23.82
25-Mar-14 09:38:00	10.43	25-Mar-14 09:38:00	29.41	25-Mar-14 09:38:00	15.54	25-Mar-14 09:38:00	8.56	25-Mar-14 09:38:00	256.10	25-Mar-14 09:38:00	2.16	25-Mar-14 09:38:00	20.03	25-Mar-14 09:38:00	23.76
25-Mar-14 09:39:00	10.42	25-Mar-14 09:39:00	29.41	25-Mar-14 09:39:00	15.54	25-Mar-14 09:39:00	8.48	25-Mar-14 09:39:00	256.10	25-Mar-14 09:39:00	2.16	25-Mar-14 09:39:00	19.84	25-Mar-14 09:39:00	23.75
Average Stack NOx, ppm (15% O2)	**10.49**	**Average Stack CO, ppm (15% O2)**	**29.56**	**Average Stack O2 (%)**	**15.55**	**Average Duct Burner Gas Flow (MSCFH)**	**8.28**	**Average Turbine Gas Flow (MSCFH)**	**255.78**	**Ave. Steam Injection Rate (lb/s)**	**2.16**	**Ave. Ammonia Injection (lb/hr)**	**20.07**	**Ave. Turbine Load (MWh)**	**23.81**

New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST
March 25, 2014

3/25/2014 9:41 3/25/2014 10:13 1 m

Run 3

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RS_NOX PPM		RS_831AIC1111C.CCO		RS_831AIC1111B.O2		DBGASFLOW_A		GTGASFLOW		921-2015.WQ		931FIC1173_MV		921-2015.DWATT	
25-Mar-14 09:41:00	10.43	25-Mar-14 09:41:00	29.41	41723.40	15.54	25-Mar-14 09:41:00	7.94	25-Mar-14 09:41:00	256.10	25-Mar-14 09:41:00	2.16	25-Mar-14 09:41:00	20.28	25-Mar-14 09:41:00	23.93
25-Mar-14 09:42:00	10.53	25-Mar-14 09:42:00	29.41	25-Mar-14 09:42:00	15.54	25-Mar-14 09:42:00	7.87	25-Mar-14 09:42:00	256.10	25-Mar-14 09:42:00	2.16	25-Mar-14 09:42:00	20.30	25-Mar-14 09:42:00	23.78
25-Mar-14 09:43:00	10.55	25-Mar-14 09:43:00	29.41	25-Mar-14 09:43:00	15.54	25-Mar-14 09:43:00	7.95	25-Mar-14 09:43:00	256.10	25-Mar-14 09:43:00	2.15	25-Mar-14 09:43:00	20.12	25-Mar-14 09:43:00	23.75
25-Mar-14 09:44:00	10.53	25-Mar-14 09:44:00	29.41	25-Mar-14 09:44:00	15.54	25-Mar-14 09:44:00	8.10	25-Mar-14 09:44:00	256.10	25-Mar-14 09:44:00	2.16	25-Mar-14 09:44:00	20.26	25-Mar-14 09:44:00	23.76
25-Mar-14 09:45:00	10.58	25-Mar-14 09:45:00	29.41	25-Mar-14 09:45:00	15.54	25-Mar-14 09:45:00	8.42	25-Mar-14 09:45:00	256.10	25-Mar-14 09:45:00	2.16	25-Mar-14 09:45:00	20.24	25-Mar-14 09:45:00	23.77
25-Mar-14 09:46:00	10.65	25-Mar-14 09:46:00	29.41	25-Mar-14 09:46:00	15.54	25-Mar-14 09:46:00	8.80	25-Mar-14 09:46:00	256.19	25-Mar-14 09:46:00	2.15	25-Mar-14 09:46:00	20.34	25-Mar-14 09:46:00	23.78
25-Mar-14 09:47:00	10.75	25-Mar-14 09:47:00	29.41	25-Mar-14 09:47:00	15.54	25-Mar-14 09:47:00	9.01	25-Mar-14 09:47:00	256.07	25-Mar-14 09:47:00	2.15	25-Mar-14 09:47:00	20.17	25-Mar-14 09:47:00	23.79
25-Mar-14 09:48:00	10.87	25-Mar-14 09:48:00	29.41	25-Mar-14 09:48:00	15.54	25-Mar-14 09:48:00	9.14	25-Mar-14 09:48:00	260.45	25-Mar-14 09:48:00	2.16	25-Mar-14 09:48:00	20.50	25-Mar-14 09:48:00	23.80
25-Mar-14 09:49:00	10.96	25-Mar-14 09:49:00	29.41	25-Mar-14 09:49:00	15.54	25-Mar-14 09:49:00	9.15	25-Mar-14 09:49:00	259.26	25-Mar-14 09:49:00	2.16	25-Mar-14 09:49:00	20.37	25-Mar-14 09:49:00	23.99
25-Mar-14 09:50:00	11.00	25-Mar-14 09:50:00	29.41	25-Mar-14 09:50:00	15.54	25-Mar-14 09:50:00	9.11	25-Mar-14 09:50:00	256.79	25-Mar-14 09:50:00	2.16	25-Mar-14 09:50:00	20.24	25-Mar-14 09:50:00	23.89
25-Mar-14 09:51:00	10.93	25-Mar-14 09:51:00	29.41	25-Mar-14 09:51:00	15.54	25-Mar-14 09:51:00	8.94	25-Mar-14 09:51:00	256.10	25-Mar-14 09:51:00	2.16	25-Mar-14 09:51:00	20.49	25-Mar-14 09:51:00	23.74
25-Mar-14 09:52:00	10.12	25-Mar-14 09:52:00	29.41	25-Mar-14 09:52:00	15.54	25-Mar-14 09:52:00	8.73	25-Mar-14 09:52:00	256.10	25-Mar-14 09:52:00	2.17	25-Mar-14 09:52:00	19.97	25-Mar-14 09:52:00	23.82
25-Mar-14 09:53:00	10.07	25-Mar-14 09:53:00	29.41	25-Mar-14 09:53:00	15.54	25-Mar-14 09:53:00	8.71	25-Mar-14 09:53:00	256.10	25-Mar-14 09:53:00	2.16	25-Mar-14 09:53:00	20.51	25-Mar-14 09:53:00	23.82
25-Mar-14 09:54:00	10.19	25-Mar-14 09:54:00	29.41	25-Mar-14 09:54:00	15.54	25-Mar-14 09:54:00	8.75	25-Mar-14 09:54:00	256.19	25-Mar-14 09:54:00	2.16	25-Mar-14 09:54:00	19.84	25-Mar-14 09:54:00	23.75
25-Mar-14 09:55:00	10.48	25-Mar-14 09:55:00	29.41	25-Mar-14 09:55:00	15.54	25-Mar-14 09:55:00	8.88	25-Mar-14 09:55:00	256.07	25-Mar-14 09:55:00	2.16	25-Mar-14 09:55:00	20.34	25-Mar-14 09:55:00	23.93
25-Mar-14 09:56:00	10.60	25-Mar-14 09:56:00	29.41	25-Mar-14 09:56:00	15.54	25-Mar-14 09:56:00	8.55	25-Mar-14 09:56:00	260.45	25-Mar-14 09:56:00	2.19	25-Mar-14 09:56:00	20.48	25-Mar-14 09:56:00	23.96
25-Mar-14 09:57:00	10.73	25-Mar-14 09:57:00	29.41	25-Mar-14 09:57:00	15.54	25-Mar-14 09:57:00	8.31	25-Mar-14 09:57:00	259.26	25-Mar-14 09:57:00	2.17	25-Mar-14 09:57:00	20.63	25-Mar-14 09:57:00	23.96
25-Mar-14 09:58:00	10.52	25-Mar-14 09:58:00	29.41	25-Mar-14 09:58:00	15.54	25-Mar-14 09:58:00	8.03	25-Mar-14 09:58:00	256.79	25-Mar-14 09:58:00	2.15	25-Mar-14 09:58:00	20.52	25-Mar-14 09:58:00	23.86
25-Mar-14 09:59:00	10.53	25-Mar-14 09:59:00	29.41	25-Mar-14 09:59:00	15.54	25-Mar-14 09:59:00	7.73	25-Mar-14 09:59:00	256.10	25-Mar-14 09:59:00	2.14	25-Mar-14 09:59:00	20.19	25-Mar-14 09:59:00	23.67
25-Mar-14 10:00:00	10.63	25-Mar-14 10:00:00	29.41	25-Mar-14 10:00:00	15.54	25-Mar-14 10:00:00	7.43	25-Mar-14 10:00:00	256.10	25-Mar-14 10:00:00	2.16	25-Mar-14 10:00:00	20.13	25-Mar-14 10:00:00	23.79
25-Mar-14 10:01:00	10.61	25-Mar-14 10:01:00	29.41	25-Mar-14 10:01:00	15.54	25-Mar-14 10:01:00	7.20	25-Mar-14 10:01:00	256.10	25-Mar-14 10:01:00	2.15	25-Mar-14 10:01:00	20.17	25-Mar-14 10:01:00	23.84
25-Mar-14 10:02:00	10.54	25-Mar-14 10:02:00	29.41	25-Mar-14 10:02:00	15.54	25-Mar-14 10:02:00	7.01	25-Mar-14 10:02:00	256.10	25-Mar-14 10:02:00	2.12	25-Mar-14 10:02:00	19.89	25-Mar-14 10:02:00	23.65
25-Mar-14 10:03:00	10.43	25-Mar-14 10:03:00	29.41	25-Mar-14 10:03:00	15.54	25-Mar-14 10:03:00	7.16	25-Mar-14 10:03:00	256.10	25-Mar-14 10:03:00	2.15	25-Mar-14 10:03:00	20.10	25-Mar-14 10:03:00	23.70
25-Mar-14 10:04:00	10.32	25-Mar-14 10:04:00	29.41	25-Mar-14 10:04:00	15.54	25-Mar-14 10:04:00	7.42	25-Mar-14 10:04:00	256.10	25-Mar-14 10:04:00	2.16	25-Mar-14 10:04:00	20.04	25-Mar-14 10:04:00	23.61
25-Mar-14 10:05:00	10.38	25-Mar-14 10:05:00	29.35	25-Mar-14 10:05:00	15.54	25-Mar-14 10:05:00	7.64	25-Mar-14 10:05:00	256.10	25-Mar-14 10:05:00	2.15	25-Mar-14 10:05:00	20.03	25-Mar-14 10:05:00	23.71
25-Mar-14 10:06:00	10.49	25-Mar-14 10:06:00	29.20	25-Mar-14 10:06:00	15.54	25-Mar-14 10:06:00	7.82	25-Mar-14 10:06:00	256.10	25-Mar-14 10:06:00	2.16	25-Mar-14 10:06:00	20.29	25-Mar-14 10:06:00	23.87
25-Mar-14 10:07:00	10.51	25-Mar-14 10:07:00	29.04	25-Mar-14 10:07:00	15.54	25-Mar-14 10:07:00	7.78	25-Mar-14 10:07:00	256.10	25-Mar-14 10:07:00	2.14	25-Mar-14 10:07:00	20.03	25-Mar-14 10:07:00	23.75
25-Mar-14 10:08:00	10.49	25-Mar-14 10:08:00	28.80	25-Mar-14 10:08:00	15.54	25-Mar-14 10:08:00	7.68	25-Mar-14 10:08:00	256.10	25-Mar-14 10:08:00	2.17	25-Mar-14 10:08:00	20.16	25-Mar-14 10:08:00	23.71
25-Mar-14 10:09:00	10.46	25-Mar-14 10:09:00	28.74	25-Mar-14 10:09:00	15.54	25-Mar-14 10:09:00	7.97	25-Mar-14 10:09:00	256.10	25-Mar-14 10:09:00	2.16	25-Mar-14 10:09:00	20.22	25-Mar-14 10:09:00	23.82
25-Mar-14 10:10:00	10.44	25-Mar-14 10:10:00	28.58	25-Mar-14 10:10:00	15.54	25-Mar-14 10:10:00	8.39	25-Mar-14 10:10:00	256.10	25-Mar-14 10:10:00	2.16	25-Mar-14 10:10:00	20.33	25-Mar-14 10:10:00	23.73
25-Mar-14 10:11:00	10.55	25-Mar-14 10:11:00	28.43	25-Mar-14 10:11:00	15.54	25-Mar-14 10:11:00	8.74	25-Mar-14 10:11:00	256.10	25-Mar-14 10:11:00	2.15	25-Mar-14 10:11:00	20.09	25-Mar-14 10:11:00	23.81
25-Mar-14 10:12:00	10.72	25-Mar-14 10:12:00	28.31	25-Mar-14 10:12:00	15.54	25-Mar-14 10:12:00	9.03	25-Mar-14 10:12:00	256.10	25-Mar-14 10:12:00	2.14	25-Mar-14 10:12:00	20.43	25-Mar-14 10:12:00	23.84
Average Stack NOx, ppm (15% O2)	**10.55**	**Average Stack CO, ppm (15% O2)**	**29.26**	**Average Stack O2 (%)**	**15.54**	**Average Duct Burner Gas Flow (MSCFH)**	**8.22**	**Average Turbine Gas Flow (MSCFH)**	**256.74**	**Ave. Steam Injection Rate (lb/s)**	**2.16**	**Ave. Ammonia Injection (lb/hr)**	**20.25**	**Ave. Turbine Load (MWh)**	**23.79**

New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST
March 25, 2014

3/25/2014 10:40 3/25/2014 11:12 1 m

Run 4

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RS_NOX PPM		RS_931AIC1111C.CCO		RS_931AIC1111B.O2		DBGASFLOW_A		GTGASFLOW		921-2015.WQ		931FIC1173_MV		921-2015.DWATT	
25-Mar-14 10:40:00	10.17	25-Mar-14 10:40:00	29.24	41723.44	15.55	25-Mar-14 10:40:00	8.02	25-Mar-14 10:40:00	256.10	25-Mar-14 10:40:00	2.15	25-Mar-14 10:40:00	20.19	25-Mar-14 10:40:00	23.81
25-Mar-14 10:41:00	10.13	25-Mar-14 10:41:00	29.24	25-Mar-14 10:41:00	15.55	25-Mar-14 10:41:00	7.98	25-Mar-14 10:41:00	256.10	25-Mar-14 10:41:00	2.16	25-Mar-14 10:41:00	20.47	25-Mar-14 10:41:00	23.74
25-Mar-14 10:42:00	10.05	25-Mar-14 10:42:00	29.24	25-Mar-14 10:42:00	15.55	25-Mar-14 10:42:00	8.11	25-Mar-14 10:42:00	256.10	25-Mar-14 10:42:00	2.15	25-Mar-14 10:42:00	20.04	25-Mar-14 10:42:00	23.81
25-Mar-14 10:43:00	10.05	25-Mar-14 10:43:00	29.24	25-Mar-14 10:43:00	15.55	25-Mar-14 10:43:00	8.13	25-Mar-14 10:43:00	256.10	25-Mar-14 10:43:00	2.16	25-Mar-14 10:43:00	20.35	25-Mar-14 10:43:00	23.73
25-Mar-14 10:44:00	10.09	25-Mar-14 10:44:00	29.24	25-Mar-14 10:44:00	15.55	25-Mar-14 10:44:00	8.10	25-Mar-14 10:44:00	256.10	25-Mar-14 10:44:00	2.16	25-Mar-14 10:44:00	20.00	25-Mar-14 10:44:00	23.54
25-Mar-14 10:45:00	10.17	25-Mar-14 10:45:00	29.24	25-Mar-14 10:45:00	15.56	25-Mar-14 10:45:00	8.08	25-Mar-14 10:45:00	256.10	25-Mar-14 10:45:00	2.16	25-Mar-14 10:45:00	20.08	25-Mar-14 10:45:00	23.62
25-Mar-14 10:46:00	10.27	25-Mar-14 10:46:00	29.24	25-Mar-14 10:46:00	15.55	25-Mar-14 10:46:00	8.07	25-Mar-14 10:46:00	256.10	25-Mar-14 10:46:00	2.15	25-Mar-14 10:46:00	20.05	25-Mar-14 10:46:00	23.78
25-Mar-14 10:47:00	10.19	25-Mar-14 10:47:00	29.24	25-Mar-14 10:47:00	15.55	25-Mar-14 10:47:00	8.20	25-Mar-14 10:47:00	256.10	25-Mar-14 10:47:00	2.11	25-Mar-14 10:47:00	20.48	25-Mar-14 10:47:00	23.75
25-Mar-14 10:48:00	10.06	25-Mar-14 10:48:00	29.24	25-Mar-14 10:48:00	15.55	25-Mar-14 10:48:00	8.41	25-Mar-14 10:48:00	256.10	25-Mar-14 10:48:00	2.15	25-Mar-14 10:48:00	20.25	25-Mar-14 10:48:00	23.90
25-Mar-14 10:49:00	10.08	25-Mar-14 10:49:00	29.09	25-Mar-14 10:49:00	15.54	25-Mar-14 10:49:00	9.04	25-Mar-14 10:49:00	256.10	25-Mar-14 10:49:00	2.16	25-Mar-14 10:49:00	20.38	25-Mar-14 10:49:00	23.87
25-Mar-14 10:50:00	10.15	25-Mar-14 10:50:00	28.79	25-Mar-14 10:50:00	15.53	25-Mar-14 10:50:00	9.81	25-Mar-14 10:50:00	256.10	25-Mar-14 10:50:00	2.14	25-Mar-14 10:50:00	20.30	25-Mar-14 10:50:00	23.77
25-Mar-14 10:51:00	10.25	25-Mar-14 10:51:00	28.49	25-Mar-14 10:51:00	15.51	25-Mar-14 10:51:00	10.19	25-Mar-14 10:51:00	256.10	25-Mar-14 10:51:00	2.16	25-Mar-14 10:51:00	20.26	25-Mar-14 10:51:00	23.72
25-Mar-14 10:52:00	10.37	25-Mar-14 10:52:00	28.18	25-Mar-14 10:52:00	15.50	25-Mar-14 10:52:00	10.44	25-Mar-14 10:52:00	256.10	25-Mar-14 10:52:00	2.20	25-Mar-14 10:52:00	20.13	25-Mar-14 10:52:00	23.73
25-Mar-14 10:53:00	10.39	25-Mar-14 10:53:00	27.84	25-Mar-14 10:53:00	15.49	25-Mar-14 10:53:00	11.10	25-Mar-14 10:53:00	256.10	25-Mar-14 10:53:00	2.15	25-Mar-14 10:53:00	20.30	25-Mar-14 10:53:00	23.66
25-Mar-14 10:54:00	10.39	25-Mar-14 10:54:00	27.28	25-Mar-14 10:54:00	15.47	25-Mar-14 10:54:00	11.89	25-Mar-14 10:54:00	256.10	25-Mar-14 10:54:00	2.17	25-Mar-14 10:54:00	20.07	25-Mar-14 10:54:00	23.66
25-Mar-14 10:55:00	10.42	25-Mar-14 10:55:00	26.71	25-Mar-14 10:55:00	15.45	25-Mar-14 10:55:00	12.22	25-Mar-14 10:55:00	256.10	25-Mar-14 10:55:00	2.18	25-Mar-14 10:55:00	20.50	25-Mar-14 10:55:00	23.91
25-Mar-14 10:56:00	10.47	25-Mar-14 10:56:00	26.50	25-Mar-14 10:56:00	15.44	25-Mar-14 10:56:00	12.38	25-Mar-14 10:56:00	256.10	25-Mar-14 10:56:00	2.15	25-Mar-14 10:56:00	20.06	25-Mar-14 10:56:00	23.72
25-Mar-14 10:57:00	10.40	25-Mar-14 10:57:00	26.41	25-Mar-14 10:57:00	15.43	25-Mar-14 10:57:00	13.11	25-Mar-14 10:57:00	256.10	25-Mar-14 10:57:00	2.16	25-Mar-14 10:57:00	20.23	25-Mar-14 10:57:00	23.76
25-Mar-14 10:58:00	10.30	25-Mar-14 10:58:00	26.87	25-Mar-14 10:58:00	15.43	25-Mar-14 10:58:00	13.98	25-Mar-14 10:58:00	256.10	25-Mar-14 10:58:00	2.12	25-Mar-14 10:58:00	20.16	25-Mar-14 10:58:00	23.75
25-Mar-14 10:59:00	10.43	25-Mar-14 10:59:00	26.97	25-Mar-14 10:59:00	15.44	25-Mar-14 10:59:00	13.40	25-Mar-14 10:59:00	256.10	25-Mar-14 10:59:00	2.17	25-Mar-14 10:59:00	20.16	25-Mar-14 10:59:00	23.75
25-Mar-14 11:00:00	10.64	25-Mar-14 11:00:00	27.28	25-Mar-14 11:00:00	15.45	25-Mar-14 11:00:00	12.27	25-Mar-14 11:00:00	256.10	25-Mar-14 11:00:00	2.18	25-Mar-14 11:00:00	20.44	25-Mar-14 11:00:00	23.77
25-Mar-14 11:01:00	10.55	25-Mar-14 11:01:00	27.46	25-Mar-14 11:01:00	15.46	25-Mar-14 11:01:00	11.73	25-Mar-14 11:01:00	256.10	25-Mar-14 11:01:00	2.18	25-Mar-14 11:01:00	19.99	25-Mar-14 11:01:00	23.81
25-Mar-14 11:02:00	10.36	25-Mar-14 11:02:00	27.60	25-Mar-14 11:02:00	15.47	25-Mar-14 11:02:00	11.43	25-Mar-14 11:02:00	256.10	25-Mar-14 11:02:00	2.16	25-Mar-14 11:02:00	20.29	25-Mar-14 11:02:00	23.76
25-Mar-14 11:03:00	10.47	25-Mar-14 11:03:00	27.70	25-Mar-14 11:03:00	15.48	25-Mar-14 11:03:00	11.37	25-Mar-14 11:03:00	256.10	25-Mar-14 11:03:00	2.16	25-Mar-14 11:03:00	19.93	25-Mar-14 11:03:00	23.98
25-Mar-14 11:04:00	10.68	25-Mar-14 11:04:00	26.95	25-Mar-14 11:04:00	15.44	25-Mar-14 11:04:00	11.41	25-Mar-14 11:04:00	256.10	25-Mar-14 11:04:00	2.15	25-Mar-14 11:04:00	20.86	25-Mar-14 11:04:00	23.93
25-Mar-14 11:05:00	10.82	25-Mar-14 11:05:00	27.36	25-Mar-14 11:05:00	15.47	25-Mar-14 11:05:00	11.39	25-Mar-14 11:05:00	256.10	25-Mar-14 11:05:00	2.15	25-Mar-14 11:05:00	20.18	25-Mar-14 11:05:00	23.86
25-Mar-14 11:06:00	10.93	25-Mar-14 11:06:00	27.58	25-Mar-14 11:06:00	15.48	25-Mar-14 11:06:00	11.35	25-Mar-14 11:06:00	256.10	25-Mar-14 11:06:00	2.16	25-Mar-14 11:06:00	20.39	25-Mar-14 11:06:00	23.69
25-Mar-14 11:07:00	10.88	25-Mar-14 11:07:00	27.85	25-Mar-14 11:07:00	15.48	25-Mar-14 11:07:00	11.36	25-Mar-14 11:07:00	256.10	25-Mar-14 11:07:00	2.15	25-Mar-14 11:07:00	20.07	25-Mar-14 11:07:00	23.83
25-Mar-14 11:08:00	10.78	25-Mar-14 11:08:00	27.85	25-Mar-14 11:08:00	15.48	25-Mar-14 11:08:00	11.39	25-Mar-14 11:08:00	256.10	25-Mar-14 11:08:00	2.15	25-Mar-14 11:08:00	20.25	25-Mar-14 11:08:00	23.82
25-Mar-14 11:09:00	10.71	25-Mar-14 11:09:00	27.85	25-Mar-14 11:09:00	15.48	25-Mar-14 11:09:00	11.17	25-Mar-14 11:09:00	256.10	25-Mar-14 11:09:00	2.16	25-Mar-14 11:09:00	20.18	25-Mar-14 11:09:00	23.91
25-Mar-14 11:10:00	10.64	25-Mar-14 11:10:00	27.85	25-Mar-14 11:10:00	15.48	25-Mar-14 11:10:00	10.86	25-Mar-14 11:10:00	256.10	25-Mar-14 11:10:00	2.16	25-Mar-14 11:10:00	20.30	25-Mar-14 11:10:00	24.04
25-Mar-14 11:11:00	10.62	25-Mar-14 11:11:00	27.85	25-Mar-14 11:11:00	15.48	25-Mar-14 11:11:00	10.78	25-Mar-14 11:11:00	256.10	25-Mar-14 11:11:00	2.11	25-Mar-14 11:11:00	20.69	25-Mar-14 11:11:00	23.81
Average Stack NOx, ppm (15% O2)	**10.40**	**Average Stack CO, ppm (15% O2)**	**28.04**	**Average Stack O2 (%)**	**15.49**	**Average Duct Burner Gas Flow (MSCFH)**	**10.54**	**Average Turbine Gas Flow (MSCFH)**	**256.10**	**Ave. Steam Injection Rate (lb/s)**	**2.16**	**Ave. Ammonia Injection (lb/hr)**	**20.25**	**Ave. Turbine Load (MWh)**	**23.80**

New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST
March 25, 2014

3/25/2014 11:13 3/25/2014 11:45 1 m

Run 5

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RS_NOX PPM		RS_931AIC1111C.CCO		RS_931AIC1111B.O2		DBGASFLOW_A		GTGASFLOW		921-2015.WQ		931FIC1173_MV		921-2015.DWATT	
25-Mar-14 11:13:00	10.37	25-Mar-14 11:13:00	27.85	41723.47	15.48	25-Mar-14 11:13:00	10.01	25-Mar-14 11:13:00	256.10	25-Mar-14 11:13:00	2.15	25-Mar-14 11:13:00	20.26	25-Mar-14 11:13:00	23.95
25-Mar-14 11:14:00	10.44	25-Mar-14 11:14:00	27.85	25-Mar-14 11:14:00	15.48	25-Mar-14 11:14:00	9.72	25-Mar-14 11:14:00	256.10	25-Mar-14 11:14:00	2.16	25-Mar-14 11:14:00	20.46	25-Mar-14 11:14:00	23.86
25-Mar-14 11:15:00	10.49	25-Mar-14 11:15:00	27.85	25-Mar-14 11:15:00	15.48	25-Mar-14 11:15:00	9.50	25-Mar-14 11:15:00	256.10	25-Mar-14 11:15:00	2.13	25-Mar-14 11:15:00	20.22	25-Mar-14 11:15:00	23.73
25-Mar-14 11:16:00	10.54	25-Mar-14 11:16:00	27.85	25-Mar-14 11:16:00	15.48	25-Mar-14 11:16:00	9.55	25-Mar-14 11:16:00	256.10	25-Mar-14 11:16:00	2.13	25-Mar-14 11:16:00	20.53	25-Mar-14 11:16:00	23.82
25-Mar-14 11:17:00	10.45	25-Mar-14 11:17:00	27.85	25-Mar-14 11:17:00	15.48	25-Mar-14 11:17:00	9.44	25-Mar-14 11:17:00	256.10	25-Mar-14 11:17:00	2.19	25-Mar-14 11:17:00	20.56	25-Mar-14 11:17:00	23.89
25-Mar-14 11:18:00	10.33	25-Mar-14 11:18:00	27.85	25-Mar-14 11:18:00	15.48	25-Mar-14 11:18:00	9.32	25-Mar-14 11:18:00	256.10	25-Mar-14 11:18:00	2.19	25-Mar-14 11:18:00	20.38	25-Mar-14 11:18:00	24.07
25-Mar-14 11:19:00	10.48	25-Mar-14 11:19:00	27.85	25-Mar-14 11:19:00	15.48	25-Mar-14 11:19:00	9.28	25-Mar-14 11:19:00	256.10	25-Mar-14 11:19:00	2.16	25-Mar-14 11:19:00	20.65	25-Mar-14 11:19:00	23.94
25-Mar-14 11:20:00	10.71	25-Mar-14 11:20:00	27.85	25-Mar-14 11:20:00	15.48	25-Mar-14 11:20:00	9.28	25-Mar-14 11:20:00	256.10	25-Mar-14 11:20:00	2.15	25-Mar-14 11:20:00	20.88	25-Mar-14 11:20:00	23.86
25-Mar-14 11:21:00	10.46	25-Mar-14 11:21:00	27.85	25-Mar-14 11:21:00	15.48	25-Mar-14 11:21:00	9.23	25-Mar-14 11:21:00	256.10	25-Mar-14 11:21:00	2.16	25-Mar-14 11:21:00	20.86	25-Mar-14 11:21:00	23.77
25-Mar-14 11:22:00	10.09	25-Mar-14 11:22:00	27.85	25-Mar-14 11:22:00	15.48	25-Mar-14 11:22:00	9.18	25-Mar-14 11:22:00	256.10	25-Mar-14 11:22:00	2.17	25-Mar-14 11:22:00	20.59	25-Mar-14 11:22:00	23.81
25-Mar-14 11:23:00	10.05	25-Mar-14 11:23:00	27.85	25-Mar-14 11:23:00	15.48	25-Mar-14 11:23:00	9.36	25-Mar-14 11:23:00	256.10	25-Mar-14 11:23:00	2.18	25-Mar-14 11:23:00	20.64	25-Mar-14 11:23:00	23.89
25-Mar-14 11:24:00	10.15	25-Mar-14 11:24:00	27.85	25-Mar-14 11:24:00	15.48	25-Mar-14 11:24:00	9.62	25-Mar-14 11:24:00	256.10	25-Mar-14 11:24:00	2.13	25-Mar-14 11:24:00	20.46	25-Mar-14 11:24:00	23.93
25-Mar-14 11:25:00	10.38	25-Mar-14 11:25:00	27.85	25-Mar-14 11:25:00	15.48	25-Mar-14 11:25:00	9.73	25-Mar-14 11:25:00	256.10	25-Mar-14 11:25:00	2.10	25-Mar-14 11:25:00	20.60	25-Mar-14 11:25:00	23.93
25-Mar-14 11:26:00	10.61	25-Mar-14 11:26:00	27.81	25-Mar-14 11:26:00	15.48	25-Mar-14 11:26:00	9.78	25-Mar-14 11:26:00	256.01	25-Mar-14 11:26:00	2.16	25-Mar-14 11:26:00	20.59	25-Mar-14 11:26:00	23.86
25-Mar-14 11:27:00	10.46	25-Mar-14 11:27:00	27.68	25-Mar-14 11:27:00	15.47	25-Mar-14 11:27:00	9.92	25-Mar-14 11:27:00	254.14	25-Mar-14 11:27:00	2.16	25-Mar-14 11:27:00	20.88	25-Mar-14 11:27:00	23.84
25-Mar-14 11:28:00	10.17	25-Mar-14 11:28:00	27.53	25-Mar-14 11:28:00	15.47	25-Mar-14 11:28:00	10.12	25-Mar-14 11:28:00	251.75	25-Mar-14 11:28:00	2.16	25-Mar-14 11:28:00	20.30	25-Mar-14 11:28:00	23.80
25-Mar-14 11:29:00	10.26	25-Mar-14 11:29:00	27.38	25-Mar-14 11:29:00	15.46	25-Mar-14 11:29:00	10.95	25-Mar-14 11:29:00	252.94	25-Mar-14 11:29:00	2.15	25-Mar-14 11:29:00	20.36	25-Mar-14 11:29:00	23.77
25-Mar-14 11:30:00	10.48	25-Mar-14 11:30:00	27.24	25-Mar-14 11:30:00	15.45	25-Mar-14 11:30:00	11.99	25-Mar-14 11:30:00	255.41	25-Mar-14 11:30:00	2.14	25-Mar-14 11:30:00	20.26	25-Mar-14 11:30:00	23.77
25-Mar-14 11:31:00	10.41	25-Mar-14 11:31:00	27.09	25-Mar-14 11:31:00	15.45	25-Mar-14 11:31:00	12.23	25-Mar-14 11:31:00	256.10	25-Mar-14 11:31:00	2.16	25-Mar-14 11:31:00	20.48	25-Mar-14 11:31:00	23.77
25-Mar-14 11:32:00	10.24	25-Mar-14 11:32:00	26.95	25-Mar-14 11:32:00	15.44	25-Mar-14 11:32:00	12.15	25-Mar-14 11:32:00	256.10	25-Mar-14 11:32:00	2.17	25-Mar-14 11:32:00	20.28	25-Mar-14 11:32:00	23.77
25-Mar-14 11:33:00	10.41	25-Mar-14 11:33:00	26.80	25-Mar-14 11:33:00	15.43	25-Mar-14 11:33:00	12.04	25-Mar-14 11:33:00	256.10	25-Mar-14 11:33:00	2.16	25-Mar-14 11:33:00	20.34	25-Mar-14 11:33:00	23.79
25-Mar-14 11:34:00	10.70	25-Mar-14 11:34:00	26.63	25-Mar-14 11:34:00	15.43	25-Mar-14 11:34:00	11.88	25-Mar-14 11:34:00	256.10	25-Mar-14 11:34:00	2.15	25-Mar-14 11:34:00	20.42	25-Mar-14 11:34:00	23.94
25-Mar-14 11:35:00	10.67	25-Mar-14 11:35:00	26.66	25-Mar-14 11:35:00	15.43	25-Mar-14 11:35:00	11.36	25-Mar-14 11:35:00	256.10	25-Mar-14 11:35:00	2.16	25-Mar-14 11:35:00	20.79	25-Mar-14 11:35:00	23.77
25-Mar-14 11:36:00	10.51	25-Mar-14 11:36:00	26.99	25-Mar-14 11:36:00	15.45	25-Mar-14 11:36:00	10.73	25-Mar-14 11:36:00	256.10	25-Mar-14 11:36:00	2.22	25-Mar-14 11:36:00	20.31	25-Mar-14 11:36:00	23.71
25-Mar-14 11:37:00	10.44	25-Mar-14 11:37:00	27.02	25-Mar-14 11:37:00	15.47	25-Mar-14 11:37:00	10.53	25-Mar-14 11:37:00	256.10	25-Mar-14 11:37:00	2.18	25-Mar-14 11:37:00	20.72	25-Mar-14 11:37:00	23.70
25-Mar-14 11:38:00	10.39	25-Mar-14 11:38:00	27.91	25-Mar-14 11:38:00	15.48	25-Mar-14 11:38:00	10.50	25-Mar-14 11:38:00	256.19	25-Mar-14 11:38:00	2.16	25-Mar-14 11:38:00	20.05	25-Mar-14 11:38:00	23.81
25-Mar-14 11:39:00	10.38	25-Mar-14 11:39:00	27.59	25-Mar-14 11:39:00	15.48	25-Mar-14 11:39:00	10.34	25-Mar-14 11:39:00	256.07	25-Mar-14 11:39:00	2.14	25-Mar-14 11:39:00	20.62	25-Mar-14 11:39:00	23.74
25-Mar-14 11:40:00	10.38	25-Mar-14 11:40:00	27.25	25-Mar-14 11:40:00	15.48	25-Mar-14 11:40:00	10.13	25-Mar-14 11:40:00	260.45	25-Mar-14 11:40:00	2.19	25-Mar-14 11:40:00	20.65	25-Mar-14 11:40:00	23.85
25-Mar-14 11:41:00	10.31	25-Mar-14 11:41:00	26.98	25-Mar-14 11:41:00	15.48	25-Mar-14 11:41:00	9.94	25-Mar-14 11:41:00	259.26	25-Mar-14 11:41:00	2.18	25-Mar-14 11:41:00	21.04	25-Mar-14 11:41:00	23.89
25-Mar-14 11:42:00	10.21	25-Mar-14 11:42:00	26.96	25-Mar-14 11:42:00	15.48	25-Mar-14 11:42:00	9.77	25-Mar-14 11:42:00	256.79	25-Mar-14 11:42:00	2.16	25-Mar-14 11:42:00	20.61	25-Mar-14 11:42:00	23.84
25-Mar-14 11:43:00	10.18	25-Mar-14 11:43:00	26.96	25-Mar-14 11:43:00	15.48	25-Mar-14 11:43:00	9.72	25-Mar-14 11:43:00	256.10	25-Mar-14 11:43:00	2.15	25-Mar-14 11:43:00	20.97	25-Mar-14 11:43:00	23.91
25-Mar-14 11:44:00	10.18	25-Mar-14 11:44:00	26.96	25-Mar-14 11:44:00	15.48	25-Mar-14 11:44:00	9.72	25-Mar-14 11:44:00	256.10	25-Mar-14 11:44:00	2.19	25-Mar-14 11:44:00	21.20	25-Mar-14 11:44:00	23.92
Average Stack NOx, ppm (15% O2)	**10.39**	**Average Stack CO, ppm (15% O2)**	**27.46**	**Average Stack O2 (%)**	**15.47**	**Average Duct Burner Gas Flow (MSCFH)**	**10.22**	**Average Turbine Gas Flow (MSCFH)**	**256.10**	**Ave. Steam Injection Rate (lb/s)**	**2.16**	**Ave. Ammonia Injection (lb/hr)**	**20.56**	**Ave. Turbine Load (MWh)**	**23.84**

New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST 3/25/2014 11:46 3/25/2014 12:18 1 m **Run 6**
March 25, 2014

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RS_NOX PPM		RS_931AIC1111C.CCO		RS_931AIC1111B.O2		DBGASFLOW_A		GTGASFLOW		921-2015.WQ		931FIC1173_MV		921-2015.DWATT	
25-Mar-14 11:46:00	10.35	25-Mar-14 11:46:00	26.96	41723.49	15.48	25-Mar-14 11:46:00	11.13	25-Mar-14 11:46:00	256.19	25-Mar-14 11:46:00	2.13	25-Mar-14 11:46:00	20.62	25-Mar-14 11:46:00	23.87
25-Mar-14 11:47:00	10.39	25-Mar-14 11:47:00	26.95	25-Mar-14 11:47:00	15.48	25-Mar-14 11:47:00	11.41	25-Mar-14 11:47:00	258.07	25-Mar-14 11:47:00	2.18	25-Mar-14 11:47:00	20.66	25-Mar-14 11:47:00	23.86
25-Mar-14 11:48:00	10.57	25-Mar-14 11:48:00	26.95	25-Mar-14 11:48:00	15.48	25-Mar-14 11:48:00	11.68	25-Mar-14 11:48:00	260.45	25-Mar-14 11:48:00	2.15	25-Mar-14 11:48:00	20.73	25-Mar-14 11:48:00	23.88
25-Mar-14 11:49:00	10.62	25-Mar-14 11:49:00	26.96	25-Mar-14 11:49:00	15.47	25-Mar-14 11:49:00	11.83	25-Mar-14 11:49:00	259.26	25-Mar-14 11:49:00	2.16	25-Mar-14 11:49:00	20.48	25-Mar-14 11:49:00	23.81
25-Mar-14 11:50:00	10.62	25-Mar-14 11:50:00	26.96	25-Mar-14 11:50:00	15.46	25-Mar-14 11:50:00	11.92	25-Mar-14 11:50:00	256.79	25-Mar-14 11:50:00	2.18	25-Mar-14 11:50:00	20.74	25-Mar-14 11:50:00	23.85
25-Mar-14 11:51:00	10.65	25-Mar-14 11:51:00	26.93	25-Mar-14 11:51:00	15.44	25-Mar-14 11:51:00	11.75	25-Mar-14 11:51:00	256.10	25-Mar-14 11:51:00	2.17	25-Mar-14 11:51:00	20.81	25-Mar-14 11:51:00	24.00
25-Mar-14 11:52:00	10.67	25-Mar-14 11:52:00	26.78	25-Mar-14 11:52:00	15.43	25-Mar-14 11:52:00	11.49	25-Mar-14 11:52:00	256.10	25-Mar-14 11:52:00	2.15	25-Mar-14 11:52:00	20.74	25-Mar-14 11:52:00	23.83
25-Mar-14 11:53:00	10.55	25-Mar-14 11:53:00	26.78	25-Mar-14 11:53:00	15.45	25-Mar-14 11:53:00	11.48	25-Mar-14 11:53:00	256.10	25-Mar-14 11:53:00	2.14	25-Mar-14 11:53:00	21.02	25-Mar-14 11:53:00	23.87
25-Mar-14 11:54:00	10.37	25-Mar-14 11:54:00	26.71	25-Mar-14 11:54:00	15.45	25-Mar-14 11:54:00	11.60	25-Mar-14 11:54:00	256.10	25-Mar-14 11:54:00	2.15	25-Mar-14 11:54:00	20.80	25-Mar-14 11:54:00	23.79
25-Mar-14 11:55:00	10.52	25-Mar-14 11:55:00	26.26	25-Mar-14 11:55:00	15.44	25-Mar-14 11:55:00	12.33	25-Mar-14 11:55:00	256.10	25-Mar-14 11:55:00	2.15	25-Mar-14 11:55:00	20.45	25-Mar-14 11:55:00	23.77
25-Mar-14 11:56:00	10.78	25-Mar-14 11:56:00	25.83	25-Mar-14 11:56:00	15.45	25-Mar-14 11:56:00	13.27	25-Mar-14 11:56:00	256.10	25-Mar-14 11:56:00	2.16	25-Mar-14 11:56:00	20.67	25-Mar-14 11:56:00	23.87
25-Mar-14 11:57:00	10.81	25-Mar-14 11:57:00	25.65	25-Mar-14 11:57:00	15.46	25-Mar-14 11:57:00	13.45	25-Mar-14 11:57:00	256.10	25-Mar-14 11:57:00	2.16	25-Mar-14 11:57:00	20.63	25-Mar-14 11:57:00	23.90
25-Mar-14 11:58:00	10.76	25-Mar-14 11:58:00	25.73	25-Mar-14 11:58:00	15.47	25-Mar-14 11:58:00	13.34	25-Mar-14 11:58:00	256.10	25-Mar-14 11:58:00	2.16	25-Mar-14 11:58:00	20.71	25-Mar-14 11:58:00	23.99
25-Mar-14 11:59:00	10.62	25-Mar-14 11:59:00	25.80	25-Mar-14 11:59:00	15.48	25-Mar-14 11:59:00	13.63	25-Mar-14 11:59:00	256.10	25-Mar-14 11:59:00	2.15	25-Mar-14 11:59:00	20.75	25-Mar-14 11:59:00	23.90
25-Mar-14 12:00:00	10.46	25-Mar-14 12:00:00	25.88	25-Mar-14 12:00:00	15.49	25-Mar-14 12:00:00	14.01	25-Mar-14 12:00:00	256.10	25-Mar-14 12:00:00	2.17	25-Mar-14 12:00:00	20.63	25-Mar-14 12:00:00	23.84
25-Mar-14 12:01:00	10.52	25-Mar-14 12:01:00	25.75	25-Mar-14 12:01:00	15.46	25-Mar-14 12:01:00	13.52	25-Mar-14 12:01:00	256.10	25-Mar-14 12:01:00	2.22	25-Mar-14 12:01:00	20.67	25-Mar-14 12:01:00	24.17
25-Mar-14 12:02:00	10.65	25-Mar-14 12:02:00	26.08	25-Mar-14 12:02:00	15.43	25-Mar-14 12:02:00	12.69	25-Mar-14 12:02:00	256.10	25-Mar-14 12:02:00	2.16	25-Mar-14 12:02:00	20.77	25-Mar-14 12:02:00	23.90
25-Mar-14 12:03:00	10.66	25-Mar-14 12:03:00	26.72	25-Mar-14 12:03:00	15.44	25-Mar-14 12:03:00	12.06	25-Mar-14 12:03:00	256.10	25-Mar-14 12:03:00	2.10	25-Mar-14 12:03:00	20.91	25-Mar-14 12:03:00	23.94
25-Mar-14 12:04:00	10.62	25-Mar-14 12:04:00	26.90	25-Mar-14 12:04:00	15.45	25-Mar-14 12:04:00	11.51	25-Mar-14 12:04:00	256.10	25-Mar-14 12:04:00	2.13	25-Mar-14 12:04:00	20.91	25-Mar-14 12:04:00	23.93
25-Mar-14 12:05:00	10.51	25-Mar-14 12:05:00	26.94	25-Mar-14 12:05:00	15.45	25-Mar-14 12:05:00	11.47	25-Mar-14 12:05:00	256.10	25-Mar-14 12:05:00	2.20	25-Mar-14 12:05:00	20.96	25-Mar-14 12:05:00	23.80
25-Mar-14 12:06:00	10.38	25-Mar-14 12:06:00	26.98	25-Mar-14 12:06:00	15.46	25-Mar-14 12:06:00	11.62	25-Mar-14 12:06:00	256.10	25-Mar-14 12:06:00	2.13	25-Mar-14 12:06:00	20.68	25-Mar-14 12:06:00	23.87
25-Mar-14 12:07:00	10.31	25-Mar-14 12:07:00	27.03	25-Mar-14 12:07:00	15.47	25-Mar-14 12:07:00	11.75	25-Mar-14 12:07:00	256.10	25-Mar-14 12:07:00	2.14	25-Mar-14 12:07:00	20.67	25-Mar-14 12:07:00	23.80
25-Mar-14 12:08:00	10.26	25-Mar-14 12:08:00	27.07	25-Mar-14 12:08:00	15.48	25-Mar-14 12:08:00	11.86	25-Mar-14 12:08:00	256.10	25-Mar-14 12:08:00	2.16	25-Mar-14 12:08:00	20.70	25-Mar-14 12:08:00	23.73
25-Mar-14 12:09:00	10.28	25-Mar-14 12:09:00	27.11	25-Mar-14 12:09:00	15.48	25-Mar-14 12:09:00	11.57	25-Mar-14 12:09:00	256.10	25-Mar-14 12:09:00	2.17	25-Mar-14 12:09:00	20.89	25-Mar-14 12:09:00	23.80
25-Mar-14 12:10:00	10.33	25-Mar-14 12:10:00	27.15	25-Mar-14 12:10:00	15.49	25-Mar-14 12:10:00	11.14	25-Mar-14 12:10:00	256.10	25-Mar-14 12:10:00	2.17	25-Mar-14 12:10:00	20.53	25-Mar-14 12:10:00	23.70
25-Mar-14 12:11:00	10.35	25-Mar-14 12:11:00	27.01	25-Mar-14 12:11:00	15.46	25-Mar-14 12:11:00	10.86	25-Mar-14 12:11:00	256.10	25-Mar-14 12:11:00	2.15	25-Mar-14 12:11:00	20.96	25-Mar-14 12:11:00	23.94
25-Mar-14 12:12:00	10.35	25-Mar-14 12:12:00	26.92	25-Mar-14 12:12:00	15.44	25-Mar-14 12:12:00	10.63	25-Mar-14 12:12:00	256.10	25-Mar-14 12:12:00	2.16	25-Mar-14 12:12:00	20.73	25-Mar-14 12:12:00	23.85
25-Mar-14 12:13:00	10.48	25-Mar-14 12:13:00	27.02	25-Mar-14 12:13:00	15.48	25-Mar-14 12:13:00	10.27	25-Mar-14 12:13:00	256.10	25-Mar-14 12:13:00	2.16	25-Mar-14 12:13:00	20.71	25-Mar-14 12:13:00	23.88
25-Mar-14 12:14:00	10.64	25-Mar-14 12:14:00	27.12	25-Mar-14 12:14:00	15.48	25-Mar-14 12:14:00	9.88	25-Mar-14 12:14:00	256.10	25-Mar-14 12:14:00	2.14	25-Mar-14 12:14:00	20.77	25-Mar-14 12:14:00	23.86
25-Mar-14 12:15:00	10.61	25-Mar-14 12:15:00	27.03	25-Mar-14 12:15:00	15.49	25-Mar-14 12:15:00	9.76	25-Mar-14 12:15:00	256.10	25-Mar-14 12:15:00	2.15	25-Mar-14 12:15:00	20.61	25-Mar-14 12:15:00	23.71
25-Mar-14 12:16:00	10.53	25-Mar-14 12:16:00	26.30	25-Mar-14 12:16:00	15.49	25-Mar-14 12:16:00	9.76	25-Mar-14 12:16:00	256.10	25-Mar-14 12:16:00	2.14	25-Mar-14 12:16:00	20.67	25-Mar-14 12:16:00	23.73
25-Mar-14 12:17:00	10.50	25-Mar-14 12:17:00	26.30	25-Mar-14 12:17:00	15.49	25-Mar-14 12:17:00	9.76	25-Mar-14 12:17:00	256.10	25-Mar-14 12:17:00	2.13	25-Mar-14 12:17:00	20.95	25-Mar-14 12:17:00	23.77
Average Stack NOx, ppm (15% O2)	**10.52**	**Average Stack CO, ppm (15% O2)**	**26.80**	**Average Stack O2 (%)**	**15.46**	**Average Duct Burner Gas Flow (MSCFH)**	**11.70**	**Average Turbine Gas Flow (MSCFH)**	**256.42**	**Ave. Steam Injection Rate (lb/s)**	**2.15**	**Ave. Ammonia Injection (lb/hr)**	**20.75**	**Ave. Turbine Load (MWh)**	**23.85**

New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST 3/25/2014 12:45 3/25/2014 13:17 1 m Run 7
March 25, 2014

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RS_NOX PPM		RS_931AIC1111C.CCO		RS_931AIC1111B.02		DBGASFLOW_A		GTGASFLOW		921-2015.WQ		931FIC1173_MV		921-2015.DWATT	
25-Mar-14 12:45:00	10.37	25-Mar-14 12:45:00	28.49	41723.53	15.53	25-Mar-14 12:45:00	8.98	25-Mar-14 12:45:00	256.10	25-Mar-14 12:45:00	2.15	25-Mar-14 12:45:00	21.11	25-Mar-14 12:45:00	23.84
25-Mar-14 12:46:00	10.37	25-Mar-14 12:46:00	28.43	25-Mar-14 12:46:00	15.52	25-Mar-14 12:46:00	9.01	25-Mar-14 12:46:00	256.10	25-Mar-14 12:46:00	2.16	25-Mar-14 12:46:00	20.99	25-Mar-14 12:46:00	23.95
25-Mar-14 12:47:00	10.41	25-Mar-14 12:47:00	28.18	25-Mar-14 12:47:00	15.51	25-Mar-14 12:47:00	9.12	25-Mar-14 12:47:00	256.10	25-Mar-14 12:47:00	2.17	25-Mar-14 12:47:00	21.08	25-Mar-14 12:47:00	23.81
25-Mar-14 12:48:00	10.46	25-Mar-14 12:48:00	27.93	25-Mar-14 12:48:00	15.52	25-Mar-14 12:48:00	9.26	25-Mar-14 12:48:00	256.10	25-Mar-14 12:48:00	2.16	25-Mar-14 12:48:00	21.05	25-Mar-14 12:48:00	23.79
25-Mar-14 12:49:00	10.46	25-Mar-14 12:49:00	27.68	25-Mar-14 12:49:00	15.53	25-Mar-14 12:49:00	9.23	25-Mar-14 12:49:00	256.10	25-Mar-14 12:49:00	2.16	25-Mar-14 12:49:00	20.77	25-Mar-14 12:49:00	23.74
25-Mar-14 12:50:00	10.43	25-Mar-14 12:50:00	27.44	25-Mar-14 12:50:00	15.54	25-Mar-14 12:50:00	9.12	25-Mar-14 12:50:00	256.10	25-Mar-14 12:50:00	2.16	25-Mar-14 12:50:00	20.66	25-Mar-14 12:50:00	23.68
25-Mar-14 12:51:00	10.54	25-Mar-14 12:51:00	27.20	25-Mar-14 12:51:00	15.55	25-Mar-14 12:51:00	8.90	25-Mar-14 12:51:00	256.10	25-Mar-14 12:51:00	2.15	25-Mar-14 12:51:00	20.96	25-Mar-14 12:51:00	23.74
25-Mar-14 12:52:00	10.69	25-Mar-14 12:52:00	27.02	25-Mar-14 12:52:00	15.52	25-Mar-14 12:52:00	8.64	25-Mar-14 12:52:00	256.10	25-Mar-14 12:52:00	2.15	25-Mar-14 12:52:00	21.10	25-Mar-14 12:52:00	23.88
25-Mar-14 12:53:00	10.66	25-Mar-14 12:53:00	26.20	25-Mar-14 12:53:00	15.50	25-Mar-14 12:53:00	8.41	25-Mar-14 12:53:00	256.10	25-Mar-14 12:53:00	2.16	25-Mar-14 12:53:00	21.06	25-Mar-14 12:53:00	23.86
25-Mar-14 12:54:00	10.57	25-Mar-14 12:54:00	26.26	25-Mar-14 12:54:00	15.51	25-Mar-14 12:54:00	8.20	25-Mar-14 12:54:00	256.10	25-Mar-14 12:54:00	2.15	25-Mar-14 12:54:00	21.24	25-Mar-14 12:54:00	23.78
25-Mar-14 12:55:00	10.61	25-Mar-14 12:55:00	26.31	25-Mar-14 12:55:00	15.52	25-Mar-14 12:55:00	8.21	25-Mar-14 12:55:00	256.10	25-Mar-14 12:55:00	2.16	25-Mar-14 12:55:00	20.91	25-Mar-14 12:55:00	23.77
25-Mar-14 12:56:00	10.72	25-Mar-14 12:56:00	26.36	25-Mar-14 12:56:00	15.53	25-Mar-14 12:56:00	8.29	25-Mar-14 12:56:00	256.10	25-Mar-14 12:56:00	2.16	25-Mar-14 12:56:00	21.18	25-Mar-14 12:56:00	23.68
25-Mar-14 12:57:00	10.83	25-Mar-14 12:57:00	26.41	25-Mar-14 12:57:00	15.54	25-Mar-14 12:57:00	8.23	25-Mar-14 12:57:00	256.10	25-Mar-14 12:57:00	2.15	25-Mar-14 12:57:00	20.85	25-Mar-14 12:57:00	23.72
25-Mar-14 12:58:00	10.95	25-Mar-14 12:58:00	26.46	25-Mar-14 12:58:00	15.55	25-Mar-14 12:58:00	8.11	25-Mar-14 12:58:00	256.10	25-Mar-14 12:58:00	2.15	25-Mar-14 12:58:00	21.15	25-Mar-14 12:58:00	23.79
25-Mar-14 12:59:00	10.99	25-Mar-14 12:59:00	26.33	25-Mar-14 12:59:00	15.52	25-Mar-14 12:59:00	8.05	25-Mar-14 12:59:00	256.10	25-Mar-14 12:59:00	2.16	25-Mar-14 12:59:00	20.86	25-Mar-14 12:59:00	23.76
25-Mar-14 13:00:00	11.00	25-Mar-14 13:00:00	26.42	25-Mar-14 13:00:00	15.54	25-Mar-14 13:00:00	8.03	25-Mar-14 13:00:00	256.10	25-Mar-14 13:00:00	2.15	25-Mar-14 13:00:00	21.10	25-Mar-14 13:00:00	23.71
25-Mar-14 13:01:00	10.92	25-Mar-14 13:01:00	26.25	25-Mar-14 13:01:00	15.51	25-Mar-14 13:01:00	7.99	25-Mar-14 13:01:00	256.10	25-Mar-14 13:01:00	2.16	25-Mar-14 13:01:00	20.92	25-Mar-14 13:01:00	23.73
25-Mar-14 13:02:00	10.81	25-Mar-14 13:02:00	26.13	25-Mar-14 13:02:00	15.52	25-Mar-14 13:02:00	7.96	25-Mar-14 13:02:00	256.19	25-Mar-14 13:02:00	2.16	25-Mar-14 13:02:00	21.13	25-Mar-14 13:02:00	23.79
25-Mar-14 13:03:00	10.78	25-Mar-14 13:03:00	26.32	25-Mar-14 13:03:00	15.54	25-Mar-14 13:03:00	8.07	25-Mar-14 13:03:00	256.27	25-Mar-14 13:03:00	2.17	25-Mar-14 13:03:00	21.14	25-Mar-14 13:03:00	23.72
25-Mar-14 13:04:00	10.79	25-Mar-14 13:04:00	26.20	25-Mar-14 13:04:00	15.52	25-Mar-14 13:04:00	8.21	25-Mar-14 13:04:00	260.45	25-Mar-14 13:04:00	2.15	25-Mar-14 13:04:00	20.87	25-Mar-14 13:04:00	23.76
25-Mar-14 13:05:00	10.68	25-Mar-14 13:05:00	26.50	25-Mar-14 13:05:00	15.51	25-Mar-14 13:05:00	8.22	25-Mar-14 13:05:00	259.26	25-Mar-14 13:05:00	2.15	25-Mar-14 13:05:00	21.12	25-Mar-14 13:05:00	23.69
25-Mar-14 13:06:00	10.53	25-Mar-14 13:06:00	26.99	25-Mar-14 13:06:00	15.55	25-Mar-14 13:06:00	8.14	25-Mar-14 13:06:00	256.79	25-Mar-14 13:06:00	2.16	25-Mar-14 13:06:00	20.75	25-Mar-14 13:06:00	23.83
25-Mar-14 13:07:00	10.47	25-Mar-14 13:07:00	29.00	25-Mar-14 13:07:00	15.54	25-Mar-14 13:07:00	7.56	25-Mar-14 13:07:00	256.10	25-Mar-14 13:07:00	2.15	25-Mar-14 13:07:00	21.22	25-Mar-14 13:07:00	23.82
25-Mar-14 13:08:00	10.46	25-Mar-14 13:08:00	28.88	25-Mar-14 13:08:00	15.53	25-Mar-14 13:08:00	6.81	25-Mar-14 13:08:00	256.10	25-Mar-14 13:08:00	2.15	25-Mar-14 13:08:00	20.92	25-Mar-14 13:08:00	23.77
25-Mar-14 13:09:00	10.48	25-Mar-14 13:09:00	29.08	25-Mar-14 13:09:00	15.52	25-Mar-14 13:09:00	6.71	25-Mar-14 13:09:00	256.10	25-Mar-14 13:09:00	2.16	25-Mar-14 13:09:00	21.05	25-Mar-14 13:09:00	23.71
25-Mar-14 13:10:00	10.51	25-Mar-14 13:10:00	28.79	25-Mar-14 13:10:00	15.51	25-Mar-14 13:10:00	6.86	25-Mar-14 13:10:00	256.10	25-Mar-14 13:10:00	2.16	25-Mar-14 13:10:00	21.09	25-Mar-14 13:10:00	23.85
25-Mar-14 13:11:00	10.52	25-Mar-14 13:11:00	28.66	25-Mar-14 13:11:00	15.50	25-Mar-14 13:11:00	6.91	25-Mar-14 13:11:00	256.10	25-Mar-14 13:11:00	2.16	25-Mar-14 13:11:00	21.26	25-Mar-14 13:11:00	23.85
25-Mar-14 13:12:00	10.52	25-Mar-14 13:12:00	28.14	25-Mar-14 13:12:00	15.53	25-Mar-14 13:12:00	6.95	25-Mar-14 13:12:00	256.10	25-Mar-14 13:12:00	2.16	25-Mar-14 13:12:00	21.22	25-Mar-14 13:12:00	23.90
25-Mar-14 13:13:00	10.51	25-Mar-14 13:13:00	28.03	25-Mar-14 13:13:00	15.51	25-Mar-14 13:13:00	7.08	25-Mar-14 13:13:00	256.10	25-Mar-14 13:13:00	2.15	25-Mar-14 13:13:00	21.02	25-Mar-14 13:13:00	23.81
25-Mar-14 13:14:00	10.51	25-Mar-14 13:14:00	28.23	25-Mar-14 13:14:00	15.49	25-Mar-14 13:14:00	7.24	25-Mar-14 13:14:00	256.10	25-Mar-14 13:14:00	2.16	25-Mar-14 13:14:00	21.42	25-Mar-14 13:14:00	23.80
25-Mar-14 13:15:00	10.57	25-Mar-14 13:15:00	28.83	25-Mar-14 13:15:00	15.49	25-Mar-14 13:15:00	7.05	25-Mar-14 13:15:00	256.10	25-Mar-14 13:15:00	2.16	25-Mar-14 13:15:00	20.86	25-Mar-14 13:15:00	23.92
25-Mar-14 13:16:00	10.65	25-Mar-14 13:16:00	28.38	25-Mar-14 13:16:00	15.49	25-Mar-14 13:16:00	6.73	25-Mar-14 13:16:00	256.10	25-Mar-14 13:16:00	2.19	25-Mar-14 13:16:00	21.31	25-Mar-14 13:16:00	23.85
Average Stack NOx, ppm (15% O2)	**10.62**	**Average Stack CO, ppm (15% O2)**	**28.31**	**Average Stack O2 (%)**	**15.52**	**Average Duct Burner Gas Flow (MSCFH)**	**8.01**	**Average Turbine Gas Flow (MSCFH)**	**256.42**	**Ave. Steam Injection Rate (lb/s)**	**2.16**	**Ave. Ammonia Injection (lb/hr)**	**21.04**	**Ave. Turbine Load (MWh)**	**23.80**

New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST
March 25, 2014

3/25/2014 13:51 3/25/2014 14:23 1 m

Run 9

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RS_NOX PPM		RS_931AIC1111C.CCD		RS_931AIC1111B.O2		DBGASFLOW_A		GTGASFLOW		921-2015.WQ		931FIC1173_MV		921-2016.DWATT	
25-Mar-14 13:51:00	10.62	25-Mar-14 13:51:00	28.24	41723.58	15.54	25-Mar-14 13:51:00	7.52	25-Mar-14 13:51:00	256.10	25-Mar-14 13:51:00	2.16	25-Mar-14 13:51:00	20.70	25-Mar-14 13:51:00	23.81
25-Mar-14 13:52:00	10.94	25-Mar-14 13:52:00	28.29	25-Mar-14 13:52:00	15.55	25-Mar-14 13:52:00	7.67	25-Mar-14 13:52:00	256.10	25-Mar-14 13:52:00	2.15	25-Mar-14 13:52:00	21.18	25-Mar-14 13:52:00	23.80
25-Mar-14 13:53:00	10.92	25-Mar-14 13:53:00	28.11	25-Mar-14 13:53:00	15.52	25-Mar-14 13:53:00	8.26	25-Mar-14 13:53:00	256.10	25-Mar-14 13:53:00	2.16	25-Mar-14 13:53:00	21.34	25-Mar-14 13:53:00	23.73
25-Mar-14 13:54:00	10.78	25-Mar-14 13:54:00	28.15	25-Mar-14 13:54:00	15.52	25-Mar-14 13:54:00	8.67	25-Mar-14 13:54:00	256.10	25-Mar-14 13:54:00	2.15	25-Mar-14 13:54:00	20.98	25-Mar-14 13:54:00	23.97
25-Mar-14 13:55:00	10.63	25-Mar-14 13:55:00	27.84	25-Mar-14 13:55:00	15.49	25-Mar-14 13:55:00	9.15	25-Mar-14 13:55:00	256.10	25-Mar-14 13:55:00	2.16	25-Mar-14 13:55:00	21.29	25-Mar-14 13:55:00	23.91
25-Mar-14 13:56:00	10.50	25-Mar-14 13:56:00	27.55	25-Mar-14 13:56:00	15.47	25-Mar-14 13:56:00	9.67	25-Mar-14 13:56:00	256.10	25-Mar-14 13:56:00	2.16	25-Mar-14 13:56:00	20.87	25-Mar-14 13:56:00	23.75
25-Mar-14 13:57:00	10.44	25-Mar-14 13:57:00	27.25	25-Mar-14 13:57:00	15.46	25-Mar-14 13:57:00	10.17	25-Mar-14 13:57:00	256.10	25-Mar-14 13:57:00	2.17	25-Mar-14 13:57:00	21.37	25-Mar-14 13:57:00	23.97
25-Mar-14 13:58:00	10.40	25-Mar-14 13:58:00	26.95	25-Mar-14 13:58:00	15.45	25-Mar-14 13:58:00	10.66	25-Mar-14 13:58:00	256.10	25-Mar-14 13:58:00	2.15	25-Mar-14 13:58:00	21.06	25-Mar-14 13:58:00	23.70
25-Mar-14 13:59:00	10.25	25-Mar-14 13:59:00	26.47	25-Mar-14 13:59:00	15.44	25-Mar-14 13:59:00	11.30	25-Mar-14 13:59:00	256.10	25-Mar-14 13:59:00	2.16	25-Mar-14 13:59:00	21.30	25-Mar-14 13:59:00	23.83
25-Mar-14 14:00:00	10.07	25-Mar-14 14:00:00	25.79	25-Mar-14 14:00:00	15.46	25-Mar-14 14:00:00	11.97	25-Mar-14 14:00:00	256.10	25-Mar-14 14:00:00	2.16	25-Mar-14 14:00:00	20.91	25-Mar-14 14:00:00	23.86
25-Mar-14 14:01:00	10.24	25-Mar-14 14:01:00	25.38	25-Mar-14 14:01:00	15.42	25-Mar-14 14:01:00	12.25	25-Mar-14 14:01:00	256.10	25-Mar-14 14:01:00	2.15	25-Mar-14 14:01:00	20.99	25-Mar-14 14:01:00	23.84
25-Mar-14 14:02:00	10.54	25-Mar-14 14:02:00	25.31	25-Mar-14 14:02:00	15.40	25-Mar-14 14:02:00	12.42	25-Mar-14 14:02:00	256.10	25-Mar-14 14:02:00	2.16	25-Mar-14 14:02:00	21.06	25-Mar-14 14:02:00	23.87
25-Mar-14 14:03:00	10.66	25-Mar-14 14:03:00	25.23	25-Mar-14 14:03:00	15.38	25-Mar-14 14:03:00	13.52	25-Mar-14 14:03:00	256.10	25-Mar-14 14:03:00	2.16	25-Mar-14 14:03:00	21.14	25-Mar-14 14:03:00	23.90
25-Mar-14 14:04:00	10.71	25-Mar-14 14:04:00	25.18	25-Mar-14 14:04:00	15.37	25-Mar-14 14:04:00	14.90	25-Mar-14 14:04:00	256.10	25-Mar-14 14:04:00	2.16	25-Mar-14 14:04:00	21.19	25-Mar-14 14:04:00	23.91
25-Mar-14 14:05:00	10.72	25-Mar-14 14:05:00	25.22	25-Mar-14 14:05:00	15.38	25-Mar-14 14:05:00	14.46	25-Mar-14 14:05:00	256.10	25-Mar-14 14:05:00	2.15	25-Mar-14 14:05:00	21.19	25-Mar-14 14:05:00	23.91
25-Mar-14 14:06:00	10.71	25-Mar-14 14:06:00	25.26	25-Mar-14 14:06:00	15.39	25-Mar-14 14:06:30	13.38	25-Mar-14 14:06:00	256.10	25-Mar-14 14:06:00	2.16	25-Mar-14 14:06:00	20.91	25-Mar-14 14:06:00	23.81
25-Mar-14 14:07:00	10.80	25-Mar-14 14:07:00	25.34	25-Mar-14 14:07:00	15.41	25-Mar-14 14:07:00	13.59	25-Mar-14 14:07:00	256.10	25-Mar-14 14:07:00	2.19	25-Mar-14 14:07:00	21.05	25-Mar-14 14:07:00	23.75
25-Mar-14 14:08:00	10.92	25-Mar-14 14:08:00	25.41	25-Mar-14 14:08:00	15.42	25-Mar-14 14:08:00	14.24	25-Mar-14 14:08:00	256.10	25-Mar-14 14:08:00	2.16	25-Mar-14 14:08:00	21.01	25-Mar-14 14:08:00	23.75
25-Mar-14 14:09:00	10.78	25-Mar-14 14:09:00	25.42	25-Mar-14 14:09:00	15.42	25-Mar-14 14:09:00	13.75	25-Mar-14 14:09:00	256.10	25-Mar-14 14:09:00	2.16	25-Mar-14 14:09:00	21.25	25-Mar-14 14:09:00	23.59
25-Mar-14 14:10:00	10.56	25-Mar-14 14:10:00	25.35	25-Mar-14 14:12:00	15.41	25-Mar-14 14:10:00	12.84	25-Mar-14 14:10:00	256.10	25-Mar-14 14:10:00	2.15	25-Mar-14 14:10:00	20.93	25-Mar-14 14:10:00	23.67
25-Mar-14 14:11:00	10.59	25-Mar-14 14:11:00	25.27	25-Mar-14 14:11:00	15.39	25-Mar-14 14:11:00	12.27	25-Mar-14 14:11:00	256.10	25-Mar-14 14:11:00	2.16	25-Mar-14 14:11:00	21.08	25-Mar-14 14:11:00	23.83
25-Mar-14 14:12:00	10.71	25-Mar-14 14:12:00	25.20	25-Mar-14 14:12:00	15.38	25-Mar-14 14:12:00	11.86	25-Mar-14 14:12:00	256.10	25-Mar-14 14:12:00	2.16	25-Mar-14 14:12:00	21.25	25-Mar-14 14:12:00	23.85
25-Mar-14 14:13:00	10.71	25-Mar-14 14:13:00	25.26	25-Mar-14 14:13:00	15.39	25-Mar-14 14:13:00	12.25	25-Mar-14 14:13:00	256.10	25-Mar-14 14:13:00	2.16	25-Mar-14 14:13:00	21.36	25-Mar-14 14:13:00	23.83
25-Mar-14 14:14:00	10.65	25-Mar-14 14:14:00	25.50	25-Mar-14 14:14:00	15.42	25-Mar-14 14:14:00	12.69	25-Mar-14 14:14:00	256.10	25-Mar-14 14:14:00	2.16	25-Mar-14 14:14:00	21.18	25-Mar-14 14:14:00	23.75
25-Mar-14 14:15:00	10.36	25-Mar-14 14:15:00	26.04	25-Mar-14 14:15:00	15.43	25-Mar-14 14:15:00	12.51	25-Mar-14 14:15:00	256.10	25-Mar-14 14:15:00	2.15	25-Mar-14 14:15:00	21.53	25-Mar-14 14:15:00	23.66
25-Mar-14 14:16:00	9.99	25-Mar-14 14:16:00	26.49	25-Mar-14 14:16:00	15.43	25-Mar-14 14:16:00	11.78	25-Mar-14 14:16:00	256.10	25-Mar-14 14:16:00	2.14	25-Mar-14 14:16:00	20.86	25-Mar-14 14:16:00	23.67
25-Mar-14 14:17:00	10.00	25-Mar-14 14:17:00	26.53	25-Mar-14 14:17:00	15.43	25-Mar-14 14:17:00	11.41	25-Mar-14 14:17:00	256.10	25-Mar-14 14:17:00	2.14	25-Mar-14 14:17:00	21.39	25-Mar-14 14:17:00	23.72
25-Mar-14 14:18:00	10.17	25-Mar-14 14:18:00	26.53	25-Mar-14 14:18:00	15.43	25-Mar-14 14:18:00	11.21	25-Mar-14 14:18:00	256.10	25-Mar-14 14:18:00	2.15	25-Mar-14 14:18:00	20.91	25-Mar-14 14:18:00	23.70
25-Mar-14 14:19:00	10.32	25-Mar-14 14:19:00	26.53	25-Mar-14 14:19:00	15.43	25-Mar-14 14:19:00	10.97	25-Mar-14 14:19:00	256.10	25-Mar-14 14:19:00	2.15	25-Mar-14 14:19:00	21.33	25-Mar-14 14:19:00	23.86
25-Mar-14 14:20:00	10.45	25-Mar-14 14:20:00	26.53	25-Mar-14 14:20:00	15.43	25-Mar-14 14:20:00	10.72	25-Mar-14 14:20:00	256.10	25-Mar-14 14:20:00	2.17	25-Mar-14 14:20:00	21.37	25-Mar-14 14:20:00	23.73
25-Mar-14 14:21:00	10.46	25-Mar-14 14:21:00	26.53	25-Mar-14 14:21:00	15.43	25-Mar-14 14:21:00	10.65	25-Mar-14 14:21:00	256.10	25-Mar-14 14:21:00	2.15	25-Mar-14 14:21:00	21.06	25-Mar-14 14:21:00	23.86
25-Mar-14 14:22:00	10.46	25-Mar-14 14:22:00	26.53	25-Mar-14 14:22:00	15.43	25-Mar-14 14:22:00	10.65	25-Mar-14 14:22:00	256.10	25-Mar-14 14:22:00	2.14	25-Mar-14 14:22:00	21.30	25-Mar-14 14:22:00	23.75
Average Stack NOx, ppm (15% O2)	**10.53**	**Average Stack CO, ppm (15% O2)**	**26.27**	**Average Stack O2 (%)**	**15.43**	**Average Duct Burner Gas Flow (MSCFH)**	**11.55**	**Average Turbine Gas Flow (MSCFH)**	**256.10**	**Ave. Steam Injection Rate (lb/s)**	**2.16**	**Ave. Ammonia Injection (lb/hr)**	**21.13**	**Ave. Turbine Load (MWh)**	**23.80**

EPA METHOD 20: MEASUREMENT SYSTEM PERFORMANCE TESTS

RESPONSE TIME

DATE OF TEST: 3/25/14 PROBE LOCATION: 1

ANALYZER TYPE & Serial No., NO_x: API 200 EH

CO: API 300 EM

O_2: Servomex 1400

Span Gas Concentration/Analyzer Full Scale Setting:

NO_x; Gas, ppmv: 11.4 Span setting, ppmv: 0-25

CO: Gas, ppmv: 19.6 Span setting, ppmv: 0-50

O_2: Gas, %: 12.1 Span setting, %: 0-25

UPSCALE TIME - Analyzer + Sampling System:

Trial #	NO_x	CO	O_2	
1	68	76	63	seconds.
2	71	78	65	seconds.
3	71	76	64	seconds.
Average Response:	70	77	.....	seconds.

DOWNSCALE - Analyzer + Sampling System:

Trial #	NO_x	CO	O_2	
1	67	78	65	seconds.
2	70	77	62	seconds.
3	71	80	65	seconds.
Average Response:	69	78	64	seconds.

Average System Response:	.....	.....	.....	seconds.
Slower Average:	.....	.....	.....	seconds.

INSTRUMENT INFORMATION

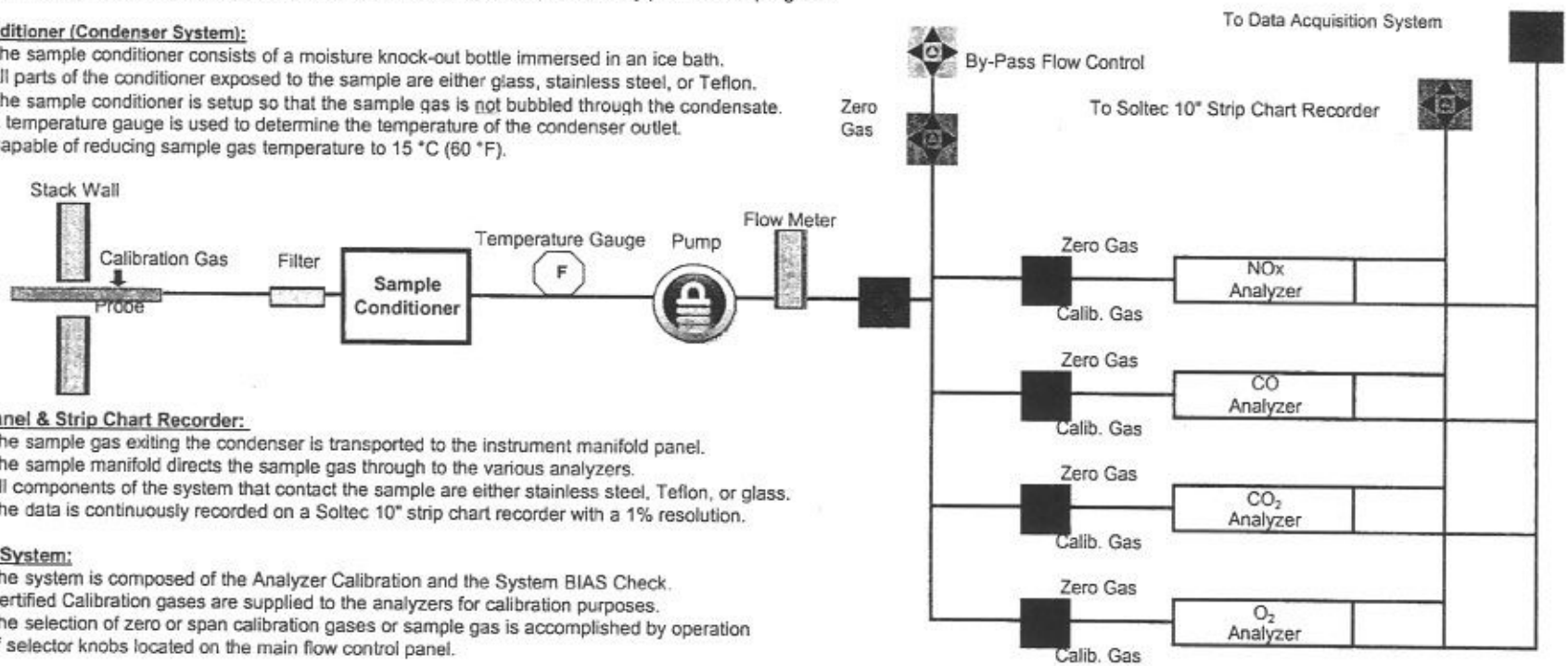
CARB Method 100 – Sample Train Assembly

Probe:

1. AIRx Testing Services, Inc. uses a stainless steel sampling probe.
2. The probe is connected to the sample conditioner using a heated (if necessary) Teflon sampling line.

Sample Conditioner (Condenser System):

1. The sample conditioner consists of a moisture knock-out bottle immersed in an ice bath.
2. All parts of the conditioner exposed to the sample are either glass, stainless steel, or Teflon.
3. The sample conditioner is setup so that the sample gas is not bubbled through the condensate.
4. A temperature gauge is used to determine the temperature of the condenser outlet.
5. Capable of reducing sample gas temperature to 15 °C (60 °F).



Manifold Panel & Strip Chart Recorder:

1. The sample gas exiting the condenser is transported to the instrument manifold panel.
2. The sample manifold directs the sample gas through to the various analyzers.
3. All components of the system that contact the sample are either stainless steel, Teflon, or glass.
4. The data is continuously recorded on a Soltec 10" strip chart recorder with a 1% resolution.

Calibration System:

1. The system is composed of the Analyzer Calibration and the System BIAS Check.
2. Certified Calibration gases are supplied to the analyzers for calibration purposes.
3. The selection of zero or span calibration gases or sample gas is accomplished by operation of selector knobs located on the main flow control panel.

Nitrogen Oxides: – Chemiluminescent Analyzer: Based on the chemiluminescent reaction of NO and ozone to form NO_2 in an excited state. Light emission is monitored through an optical filter by a high sensitivity photomultiplier tube, the output of which is electronically processed so it is linearly proportional to the NO concentration. The output is in units of ppmv.

Carbon Monoxide – Non-Dispersive Infrared (NDIR) Analyzer: Radiation from an infrared source is passed through a narrow band-pass filter and a multiple optical pass sample cell where absorption by the sample gas occurs. The infrared radiation exits the sample cell and falls on a solid state infrared detector. The output is in units of ppmv.

Oxygen – Electrochemical Analyzer: Oxygen in the flue gas sample diffuses through a Teflon membrane and is reduced on the surface of the cathode. A corresponding oxidation occurs at the anode and an electric current proportional to the concentration of oxygen is produced. The output is in units of percent O_2 by volume.

Carbon Dioxide – Non Dispersive Infrared (NDIR) Analyzer: The instrument measures the differential in infrared energy absorbed from energy beams passed through a reference cell (containing a gas selected to have minimal absorption of infrared energy in the wavelength absorbed by CO_2) and a sample cell through which the sample gas flows continuously. The output is in units of percent CO_2 by volume.

SOURCE EMISSION INSTRUMENTATION LIST
2/16/2011

OXIDES OF NITROGEN

Unit No. - 1: Manufacturer: API Model No.: 200 EH Serial No.: 233 Method: Chemiluminescence Range (ppmv) 0-5000	**Unit No. - 6:** Manufacturer: Thermo Environmental (TECO) Model No.: 10AR Serial No.: 26886-227 Method: Chemiluminescence Range (ppmv) 0-2.5, 10, 25, 100, 250, 1000, 2500, 10000
Unit No. - 2: Manufacturer: API Model No.: 200 EH Serial No.: 234 Method: Chemiluminescence Range (ppmv) 0-5000	**Unit No. - 7:** Manufacturer: Thermo Environmental (TECO) Model No.: 10AR Serial No.: 25559-221 Method: Chemiluminescence Range (ppmv) 0-2.5, 10, 25, 100, 250, 1000, 2500, 10000
Unit No. - 3: Manufacturer: API Model No.: 200 EH Serial No.: 109 Method: Chemiluminescence Range (ppmv) 0-5000	**Unit No. - 8:** Manufacturer: Thermo Environmental (TECO) Model No.: 10AR Serial No.: 38586-258 Method: Chemiluminescence Range (ppmv) 0-2.5, 10, 25, 100, 250, 1000, 2500, 10000
Unit No. - 4: Manufacturer: Thermo Environmental (TECO) Model No.: 10 Serial No.: 24697-216 Method: Chemiluminescence Range (ppmv) 0-2.5, 10, 25, 100, 250, 1000, 2500, 10000	
Unit No. - 5: Manufacturer: Thermo Environmental (TECO) Model No.: 10AR Serial No.: 26840-227 Method: Chemiluminescence Range (ppmv) 0-2.5, 10, 25, 100, 250, 1000, 2500, 10000	

SOURCE EMISSION INSTRUMENTATION LIST
2/16/2011

OXIDES OF NITROGEN (cont)

Unit No. - 4:	
Manufacturer:	API
Model No.:	200 EH
Serial No.:	442
Method:	Chemiluminescence
Range (ppmv)	0-5000
Unit No. - 5:	
Manufacturer:	API
Model No.:	200 EH
Serial No.:	441
Method:	Chemiluminescence
Range (ppmv)	0-5000
Unit No. - 6:	
Manufacturer:	API
Model No.:	200 A
Serial No.:	1013
Method:	Chemiluminescence
Range (ppmv)	0-50

Range (ppmv	0-5, 10, 25, 50, 100, 250, 500, 1000, 2500, 5000	Range (ppmv)	0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000
Unit No. - 6:		**Unit No. - 7:**	
Manufacturer:	Thermo Environmental (TECO)	Manufacturer:	Siemens
Model No.:	48H	Model No.:	Ultramat 21p
Serial No.:	29031-233	Serial No.:	AO4-254
Method:	NDIR/GFC	Method:	NDIR
Range (ppmv)	0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000	Range (ppmv)	0-300
Unit No. - 10:		**Unit No. - 11:**	
Manufacturer:	Thermo Environmental (TECO)	Manufacturer:	Thermo Environmental (TECO)
Model No.:	48H	Model No.:	48H
Serial No.:	38391-257	Serial No.:	35226-249
Method:	NDIR/GFC	Method:	NDIR/GFC
Range (ppmv)	0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000	Range (ppmv)	0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000
Unit No - 13:		**Unit No - 14:**	

SOURCE EMISSION INSTRUMENTATION LIST
2/16/2011

OXYGEN

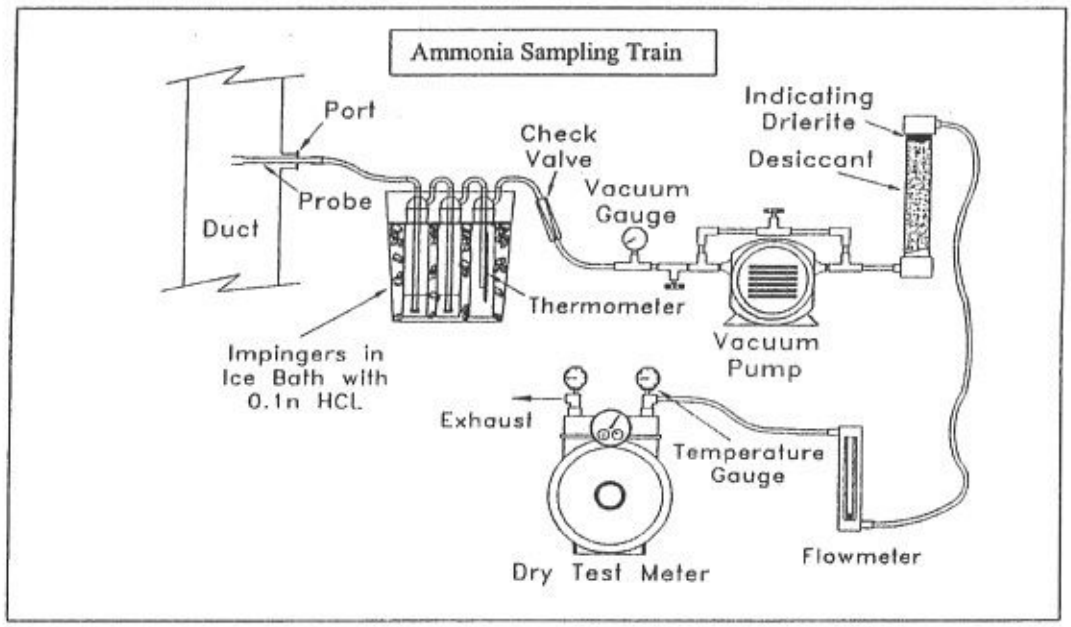
Unit No. - 5:	
Manufacturer:	Teledyne
Model No.:	320-AX
Serial No.:	108743
Method:	Electrochemical
Range (%)	0-5, 10, 25
Unit No. - 7:	
Manufacturer:	Teledyne
Model No.:	320-AX
Serial No.:	108742
Method:	Electrochemical
Range (%)	0-5, 10, 25
Unit No. - 9:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B701/730
Method:	Paramagnetic
Range (%)	0-25, 100
Unit No. - 10:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B701/747
Method:	Paramagnetic
Range (%)	0-25, 100
Unit No. - 11:	
Manufacturer:	Teledyne
Model No.:	320-A
Serial No.:	111211
Method:	Electrochemical
Range (%)	0-5, 10, 25

BAAQMD Method ST-1B / Ammonia Integrated Sampling

Principle: A gas sample is drawn through a solution of 0.1N hydrochloric acid which absorbs the ammonia.

Pre-Test Procedures:

- Add 100 ml of 0.1N to each of two impingers; retain 100 ml of the HCl to analyze as a blank
- Leak-test sampling train by starting the pump, plugging the probe, and adjusting the pump inlet vacuum to 10 inches Hg. The leak rate must not exceed 0.6 liter/min (0.02 CFM). Release plug, stop pump.
- Record initial "dry test meter" reading and barometric pressure.
- In the absence of stratification, sample at single point, otherwise select sampling traverse points.



Sampling Procedure:

- Each test run shall be of ***30 minute*** duration or 90% of the batch time, whichever is less
- Position probe at the sampling point and start the pump
- Sample at constant rate of ***14.3 liter/min (0.5 CFM),*** using rotameter to establish initial rate only
- Record "dry test meter" volume and temperature and "impinger outlet" temperature at 5-min intervals
- Maintain impinger temperature at 7°C (45°F) or less by adding ice as necessary
- At the conclusion of each run, stop pump, remove probe from stack and record final reading
- Point probe upward and purge sample train with ambient air

Analysis: Individually analyze the hydrochloric acid solutions and the blank for total ammonia content.

Calculations:

Standard sample volume	***Ammonia Concentration***
$Vo = (17.71)V_m P_b / T_m$ Where: Vo = Corrected sample volume to std conditions; T_m = Average run meter temperature (°R); V_m = Uncorrected meter volume (ft^3); P_b = Barometric pressure (inches Hg); 17.71 = Constant correcting to 70°F & 29.92 in.Hg.	$C = 5.02 \times 10^4 W / V_o$ Where: C = Ammonia concentration, ppmv on a dry basis; W = Total weight of ammonia in the impinger catch, for each run, (g); 5.02×10^4 = Constant derived from the MW and correcting to standard conditions.

QUALITY ASSURANCE

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Intertek

RATA CLASS

Guaranteed +/- 1% Accuracy

8832 DICE ROAD, SANTA FE SPRINGS, CA 90670-2516 Phone: 800-323-2212 Fax: 562-464-5262

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory - PGVP Vendor ID: A52013
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
8832 DICE ROAD
SANTA FE SPRINGS, CA 90670-2516

P.O. No.: VEN-1/14/14
Document # : 53806909-003

Customer
AIRX TESTING SERVICES, INC.
RYAN YANAGIHARA
2472 EASTMAN AVE.
UNIT # 34
VENTURA CA 93003
US

ANALYTICAL INFORMATION Gas Type : NO,BALN

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1, EPA/600/R-12/531; May 2012. Do not use this standard if pressure is less than 100 psig.

Cylinder Number: CC10018
Cylinder Pressure: 2000 PSIG
Certification Date: 29Oct2013
Exp. Date: 30Oct2016
Batch No: SB00085511

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY (ABSOLUTE / RELATIVE)
NITRIC OXIDE	11.4 PPM	0.16 PPM / 1.4 %
NITROGEN - OXYGEN FREE	BALANCE	
TOTAL OXIDES OF NITROGEN	11.5 PPM	Reference Value Only

TRACEABILITY

REFERENCE STANDARD

COMPONENT	CONCENTRATION	UNCERTAINTY	CYLINDER	TYPE/SRM SAMPLE	EXP. DATE
NITRIC OXIDE	20.3400 PPM	0.2500 PPM	KAL004237	NTRM 2629	31May2016

ANALYTICAL METHOD

1st Analysis: 22Oct2013

COMPONENT	INSTRUMENT	ANALYTICAL/PRINCIPLE	CALIBRATED	CONCENTRATION
NITRIC OXIDE	ECOPHYSICS/CLD 84 M/84M0405	CHEMILUMINESCENCE	10Oct2013	11.40 PPM

2nd Analysis: 29Oct2013

COMPONENT	INSTRUMENT	ANALYTICAL/PRINCIPLE	CALIBRATED	CONCENTRATION
NITRIC OXIDE	ECOPHYSICS/CLD 84 M/84M0405	CHEMILUMINESCENCE	10Oct2013	11.38 PPM

Special Notes: 02-87920

APPROVED BY: MT

AIR LIQUIDE Air Liquide America Specialty Gases LLC

Intertek

RATA CLASS

Dual-Analyzed Calibration Standard

8832 DICE ROAD, SANTA FE SPRINGS, CA 90670-2516 Phone: 800-323-2212 Fax: 562-464-5262

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory - PGVP Vendor ID: A52013

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
8832 DICE ROAD
SANTA FE SPRINGS, CA 90670-2516

P.O. No.: VEN-8/21/13-RY
Document # : 52017316-001

Customer

AIRX TESTING SERVICES, INC.

RYAN YANAGIHARA
2472 EASTMAN AVE.
UNIT # 34
VENTURA CA 93003
US

ANALYTICAL INFORMATION Gas Type : NO,BALN

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL2002 **Certification Date:** 22Apr2013 **Exp. Date:** 23Oct2016
Cylinder Pressure*:** 2000 PSIG **Batch No:** SB00077049

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
NITRIC OXIDE	19.7	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	19.8	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2629	31May2016	KAL004237	20.34 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
ECOPHYSICS/CLD 84 M/84M0405	15Apr2013	CHEMILUMINESCENCE

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis

NITRIC OXIDE

Date: 15Apr2013 Response Unit: PPM

Z1 = 0.00000	R1 = 20.70000	T1 = 20.06000
R2 = 20.71000	Z2 = 0.00000	T2 = 20.04000
Z3 = 0.00000	T3 = 20.02000	R3 = 20.68000

Avg. Concentration: 19.69 PPM

Second Triad Analysis

Date: 22Apr2013 Response Unit: PPM

Z1 = 0.00000	R1 = 20.68000	T1 = 20.05000
R2 = 20.65000	Z2 = 0.00000	T2 = 20.03000
Z3 = 0.00000	T3 = 20.02000	R3 = 20.66000

Avg. Concentration: 19.72 PPM

Calibration Curve

Concentration = A + Bx + Cx2 + Dx3 + Ex4
r = 0.999986759

Constants:	A = 0.056605996
B = 0.982273841	C = 0
D = 0	E = 0

APPROVED BY: _____
MT

AIRx Testing Inc

CHAIN OF CUSTODY

INVOICE TO:

ATTN:

REPORT TO: PO#

AIRx Testing Inc.
2472 Eastman Avenue, Unit 34
Ventura, CA 93003
(805) 644-1099 Fax (805) 644-2672

Contact:

LAB # 213-028 PROJECT Name: New Indy Turbine Test

Samplers: (Signature)

Rush: 24hr. Normal: 10 Day

Sample Method:

Return or Dispose

ANALYSIS

Sample No.	Sample Date	Sample Time	Comp	Grab	Sample Description	Volume (g) (ml)	Fuel (ng) (oil)	REMARKS
1	3/25		X		NH_3 R-1	610		
2	↓		↓		" R-2	600		
3	↓		↓		" R-3	680		

67

Relinquished by:	Received by	Relinquished by:	Received by:
Date: 3/26/14 Time 8:00 AM	Date: Time	Date: Time:	Date: Time

Attachment to 6.a. 74.15N3-0157

Condition No.	Response
1	Pursuant to Rule 74.15.C.3 , the Rule 74.15.B.1 requirement does not apply when the unit operated during breakdowns which were reported under Rule 32. In addition, B.1 does not apply because the unit burned less than 9,000,000,000 Btu/yr.
2	When combined with emissions from the Cogen unit(s), emissions do not exceed 50 tons of NOx per year and 97.66 tons of CO per year (see table below).
3	Pursuant to Rule 74.14.B.2.c, the unit was not tuned during this compliance period because it operated less than 10 days during this compliance period.
4	Rule 74.15.D.2 requires tune-up reports to be submitted to the District. No tune-ups were conducted during this period, so no tune-up reports were provided to the District.
5	Records of hours of operation and resulting emissions are presented in the table below.

Month-Year	Monthly		Rolling 12-Months			Emissions							
	Natrual Gas (scf)	Uptime (hours)	Natrual Gas (scf)	Uptime (hours)	Capacity Factor (%)	Nebraska Emissions NOx (tons)	Nebraska Emissions CO (tons)	Cogen Emissions NOx (tons)	Cogen Emissions CO(tons)	Total Emissions NOx (tons)	Total Emissions CO (tons)	Rolling 12 Months NOx (tons)	Rolling 12 Months CO (tons)
May-12	3,918	1.9	3,918	2	0.000%	0.009	0.00114	3.91	9.00	3.92	9.00	39.73	53.15
June-12	0	0	3,918	2	0.000%	0	0	3.82	5.46	3.82	5.46	39.79	54.53
July-12	0	0	3,918	2	0.000%	0	0	4.02	3.99	4.02	3.99	40.58	54.69
August-12	0	0	3,918	2	0.000%	0	0	4.00	4.29	4.00	4.29	40.83	54.80
September-12	0	0	3,918	2	0.000%	0	0	3.97	4.40	3.97	4.40	41.81	55.93
October-12	104,676	2.2	108,594	4	0.012%	0.011	0.0013	3.92	4.24	3.93	4.24	42.63	56.83
November-12	4,280,571	73	4,389,165	77	0.476%	0.350	0.044	3.75	3.69	4.10	3.73	43.87	57.13
December-12	786,206	14	5,175,372	91	0.561%	0.067	0.0084	3.90	5.91	3.97	5.92	46.30	61.44
January-13	0	0	5,175,372	91	0.561%	0	0	3.86	5.26	3.86	5.26	46.30	62.43
February-13	0	0	5,175,372	91	0.561%	0	0	2.75	3.69	2.75	3.69	45.33	61.30
March-13	0	0	5,175,372	91	0.561%	0	0	4.02	5.13	4.02	5.13	46.01	62.14
April-13	0	0	5,175,372	91	0.561%	0	0	3.82	4.43	3.82	4.43	46.18	59.54
May-13	4,180,459	70.75	9,351,913	160	1.013%	0.340	0.0425	3.68	4.09	4.02	4.13	46.28	54.68
June-13	0	0	9,351,913	160	1.013%	0	0	3.81	5.15	3.81	5.15	46.27	54.37
July-13	0	0	9,351,913	160	1.013%	0	0	3.90	6.09	3.90	6.09	46.15	56.47
August-13	0	0	9,351,913	160	1.013%	0	0	3.90	5.30	3.90	5.30	46.05	57.48
September-13	0	0	9,351,913	160	1.013%	0	0	3.93	6.54	3.93	6.54	46.01	59.62
October-13	3,004,121	53.72	12,251,358	211	1.327%	0.258	0.0322	3.86	5.32	4.12	5.35	46.20	60.73
November-13	129,180	4.7	8,099,966	143	0.878%	0.023	0.0028	3.79	5.99	3.81	5.99	45.91	62.99
December-13	0	0	7,313,760	129	0.792%	0	0	3.64	5.14	3.64	5.14	45.58	62.21
January-14	0	0	7,313,760	129	0.792%	0	0	3.25	4.44	3.25	4.44	44.97	61.39
February-14	0	0	7,313,760	129	0.792%	0	0	3.45	4.43	3.45	4.43	45.67	62.13
March-14	0	0	7,313,760	129	0.792%	0	0	3.42	5.28	3.42	5.28	45.07	62.28
Maximums:	**4,180,459**	**70.75**	**12,251,358**	**211**	**1.327%**	**0.340**	**0.042**	**3.93**	**6.54**	**4.12**	**6.54**	**46.28**	**62.99**

Sample Calculation:

Capacity Factor = Annual Fuel Usage * HHV natural gas /(Equipment rating * Hours/year)

Capacity Factor = (10 MMcf/yr) * (1,030 BTU/cf) / ((108 MMBtu/hr) * (8,760 hr/yr))

Capacity Factor = 1.09%

Tune-up: None this year. Operated only 9 days.

Attachment to 7.b. PO0157PC1

Material Name:	Power Back		3M Stainless Steel Polish		Electron LVC Aerosol		Sprayon All-Purpose Silicone Lube		TKX All Purpose Penetrant, Lubricant,		WD-40 Aerosol		Brakleen Brake Parts Cleaner-aerosol		Chain & Wire Rope Aerosol		LST Penetrant (LPS) Aerosol	
Container size (gal):	1		1		0.141		0.125		0.125		0.086		0.109		0.086		0.086	
VOC content (lb/gal):	0.14		2.8		0.818		5.1		4.9		2.6		5.5		2.04		0	
HHC content (lb/gal):	0		0		0		0		0		0		0		0		0	
	(containers/mo)	(gal/yr)	(containers/mo)	(gal/yr)	(containers/mo)	(gal/yr)	(containers/mo)	(gal/yr)	(containers/mo)	(gal/yr)	(containers/mo)	(gal/yr)	(containers/mo)	(gal/yr)	(containers/mo)	(gal/yr)	(containers/mo)	(gal/yr)
May-12	-	38	-	2	-	2.39	6	1.50	-	5.00	-	2.23	0.5	0.11				
Jun-12	6	38	-	2	-	2.39	-	1.50	-	4.25	-	1.72	0.5	0.16				
Jul-12	7	37	2	4	-	2.39	6	2.25	-	4.25	12.00	2.41	0.5	0.22				
Aug-12	-	32	-	4	1	2.53	-	2.25	-	3.75	12.00	3.44	0.5	0.27				
Sep-12	8	33	-	4	-	2.53	-	2.25	-	3.00	6.00	3.61	0.5	0.33				
Oct-12	-	33	-	4	-	1.13	-	2.25	-	2.25	6.00	3.09	0.5	0.38				
Nov-12	-	33	-	2	-	0.70	6	3.00	-	2.25	6.00	3.61	0.5	0.44				
Dec-12	5	38	-	2	-	0.70	-	2.25	-	1.50	6.00	4.13	0.5	0.49				
Jan-13	-	32	-	2	2	0.56	-	2.25	-	0.75	4.00	4.47	0.5	0.55				
Feb-13	5	37	-	2	2	0.84	-	2.25	6	1.50	4.00	4.81	0.5	0.60				
Mar-13	-	31	-	2	-	0.70	-	2.25	6	1.50	4.00	5.16	0.5	0.66				
Apr-13	0	31	0	2	2	0.98	0	2.25	3	1.88	4.00	5.50	0.5	0.66	0	0.00	2	0.17
May-13	0	31	0	2	12	2.67	4	2.00	5	2.50	6.00	6.02	0.5	0.66	2	0.17	0	0.17
Jun-13	7	32	0	2	0	2.67	0	2.00	1	2.63	1.00	6.10	0.5	0.66	4	0.52	1	0.26
Jul-13	6	31	0	0	0	2.67	2	1.50	0	2.63	13.00	6.19	0.5	0.66	1	0.60	6	0.77
Aug-13	5	36	0	0	8	3.66	0	1.50	11	4.00	8.00	5.84	0.5	0.66	4	0.95	3	1.03
Sep-13	0	28	0	0	0	3.66	0	1.50	3	4.38	3.00	5.59	0.5	0.66	2	1.12	3	1.29
Oct-13	3	31	0	0	3	4.08	0	1.50	3	4.75	11.00	6.02	0.5	0.66	4	1.46	8	1.98
Nov-13	4	35	0	0	0	4.08	3	1.13	1	4.88	3.00	5.76	0.5	0.66	0	1.46	7	2.58
Dec-13	4	34	0	0	1	4.22	3	1.50	2	5.13	7.00	5.84	0.5	0.66	0	1.46	7	3.18
Jan-14	4	38	0	0	1	4.08	1	1.63	1	5.25	3.00	5.76	0.5	0.66	0	1.46	10	4.04
Feb-14	4	37	0	0	5	4.50	0	1.63	0	4.50	1.00	5.50	0.5	0.66	0	1.46	3	4.30
Mar-14	4	41	0	0	0	4.50	1	1.75	2	4.00	7.00	5.76	0.5	0.66	0	1.46	13	5.41
Rolling 12-Month Max.:	7	41	0	2	12	4.50	4	2.25	11	5.25	13	6.19	0.5	0.66	4	1.46	13	5.41
VOC Emissions (tpy):	0.0029		0.0028		0.0018		0.0057		0.013		0.0080		0.0018		0.0015		0.0000	
HHC Emissions (tpy):	0		0		0		0		0		0		0		0		0	

* lb/gal VOC and HHC contents are calculated on a less water and exempt compounds basis.

MATERIAL SAFETY DATA SHEET
LPS® LST

Revision Date: February 17, 2012 **Supersedes:** February 17, 2009

Section 1 • Product and Company Identification

Product Name: LPS® LST

Part Number(s): 01916 (aerosol), 01928, 01905, 01955, C01916 (aerosol), C01928, C01905, C01955

Chemical Name: Petroleum Distillates

Product Use: An industrial penetrant designed to penetrate rust and loosen seized bolts and other equipment damaged by corrosion.

Manufacturer Information: LPS Laboratories, 4647 Hugh Howell Road, Tucker, GA, USA 30084
TEL: USA & Canada: 1 800 241-8334
Outside USA and Canada: +1 770 243-8800
FAX: USA & Canada: 1 800 543-1563
Outside USA and Canada: +1 770 243-8899

Emergency Telephone Number: Chemtrec: USA & Canada: 1 800 424-9300
Outside USA and Canada: +1 703 527-3887

Website: http://www.lpslabs.com

Section 2 • Hazards Identification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Emergency Overview:

Aerosol: DANGER: Flammable. Contents under pressure. Harmful or fatal if swallowed.

Bulk: DANGER: Combustible. Keep away from heat and flame. Harmful or fatal if swallowed.

Primary route(s) of entry: Skin and eye contact. Inhalation.

Potential Acute Health Effects:

Eyes: Irritating to eyes.

Skin: Repeated exposure may cause skin dryness or cracking.

Inhalation: Excessive inhalation of vapors can cause irritation of the respiratory tract, nausea, dizziness or headache.

Ingestion: Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation. May cause injury if aspirated into lungs.

Potential Chronic Health Effects:

Carcinogenic Effects: **NTP:** No **IARC:** No **OSHA:** No **ACGIH:** No

Mutagenic Effects: None

Teratogenic Effects: None

Target Organs: None

Medical conditions aggravated by exposure:
Persons with pre-existing central nervous system (CNS) disease, neurological conditions, skin disorders, chronic respiratory diseases, or impaired liver or kidney function should avoid exposure.

Signs and Symptoms
Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high vapor concentrations may cause headaches, stupor, irritation of throat and eyes, and kidney effects.

Section 3 • Composition / Information on Ingredients

Component	CASRN	Weight Percent
Distillates (Petroleum), Hydrotreated Light	64742-47-8	80 - 90%
Distillates (Petroleum), Hydrotreated Middle	64742-46-7	10 - 20%
Carbon Dioxide (aerosol only)	124-38-9	1 - 5%

Section 4 • First Aid Measures

Eyes: Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. DO NOT use eye ointment. Seek medical attention immediately.

Skin: Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. DO NOT use ointments. Seek medical attention if irritation persists.

Inhalation: Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. DO NOT leave victim unattended. Seek medical attention immediately.

Section 5 • Fire Fighting Measures

Products of Combustion: Carbon monoxide and carbon dioxide.

General Fire Hazards: High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers.

Firefighting media: SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use CO2, water spray, fog or foam. Cool containing vessels with water jet in order to prevent pressure build-up, auto-ignition or explosions.

Sensitivity to Impact: None **Sensitivity to Static Discharge:** None

Protection Clothing (Fire): Wear protective clothing and equipment suitable for the surrounding fire, including helmet, face mask, and self-contained breathing apparatus.

Special Remarks on Explosion Hazards:
High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers. Aerosols may explode upon heating, spread fire and overcome sprinkler systems.

Section 6 • Accidental Release Measures

Containment Procedures:

Small Spill and Leak: Absorb with an inert material and dispose of properly.

Large Spill and Leak: Secure the area and control access. Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for disposal using absorbent pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal.

Clean-Up Procedures: Contain and recover spilled material when possible.

Evacuation Procedures: Ventilate area of leak or spill. Keep unnecessary and unprotected people away.

Special Procedures: Remove all sources of ignition. Ventilate area. Wear personal protective equipment during cleanup.

Section 7 • Handling and Storage

Handling: DO NOT spray into or around ignition sources. DO NOT allow material to come in contact with eyes or skin. Wear appropriate protective equipment during handling. Keep container closed. Avoid breathing vapors or mists. Use only with adequate ventilation. Wash thoroughly after handling.

Storage: Keep container in a cool, well-ventilated area. Avoid all sources of ignition (spark or flame). Store between 40°F and 120°F (4.4°C and 49°C).

Precautions to be taken in handling and storage:
Store aerosols as Level 3 Aerosol (NFPA 30B). Store all materials in a dry, well-ventilated area. Avoid breathing vapors.

Section 8 • Exposure Controls / Personal Protection

Exposure Guidelines:

Component	CASRN	OSHA	ACGIH	NIOSH	Supplier
Distillates (Petroleum), Hydrotreated Light	64742-47-8	5 mg/m3 (oil mist) PEL	5 mg/m3 (oil mist) TLV 10 mg/m3 (oil mist) STEL	5 mg/m3 (oil mist) TWA 10 mg/m3 (oil mist) STEL	100 ppm TWA 525 mg/m3 TWA
Distillates (Petroleum), Hydrotreated Middle	64742-46-7	5 mg/m3 (oil mist) PEL	5 mg/m3 (oil mist) TLV 10 mg/m3 (oil mist) STEL	5 mg/m3 (oil mist) TWA 10 mg/m3 (oil mist) STEL	None reported
Carbon Dioxide (aerosol only)	124-38-9	5000 ppm PEL	5000 ppm TLV 30000 ppm STEL	5000 ppm TWA 30000 ppm STEL	None reported

Engineering Controls: Provide general and/or local exhaust ventilation to keep exposures below the exposure guidelines listed above.

Personal protective equipment

Eye protection: Safety glasses with side shields conforming to appropriate regulations. Eye wash fountain and emergency shower facilities are recommended.

Hand protection: Normally no hand protection is required; however, if product will be sprayed for an extended period, "overspray" onto skin may occur. If so, wear chemical resistant gloves conforming to appropriate regulations. Please observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves.

Respiratory protection: Typical use of this product under normal conditions does not require the use of respiratory protection. If airborne concentrations are above the applicable exposure limits (listed above), use NIOSH approved respiratory protection (i.e. organic vapor cartridge).

General Hygiene Considerations: Wash thoroughly after handling. Have eye-wash facilities immediately available.

Section 9 • Physical and Chemical Properties

Appearance:	Liquid	**Color:**	Clear
Odor:	Vanilla	**Evaporation Rate:**	< 0.7 (BuAc = 1)
Solubility Description:	< 0.1% in water	**Flash Point:**	79°C (175°F) - dispensed liquid
Boiling Point:	195°C (383°F)	**Flash Point Method:**	Tag-Closed Cup
Specific Gravity (H2O=1):	0.79 - 0.81 @ 20°C	**Decomposition Temperature:**	Not established
Vapor Density (air = 1):	4.7	**Auto ignition temperature:**	Not established
Vapor Pressure:	< 0.1 mm Hg @ 20°C	**Flammable limits (estimated):**	LOWER: 0.6% UPPER: 7.0%
Rule 1171 PPc:	Not established	**Partition Coefficient (octanol/water):**	< 1
V.O.C. Content:	Aerosol: 0% per State & Federal Consumer Product Regulations Bulk: 0% per State & Federal Consumer Product Regulations	**Odor Threshold:**	Not established
Melting Point:	Not established	**Viscosity:**	Not established
pH:	Not applicable	**Volatiles:**	96 - 99%
Heat of combustion:	Aerosol: > 30 kJ/g Bulk: > 30 kJ/g		

Section 10 • Stability and Reactivity

Chemical Stability:	Product is stable under recommended storage conditions.
Conditions to Avoid:	Keep away from heat and ignition sources.
Incompatibility:	Reactive or incompatible with oxidizing agents.
Hazardous Decomposition:	Combustion will generate smoke, possibly thick and choking, resulting in zero visibility and combustion products include carbon monoxide and carbon dioxide.
Hazardous Polymerization:	Will not occur.

Section 11 • Toxicological Information

Acute and Chronic Toxicity

A: General Product Information
An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

B: Component Analysis

Component	CASRN	LC-50	LD-50
Distillates (Petroleum), Hydrotreated Light	64742-47-8	> 6.8 mg/L*	> 5 g/kg*
Distillates (Petroleum), Hydrotreated Middle	64742-46-7	Not established	Not established
Carbon Dioxide (aerosol only)	124-38-9	470000 ppm / rat / 30 minutes	Not appropriate

* Supplier Data

Section 12 • Ecological Information

Mobility: Semi-volatile. Readily absorbed into soil. **Persistence / Degradability:** Only slightly biodegradable

Bioaccumulative potential: No bioaccumulation potential **Other adverse effects:** None known

Ecological studies have not been conducted for this product. The following information is available for component(s) of this product.

Ecotoxicity

Effects on Organisms	Component	CASRN	Test	Species	Results
Acute Toxicity on Fishes	Distillates (Petroleum), Hydrotreated Light	64742-47-8	96-hr LC50	Oncorhynchus Mykiss	3,200 µg/L*
Acute Toxicity on Daphnia	No data available				
Bacterial Inhibition					
Growth inhibition of algae					
Bioaccumulation in fish					

* Supplier Data

For the 64742-47-8 component, no toxicity has been observed in water due to extremely low water solubility. However, hydrocarbon and petroleum distillates are potentially toxic to freshwater and saltwater ecosystems. If material is spilled on soil, some potential toxic effects could occur before biodegradation could remove material.

If spilled, the 64742-46-7 constituent may kill grasses and small plants by interfering with transpiration. Spilled material may coat gill structures of fish resulting in suffocation if spilled in shallow, running water. This product may be toxic to amphibians by preventing dermal respiration. This product may also cause gastrointestinal distress to birds and mammals through ingestion. Biodegradation of this product is possible within 90 to 120 days in aerobic environments at temperatures above 21°C.

Section 13 • Disposal Considerations

Waste Status: In its purchased form, non-aerosol material does not meet the definition of a RCRA hazardous waste. Aerosol products, if depressurized and emptied to less than 1 inch (2.54 cm) of fluid contents are classified as non-hazardous waste under 40 CFR 261.7 (U.S.). However, if disposed of in its received form, an aerosol carries the waste code D003. (U.S.).

Disposal: Waste must be disposed of in accordance with any and all applicable environmental control rules and/or regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.

Section 14 • Transport Information

Aerosol

D.O.T. Ground	Shipping Name:	Consumer Commodity	UN No.:	NA
	Hazard Class:	ORM-D	Technical Name:	NA
	Subclass:	NA	Hazard Label:	ORM-D Already on box
	Packing Group:	NA		
Road/Rail - ADR/RID	UN No.:	1950	ADR Class:	2
	Packing Group:	NA	Classification Code:	5F
	Name and description:	AEROSOLS, flammable	Hazard ID No.:	NA
	Labeling:	2.1	Technical Name:	NA
IMDG-IMO	UN No.:	1950	Class:	2
	Shipping Name:	Aerosols	Subsidiary Risk:	2.1
	Labeling:	NA	Packing Group:	NA
	Packing Instructions:	P003, LP02	EmS:	F-D, S-U
	Marine pollutant:	No	Technical Name:	NA
IATA - ICAO:	UN No.:	1950	Class:	2.1
	Shipping Name:	Aerosols, flammable	Subclass:	NA
	Packing Instructions:	203, Y203 (Ltd. Qty.)	Packing Group:	NA
	Labeling:	Flammable Gas	Technical Name:	NA

Non-aerosol versions of this product are not regulated by any mode of transportation.

The preceding information is subject to change and must be verified prior to shipment. It is the responsibility of anyone offering hazardous materials for shipment to ensure compliance with all applicable regulations.

Section 15 • Regulatory Information

U.S. Federal Regulations

RCRA Hazardous Waste No.: D003 (aerosol only)

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA):
None

Toxic Substances Control Act (TSCA):
All components of this product are TSCA inventory listed and/or are exempt.

Superfund Amendments and Reauthorization Act (SARA) Title III SARA Section 311/312 (40 CFR 370) Hazard Categories:
Sudden Release of Pressure (aerosols only), Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):
No individual section 313 component is present at or above 1%.

Section 112 Hazardous Air Pollutants (HAPs): None

State Regulations

California: This product does not contain chemical(s) known to the State of California to cause cancer, birth defects or other

California and OTC States: This product conforms to consumer product regulations.

New Jersey Right to Know:
Aerosol: Distillates (Petroleum), Hydrotreated Light 64742-47-8 • Distillates (Petroleum), Hydrotreated Middle 64742-46-7 • Carbon Dioxide 124-38-9 • Sorbitan Trioleate 26266-58-0 • Proprietary Mixture NJ TS RN 800967-5473P
Bulk: Distillates (Petroleum), Hydrotreated Light 64742-47-8 • Distillates (Petroleum), Hydrotreated Middle 64742-46-7 • Sorbitan Trioleate 26266-58-0 • Proprietary Mixture NJ TS RN 800967-5473P • C18 Unsaturated Dimer Fatty Acids 61788-89-4

International Regulations

Canadian Environmental Protection Act (CEPA):
All of the components of this product are included on the Canadian Domestic Substances list (DSL).

Canadian Workplace Hazardous Materials Information System WHMIS:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification:
Aerosol: Class A, Class B5, Class D2B

WHMIS Classification:
Bulk: Class B3, Class D2B

Other Regulations:

Montreal Protocol listed ingredients:	None
Stockholm Convention listed ingredients:	None
Rotterdam Convention listed engredients:	None
RoHS Compliant:	Yes

MATERIAL SAFETY DATA SHEET
LPS® LST

Revision Date: February 17, 2012 **Supersedes:** February 17, 2009

Section 16 • Other Information

MSDS#: 11916 MSDS Preparation Responsible Name: Elena Badiuzzi Compliance Manager Telephone: +1 770 243-8800	**HMIS 1996**		**HMIS III**		**NFPA** Flammability Health 2 1 0 Reactivity Special
	Health:	1	Health:	[/] 1	
	Flammability:	2	Flammability Aerosol: Flammability Bulk:	4 2	
	Reactivity:	0	Physical Hazard Aerosol: Physical Hazard Bulk:	2 0	

Notice to Reader:
To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Elena Badiuzzi, Compliance Manager
LPS Laboratories, a division of Illinois Tool Works

SAFETY DATA SHEET

1. Identification

Product identifier LPS® ChainMate

Other means of identification

Part Number 02416

Recommended use A spray lubricant designed to penetrate chains and wire ropes, displace moisture and provide long lasting lubrication under high loads and humid conditions.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer

Company name LPS Laboratories, a division of Illinois Tool Works, Inc.

Address 4647 Hugh Howell Rd.
Tucker, GA 30084

Country (U.S.A.)

Tel: +1 770-243-8800

In Case of Emergency 1-800-424-9300 (inside U.S.)
+001 703-527-3887 (outside U.S.)

Website www.lpslabs.com

E-mail sds@lpslabs.com

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 1
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Extremely flammable aerosol. Causes skin irritation. May cause drowsiness or dizziness. Causes serious eye irritation.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves. Wear eye/face protection.

Response If on skin: Wash with plenty of water. Specific treatment (see this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information 65.99% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Heptane		142-82-5	10 - < 20
Petroleum Gases, Liquified, Sweetened		68476-86-8	10 - < 20
Acetone		67-64-1	3 - < 5
Other components below reportable levels			70 - < 80

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops and persists.

Eye contact
Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists.

Ingestion
Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed
Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin. Rash. Symptoms of overexposure can include shortness of breath, drowsiness, headaches, confusion, decreased coordination, visual disturbances and vomiting, and are reversible if exposure is stopped.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim under observation. Symptoms may be delayed.

General information
In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media
Powder. Water. Foam. Carbon dioxide (CO2).

Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Special protective equipment and precautions for firefighters
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire-fighting equipment/instructions
Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. In the event of fire and/or explosion do not breathe fumes.

General fire hazards
Extremely flammable aerosol.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing gas. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

Methods and materials for containment and cleaning up
Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not re-use empty containers. Do not breathe gas. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Acetone (CAS 67-64-1)	PEL	2400 mg/m3 1000 ppm
Heptane (CAS 142-82-5)	PEL	2000 mg/m3 500 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	750 ppm
	TWA	500 ppm
Heptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	590 mg/m3 250 ppm
Heptane (CAS 142-82-5)	Ceiling	1800 mg/m3 440 ppm
	TWA	350 mg/m3 85 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended.

Skin protection

Hand protection

Chemical resistant gloves are recommended.

Other

Avoid contact with clothing. Wear suitable protective clothing. Chemical resistant gloves.

Respiratory protection

No personal respiratory protective equipment normally required. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

Thermal hazards

Not applicable.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Gas.
Form	Aerosol.
Color	Dark grey. Black.
Odor	Slight petroleum odor
Odor threshold	Not established
pH	Not applicable
Melting point/freezing point	Not established
Initial boiling point and boiling range	Not established
Flash point	< -0.4 °F (< -18.0 °C) Tag Closed Cup
Evaporation rate	Not established
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not established
Flammability limit - upper (%)	Not established
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not established
Vapor density	> 1
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not established
Auto-ignition temperature	Not established
Decomposition temperature	Not established
Viscosity	31 cP
Other information	
Density	7.09
Heat of combustion	> 30 kJ/g
Percent volatile	32.5 %
Specific gravity	0.85 @ 20°C
VOC (Weight %)	24.5 % per US State and Federal Consumer Prodcut Regulations

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion.

11. Toxicological information

Information on likely routes of exposure

Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Inhalation	Narcotic effects. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics	n irritation. Causes serious eye irritation. Vapors h. a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Components	Species	Test Results
Acetone (CAS 67-64-1)		
Acute		
Dermal		
LD50	Rabbit	20000 mg/kg
		20 ml/kg
Inhalation		
LC50	Rat	76 mg/l, 4 Hours
		50.1 mg/l, 8 Hours
Oral		
LD50	Mouse	3000 mg/kg
	Rabbit	5340 mg/kg
	Rat	5800 mg/kg
Other		
LD50	Mouse	1297 mg/kg
	Rat	5500 mg/kg
Heptane (CAS 142-82-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 29.29 mg/l
		103 mg/l, 4 Hours
LD50	Mouse	75 mg/l, 2 Hours
Oral		
LD50	Rat	> 5000 mg/kg
Other		
LD50	Mouse	222 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Based on available data, the classification criteria are not met.
ACGIH Carcinogens	
Acetone (CAS 67-64-1)	Not classifiable as a human carcinogen. A4
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Narcotic effects.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components		Species	est Results
Acetone (CAS 67-64-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	10294 - 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
Heptane (CAS 142-82-5)			
Aquatic			
Fish	LC50	Mozambique tilapia (Tilapia mossambica)	375 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability Not inherently biodegradable.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

LPS® ChainMate	> 1
Acetone	-0.24
Heptane	4.66

Mobility in soil Readily absorbed into soil.

Other adverse effects None known.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D001: Waste Flammable material with a flash point <140 F
D003: Waste Reactive material

US RCRA Hazardous Waste U List: Reference

Acetone (CAS 67-64-1)	U002

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport information

DOT

UN number UN1950
UN proper shipping name Aerosols, flammable
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Label(s) 2.1
Packing group Not applicable.
Environmental hazards
Marine pollutant No
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions N82
Packaging exceptions 306
Packaging bulk None

IATA

UN number UN1950
UN proper shipping name Aerosols, flammable
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Packing group Not applicable.
Environmental hazards No.
ERG Code 10L

Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS, flammable (Heptane), MARINE POLLUTANT
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	Yes
EmS	F-D, S-U
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

DOT

IATA; IMDG

Marine pollutant

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1) LISTED

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

Not regulated.

Superfund Amendments and Re. orization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No
SARA 302 Extremely hazardous substance	Yes
SARA 311/312 Hazardous chemical	Yes

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Acetone (CAS 67-64-1)	6532

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Acetone (CAS 67-64-1)	35 % weight/volumn

DEA Exempt Chemical Mixtures Code Number

Acetone (CAS 67-64-1)	6532

US state regulations

US. Massachusetts RTK - Substance List
Acetone (CAS 67-64-1)
Heptane (CAS 142-82-5)

US. New Jersey Worker and Community Right-to-Know Act
Not regulated.

US. Pennsylvania RTK - Hazardous Substances
Acetone (CAS 67-64-1)
Heptane (CAS 142-82-5)

US. Rhode Island RTK
Acetone (CAS 67-64-1)

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 09-19-2013

Revision date	05-2013
Version #	02
HMIS® ratings	Health: 1 Flammability: 4 Physical hazard: 0
NFPA ratings	Health: 1 Flammability: 4 Instability: 0
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision Information	Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Transport Information: Material Transportation Information Regulatory Information: United States HazReg Data: International Inventories GHS: Classification

Attachment to 7.c. PO00157PC2

DATE	GAS TURBINE				COEN DUCT BURNER			MAXON BURNER					CEMS			
	Monthly (therms)	HHV	Monthly (scf)	Rolling 12-month (MMcf)	Monthly (therms)	Monthly (scf)	Rolling 12-month (MMcf)	Monthly (therms)	Monthly (scf)	Rolling 12-month (MMcf)	NOx (tons)	NOx, Rolling 12-month (tons)	Monthly CO (tons)	Monthly NOx (tons)	Rolling 12-Months CO (tons)	Rolling 12-Months NOx (tons)
May-12	2,000,575	1,015	197,100,985	1,939	59,041	5,816,847	63	2,542	247,980	8.0	0.011	0.37	9.00	3.91	53.2	39.7
Jun-12	1,973,691	1,025	192,555,220	1,940	29,147	2,843,610	63	18,368	1,791,854	9.6	0.083	0.44	5.46	3.82	54.5	39.8
Jul-12	2,089,220	1,031	202,640,155	1,981	22,319	2,164,791	61	8,639	842,761	10.2	0.039	0.47	3.99	4.02	54.7	40.6
Aug-12	2,048,680	1,021	200,654,261	1,992	26,782	2,623,115	59	6,566	640,533	10.4	0.030	0.48	4.29	4.00	54.8	40.8
Sep-12	1,983,602	1,013	195,814,610	2,042	24,738	2,442,053	58	4,804	468,645	10.6	0.022	0.49	4.40	3.97	55.9	41.8
Oct-12	1,993,708	1,035	192,628,792	2,083	26,366	2,547,440	56	5,588	545,126	10.8	0.025	0.50	4.24	3.92	56.8	42.6
Nov-12	1,757,585	1,027	171,137,780	2,116	23,749	2,312,463	53	5,553	541,712	10.6	0.025	0.49	3.69	3.75	57.1	43.5
Dec-12	1,893,663	1,034	183,139,555	2,229	76,973	7,444,197	57	8,056	785,887	10.2	0.036	0.47	5.91	3.90	61.4	45.9
Jan-13	1,934,972	1,032	187,497,287	2,243	53,526	5,186,628	54	419	40,875	8.9	0.002	0.41	5.26	3.86	62.4	45.9
Feb-13	1,371,871	1,031	133,062,173	2,196	22,905	2,221,629	47	110	10,731	8.5	0.000	0.39	3.69	2.75	61.3	44.9
Mar-13	2,005,639	1,037	193,407,811	2,227	35,600	3,432,980	44	695	67,799	7.4	0.003	0.34	5.13	4.02	62.1	45.6
Apr-13	1,924,347	1,027	187,375,560	2,237	30,540	2,973,710	42	5,172	504,544	6.5	0.023	0.30	4.43	3.82	59.5	45.7
May-13	1,732,673	1,016	170,538,681	2,210	14,939	1,470,374	38	10,615	1,035,526	7.3	0.048	0.34	4.09	3.68	54.6	45.5
Jun-13	1,956,882	1,026	190,729,240	2,209	13,728	1,338,012	36	8,193	799,252	6.3	0.037	0.29	5.15	3.81	54.3	45.5
Jul-13	2,021,193	1,027	196,805,550	2,203	11,297	1,100,000	35	12,291	1,199,024	6.6	0.055	0.31	6.09	3.90	56.4	45.4
Aug-13	2,018,859	1,032	195,625,872	2,198	10,128	981,395	33	6,985	681,408	6.7	0.031	0.31	5.30	3.90	57.4	45.3
Sep-13	2,031,610	1,032	196,861,434	2,199	15,319	1,484,399	32	9,607	937,192	7.1	0.043	0.33	6.54	3.93	59.5	45.2
Oct-13	1,794,950	1,017	176,494,592	2,183	38,090	3,745,329	34	8,674	846,175	7.5	0.039	0.34	5.32	3.86	60.6	45.2
Nov-13	1,905,757	1,030	185,024,951	2,197	36,206	3,515,146	35	7,841	764,913	7.7	0.035	0.35	5.99	3.79	62.9	45.2
Dec-13	1,861,322	1,032	180,360,659	2,194	20,147	1,952,229	29	1,570	153,158	7.0	0.007	0.32	5.14	3.64	62.1	45.0
Jan-14	1,664,333	1,029	161,742,760	2,168	31,218	3,033,819	27	7,707	751,841	7.8	0.035	0.36	4.44	3.25	61.3	44.4
Feb-14	1,800,752	1,016	177,239,370	2,212	20,032	1,971,654	27	18,194	1,774,880	9.5	0.082	0.44	4.43	3.45	62.1	45.1
Mar-14	1,709,695	1,017	168,111,603	2,187	29,462	2,896,952	26	20,997	2,048,321	11.5	0.094	0.53	5.28	3.42	62.2	44.5
Max. Rolling 12 Months				2,237	-	-	42	-	-	11.5	-	0.53	-	-	62.90	45.74
Permit Limit				2,847	-	-	854	-	-	36.5	-	1.90	-	-	97.66	50.0
Exceeds Permit Limit?				NO	-	-	NO	-	-	NO	-	NO	-	-	NO	NO
Excess Emissions (Max. Rolling 12 Months)				-610	-	-	-812	-	-	-25.0	-	-1.37	-	-	-34.76	-4.26
Excess Emissions (Compliance Year)				-897	-	-	-795	-	-	-29.4	-	-1.57	-	-	-52.02	-10.39

*CEMS data columns calculate monthly emissions by summing the pounds per hour emissions for every hour during the month that the turbine was operating, including start-ups, shut-downs, and upsets. The CEMS uses the following methodology to estimate emissions as presented in this condition of the permit.

lb/hr = X * (hourly ppmv@15% O2) * (hourly fuel throughput)

ton/yr = Sum of hourly emissions for each month and evaluate annual limits based on rolling 12-month average. 2000 lb/ton.

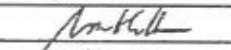
where $X = (8{,}740\ dscf/MMBtu) * ([NOx\ or\ CO]\ lb/lb\text{-}mole) * (20.9/(20.9-15)) * (lb\text{-}mole/387\ scf) * 1E\text{-}6 * HHV$

$HHV =$ 1,025 btu/cf (average HHV of fuel analyses over compliance year)

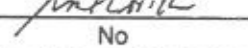
$NOx =$ 46 lb/lb-mole

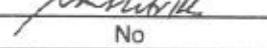
$CO =$ 28 lb/lb-mole

Stack Opacity Observation Protocol

Object:	Cogen Stack
Date of Observation:	2/10/2014
Time of Observation:	2:00 PM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	No

Object:	Nebraska Boiler
Date of Observation:	n/a
Time of Observation:	n/a
Fuel burned:	n/a
Name of the observing person:	n/a
Signature	n/a
Was Visible Emission Other Than Steam Present ?	n/a

Object:	Paper Forming/Paper Drying
Date of Observation:	2/10/2014
Time of Observation:	2:00 PM
Fuel burned:	N/A
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	No

Object:	Maxon Burner
Date of Observation:	2/10/2014
Time of Observation:	2:00 PM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	No

Stack Opacity Observation Protocol

Object:	Cogen Stack
Date of Observation:	11/21/13
Time of Observation:	9:45 AM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

Object:	Nebraska Boiler
Date of Observation:	11/22/13
Time of Observation:	4:30 PM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

Object:	Paper Forming/Paper Drying
Date of Observation:	11/21/13
Time of Observation:	9:45 AM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

Object:	Maxon Burner
Date of Observation:	11/21/13
Time of Observation:	9:45 AM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

Stack Opacity Observation Protocol

Object:	Cogen Stack
Date of Observation:	08/15/13
Time of Observation:	9:00 AM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

Object:	Nebraska Boiler
Date of Observation:	08/15/13
Time of Observation:	9:00 AM
Fuel burned:	N/A
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	N/A

Object:	Paper Forming/Paper Drying
Date of Observation:	08/15/13
Time of Observation:	9:00 AM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

Object:	Maxon Burner
Date of Observation:	08/15/13
Time of Observation:	9:00 AM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

Stack Opacity Observation Protocol

Object:	Cogen Stack
Date of Observation:	05/21/13
Time of Observation:	1 :00 PM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

Object:	Nebraska Boiler
Date of Observation:	05/16/13
Time of Observation:	1:00 PM
Fuel burned:	N/A
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

Object:	Paper Forming/Paper Drying
Date of Observation:	05/21/13
Time of Observation:	1 :00 PM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

Object:	Maxon Burner
Date of Observation:	05/21/13
Time of Observation:	1 :00 PM
Fuel burned:	Natural Gas
Name of the observing person:	R. Lebrilla
Signature	
Was Visible Emission Other Than Steam Present ?	NO

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Karl Krause DATE: May 23, 1996

FROM: Terri Thomas

SUBJECT: Rule 54.B.2 Compliance

Per your request, I ran some screening level dispersion modeling tests to determine equipment parameters that would comply with Rule 54.B.2. Rule 54.B.2 limits ground level property line SO_2 concentrations to 0.25 ppm_v for 1 hour and 0.04 ppm_v for 24 hours.

I assume that the most common SO_2 emission source is diesel combustion in IC engines. Therefore, that was the focus of my analysis.

To determine appropriate stack parameters, I reviewed 4 source test reports for diesel ICEs prepared for AB 2588. For screening purposes, the most conservative value was chosen from the test data for each stack parameter. The following summarizes stack data from these reports:

Parameter	# tests reporting parameter value	range of values	screening value
Stack velocity	3	1,812-11,343 ft/min	1,812 ft/min 9.2 m/s
Stack diameter	3	2-6 inches	2 inches 0.05 meters
Stack temperature	4	192-785°F	192°F 362 K
Stack height	0	NA	2 meters

SO_2 emissions were based on 300 ppm_v in the stack, which is the limit in Rule 54.B.1.a. This limit cannot be exceed if the diesel fuel meets the 0.5% sulfur limit in Rule 64.B.2.

Other assumptions used in modeling were that the stack was vertical and has no raincap, and the property line was at least 100 meters from the stack.

Using the parameters and assumptions listed above, screening modeling showed that the limits in Rule 54.B.2 would not be exceeded.

Use of the minimum stack diameter, and thus, the minimum flow rate and emission rate is not the most conservative case. In order to determine the maximum emission rate that could be shown to meet the Rule under the conditions described above, modeling was performed by increasing the emissions and flow rate (to maintain the 300 ppm_v SO_2 stack concentration), but increasing the stack diameter to maintain the minimum velocity. Modeling results are summarized below.

Emission rate (g/s)	Emission rate (lb/hr) and (lb/day)	1 hour max concentration (ppm_v) (limit=0.25)	24 hour max concentration (ppm_v) (limit=0.04)
0.0145	0.12 2.76	0.04	0.01
0.029	0.23 5.52	0.06	0.03
0.058	0.46 11.04	0.11	0.04
0.116	0.92 22.08	0.17	0.07
0.232	1.84 44.15	0.23	0.05

From the above, if SO_2 emissions do not exceed 1.84 lb/hr, the 1-hour limit of Rule 54.B.2 will be met. This is equivalent to burning 26 gallons of diesel at 0.5% sulfur per hour.

If SO_2 emissions do not exceed 11.04 lb/day, the 24-hour limit of Rule 54.B.2 will be met. This is equivalent to burning 155 gallons of diesel at 0.5% sulfur per day.

If the sulfur content of the fuel is lower than 0.5%, the allowable amount of fuel would, of course, be greater.

Let me know if the above information meets your needs. If so, another scenario that is probably common is a nonvertical stack (or stack with raincap). I can develop similar information for this case if you want.

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VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Interested Parties DATE: December 3, 1997

FROM: John Harader

SUBJECT: Rule 57.B / AP-42 Emission Factor Comparison

Section B of District Rule 57, "Combustion Contaminants - Specific", limits the combustion contaminant emission concentration from any fuel burning equipment Combustion contaminants are defined in District Rule 2 as particulate matter discharged into the atmosphere from the burning of any kind of material containing carbon in a free or combined state. The emission concentration limit is 0.1 grain per cubic foot of gas calculated to 12 percent of carbon dioxide at standard conditions (0 1 gr/scf @ 12% CO_2) This limit can be converted to a lb/MMBTU emission factor by the following equation from 40 CFR Part 60, Appendix A, Method 19:

$$E = C F_c (100/\%CO_2)(lb/7000gr)$$

E = lb/MMBTU emission factor
C = Pollutant concentration (lb/DSCF)
F_c = CO_2 F-factor
= 1430 dscf CO_2/MMBTU for liquid fuels
= 1040 dscf CO_2/MMBTU for natural gas

The pollutant concentration, C, and the $\%CO_2$ values can be wet or dry as long as they are consistent. The $\%CO_2$ of 12 may be used in the equation if the pollutant concentration has been corrected to 12% CO_2:

$$C_{@12\%CO2} = C(12/\%CO_2)$$

The Rule 57.B emission limit is a limit at 12% CO_2; therefore the emission rate equation can be written:

$$E = (0\ 1\ gr/scf)\ F_c\ (100/12)(lb/7000gr)$$

For Natural Gas: E = 0.12 lb PM/MMBTU
For Liquid Fuels: E = 0.17 lb PM/MMBTU

Based on EPA AP-42 emission factors and source test data, all natural gas fired or fuel oil fired boilers, process heaters, and turbines; and natural gas fired or diesel fired engines

operate below this emission factor or emission limit. The particulate matter emission factors for these units are:

Natural Gas Fired Units	Rule 57.B Factor = 0.12 lb PM / MMBTU	
Boiler > 100 MMBTU/Hr	3 lb/mmcf	0.00286 lb / MMBTU
Boiler 10 - 100 MMBTU/Hr	13.7 lb/mmcf	0.0131 lb / MMBTU
Boiler < 10 MMBTU/Hr	12 lb/mmcf	0.0114 lb / MMBTU
Turbine		0.0419 lb / MMBTU
Lean Burn Engine		0.046 lb / MMBTU
Rich Burn Engine		0.0007 lb / MMBTU

Fuel Oil or Diesel Fired Units	Rule 57.B Factor = 0.17 lb PM / MMBTU	
Fuel Oil Fired Boiler	2 lb / Mgal	0.014 lb / MMBTU
Fuel Oil Fired Turbine		0.061 lb/ MMBTU
Diesel Engine > 600 HP		0.062 lb/ MMBTU

Compliance with the emission limit for diesel engines < 600 HP has been shown through the conducting of a source test on an engine within Ventura County. This source test was conducted for the purpose of generating an emission factor to be used for Air Toxic "Hot Spots" emission estimations. The measured particulate concentration for this engine was 0.1 gr/dscf at 12 percent CO_2. The engine source test was a Cummins NTA engine rated at 335 horsepower at 2100 rpm. The source test was conducted July 29, 1992.

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