

April 29, 2014

CERTIFIED: 7001 1140 0001 6090 9450

Department of Environmental Quality Office of Environmental Compliance Enforcement Division P.O. Box 4312 Baton Rouge, LA 70821-4312

Re:

NSPS Excess Emissions & CEM Performance Report – 1st Quarter 2014

Valero Refining - Meraux LLC, Agency Interest # 1238 2500 East St. Bernard Hwy., St. Bernard Parish, Meraux, LA

Title V Permit Numbers: 2500-00001-V8

Gentlemen,

Valero Refining, Meraux LLC hereby submits this Excess Emissions and Monitoring Systems Reports, per LAC 33:III, Chapter 30, 40 CFR 60.7(c), 40 CFR 60.108a(d) and 40 CFR 63.1575 for the First Quarter 2014.

For this reporting period, excess emissions greater than or equal to 1 percent of the total operating time occurred at the #2 FCCU ESP Stack (EPN 2-77, EQT 0032) for Carbon Monoxide, the #2 SRU Incinerator (EPN 1-93, EQT 0019) for Sulfur Dioxide, the #3 SRU Incinerator (EPN 5-00, EQT 0079) for Sulfur Dioxide, and the Area 6 Fuel Drum for Hydrocracker & Hydrotreater Charge Heaters (EPN 1-00, EQT 0009). CEMS Downtime greater than 5 percent of the total operating time occurred at the Boiler B-6 (EPN 3-00, EQT 0048) for Nitrous Oxide. Also enclosed are the Data Assessment Reports for the appropriate CEMs.

Should you have any questions regarding this submission, please contact Mr. Justin Stubbe at (504) 271-4141.

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

Regards,

Lauren K. Bird

Vice President & General Manager Valero Refining – Meraux LLC

auru K. Bird

Enclosures

cc: Mr. Mike Algero, LDEQ SE Regional Office, New Orleans, LA

(per 40 CFR 60.7(d))

Pollutant: Opacity

Applicable NSPS Subpart: __J__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Opacity shall not exceed 30% for more than one 6-minute interval in any 1-hour period

Monitor Manufacturer and Model No.: Teledyne Monitor Labs LightHawk 560

Date of Latest CMS Certification or Audit: Certification (4/20/13)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

Emissions Data Summary ¹	
1. Duration of excess emissions in reporting period due to:	(minutes)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(minutes)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	71
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	71
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.1 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pollutant: CO

Applicable NSPS Subpart: ___ J (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 27)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: CO corrected to 0% O2 shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O2)

Date of Latest CMS Certification or Audit: CGA on 3/1/14 (CO), 1/27/14 (O2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	28
b. Control equipment problems	0
c. Process problems	I
d. Other known causes	72
e. Unknown causes	0
2. Total duration of excess emission	101
3. Total duration of excess emissions x (100) [Total source operating time] 2	4.7 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	6
d. Other known causes	24
e. Unknown causes	0
2. Total CMS Downtime	30
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	1.4 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pollutant: SO₂

Applicable NSPS Subpart: __J__ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 18)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 50 ppm on a 7 day rolling average and 25 ppm on a 365 day rolling

average (Consent Decree Limits)

Monitor Manufacturer and Model No.: Thermo Environmental 43i (SO₂)/Servomex 1155 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/10/14 (SO₂), 1/27/14 (O₂)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	6
d. Other known causes	24
e. Unknown causes	0
2. Total CMS Downtime	30
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	1.4 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pollutant: NO_x

Applicable NSPS Subpart: None (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 15)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: NOx corrected to 0% O2 shall not exceed 80 ppm on a 7 day rolling average and 40 ppm on a 365 day rolling

average (Consent Decree Interim Limits)

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NOx)/Servomex 1155 (O2)

Date of Latest CMS Certification or Audit: CGA on 3/2/14 (NOx), 1/27/14 (O2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time] 2	0.0 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	6
d. Other known causes	24
e. Unknown causes	0
2. Total CMS Downtime	30
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	2.0 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: SO₂

Applicable NSPS Subpart: __Ja_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Brimstone SGX-231(SO₂)/Rosemount Oxymitter 4000(O₂)

Date of Latest CMS Certification or Audit: CGA on 2/27/14 (SO₂), 2/1/14 (O₂)

Process Unit(s) Description: #2 SRU Incinerator (EPN 1-93, EQT 0019)

Total source operating time in reporting period: 1,386 hours

Emissions Data Summary ¹	
1. Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	53
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	53
3. Total duration of excess emissions x (100) [Total source operating time] 2	3.8 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	3
d. Other known causes	19
e. Unknown causes	0
2. Total CMS Downtime	22
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	1.6 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: SO₂

Applicable NSPS Subpart: __Ja

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: Brimstone 991-CEM-X(SO₂)/ Rosemount Oxymitter 4000(O₂)

Date of Latest CMS Certification or Audit: CGA on 2/2/14(SO₂), 2/1/14 (O₂)

Process Unit(s) Description: #3 SRU Incinerator (EPN 5-00, EQT 0079)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	28
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	12
e. Unknown causes	0
2. Total duration of excess emission	40
3. Total duration of excess emissions x (100) [Total source operating time] 2	1.9 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	73
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	73
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	3.4 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pol	lu	tan	t:	Н	25

Applicable NSPS Subpart: __J_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek, #4661

Date of Latest CMS Certification or Audit: CGA on 2/4/14

Process Unit(s) Description: Area 1 Fuel Drum for Boiler TB-01 (EPN 1-06, EQT 0010)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0 %

CMS Performance Summary ¹		
1. CMS downtime in reporting period due to:	(hours)	
a. Monitor equipment malfunctions	0	
b. Non-Monitor equipment malfunctions	0	
c. Quality assurance calibration	1	
d. Other known causes	20	
e. Unknown causes	0	
2. Total CMS Downtime	21	
3. Total duration of CMS Downtime x (100) [Total source operating time] 2	1.0 %	

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pollutant:	H_2S
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Applicable NSPS Subpart: __J_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14_

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek, #4661

Date of Latest CMS Certification or Audit: CGA on 2/4/14

Process Unit(s) Description: Area 1 Fuel Drum for Boiler B-7 (EPN 1-07, EQT 0011)

Emissions Data Summary ¹		
1. Duration of excess emissions in reporting period due to:	(hours)	
a. Startup/shutdown	0	
b. Control equipment problems	0	
c. Process problems	0	
d. Other known causes	0	
e. Unknown causes	0	
2. Total duration of excess emission	0	
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0 %	

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	1
d. Other known causes	20
e. Unknown causes	0
2. Total CMS Downtime	21
3. Total duration of CMS Downtime x (100) [Total source operating time] 2	1.0%

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pollutant: H₂S

Applicable NSPS Subpart: __J_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average

Monitor Manufacturer and Model No.: Ametek, #4661

Date of Latest CMS Certification or Audit: CGA on 2/4/14

Process Unit(s) Description: Area 1 Fuel Drum for MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033)

Emissions Data Summary ¹		
1. Duration of excess emissions in reporting period due to:	(hours)	
a. Startup/shutdown	0	
b. Control equipment problems	0	
c. Process problems	0	
d. Other known causes	0	
e. Unknown causes	0	
2. Total duration of excess emission	0	
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0 %	

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	1
d. Other known causes	12
e. Unknown causes	0
2. Total CMS Downtime	13
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	1.0 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: H2S

Applicable NSPS Subpart: __J__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Subpart J: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average.

Subpart Ja: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average and 60 ppm on a 365 day rolling average.

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/6/14

Process Unit(s) Description: Area 2 Fuel Drum for: No.1 Crude Heater (EPN 12-72A, EQT 0022)

Emissions Data Summary ¹		
Duration of excess emissions in reporting period due to:	(hours)	
a. Startup/shutdown	0	
b. Control equipment problems	0	
c. Process problems	14	
d. Other known causes	0	
e. Unknown causes	0	
2. Total duration of excess emission	14	
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.7%	

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	1
d. Other known causes	15
e. Unknown causes	0
2. Total CMS Downtime	16
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.7 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: H2S

Applicable NSPS Subpart: ___J___

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Subpart J: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average.

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/6/14

Process Unit(s) Description: Area 2 Fuel Drum for Vacuum Heater (EPN 1-76, EQT 0013)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	14
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	14
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.6%

CMS Performance Summary ¹		
1. CMS downtime in reporting period due to:	(hours)	
a. Monitor equipment malfunctions	0	
b. Non-Monitor equipment malfunctions	0	
c. Quality assurance calibration	1	
d. Other known causes	15	
e. Unknown causes	0	
2. Total CMS Downtime	16	
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.7 %	

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: H2S

Applicable NSPS Subpart: __J__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Subpart J: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average.

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/6/14

Process Unit(s) Description: Area 2 Fuel Drum for NHT Charge Heater (EPN 14-72, EQT 0023); NHT Debut Reboiler (EPN 15-72, EQT 0024); NHT Depent Reboiler (EPN 16-72 EQT 0027); Platformer Charge Heater (EPN 17-72 a,b,c, EQT 0028); Platformer Debut Reboiler (EPN 19-72, EQT 0029)

Total source operating time in reporting period: <u>EQT 0023 – 1,437 hours</u>; <u>EQT 0024 – 1,438 hours</u>; <u>EQT 0027 – 1429 hours</u>; EQT 0028 – 1,399 hours; <u>EQT 0029 – 1,440 hours</u>

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	11
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	11
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.8%

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	9
e. Unknown causes	0
2. Total CMS Downtime	9
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.6 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pol	lutant:	H ₂ S

Applicable NSPS Subpart: __J__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Subpart J: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average.

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/6/14

Process Unit(s) Description: Area 2 Fuel Drum for ROSE Heater (EPN 1-80, EQT 0014)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0%

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	9
e. Unknown causes	0
2. Total CMS Downtime	9
3. Total duration of CMS Downtime x (100) [Total source operating time] 2	0.9 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pol	lutant:	H ₂ S

Applicable NSPS Subpart: __J__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Subpart J: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average.

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/6/14

Process Unit(s) Description: Area 2 Fuel Drum for DHT Charge Heater (EPN 5-73, EQT 0058)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0%

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	15
e. Unknown causes	0
2. Total CMS Downtime	15
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.8 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: H2S

Applicable NSPS Subpart: <u>Ja</u>

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Subpart Ja: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average and 60 ppm on a 365 day

rolling average.

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/6/14

Process Unit(s) Description: Area 2 Fuel Drum for Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0%

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.0 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pollutant: H₂S

Applicable NSPS Subpart: __J__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average.

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/4/14

Process Unit(s) Description: Area 4 Fuel Drum for Alky Reboiler (EPN 1-77, EQT 0078)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	20
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	20
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.9 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	1
d. Other known causes	12
e. Unknown causes	0
2. Total CMS Downtime	13
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.6 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pollutant: H2S

Applicable NSPS Subpart: __J_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average.

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/5/14

Process Unit(s) Description: Area 6 Fuel Drum for Hydrocracker & Hydrotreater Charge Heaters (EPN 1-00, EQT 0009)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	23
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	23
3. Total duration of excess emissions x (100) [Total source operating time] ²	1.1 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	6
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	6
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.3 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

$\frac{\text{SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND}}{\text{MONITORING SYSTEMS PERFORMANCE}}$

(per 40 CFR 60.7(d))

Pollutant: H₂S

Applicable NSPS Subpart: __J_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average.

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/4/14

Process Unit(s) Description: Area 6 Fuel Drum for Boilers B-5 (EPN 2-00, EQT 0030) and B-6 (EPN 3-00, EQT 0048)

Total source operating time in reporting period: EQT 0030 – 2,153 hours; EQT 0048 – 2,041 hours

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	2
d. Other known causes	7
e. Unknown causes	0
2. Total duration of excess emission	9
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.4 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	11
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	11
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.5 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pollutant: NO_x

Applicable NSPS Subpart: ___Db__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average.

Monitor Manufacturer and Model No.: ABB Lumus 11, Serial No. 23042-5-8018413

Date of Latest CMS Certification or Audit: CGA on 3/19/14 (NOx), 1/26/14 (O₂)

Process Unit(s) Description: Boiler B-5 (EPN 2-00, EQT 0030)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	7
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	7
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.3%

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pollutant: NO_x

Applicable NSPS Subpart: __Db__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average.

Monitor Manufacturer and Model No.: ABB Lumus 11, Serial No. 23042-5-8018413

Date of Latest CMS Certification or Audit: CGA on 3/16/14 (NOx), 1/26/14 (O₂)

Process Unit(s) Description: Boiler B-6 (EPN 3-00, EQT 0048)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time] 2	0.0 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	2
d. Other known causes	172
e. Unknown causes	0
2. Total CMS Downtime	174
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	8.5 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d))

Pollutant: NO_x

Applicable NSPS Subpart: ___Db__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average.

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NOx), Thermo Environmental (O₂)

Date of Latest CMS Certification or Audit: CGA on 3/17/14 (NOx), 1/26/14 (O₂)

Process Unit(s) Description: Boiler TB-01 (EPN 1-06, EQT 0010)

Total source operating time in reporting period: 2,160 hours

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	0
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	7
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	7
3. Total duration of CMS Downtime x (100) [Total source operating time] 2	0.3 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: NO_x

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide corrected to 0% O₂ shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NOx)/(O2)

Date of Latest CMS Certification or Audit: CGA on 3/15/14 (NOx), and 1/30/14 (O₂)

Process Unit(s) Description: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

Emissions Data Summary ¹	
Duration of excess emissions in reporting period due to:	(hours)
a. Startup/shutdown	0
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	1
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.1 %

CMS Performance Summary ¹	
1. CMS downtime in reporting period due to:	(hours)
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	1
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.0 %

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: Total Sulfur

Applicable NSPS Subpart: Ja¹ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 3/16/14

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

Total source operating time in reporting period: 2,160 hours

Emissions Data Summary ²				
Duration of excess emissions in reporting period due to:	(hours)			
a. Startup/shutdown	0			
b. Control equipment problems	0			
c. Process problems	0			
d. Other known causes	0			
e. Unknown causes	0			
2. Total duration of excess emission	0			
3. Total duration of excess emissions x (100) [Total source operating time] ³	0.0 %			

CMS Performance Summary ²				
1. CMS downtime in reporting period due to:	(hours)			
a. Monitor equipment malfunctions	0			
b. Non-Monitor equipment malfunctions	0			
c. Quality assurance calibration	11			
d. Other known causes	22			
e. Unknown causes	0			
2. Total CMS Downtime	33			
3. Total duration of CMS Downtime x (100) [Total source operating time] ³	1.5 %			

¹ According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

² For opacity, record all times in minutes. For gases, record all times in hours.

³ For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: Total Sulfur

Applicable NSPS Subpart: Ja¹ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 3/16/14

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

Emissions Data Summary ²				
Duration of excess emissions in reporting period due to:	(hours)			
a. Startup/shutdown	0			
b. Control equipment problems	0			
c. Process problems	0			
d. Other known causes	0			
e. Unknown causes	0			
2. Total duration of excess emission	0			
3. Total duration of excess emissions x (100) [Total source operating time] ³	0.0 %			

CMS Performance Summary ²					
1. CMS downtime in reporting period due to:	(hours)				
a. Monitor equipment malfunctions	0				
b. Non-Monitor equipment malfunctions	0				
c. Quality assurance calibration	41				
d. Other known causes	14				
e. Unknown causes	0				
2. Total CMS Downtime	55				
3. Total duration of CMS Downtime x (100) [Total source operating time] ³	2.5 %				

¹ According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

² For opacity, record all times in minutes. For gases, record all times in hours.

³ For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

(per 40 CFR 60.7(d) and 60.108a(d))

Pollutant: Total Sulfur

Applicable NSPS Subpart: Ja¹ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 3/16/14

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

Emissions Data Summary ²					
Duration of excess emissions in reporting period due to:	(hours)				
a. Startup/shutdown	0				
b. Control equipment problems	0				
c. Process problems	0				
d. Other known causes	0				
e. Unknown causes	0				
2. Total duration of excess emission	0				
3. Total duration of excess emissions x (100) [Total source operating time] ³	0.0 %				

CMS Performance Summary ²					
1. CMS downtime in reporting period due to:	(hours)				
a. Monitor equipment malfunctions	0				
b. Non-Monitor equipment malfunctions	0				
c. Quality assurance calibration	42				
d. Other known causes	28				
e. Unknown causes	0				
2. Total CMS Downtime	80				
3. Total duration of CMS Downtime x (100) [Total source operating time] ³	3.7 %				

¹ According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

² For opacity, record all times in minutes. For gases, record all times in hours.

³ For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE (per 40 CFR 60.7(c))

Pollutant: CO

Applicable NSPS Subpart: __J_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: CO corrected to 0% O₂ shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O2)

Date of Latest CMS Certification or Audit: <u>CGA on 3/1/14 (CO), 1/27/14 (O₂)</u>
Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

				E	XCESS EMISSIONS	
Date	Start	End	Duration (hours)	Max 1- HRA (ppm)	Cause	Corrective Action
2/3/14	22:42	23:42	1	501.4	#2 FCC CO >500 ppm, 1-HRA, due to low Regenerator temperature. The low Regenerator temperature was	
2/5/14	04:34	12:34	8	611.2		
2/5/14	21:37		9	584.2	caused by lighter than normal feed quality and low charge rates due	
2/6/14		06:37	,	364.2	to the ROSE unit being down for	Valero used all available means to
2/6/14	07:01	08:01	1	505.8	ROSE unit provides De-Asphalted Oil (DAO) to the FCC. This is	maintain Regenerator temperature including adding additional
2/6/14	15:22	17:22	2	613.5	the heaviest and highest carbon content component of FCC feed.	combustion promoter and Torch Oil. The use of Torch Oil with low unit
2/6/14	19:15		21	21 0642	The lighter feed quality produced	charge rates also causes elevated levels of CO.
2/7/14		16:15	lower levels of coke on the	catalyst. When this coke was	004.2	
2/9/14	09:20	12:20	3	burnt off in the regenerator, there was an insufficient amount of		
2/9/14	18:31	19:31	1	500.7	coke to reach the necessary temperature for complete combustion and CO was formed.	
2/10/14	17:15		- 28	>1000	#2 FCC CO >500 ppm, 1-HRA due to the unit being shut down and placed in hot standby on Torch Oil. The #2 FCC was shut	The use of Torch Oil with low unit charge causes elevated levels of CO.
2/11/14		21:15	20	>1000	down as part of the refinery Sulfur Shedding Procedure in response to an upset that led to the loss of both SRU's.	Valero completed the unit startup pe the SSM Plan.

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE (per 40 CFR 60.7(c))

Pollutant: CO

Applicable NSPS Subpart: __ J

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: CO corrected to 0% O₂ shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O₂)

Date of Latest CMS Certification or Audit: CGA on 3/1/14 (CO), 1/27/14 (O2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

				EXC	CESS EMISSIONS cont.		
Date	Start	End	Duration (hours)	Max 1- HRA (ppm)	Cause	Corrective Action	
2/13/14	10:15	11:15	1	510.8			
2/13/14	14:31	19:31	5	613.1			
2/13/14	21:03			5.42.1			
2/14/14		00:03	3	542.1			
2/14/14	00:54	01:54	1	550.4	Cause and Corrective Actions for this series of excess emissions are the same as for those stated earlier in this table for 2/3/14 to 2/9/14.		
2/14/14	07:34	17:34	10	>1000			
2/15/14	10:42	11:42	1	542.6			
2/15/14	15:39	17:39	2	511.1			
2/23/14	21:37	23:37	2	581.2			
3/6/14	01:13	02:13	1	>1000	#2 FCC CO >500 ppm, 1-HRA due to unit upset caused by a loss of Main Fractionator bottoms level and circulation.	Valero pulled the unit charge and re- established the Main Fractionator bottoms level and circulation before returning charge to the unit.	
3/6/14	03:35	04:35	1	509.3	Cause and Corrective Actions for the those stated earlier in this table for	his excess emission is the same as for 2/3/14 to 2/9/14.	
TOTAL			101				

GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE (per 40 CFR 60.7(c))

Pollutant: CO

Applicable NSPS Subpart: __J_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: CO corrected to 0% O2 shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O2)

Date of Latest CMS Certification or Audit: CGA on 3/1/14 (CO), 1/27/14 (O₂)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

				CMS PERFORMANCE	
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/14/14	07:56	08:56	1	Adjusted for calibration drift.	N/A
1/27/14	10:51	11:51	1	O ₂ Cylinder Gas Audit	N/A
2/10/14	13:06	14:06	1	SO ₂ Cylinder Gas Audit	N/A
3/1/14	08:04	09:04	1	CO ₂ Cylinder Gas Audit	N/A
3/1/14	13:03	14:03	1	CO Cylinder Gas Audit	N/A
3/2/14	13:58	14:58	1	NOx Cylinder Gas Audit	N/A
3/29/14	14:30		24	Instrument air inadvertently secured to	Instrument air restored and analyzers
3/30/14		14:30	24	sample probe eductor. All analyzers offline.	calibrated.
TOTAL			30		

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: SO₂

Applicable NSPS Subpart: __Ja_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO_2 corrected to 0% O_2 shall not exceed 250 ppm on a 12-hour rolling average Monitor Manufacturer and Model No.: Brimstone SGX-231(SO₂)/Rosemount Oxymitter 4000(O₂)

Date of Latest CMS Certification or Audit: <u>CGA on 2/27/14 (SO₂), 2/1/14 (O₂)</u> Process Unit(s) Description: #2 SRU Incinerator (EPN 1-93, EQT 0019)

					EXCESS EMISSIONS		
Date	Start	End	Duration (hours)	Max 12- HRA (ppm)	Cause	Corrective Action	
2/7/14	09:47		16	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with SO ₂ emission 500 lbs/day above the allowable limit. Please see attached Unaut		> 500	ase see attached Unauthorized
2/8/14		01:47	10	300	Discharge Notification Report dated April actions.		
2/11/14	02:10		37	> 500	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with SO ₂ emissions less than 500 lbs/day above the allowable limit. Please see attached Unauthorized Discharge Notification Report dated April 11, 2014 for cause and correctivactions.		
2/12/14		15:10	37	> 300			
TOTAL			53				

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: SO₂

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average Monitor Manufacturer and Model No.: Brimstone SGX-231(SO₂)/Rosemount Oxymitter 4000(O₂)

Date of Latest CMS Certification or Audit: <u>CGA on 2/27/14 (SO₂), 2/1/14 (O₂)</u> Process Unit(s) Description: #2 SRU Incinerator (EPN 1-93, EQT 0019)

Date	Start	End	Duration (hours)	Cause	Corrective Action
1/29/14	01:24	02:24	1	Adjusted for calibration drift.	N/A
2/1/14	14:00	15:00	1	O ₂ Cylinder Gas Audit.	N/A
2/3/14	10:20	19:20	9	Offline to replace O ₂ Cell and SO ₂ Lamp.	Calibrated and returned to service.
2/5/14	13:31	14:31	1	Adjusted for calibration drift.	N/A
2/27/13	11:09	12:09	0	SO ₂ Cylinder Gas Audit. Unit shutdown.	N/A
3/26/14	10:07	20:07	10	SO ₂ Analyzer online during SRU start up with no satisfactory calibration check during the period of operation. During SRU start up, there is a period when the SO ₂ levels are above the max span of the instrument. Because of the high SO ₂ present, the sample lines must be purged for an extended period to get a good zero gas calibration. The automated sequence is not long enough to adequately purge the sample lines. Normal Valero practice is to wait until the SO ₂ has returned to normal and then manually perform a calibration check. The SO ₂ analyzer went into alarm and shutdown and before it could be repaired and calibrated, the SRU start up was aborted before the measured SO ₂ concentration could return to the instrument span.	Valero has counted the period as instrument downtime. The SO ₂ analyzer was repaired and returned to service.
TOTAL			22		

¹In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: SO₂

Applicable NSPS Subpart: __Ja__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: Brimstone 991-CEM-X(SO₂)/Rosemount Oxymitter 4000(O₂)

Date of Latest CMS Certification or Audit: CGA on 2/2/14(SO₂), 2/1/14 (O₂)

Process Unit(s) Description: #3 SRU Incinerator (EPN 5-00, EQT 0079)

					EXCESS EMISSIONS		
Date	Start	End	Duration (hours)	Max 12- HRA (ppm)	Cause	Corrective Action	
1/7/14	11:35	23:35	12	> 500	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with SO ₂ emissions less than 500 lbs/day above the allowable limit due to the #3 Tail Gas Treater (TGT) fin fans freezing during cold weather conditions.	The TGT fin fans were unfrozen using steam and blankets and adjusted to prevent freezing from occurring again.	
2/10/14	13:38		20	> 500	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with SO ₂ emissions greater th 500 lbs/day above the allowable limit. Please see attached Unauthorized		
2/11/14		17:38	28		Discharge Notification Report dated Apri actions.	111, 2014 for cause and corrective	
TOTAL			40				

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: SO₂

Applicable NSPS Subpart: ___Ja___

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: Brimstone 991-CEM-X(SO₂)/ Rosemount Oxymitter 4000(O₂)

Date of Latest CMS Certification or Audit: CGA on 2/2/14(SO₂), 2/1/14 (O₂)

Process Unit(s) Description: #3 SRU Incinerator (EPN 5-00, EQT 0079)

A STEELER				CMS PERFORMANCE ¹		
Data Stort End		Duration (hours)	Cause	Corrective Action		
1/21/14	10:14	11:15	1	Adjusted for calibration drift.	N/A	
1/21/14	11:15		- 22	SO ₂ Analyzer taken offline on 1/21 to clean the sample probe and replace filters followed by a calibration. On 1/22, the automatic daily calibration check was unsatisfactory making the analyzer Out of Control. Valero suspects	The SO ₂ analyzer was calibrated and returned to service with no further	
1/22/14			22	the cause to be either the technician didn't allow the system to reach normal operating temperature before calibrating it on 1/21 or the 25 F drop in temperature from 1/21 to 1/22.	issues.	
1/28/14	09:22		- 48	Out of Control. The O ₂ analyzer failed to run the automatic calibration check sequence on 1/29 and 1/30. The operators responsible for checking the calibrations failed to notice this	A calibration check sequence was manually initiated on 1/30 and was satisfactory with no analyzer	
1/30/14			40	and initiate corrective actions. The cause of the failed timer is unknown, but Valero suspects it was a recent cold weather related power interruption.	adjustment. The timer was reset and the problem did not reoccur.	
2/1/14	13:12	14:12	1	O ₂ Cylinder Gas Audit	N/A	
2/2/14	10:34	11:34	1	SO ₂ Cylinder Gas Audit	N/A	
TOTAL			73			

¹In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

ROOT CAUSE ANALYSIS SUMMARY REPORT (per 40 CFR 60.108a(d)(5))

60.108a	Affected Facility:	#3 SRU Incinerator (EPN 1-93, EQT 0019)			
(c)(6)(i)	Description of Discharge:	#3 SRU Incinerator SO ₂ emissions >500 lbs/day due to an upset of the #2 SRU and #2 TGT.			
(ii)	Start:	2/10/14 11:02			
	Stop:	2/11/14 08:53			
	Duration:	21.8hrs			
(iii)	SO ₂ Emissions ¹ :	2,058 lbs			
	H ₂ S Emissions ¹ :	6 lbs			
(iv)	Measured Total Sulfur Concentration of Discharge from a Flare	Not applicable to Sulfur Recovery Units.			
(v)	Measured Concentration of H ₂ S in Fuel Gas or SO ₂ of Discharge from a Fuel Gas Combustion Device	Not applicable to Sulfur Recovery Units.			
(vi)	Measured Concentration SO ₂ Discharged from a Sulfur Recovery Plant	>500 ppm (Maximum Range of SO ₂ CEMS)			
(vii)	Total SO ₂ Emissions ¹ :	2,058 lbs			
	Total H ₂ S Emissions ¹ :	6 lbs			
(viii)	Steps Taken to Limit Emissions During Discharge:	Valero initiated the Sulfur Shedding Procedure and followed the MACT UUU SSM Plan to recover the #3 SRU.			
(ix)	Root Cause:	Please see attached Unauthorized Discharge Notification Report dated			
	Was discharge the result of a Root Cause identified by previous Root Cause Analysis? (Yes/No)	April 11, 2014 for cause and corrective actions.			
(x)	Corrective Action(s) Completed within 45 days of Discharge ² :				
	Incomplete Correction Actions (Include scheduled commencement and completion dates)				

If the discharge duration exceeds 24 hours, record the discharge quantity for each 24-hour period.

² Enter a description of the recommended corrective actions or a an explanation of why corrective action is not necessary.

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: H2S

Applicable NSPS Subpart: __Ja__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average and 60 ppm on a 365 day rolling

average

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/6/14

Process Unit(s) Description: Area 2 Fuel Drum for: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

				Ja EXC	ESS EMISSIONS	
Date	Start	End	Duration (hours)	Max 12- HRA (ppm)	Cause	Corrective Action
None						
OTAL			0			

Ja CMS PERFORMANCE ¹						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
None						
TOTAL			0			

In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: H2S

Applicable NSPS Subpart: __J_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Hydrogen Sulfide shall not exceed 162 ppm on a 3-hour rolling average.

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/5/14

Process Unit(s) Description: Area 6 Fuel Drum for Hydrocracker & Hydrotreater Charge Heaters (EPN 1-00, EQT 0009)

EXCESS EMISSIONS							
Date	Start	End	Duration (hours)	Max 12- HRA (ppm)	Cause	Corrective Action	
2/10/14	13:13		20	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with SO ₂ emissions		HRA, with SO ₂ emissions less than	
2/11/14		09:13	20	> 300	500 lbs/day above the allowable limit. Please see attached Unauth Discharge Notification Report dated April 11, 2014 for cause and		
2/12/14	04:18	07:18	3	227.6	actions.		
TOTAL			23				

CMS PERFORMANCE						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
2/5/14	08:00	14:00	6	Cylinder Gas Audit	N/A	
TOTAL			6			

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: NO_x

Applicable NSPS Subpart: ___Db__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average.

Monitor Manufacturer and Model No.: ABB Lumus 11, Serial No. 23042-5-8018413

Date of Latest CMS Certification or Audit: CGA on 3/16/14 (NOx), 1/26/14 (O₂)

Process Unit(s) Description: Boiler B-6 (EPN 3-00, EQT 0048)

Total source operating time in reporting period: 2,041 hours

				EXC	ESS EMISSIONS	
Date	Start	End	Duration (hours)	Max 1- HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

				CMS PERFORMANCE	
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/8/14	10:32		172	Analyzer offline due to failed thermal link and fouled sample cell lens.	Valero rush ordered the replacement parts and a technician from the manufacturer refurbished the analyzer. The spare parts
1/15/14		14:32	172	Replacement parts were not part of the spare parts inventory maintained onsite.	inventory was updated and additional preventative maintenance tasks were added based on the technician's recommendation
1/26/14	13:18	14:18	1	O ₂ Cylinder Gas Audit	N/A
3/16/14	14:03	15:03	1	NOx Cylinder Gas Audit	N/A
TOTAL			174		

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: NO_x

Applicable NSPS Subpart: __Ja__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide corrected to 0% O2 shall not exceed 40 ppm on a 30-day rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NOx)/(O2)

Date of Latest CMS Certification or Audit: CGA on 3/15/14 (NOx), 1/30/14 (O₂)

Process Unit(s) Description: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

Total source operating time in reporting period: 1,094 hours

				Ja EXCI	ESS EMISSIONS	
Date	Start	End	Duration (hours)	Max 12- HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

				Ja CMS PERFORMANCE ¹	
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/30/14	13:19	14:19	1	NOx Cylinder Gas Audit. O ₂ Cylinder Gas Audit was performed on 1/30/14 when the unit was down.	N/A
TOTAL			1		

¹In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: Total Sulfur

Applicable NSPS Subpart: __Ja¹__(Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 3/16/14

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header

Total source operating time in reporting period: 2,160 hours

				Ja EXCI	ESS EMISSIONS	
Date	Start	End	Duration (hours)	Max 12- HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

				Ja CMS PERFORMANCE ²	
Date	Start	End	Duration (hours)	Cause	Corrective Action
2/7/14	10:29	12:29	2	Adjusted for calibration drift.	N/A
2/9/14	06:04	09:04	3	Following a satisfactory calibration check, the analyzer failed to sampling properly due to a restricted sample line.	The line was cleared and the analyzer wa calibrated and returned to service.
2/14/14	09:47	14:47	5	Analyzer offline for preventative maintenance.	N/A
2/18/14	13:02	16:02	3	Analyzer offline for preventative maintenance.	N/A
3/16/14	14:43	15:43	1	Cylinder Gas Audit	N/A
3/22/14	17:13		- 19	Analyzer automatically shut down during a period of heavy flaring from the ROSE unit. Valero suspects the intrusion of liquid pentane into the	Valero maintenance blew out the sample lines and performed a normal analyzer
3/23/14		12:13	19	heated sample lines or instrument furnace itself caused excessive pressure transients that trigged the automatic shutdown.	start up. The analyzer was calibrated and returned to service.
TOTAL			33		

¹ According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

² In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: Total Sulfur

Applicable NSPS Subpart: Ja¹ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 3/16/14

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

Total source operating time in reporting period: 2,160 hours

				Ja EXCI	ESS EMISSIONS	
Date	Start	End	Duration (hours)	Max 12- HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: Total Sulfur

Applicable NSPS Subpart: Ja¹ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 3/16/14

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

Total source operating time in reporting period: 2,160 hours

Date	Start	End	Duration (hours)	Cause	Corrective Action
1/2/14	08:07	11:07	3	After performing a satisfactory calibration check on its low range, the analyzer failed to check its high range.	Analyzer was adjusted, calibrated, and returned to service.
1/3/14	02:43	11:43	9	On 1/3, the analyzer shutdown due to low sample flow. For several days after, the	
1/3/14	13:54	14:54	1	Valero initially believed this was caused by a	The regulator was adjusted and the analyzer was calibrated and returned
1/6/14	10:03	14:03	4		to service.
1/7/14	10:01	11:01	1		
1/12/14	06:07	15:07	33	Out of Control. Failed daily calibration check. The cause was a sheared coupling between an air operator and a switching valve. The hairline crack on this coupling was difficult to detect and likely had been present for some time. The switching valve still operated normally most of the time, but occasionally would fail to fully switch completely. Valero believes that this contributed to this analyzers recent sample flow problems.	Valero replaced the sheared coupling, calibrated the analyzer, and returned it to service.
2/18/14	13:02	16:02	3	Analyzer offline for preventative maintenance.	N/A
3/16/14	13:37	14:37	1	Cylinder Gas Audit	N/A
TOTAL			55		

¹ According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

² In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: Total Sulfur

Applicable NSPS Subpart: __Ja¹_ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 3/16/14

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

Total source operating time in reporting period: 2,160 hours

				Ja EXCI	ESS EMISSIONS	医血管管 正常 计工作文字 医动脉管
Date	Start	End	Duration (hours)	Max 12- HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

(per 40 CFR 60.7(c) and 60.108a(d))

Pollutant: Total Sulfur

Applicable NSPS Subpart: <u>Ja¹</u> (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Date of Latest CMS Certification or Audit: CGA on 3/16/14

Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)

Total source operating time in reporting period: 2,160 hours

				Ja CMS PERFORMANCE ²	
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/6/14	10:04	15:04	5	Analyzer offline due to low sample flow. Sample flow to the analyzer is controlled by	
1/7/14	06:35	12:35	6	inlet and outlet pressure regulators that maintain a constant differential pressure.	After each period, Valero adjusted the inlet and outlet pressure regulators to bring
1/18/14	19:00		19	Valero initially believed that these regulators were malfunctioning during cold weather	sample flow back into the normal range and calibrated the analyzer.
1/19/14		14:00	17	conditions.	~
1/19/14	14:00			Out of Control. Failed calibration check due to low sample flow. Valero believed that the	Valero rebuilt the sample pump diaphragm
1/20/14		15:00	25	sample pump that had recently been replaced (in Nov. 2013) was not providing sufficient pressure.	and ordered a new sample pump for replacement.
2/4/14	09:27	17:27	8	Low sample flow problems continued,	
2/5/14	08:00	09:00	1	causing the analyzer to either go offline or require frequent adjustments.	
2/6/14	10:01	15:01	5	require frequent adjustments.	
2/7/14	10:42	11:42	1	Further investigation revealed that the original	On 2/17, Valero ordered the necessary
2/17/14	10:25	13:25	3	sample pump installed on the system had been modified by the installer to meet the system flow requirements. The pump consisted of a hybrid of 2 pumps with the motor of one pump joined to the diaphragm of another. This was not properly documented in the parts inventory so when Valero replaced the pump in Nov. 2013, it was with a "weaker" pump that was just barely adequate for the system and could not maintain adequate sample flow during the cold weather conditions.	parts to replace the original hybrid sample pump. With the knowledge that the pump was the cause and not the regulators and more benign weather conditions, Valero was able to prevent the low sample flow conditions from reoccurring until the pump could be replaced.
2/18/14	13:02	16:02	3	Analyzer offline for preventative maintenance.	N/A
3/3/14	08:00	10:00	2	Offline to replace sample pump.	Calibrated and returned to service.
3/4/14	08:28	09:28	1	Adjusted for calibration drift.	N/A
3/16/14	15:29	16:29	1	Cylinder Gas Audit	N/A
TOTAL			80		

¹ According to 40 CFR 60.107a(e), existing monitoring systems capable of complying with Subpart Ja must comply with the monitoring requirements of Subpart Ja.

² In accordance with 40 CFR 60.108a(d)(6), changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit have been compared with operation of the control system and affected facility before and following the period of data unavailability to ensure that any changes made in operation of the emission control system during the period of data unavailability did not affect the ability of the system to meet the applicable emission limit.

Pollutant: Opacity
Applicable NSPS Subpart:J_
Reporting period dates: From 1/1/14 to 3/31/14
Date submitted: 4/30/14
Company: Valero Refining - Meraux LLC
Address: 2500 East St. Bernard Highway, Meraux, LA 70075
Emission Limitation: Opacity shall not exceed 30% for more than one 6-minute interval in any 1-hour period
Monitor Manufacturer and Model No.: Teledyne Monitor Labs LightHawk 560
Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)
CEM Sampling Location: _#2 FCCU ESP Stack_
CEM Span Value: Opacity 100%
I. ACCURACY ASSESSMENT RESULTS
Not applicable to opacity monitors
II. CALIBRATION DRIFT ASSESSMENT
A. Out-of Control Periods:
1. Dates: <u>N/A</u>
2. Number of Days <u>N/A</u>

B. Corrective Actions: N/A

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: CO
Applicable NSPS Subpart:J(Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 27)
Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: CO corrected to 0% O₂ shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

CEM Sampling Location: #2 FCCU ESP Stack
CEM Span Value: Carbon Monoxide 1000 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	CO #1	CO #2	O ₂ #1	$O_2 \# 2$
	(low scale)	(high scale)	(low scale)	(high scale)
Date of Audit	3/1/14	3/1/14	1/27/14	1/27/14
Audit Gas Cylinder No.	LL38472	LL16838	LL42560	LL42613
Date of Audit Gas Cert.	1/29/13	1/29/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	249.3	546.1	5.95	10.04
CEM Response Value	266.0	579.7	5.83	9.80
Accuracy	6.7%	6.2%	2.0%	2.4%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

Α.	Out-of	Control	Periods:
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- 1. Dates: <u>N/A</u>
- 2. Number of Days N/A
- B. Corrective Actions: N/A

(per 40 CFR 60, Appendix F, Section 7)

Pollutant:	SO_2

Applicable NSPS Subpart: __J__ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 18)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO2 corrected to 0% O2 shall not exceed 50 ppm on a 7 day rolling average and 25 ppm on a 365 day rolling

average

Monitor Manufacturer and Model No.: Thermo Environmental 43i (SO₂)/Servomex 1155 (O₂)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

CEM Sampling Location: #2 FCCU ESP Stack

CEM Span Value: Sulfur Dioxide 500 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	SO ₂ #1	SO ₂ #2	O ₂ #1	O ₂ #2
	(low scale)	(high scale)	(low scale)	(high scale)
Date of Audit	2/10/14	2/10/14	1/27/14	1/27/14
Audit Gas Cylinder No.	LL166006	LL165997	LL42560	LL42613
Date of Audit Gas Cert.	2/8/13	2/8/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	125.0	279.2	5.95	10.04
CEM Response Value	135.3	293.3	5.83	9.80
Accuracy	8.2%	5.1%	2.0%	2.4%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

		00			
Δ	Out.	of Ca	ntrol	Period	ic.

- 1. Dates: <u>N/A</u>
- 2. Number of Days N/A
- B. Corrective Actions: N/A

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: NOx

Applicable NSPS Subpart: None (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 15)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Not Applicable

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NOx)/Servomex 1155 (O2)

Process Unit(s) Description: #2 FCCU ESP Stack (EPN 2-77, EQT 0032)

CEM Sampling Location: #2 FCCU ESP Stack

CEM Span Value: Nitrogen Oxide 250 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NOx #1	NOx #2	O ₂ #1	O ₂ #2
	(low scale)	(high scale)	(low scale)	(high scale)
Date of Audit	3/2/14	3/2/14	1/27/14	1/27/14
Audit Gas Cylinder No.	LL164501	LL47213	LL42560	LL42613
Date of Audit Gas Cert.	2/5/13	2/4/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	54.7	127.1	5.95	10.04
CEM Response Value	55.6	132.9	5.83	9.80
Accuracy	1.6%	4.6%	2.0%	2.4%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

	A. (Out-of	Control	Periods
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1. Dates: <u>N/A</u>

2. Number of Days N/A

B. Corrective Actions: N/A

Pollutant: S	$5O_2$
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Applicable NSPS Subpart: __Ja_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: Brimstone SGX-231(SO₂)/Rosemount Oxymitter 4000(O₂)

Source unit: #2 SRU Incinerator (EPN 1-93, EQT 0019)

CEM Sampling Location: #2 SRU Incinerator (#1-93)

CEM Span Value: Sulfur Dioxide 500 ppm; Oxygen 25%

I. ACCURACY ASSESSMENT RESULTS (CGA):

e Transis - Transis - Ar de Transis - Tr	SO ₂ #1	SO ₂ #2	O ₂ #1	O ₂ #2
	(low scale)	(high scale)	(low scale)	(high scale)
Date of Audit	2/27/14	2/27/14	2/1/14	2/1/14
Audit Gas Cylinder No.	LL166006	LL165997	LL42560	LL42613
Date of Audit Gas Cert.	2/8/13	2/8/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	125.0	279.2	5.95	10.04
CEM Response Value	130.3	283.3	6.00	10.07
Accuracy	4.2%	1.5%	0.8%	0.3%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

		and the second s	
Α	Out at	Cantra	Periods:
A.	Oni-or	Control	renous.

- N/A 1. Dates:
- 2. Number of Days N/A
- B. Corrective Actions: N/A

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: SO₂

Applicable NSPS Subpart: __Ja_

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: SO₂ corrected to 0% O₂ shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: Brimstone 991-CEM-X (SO₂), Rosemount Oxymitter 4000 (O2)

Source unit: #3 SRU Incinerator (EPN 5-00, EQT 0079)

CEM Sampling Location: #3 SRU Incinerator (#5-00)
CEM Span Value: Sulfur Dioxide 500 ppm; Oxygen 25%

I. ACCURACY ASSESSMENT RESULTS (CGA):

	SO ₂ #1	SO ₂ #2	O ₂ #1	O ₂ #2
	(low scale)	(high scale)	(low scale)	(high scale)
Date of Audit	2/2/14	2/2/14	2/1/14	2/1/14
Audit Gas Cylinder No.	LL166006	LL165997	LL42560	LL42613
Date of Audit Gas Cert.	2/8/13	2/8/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	125.0	279.2	5.95	10.04
CEM Response Value	141.7	294.3	5.75	9.84
Accuracy	13.4%	5.4%	3.4%	2.0%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: 1/21/14 11:15 – 1/22/14 09:15, 22 hours 1/28/14 09:22 – 1/20/14 09:22, 48 hours

2. Number of Days 2.9

B. Corrective Actions: <u>See GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE</u> page on the #3 SRU SO₂ for a description of causes and corrective actions.

Pollutant: H_2S

Applicable NSPS Subpart: __J_

Reporting peri	iod dates: From 1/1/14	to 3/31/14			
Date submitted	d: 4/30/14				
Company: <u>Va</u>	llero Refining - Merau	x LLC			
Address: 250	00 East St. Bernard Hi	ghway, Meraux, LA 70075	5_		
Emission Lim	itation: <u>Hydrogen St</u>	ılfide shall not exceed 162	ppm on a 3-hour r	olling average.	
Monitor Manu	ifacturer and Model N	o.:_ Ametek 4661_			
Source Unit:_	Area 1 Fuel Drum for	Boiler TB-01 (EPN 1-06,	EQT 0010)		
CEM Samplin	g Location: Area 1 F	uel Drum			
CEM Span Va	alue: Hydrogen Sulfic	de, 300 ppm_			
I. ACCURA	ACY ASSESSMENT	RESULTS (CGA):			
		Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value CEM Response Value Accuracy Standard	H ₂ S #1 (low scale) 2/4/14 CC403727 8/7/13 EPA Protocol 1 73.6 73.7 0.1% <15%	H ₂ S #2 (high scale) 2/4/14 CC212507 8/7/13 EPA Protocol 1 169.9 165.7 2.5% <15%	
	ATION DRIFT ASSE				
Α. (Out-of Control Periods	s:			
1	1. Dates:	N/A			
	2. Number of Days	N/A			
	55 Vales 17 - 26				
В. (Corrective Actions:	N/A			
37		100 May			

Pollutant: H ₂ S			
Applicable NSPS Subpart: J and .	Ja (Benzene Recovery U	Jnit Reboiler Subj	ect to Ja)
Reporting period dates: From 1/1/14	to <u>3/31/14</u>		
Date submitted: 4/30/14			
Company: Valero Refining - Merau	IX LLC		
Address: 2500 East St. Bernard Hig	ghway, Meraux, LA 70075	_	
Emission Limitation: <u>Hydrogen S</u>	Sulfide shall not exceed 16	52 ppm on a 3-hou	r rolling average(J and Ja) and 60 ppm on a 365 day
rolling average (Ja only)			
Monitor Manufacturer and Model N	o.: Ametek 4661		
(EPN 12-72A, EQT 022); ROSE H Platformer Charge Heater (EPN 17- NHT Charge Heater (EPN 14-72, E	eater (EPN 1-80, EQT 001 -72 a,b,c , EQT 0028); Pla QT 0023); NHT Debut Re	4); Vacuum Heate atformer Debut Reb boiler (EPA 15-72	poiler (EPN 19-72, EQT 0029);
CEM Sampling Location: Area 2	Fuel Drum_		
CEM Span Value: Hydrogen Sulfic	de, 300 ppm		
I. ACCURACY ASSESSMENT	RESULTS (CGA):		
	Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value CEM Response Value Accuracy Standard	H ₂ S #1 (low scale) 2/6/14 CC403727 8/7/13 EPA Protocol 1 73.6 75.2 2.1% <15%	H ₂ S #2 (high scale) 2/6/14 CC212507 8/7/13 EPA Protocol 1 169.9 171.0 0.6% <15%
II. CALIBRATION DRIFT ASSE	SSMENT		
A. Out-of Control Period	s:		
1. Dates:	N/A		
2. Number of Days	N/A		
B. Corrective Actions: _	N/A		

Pollutant: H ₂ S					
Applicable NSPS Subpart:	<u>J</u>				
Reporting period dates: From	<u>1/1/14</u> to <u>3/31/14</u>				
Date submitted: 4/30/14					
Company: Valero Refining -	Meraux LLC				
Address: 2500 East St. Bern	ard Highway, Meraux, LA 7007	5			
Emission Limitation: Hydro	ogen Sulfide shall not exceed 162	2 ppm on a 3-hour	rolling average.		
Monitor Manufacturer and M	odel No.: Ametek 4661				
Process Unit(s) Description:_	Area 4 Fuel Drum for Alky Reb	oiler (EPN 1-77, E	EQT 0078)		
CEM Sampling Location: Ar	ea 4 Fuel Drum				
CEM Span Value: Hydroger	Sulfide, 300 ppm				
I. ACCURACY ASSESSM	IENT RESULTS (CGA):				
	Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value CEM Response Value Accuracy Standard	H ₂ S #1 (low scale) 2/4/14 CC403727 8/7/13 EPA Protocol 1 73.6 71.7 2.6% <15%	H ₂ S #2 (high scale) 2/4/14 CC212507 8/7/13 EPA Protocol 1 169.9 162.7 4.2% <15%		
II. CALIBRATION DRIFT	ASSESSMENT				
A. Out-of Control Periods:					
1. Dates:	N/A				
2. Number of	2. Number of Days <u>N/A</u>				
B. Corrective Action	ons: N/A				

Pollutant: H₂S

Applicable NSPS Subpart:J_			
Reporting period dates: From 1/	1/14 to 3/31/14		
Date submitted: 4/30/14			
Company: Valero Refining - Me	eraux LLC		
Address: 2500 East St. Bernard	Highway, Meraux, LA 7007:	5	
Emission Limitation: <u>Hydroge</u>	n Sulfide shall not exceed 162	2 ppm on a 3-hour	rolling average.
Monitor Manufacturer and Mode	el No.: Ametek 4661		
Process Unit(s) Description: Ar	ea 6 Fuel Drum for Hydrocrae	cker & Hydrotreat	er Charge Heaters (EPN 1-00, EQT 0009)
CEM Sampling Location: Area	6 Fuel Drum		
CEM Span Value: <u>Hydrogen S</u>	ulfide, 300 ppm		
I. ACCURACY ASSESSMEN	NT RESULTS (CGA):		
	Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value CEM Response Value Accuracy Standard	H ₂ S #1 (low scale) 2/5/14 CC403727 8/7/13 EPA Protocol 1 73.6 75.0 1.9% <15%	H ₂ S #2 (high scale) 2/5/14 CC212507 8/7/13 EPA Protocol 1 169.9 163.0 4.1% <15%
II. CALIBRATION DRIFT AS			
A. Out-of Control Per	iods:		
1. Dates:	N/A		
2. Number of Da	vs N/A		
	• • • • • • • • • • • • • • • • • • • •		
B. Corrective Actions	: <u>N/A</u>		
,	14		

Pollutant: H₂S

Applicable NSPS Subpa	ırt: <u>J</u>			
Reporting period dates:	From <u>1/1/14</u> to <u>3/31/14</u>			
Date submitted: 4/30/14	1			
Company: Valero Refir	ning - Meraux LLC			
Address: 2500 East St.	Bernard Highway, Meraux, LA 7007	5		
Emission Limitation:	Hydrogen Sulfide shall not exceed 16	2 ppm on a 3-hour	rolling average.	
Monitor Manufacturer a	nd Model No.: Ametek 4661			
Process Unit(s) Descript	ion: Area 6 Fuel Drum for Boilers F	3-5 (EPN 2-00, EQ	Γ 0030) and B-6 (EPN 3-00, EQT 0048)	
CEM Sampling Location	n: Area 6 Fuel Drum			
CEM Span Value: Hyd	drogen Sulfide, 300 ppm			
I. ACCURACY ASSI	ESSMENT RESULTS (CGA):			
II. CALIBRATION D	Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value CEM Response Value Accuracy Standard		H ₂ S #2 (high scale) 2/4/14 CC212507 8/7/13 EPA Protocol 1 169.9 171.0 0.6% <15%	
II. CALIBRATION D	RIFT ASSESSMENT			
A. Out-of Co	ntrol Periods:			
1. Dates	. <u>N/A</u>			
2. Number of Days N/A				
B. Corrective	Actions: N/A			

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: NO_x

Applicable NSPS Subpart: ___Db__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average.

Monitor Manufacturer and Model No.: ABB 23042-5-8018413

Process Unit(s) Description: Boiler B-5 (EPN 2-00, EQT 0030)

CEM Sampling Location: Boiler B-5

CEM Span Value: Nitrogen Oxide 100 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NOx #1	NOx #2	O ₂ #1	O ₂ #2
	(low scale)	(high scale)	(low scale)	(high scale)
Date of Audit	3/19/14	3/19/14	1/26/14	1/26/14
Audit Gas Cylinder No.	LL165998	LL164501	LL42560	LL42613
Date of Audit Gas Cert.	2/4/14	2/5/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.69	54.73	5.95	10.04
CEM Response Value	27.7	55.0	5.98	10.06
Accuracy	12.2%	0.5%	0.5%	0.2%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

11.40		00	1 10	1
A.	()nt_c	of Contro	1 Perioc	16.

- 1. Dates: <u>N/A</u>
- 2. Number of Days N/A
- B. Corrective Actions: N/A

(per 40 CFR 60, Appendix F, Section 7)

Pollutant: NO_x

Applicable NSPS Subpart: __Db__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average.

Monitor Manufacturer and Model No.: ABB 23042-5-8018413

Process Unit(s) Description: Boiler B-6 (EPN 3-00, EQT 0048)

CEM Sampling Location: Boiler B-6

CEM Span Value: Nitrogen Oxide 100 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NOx #1	NOx #2	O ₂ #1	O ₂ #2
	(low scale)	(high scale)	(low scale)	(high scale)
Date of Audit	3/19/14	3/19/14	1/26/14	1/26/14
Audit Gas Cylinder No.	LL165998	LL167083	LL42560	LL42613
Date of Audit Gas Cert.	2/4/14	2/14/14	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.69	54.26	5.95	10.04
CEM Response Value	26.0	55.0	6.01	10.11
Accuracy	5.3%	1.4%	1.0%	0.7%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

100		
A	Out-of Control	Periods:

1. Dates: <u>N/A</u>

2. Number of Days N/A

B. Corrective Actions: N/A

Pollutant: NO_x

Applicable NSPS Subpart: ___Db__

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: Nitrogen Oxide shall not exceed 0.1 pound/MMBtu on a 30-day rolling average.

Monitor Manufacturer and Model No.: Thermo Environmental Model 42i (NOx)/(O2)

Process Unit(s) Description: Boiler TB-01 (EPN 1-06, EQT 0010)

CEM Sampling Location: Boiler TB-01

CEM Span Value: Nitrogen Oxide 500 ppm, Oxygen 25 %

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NOx #1	NOx #2	O ₂ #1	O ₂ #2
	(low scale)	(high scale)	(low scale)	(high scale)
Date of Audit	3/17/14	3/17/14	1/26/14	1/26/14
Audit Gas Cylinder No.	LL47213	LL65256	LL42560	LL42613
Date of Audit Gas Cert.	2/4/13	2/18/13	1/28/13	1/30/13
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	127.1	272.4	5.95	10.04
CEM Response Value	130.5	275.0	5.67	9.70
Accuracy	2.7%	1.0%	4.7%	3.4%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

	-		-			
Λ	 hit	at	Car	tral	Peri	ode.
r	 	-01	COL	шон	I CII	OUS.

- 1. Dates: __N/A__
- 2. Number of Days N/A
- B. Corrective Actions: N/A

Pollutant: N	NOx				
Applicable 1	NSPS Subpart:Ja				
Reporting p	eriod dates: From <u>1/1/14</u> to <u>3/31/1</u>	4_			
Date submit	ted: 4/30/14				
Company:_	Valero Refining - Meraux LLC				
Address: 25	500 East St. Bernard Highway, Me	eraux, LA 70075_			
Emission Li	mitation: Nitrogen Oxide correc	ted to 0% O2 shall 1	not exceed 40 ppm	on a 30-day rolling	average
Monitor Ma	nufacturer and Model No.: Therr	no Environmental N	Model 42i (NOx)/(0	O_2)	=======================================
	t(s) Description:_Benzene Recove			mana	
	ling Location: Benzene Recovery		,		
CEM Span	Value: Nitrogen Oxide 100 ppm,	Oxygen 25 %			
I. ACCUI	RACY ASSESSMENT RESULTS	(CGA):			
	Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value CEM Response Value Accuracy Standard	NOx #1 (low scale) 3/15/14 LL168198 12/2/13 EPA Protocol 1 24.40 24.50 0.4% <15%	NOx #2 (high scale) 3/15/14 LL164501 2/5/13 EPA Protocol 1 54.73 54.00 1.3% <15%	O ₂ #1 (low scale) 1/30/14 LL42560 1/28/13 EPA Protocol 1 5.95 5.70 4.2% <15%	O ₂ #2 (high scale) 1/30/14 LL42613 1/30/13 EPA Protocol 1 10.04 9.57 4.7% <15%
II. CALIB	RATION DRIFT ASSESSMENT				
A.	Out-of Control Periods: 1. Dates: N/A 2. Number of Days N/A				
В.	Corrective Actions: N/A				

Pollutant: Total Sulfur				
Applicable NSPS Subpart:Ja(Required by Consent Decre	ee: 3:10-cv-00563-	bbc, Paragraph 49.a.ii)	
Reporting period dates: From 1/1/14	to 3/31/14			
Date submitted: 4/30/14				
Company: Valero Refining - Merau	x LLC			
Address: 2500 East St. Bernard Hig	hway, Meraux, LA 70075			
Emission Limitation: None				
Monitor Manufacturer and Model N	o.: Thermo Scientific SOL	A II		
Process Unit(s) Description: North I	Flare Stack (EPN 20-72, EC	QT 0035), North Fl	lare Header	
CEM Sampling Location: North Fla	re Stack, North Flare Head	er		
CEM Span Value: Total Sulfur, Du	al Range 10,000 ppm, 1,00	0,000 ppm		
I. ACCURACY ASSESSMENT I	RESULTS (CGA):			
¹ Valero unable to	Date of Audit Audit Gas Cylinder No. Date of Audit Gas Cert. Type of Certification Certified Audit Value CEM Response Value Accuracy Standard	H ₂ S #1 (low scale) 3/16/14 LL54215 2/11/13 EPA Protocol 1 1021.0 999.0 2.2% <15%	H ₂ S #2 (high scale) 3/16/14 CC115208 12/16/13 Certified Gas 10000.0 9724.3 2.8% <15% than 1000 ppm.	
II. CALIBRATION DRIFT ASSES		eu gueve g. eure.	ross pp	
A. Out-of Control Periods	į			
1. Dates:	N/A			
2. Number of Days	N/A			
B. Corrective Actions:	N/A			

Pollutant: Total Sulfur

Applicable NSPS Subpart: __Ja__ (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)

Reporting period dates: From 1/1/14 to 3/31/14

Date submitted: 4/30/14

Company: Valero Refining - Meraux LLC

Address: 2500 East St. Bernard Highway, Meraux, LA 70075

Emission Limitation: None

Monitor Manufacturer and Model No.: Thermo Scientific SOLA II

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header

CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header

CEM Span Value: Total Sulfur, Dual Range: 10,000 ppm, 1,000,000 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1	H ₂ S #2
	(low scale)	(high scale)
Date of Audit	3/16/14	3/16/14
Audit Gas Cylinder No.	LL54215	CC115208
Date of Audit Gas Cert.	2/11/13	12/16/13
Type of Certification	EPA Protocol 1	Certified Gas
Certified Audit Value	1021.0	10000.0
CEM Response Value	969.7	9952.3
Accuracy	5.0%	0.5%
Standard	<15%	<15%

¹ Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm.

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

- 1. Dates: $1/12/14\ 06:07 - 1/13/14\ 15:07$, 33 hours
- 2. Number of Days ___1.4
- B. Corrective Actions: See GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE page on the North Flare Stack, Hydrocracker Flare Header for a description of causes and corrective actions.

(per 40 CFR 60, Appendix F, Section 7)

Applicable NSPS Subpart:Ja(Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 49.a.ii)	
Reporting period dates: From <u>1/1/14</u> to <u>3/31/14</u>	
Date submitted: 4/30/14	
Company: Valero Refining - Meraux LLC	
Address: 2500 East St. Bernard Highway, Meraux, LA 70075	
Emission Limitation: None	
Monitor Manufacturer and Model No.: Thermo Scientific SOLA II	
Process Unit(s) Description: South Flare Stack (EPN 3-77, EQT 0049)	
CEM Sampling Location: South Flare Stack	
CEM Span Value: Total Sulfur, Dual Range: 10,000 ppm, 1,000,000 ppm	

I. ACCURACY ASSESSMENT RESULTS (CGA):

Pollutant: Total Sulfur

	H ₂ S #1	H ₂ S #2
	(low scale)	(high scale)
Date of Audit	3/16/14	3/16/14
Audit Gas Cylinder No.	LL54215	CC115208
Date of Audit Gas Cert.	2/11/13	12/16/13
Type of Certification	EPA Protocol 1	Certified Gas
Certified Audit Value	1021.0	10000.0
CEM Response Value	995.7	9821.7
Accuracy	2.5%	1.8%
Standard	<15%	<15%

¹ Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm.

II. CALIBRATION DRIFT ASSESSMENT

 A. Out-of Control Period 	ds:	Perioc	Control	Out-of	A.
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1.	Dates:	1/19/14 14:00 - 1/20/14 15:00, 25 hours
	7 K2/13/1	8
2.	Number of Days	<u></u>

B. Corrective Actions: See GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEMS PERFORMANCE page on the South Flare Stack for a description of causes and corrective actions.