



October 30, 2012

CERTIFIED: 7009 1410 0001 6281 1773

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 – 3rd Quarter 2012  
Valero Refining - Meraux LLC, Agency Interest # 1238  
2500 East St. Bernard Hwy., St. Bernard Parish, Meraux, LA  
Title V Permit Numbers: 2500-00001-V7

Gentlemen,

Valero Refining, Meraux LLC is hereby submitting the 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 Third Quarter 2012.

For this reporting period, excess emissions greater than 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, and sources fueled by the Area 1, Area 2, and Hydrocracker Boilers Fuel Drums for Hydrogen Sulfide. No CEMS had downtime greater than 5 percent of the total operating time. 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,

A handwritten signature in black ink that reads 'Lauren K. Bird'. The signature is written in a cursive style with a horizontal line underneath.

Lauren K. Bird  
Vice President & General Manager  
Valero Refining – Meraux LLC

Enclosures

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

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: **Opacity**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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.: Monitor Labs Inc., #550

Date of Latest CMS Certification or Audit: Certification (4/11/01)

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

Total source operating time in reporting period<sup>1</sup>: 101,111 minutes

<b>Emissions Data Summary<sup>1</sup></b>	
<b>1. Duration of excess emissions in reporting period due to:</b>	<i>(minutes)</i>
a. Startup/shutdown	43
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
<b>2. Total duration of excess emission</b>	43
<b>3. Total duration of excess emissions x (100) [Total source operating time]<sup>2</sup></b>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
<b>1. CMS downtime in reporting period due to:</b>	<i>(minutes)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	128
e. Unknown causes	0
<b>2. Total CMS Downtime</b>	128
<b>3. Total duration of CMS Downtime x (100) [Total source operating time]<sup>2</sup></b>	0.1 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: **CO**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: CO corrected to 0% O<sub>2</sub> shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 9/25/12 (CO), 9/15/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 1,683 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	69
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	69
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	4.1 %

<b>CMS Performance Summary<sup>1</sup></b>	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	10
e. Unknown causes	0
2. Total CMS Downtime	10
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.6 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: **SO<sub>2</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> 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 (SO<sub>2</sub>)/Servomex 1155 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 9/26/12 (SO<sub>2</sub>), 9/15/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 1,683 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	10
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.6 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: **NO<sub>x</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 (NO<sub>x</sub>)/Servomex 1155 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 9/26/12 (NO<sub>x</sub>), 9/15/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 1,683 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	10
e. Unknown causes	0
2. Total CMS Downtime	10
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.6 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: **SO<sub>2</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Brimstone SGX-231(SO<sub>2</sub>)/Rosemount Oxymitter 4000(O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 8/11/12 (SO<sub>2</sub>), 8/13/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 1,455 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	34
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	34
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	2.3 %

<b>CMS Performance Summary<sup>1</sup></b>	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	32
e. Unknown causes	0
2. Total CMS Downtime	32
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	2.2 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: **SO<sub>2</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: Brimstone 991-CEM-X(SO<sub>2</sub>)/ Rosemount Oxymitter 4000(O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 8/11/12 (SO<sub>2</sub>), 9/18/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 1,728 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	11
e. Unknown causes	0
2. Total CMS Downtime	11
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.6 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/20/12

Process Unit(s) Description: Area 1 Fuel Drum for Boiler TB-01 (EPN 1-06, EQT 0010) and Boiler B-7 (EPN 1-07, EQT 0011)

Total source operating time in reporting period: 2,044 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	52
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	52
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	2.6 %

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

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.



**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: **H<sub>2</sub>S**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/20/12

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

<u>ROSE Heater (EPN 1-80, EQT 0014);</u>
<u>Vacuum Heater (EPN 1-76, EQT 0013);</u>
<u>Platformer Charge Heater (EPN 17-72 a,b,c, EQT 0028);</u>
<u>Hydrobon Charge Heater (EPN 14-72, EQT 0023)</u>
<u>Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)</u>

Total source operating time in reporting period: 804 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	9
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	9
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	1.1 %

<b>CMS Performance Summary<sup>1</sup></b>	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
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] <sup>2</sup>	1.9 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/20/12

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

Total source operating time in reporting period: 1,945 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	3
e. Unknown causes	0
2. Total CMS Downtime	3
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.2 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/24/12

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

Total source operating time in reporting period: 1,808 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	3
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	3
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	0.2 %

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

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/24/12

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: 2,187 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	67
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	67
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	3.1 %

<b>CMS Performance Summary<sup>1</sup></b>	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	19
e. Unknown causes	0
2. Total CMS Downtime	19
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.9 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: **NO<sub>x</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/26/12 (NO<sub>x</sub>), 9/15/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 2,185 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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] <sup>2</sup>	0.0 %

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

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: **NO<sub>x</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/26/12 (NO<sub>x</sub>), 9/15/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 2,062 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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] <sup>2</sup>	0.0 %

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

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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.

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND  
MONITORING SYSTEMS PERFORMANCE**

*(per 40 CFR 60.7(d))*

Pollutant: NO<sub>x</sub>

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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

Date of Latest CMS Certification or Audit: CGA on 9/25/12 (NO<sub>x</sub>), 9/15/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 2,024 hours

<b>Emissions Data Summary<sup>1</sup></b>	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	24
d. Other known causes	5
e. Unknown causes	0
2. Total CMS Downtime	29
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	1.4 %

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> 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**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: CO corrected to 0% O<sub>2</sub> shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 9/25/12 (CO), 9/15/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 1,683 hours

**EXCESS EMISSIONS**

Date	Start	End	Duration (hours)	Max 1-HRA (ppm)	Cause	Corrective Action
7/21/12	22:00		3	>1000	#2 FCC CO >500 ppm, 1-HRA, during unit start up on Torch Oil following the failure of an electrical transformer that caused the unit to shutdown.	The use of Torch Oil with low unit charge causes elevated levels of CO. Valero used the #2 FCC Air Preheater to minimize the time CO was > 500 ppm. Valero completed the unit startup per the SSM Plan.
7/22/12		01:00				
8/6/12	09:00	20:00	16	>1000	#2 FCC CO >500 ppm, 1-HRA, during unit start up on Torch Oil following unit shutdown after a fire in the Crude Unit on 7/22/12. The startup was delayed by a loss of instrument air caused by a stuck open blow-off valve on the instrument air compressor that tripped the Main Air Blower.	Valero restored the instrument air system, restarted the Main Air Blower, and continued with the startup. The use of Torch Oil with low unit charge causes elevated levels of CO. Valero used the #2 FCC Air Preheater to minimize the time CO was > 500 ppm. Valero completed the unit startup per the SSM Plan.
8/6/12	23:00					
8/7/12		15:00				
8/7/12	16:00	18:00	2	>1000		
9/3/12	02:00	12:00	10	>1000	#2 FCC CO >500 ppm, 1-HRA during unit start up on Torch Oil following unit shutdown for Hurricane Isaac.	The use of Torch Oil with low unit charge causes elevated levels of CO. Valero used the #2 FCC Air Preheater to minimize the time CO was > 500 ppm. Valero completed the unit startup per the SSM Plan.
9/9/12	20:00		18	>1000	#2 FCC CO >500 ppm, 1-HRA due to an upset caused by a malfunction of the East Flue Gas Slide Valve. Control of the valve was lost and the valve went fully open.	Valero removed charge and shutdown the unit. Valero maintained the unit ready for start up using Torch Oil. The use of Torch Oil with low unit charge causes elevated levels of CO.
9/10/12		14:00				
9/10/12	23:30		9	>1000	#2 FCC CO >500 ppm, 1-HRA during unit start up on Torch Oil following the malfunction of the east flue gas slide valve on 9/9/12. During the start up, the Wet Gas Compressor tripped due to a blown fuse.	Valero replaced the blown fuse, re-started the Wet Gas Compressor, and continued with the startup. The use of Torch Oil with low unit charge causes elevated levels of CO. Valero completed the unit startup per the SSM Plan.
9/11/12		08:30				
TOTAL			69			



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

Pollutant: **CO**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: CO corrected to 0% O<sub>2</sub> shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 9/25/12 (CO), 9/15/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 1,683 hours

**CMS PERFORMANCE**

Date	Start	End	Duration (hours)	Cause	Corrective Action
7/2/12	10:11	11:11	1	Adjusted for calibration drift	N/A
7/9/12	08:19	09:19	1	Adjusted for calibration drift	N/A
8/13/12	10:55	11:55	1	Changed critical flow orifice on sample probe	N/A
9/15/12	14:09	15:09	1	O <sub>2</sub> Cylinder Gas Audit	N/A
9/24/12	10:30	11:30	1	Adjusted for calibration drift	N/A
9/25/12	13:35	16:35	3	CO and CO <sub>2</sub> Cylinder Gas Audit	N/A
9/26/12	10:20	11:20	1	SO <sub>2</sub> Cylinder Gas Audit	N/A
9/26/12	13:16	14:16	1	NOx Cylinder Gas Audit	N/A
<b>TOTAL</b>			<b>10</b>		

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

Pollutant: **SO<sub>2</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Brimstone SGX-231(SO<sub>2</sub>)/Rosemount Oxymitter 4000(O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 8/11/12 (SO<sub>2</sub>), 8/13/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 1,455 hours

**EXCESS EMISSIONS**

Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
7/21/12	01:45	22:45	21	>500	#2 SRU Incinerator SO <sub>2</sub> >250 ppm, 12-HRA, during unit upset with #2 Tail Gas Treater (TGT) bypassed due to the failure of an electrical transformer that caused a loss of power to pumps throughout the refinery. Valero determined the root cause to be an electrical fault caused by moisture intrusion and corrosion in the air terminal chamber of the transformer.	Valero restored the #2 SRU to normal operation per the MACT UUU SSM Plan. SO <sub>2</sub> emissions were less than >500 lbs/day from the #2 SRU Incinerator.  Valero inspected all the transformers throughout the refinery for signs of moisture intrusion and replaced the damaged one. Valero determined that the current design used for the air terminal boxes is inadequate and will design and install appropriate terminal boxes.
8/16/12	03:30	16:30	13	>500	#2 SRU Incinerator SO <sub>2</sub> >250 ppm, 12-HRA, during startup following an unplanned shutdown on 8/14/12 when the #2 SRU tripped on high burner pressure caused by a plugged condenser seal leg. Valero determined the root cause to be a steam leak into the process from a steam-jacketed pipe between the sulfur condenser and the plugged seal leg. A contributing factor was the unit had been running at low sulfur production rates for an extended period with a higher proportion of Sour Water Stripper offgas than normal. Plugging is more likely in this condition due to lower flows in the seal legs and a greater concentration of contaminants.	Valero replaced the corroded section of jacketed pipe and completed the unit startup, per the MACT UUU SSM Plan. SO <sub>2</sub> emissions were less than >500 lbs/day from the #2 SRU Incinerator.  Valero commissioned a new acid gas transfer line to/from the #3 SRU that will help prevent running the unit at low sulfur production rates in the future.
<b>TOTAL</b>			34			

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

Pollutant: SO<sub>2</sub>

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average

Monitor Manufacturer and Model No.: Brimstone SGX-231(SO<sub>2</sub>)/Rosemount Oxymitter 4000(O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 8/11/12 (SO<sub>2</sub>), 8/13/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 1,455 hours

CMS PERFORMANCE <sup>1</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
7/1/12	11:16	12:16	1	Adjusted for calibration drift	N/A
7/2/12	08:22	09:22	1	Adjusted for calibration drift	N/A
7/6/12	07:39	08:39	1	Adjusted for calibration drift	N/A
7/10/12	15:11	16:11	1	Adjusted for calibration drift	N/A
7/11/12	08:29	18:29	10	Sampling system had likely become contaminated during the event on 6/29/12 and caused the frequent need for adjustments	Cleaned sample lines and sampling system
7/18/12	09:17	10:17	1	Maintenance check	N/A
8/11/12	14:14	15:14	1	SO <sub>2</sub> Cylinder Gas Audit	N/A
8/13/12	10:07	11:07	1	O <sub>2</sub> Cylinder Gas Audit	N/A
8/20/12	07:45	10:45	3	Cleaned sample lines and system following event on 8/16/12	N/A
8/21/12	07:51	08:21	1	SO <sub>2</sub> adjusted for calibration drift	N/A
9/18/12	10:50	11:50	1	O <sub>2</sub> Cylinder Gas Audit	N/A
9/25/12	08:14	09:14	1	O <sub>2</sub> adjusted for calibration drift	N/A
9/30/12	15:00	00:00	9	Loose RTD wire caused heater to remain energized too long causing a fuse to blow and de-energize the heater. Low temperature allowed liquid to build up and contaminate the sample line.	Repaired RTD, checked heater operation, and steamed out sample line.
1TOTAL			32		

<sup>1</sup>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.

## ROOT CAUSE ANALYSIS SUMMARY REPORT

(per 40 CFR 60.108a(d)(5))

SUBPART Ja ROOT CAUSE ANALYSIS SUMMARY				
60.108a (c)(6)(i)	Affected Facility:	#2 SRU Incinerator (EPN 1-93, EQT 0019)		
	Description of Discharge:	#2 SRU Incinerator SO <sub>2</sub> emissions >500 lbs/day due to an upset of the #2 SRU and #2 TGT. The #2 SRU and #2 TGT were overwhelmed by the acid gas production caused by a sudden, unexpected spike in crude charge sulfur content. SO <sub>2</sub> coming from the #2 SRU exceeded the capacity of the #2 TGT Reactor and passed through to the #2 SRU Incinerator. SO <sub>2</sub> entering the #2 TGT Quench Tower chemically unbalanced the system and plugged the Quench Water Filter, further reducing the #2 TGT function and delaying recovery.		
(ii)	Start:	6/29/12 09:20 <sup>1</sup>		
	Stop:	6/30/12 15:45		
	Duration:	6.4 hrs		
(iii)	SO <sub>2</sub> Emissions <sup>2</sup> :	2,138 lbs		
	H <sub>2</sub> S Emissions <sup>2</sup> :	11 lbs		
(iv)	Measured Total Sulfur Concentration of Discharge from a Flare	Not applicable to Sulfur Recovery Units.		
(v)	Measured Concentration of H <sub>2</sub> S in Fuel Gas or SO <sub>2</sub> of Discharge from a Fuel Gas Combustion Device	Not applicable to Sulfur Recovery Units.		
(vi)	Measured Concentration SO <sub>2</sub> Discharged from a Sulfur Recovery Plant	>500 ppm (Maximum Range of SO <sub>2</sub> CEMS)		
(vii)	Total SO <sub>2</sub> Emissions <sup>2</sup> :	2,138 lbs		
	Total H <sub>2</sub> S Emissions <sup>2</sup> :	11 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 #2 SRU and #2 TGT. Valero activated the mixers on the crude tank to reduce the crude charge sulfur content.		
(ix)	Root Cause:	Valero determined the root cause to be operator error. Valero was filling a crude tank with high sulfur crude oil via pipeline and a mechanical mixer that usually mixes the crude was not activated. Heavier, high sulfur crude settled to the bottom of the tank and passed, unmixed, to the crude unit charge.		
	Was discharge the result of a Root Cause identified by previous Root Cause Analysis? (Yes/No)	No		
(x)	Corrective Action(s) Completed within 45 days of Discharge <sup>3</sup> :	None		
	Incomplete Correction Actions (Include scheduled commencement and completion dates)	<ol style="list-style-type: none"> <li>1. Bring mixer run status into the DCS. Estimated completion: 11/15/12</li> <li>2. Develop mixer runs status page Pumper/Gauger DCS. Estimated completion: 11/15/12</li> <li>3. Add mixer run status to Shift Foreman Reports. Estimated completion: 11/1/12</li> </ol>		

<sup>1</sup> Follow-up to report submitted for 2<sup>nd</sup> Quarter 2012. Investigation was not complete at time of initial report.

<sup>2</sup> If the discharge duration exceeds 24 hours, record the discharge quantity for each 24-hour period.

<sup>3</sup> Enter a description of the recommended corrective actions or a an explanation of why corrective action is not necessary.

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

Pollutant: **SO<sub>2</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: Brimstone 991-CEM-X(SO<sub>2</sub>)/ Rosemount Oxymitter 4000(O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 8/11/12 (SO<sub>2</sub>), 9/18/12 (O<sub>2</sub>)

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

Total source operating time in reporting period: 1,728 hours

**EXCESS EMISSIONS**

Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
None						
<b>TOTAL</b>			<b>0</b>			

**CMS PERFORMANCE<sup>1</sup>**

Date	Start	End	Duration (hours)	Cause	Corrective Action
7/1/12	10:34	11:34	1	SO <sub>2</sub> adjusted for calibration drift	NA
7/3/12	08:15	09:15	1	SO <sub>2</sub> adjusted for calibration drift	NA
7/6/12	10:13	11:13	1	SO <sub>2</sub> adjusted for calibration drift	NA
7/8/12	13:50	14:50	1	SO <sub>2</sub> adjusted for calibration drift	NA
7/11/12	07:43	08:43	1	SO <sub>2</sub> adjusted for calibration drift	NA
7/12/12	08:33	09:33	1	SO <sub>2</sub> adjusted for calibration drift	NA
7/14/12	11:10	12:10	1	SO <sub>2</sub> adjusted for calibration drift	NA
7/18/12	09:33	10:33	1	SO <sub>2</sub> adjusted for calibration drift	Sample system was cleaned with unit down
8/11/12	09:58	10:58	1	SO <sub>2</sub> adjusted for calibration drift	NA
8/11/12	15:00	16:00	1	SO <sub>2</sub> Cylinder Gas Audit	NA
8/22/12	08:55	09:55	1	SO <sub>2</sub> adjusted for calibration drift	NA
9/18/12	10:02	11:02	1	O <sub>2</sub> Cylinder Gas Audit	NA
<b>1TOTAL</b>			<b>11</b>		

<sup>1</sup>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.

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

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/20/12

Process Unit(s) Description: Area 1 Fuel Drum for Boiler TB-01 (EPN 1-06, EQT 0010) and Boiler B-7 (EPN 1-07, EQT 0011)

Total source operating time in reporting period: 2,044 hours

**EXCESS EMISSIONS**

Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
8/14/12	02:28		52	>300	H <sub>2</sub> S > 162 ppm, 3-HRA due to the unplanned shutdown of the #1 Amine Unit. The #1 Amine Unit shut down after the #2 SRU SRU tripped on high burner pressure caused by a plugged condenser seal leg. Valero determined the root cause to be a steam leak into the process from a steam-jacketed pipe between the sulfur condenser and the plugged seal leg. A contributing factor was the unit had been running at low acid gas rate rates for an extended period with a higher proportion of Sour Water Stripper offgas than normal. Plugging is more likely in this condition due to lower flows in the seal legs and a greater concentration of contaminants.	Valero replaced the corroded section of jacketed pipe and started up the #1 Amine and #2 SRU.  Valero commissioned a new acid gas transfer line to/from the #3 SRU that will help prevent running the unit at low acid gas rates in the future.
8/16/12		06:38				
<b>TOTAL</b>			52			

**CMS PERFORMANCE**

Date	Start	End	Duration (hours)	Cause	Corrective Action
7/2/12	09:30	11:30	2	Maintenance check	N/A
9/20/12	10:17	11:17	1	Cylinder Gas Audit	N/A
<b>TOTAL</b>			3		

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

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/20/12

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

ROSE Heater (EPN 1-80, EQT 0014);

Vacuum Heater (EPN 1-76, EQT 0013);

Platformer Charge Heater (EPN 17-72 a,b,c , EQT 0028);

Hydrobon Charge Heater (EPN 14-72, EQT 0023)

Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

Total source operating time in reporting period: 804 hours

**EXCESS EMISSIONS**

Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
7/21/12	00:54	03:54	3	231	H <sub>2</sub> S > 162 ppm, 3-HRA, due to the failure of an electrical transformer that caused a loss of power to pumps throughout the refinery. The #1 Amine and #2 SRU units were shutdown and fuel gas containing H <sub>2</sub> S entered the fuel gas system. Valero determined the root cause to be an electrical fault caused by moisture intrusion and corrosion in the air terminal chamber of the transformer.	Valero quickly restarted the #1 Amine and #2 SRU.  Valero inspected all transformers throughout the refinery for signs of moisture intrusion and replaced the damaged one. Valero determined that the current design used for the air terminal boxes is inadequate and will design and install appropriate terminal boxes.
7/21/12	05:10	11:10	6	291		
<b>TOTAL</b>			9			

**CMS PERFORMANCE**

Date	Start	End	Duration (hours)	Cause	Corrective Action
7/2/12	09:04	10:04	1	Adjusted for calibration drift	N/A
7/6/12	07:46	08:46	1	Adjusted for calibration drift	N/A
7/15/12	08:22	09:22	1	Adjusted for calibration drift	N/A
7/16/12	13:44	17:44	4	Out of service due to erratic operation	Repaired and placed in service
9/19/12	12:00	18:55	7	Heaters firing on fuel gas with H <sub>2</sub> S CEMS not in service	Maintenance calibrated and placed CEMS in service
9/20/12	08:25	09:25	1	Cylinder Gas Audit	
<b>TOTAL</b>			15		

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

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/24/12

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: 2,187 hours

**EXCESS EMISSIONS**

Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
7/21/12	00:49	03:49	3	210	H <sub>2</sub> S > 162 ppm, 3-HRA, due to the failure of an electrical transformer that caused a loss of power to pumps throughout the refinery. The #1 Amine and #2 SRU units were shutdown and fuel gas containing H <sub>2</sub> S entered the fuel gas system. Valero determined the root cause to be an electrical fault caused by moisture intrusion and corrosion in the air terminal chamber of the transformer.	Valero quickly restarted the #1 Amine and #2 SRU.  Valero inspected all transformers throughout the refinery for signs of moisture intrusion and replaced the damaged one. Valero determined that the current design used for the air terminal boxes is inadequate and will design and install appropriate terminal boxes.
7/21/12	04:25	11:25	7	292		
7/22/12	04:35	09:35	5	> 300	H <sub>2</sub> S > 162 ppm, 3-HRA, due to a fire in the Crude Unit. Valero rapidly shutdown the entire refinery except two boilers supplied by this fuel drum. The rapid shutdown of the #1 Amine and #2 SRU allowed some fuel gas containing H <sub>2</sub> S to enter the fuel gas system.	The high H <sub>2</sub> S condition cleared once the fuel gas generated by the emergency shutdown was burned off and replaced with natural gas.
8/14/12	01:57	05:57	52	> 300	H <sub>2</sub> S > 162 ppm, 3-HRA due to the unplanned shutdown of the #1 Amine Unit. The #1 Amine Unit shut down after the #2 SRU SRU tripped on high burner pressure caused by a plugged condenser seal leg. Valero determined the root cause to be a steam leak into the process from a steam-jacketed pipe between the sulfur condenser and the plugged seal leg. A contributing factor was the unit had been running at low acid gas rate rates for an extended period with a higher proportion of Sour Water Stripper offgas than normal. Plugging is more likely in this condition due to lower flows in the seal legs and a greater concentration of contaminants.	Valero replaced the corroded section of jacketed pipe and started up the #1 Amine and #2 SRU.
8/16/12						Valero commissioned a new acid gas transfer line to/from the #3 SRU that will help prevent running the unit at low acid gas rates in the future.
TOTAL			67			



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

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 9/24/12

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: 2,187 hours

**CMS PERFORMANCE**

Date	Start	End	Duration (hours)	Cause	Corrective Action
7/23/12	09:02	10:02	1	Adjusted for calibration drift	N/A
7/24/12	13:20	15:20	2	Adjusted for calibration drift	N/A
9/22/12	23:03	14:03	15	Blown Fuse	Fuse replaced
9/24/12	10:14	11:14	1	Cylinder Gas Audit	N/A
TOTAL			19		

# DATA ASSESSMENT REPORT

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

Pollutant: **Opacity**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 hourly period.

Monitor Manufacturer and Model No.: Monitor Labs, Model #550

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: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: **CO**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: CO corrected to 0% O<sub>2</sub> shall not exceed 500 ppm on a 1 hour rolling average

Monitor Manufacturer and Model No.: Thermo Environmental 48i (CO)/Servomex 1155 (O<sub>2</sub>)

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 <u>(low scale)</u>	CO #2 <u>(high scale)</u>	O <sub>2</sub> #1 <u>(low scale)</u>	O <sub>2</sub> #2 <u>(high scale)</u>
Date of Audit	9/25/12	9/25/12	9/15/12	9/15/12
Audit Gas Cylinder No.	CC334652	SG9111608	CC62176	ALM004031
Date of Audit Gas Cert.	1/20/11	1/23/12	8/31/12	8/30/12
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	253.1	594.4	6.1	10.1
CEM Response Value	269.7	619.3	5.5	9.5
Accuracy	6.5%	4.2%	9.8%	5.9%
Standard	<15%	<15%	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: **SO<sub>2</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> 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 (SO<sub>2</sub>)/Servomex 1155 (O<sub>2</sub>)

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 <sub>2</sub> #1 (low scale)	SO <sub>2</sub> #2 (high scale)	O <sub>2</sub> #1 (low scale)	O <sub>2</sub> #2 (high scale)
Date of Audit	9/26/12	9/26/12	9/15/12	9/15/12
Audit Gas Cylinder No.	CC310467	CC334126	CC62176	ALM004031
Date of Audit Gas Cert.	1/24/12	1/23/12	8/31/12	8/30/12
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	124.0	272.0	6.1	10.1
CEM Response Value	135.0	287.0	5.5	9.5
Accuracy	8.9%	5.5%	9.8%	5.9%
Standard	<15%	<15%	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: **NO<sub>x</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Murphy Oil USA, Inc., Meraux Refinery

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

Emission Limitation: Not Applicable

Monitor Manufacturer and Model No.: Thermo Environmental 42i (NO<sub>x</sub>)/Servomex 1155 (O<sub>2</sub>)

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):

	NO <sub>x</sub> #1 <u>(low scale)</u>	NO <sub>x</sub> #2 <u>(high scale)</u>	O <sub>2</sub> #1 <u>(low scale)</u>	O <sub>2</sub> #2 <u>(high scale)</u>
Date of Audit	9/26/12	9/26/12	9/15/12	9/15/12
Audit Gas Cylinder No.	CC357679	CC47662	CC62176	ALM004031
Date of Audit Gas Cert.	1/23/12	1/23/12	8/31/12	8/30/12
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	55.9	128.0	6.1	10.1
CEM Response Value	56.0	129.0	5.5	9.5
Accuracy	0.2%	0.8%	9.8%	5.9%
Standard	<15%	<15%	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: SO<sub>2</sub>

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: Brimstone SGX-231(SO<sub>2</sub>)/Rosemount Oxymitter 4000(O<sub>2</sub>)

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):

	SO <sub>2</sub> #1 (low scale)	SO <sub>2</sub> #2 (high scale)	O <sub>2</sub> #1 (low scale)	O <sub>2</sub> #2 (high scale)
Date of Audit	8/11/12	8/11/12	9/18/12	9/18/12
Audit Gas Cylinder No.	CC310467	CC334126	CC62176	ALM004031
Date of Audit Gas Cert.	1/24/12	1/23/12	8/31/12	8/30/12
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	123.6	271.6	6.1	10.1
CEM Response Value	131.7	280.7	5.6	9.7
Accuracy	6.5%	3.3%	8.2%	4.0%
Standard	<15%	<15%	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: **SO<sub>2</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

Company: Valero Refining - Meraux LLC

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

Emission Limitation: SO<sub>2</sub> corrected to 0% O<sub>2</sub> shall not exceed 250 ppm on a 12-hour rolling average.

Monitor Manufacturer and Model No.: Brimstone 991-CEM-X (SO<sub>2</sub>), Rosemount Oxymitter 4000 (O<sub>2</sub>)

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 <sub>2</sub> #1 (low scale)	SO <sub>2</sub> #2 (high scale)	O <sub>2</sub> #1 (low scale)	O <sub>2</sub> #2 (high scale)
Date of Audit	8/11/12	8/11/12	9/18/12	9/18/12
Audit Gas Cylinder No.	CC310467	CC334126	CC62176	ALM004031
Date of Audit Gas Cert.	1/24/12	1/23/12	8/31/12	8/30/12
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	123.6	271.6	6.1	10.1
CEM Response Value	133.3	283.7	7.0	10.8
Accuracy	7.9%	4.4%	14.8%	6.9%
Standard	<15%	<15%	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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

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

CEM Sampling Location: Area 1 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

## I. ACCURACY ASSESSMENT RESULTS (CGA):

	H <sub>2</sub> S #1 (low scale)	H <sub>2</sub> S #2 (high scale)
Date of Audit	9/20/12	9/20/12
Audit Gas Cylinder No.	ALM060506	CC62458
Date of Audit Gas Cert.	9/11/12	9/11/12
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	76.4	164.0
CEM Response Value	76.3	162.7
Accuracy	0.1%	0.8%
Standard	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: **H<sub>2</sub>S**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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

Source Unit: Area 2 Fuel Drum for: MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033);  
ROSE Heater (EPN 1-80, EQT 0014); Vacuum Heater (EPN 1-76, EQT 0013);  
Platformer Charge Heater (EPN 17-72 a,b,c , EQT 0028);  
Hydrobon Charge Heater (EPN 14-72, EQT 0023)  
Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

CEM Sampling Location: Area 2 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

## I. ACCURACY ASSESSMENT RESULTS (CGA):

	H <sub>2</sub> S #1 <u>(low scale)</u>	H <sub>2</sub> S #2 <u>(high scale)</u>
Date of Audit	9/20/12	9/20/12
Audit Gas Cylinder No.	ALM060506	CC62458
Date of Audit Gas Cert.	9/11/12	9/11/12
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	76.4	164.0
CEM Response Value	72.1	155.9
Accuracy	5.6%	5.0%
Standard	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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**DATA ASSESSMENT REPORT**  
*(per 40 CFR 60, Appendix F, Section 7)*

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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

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

CEM Sampling Location: Area 4 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H <sub>2</sub> S #1 <u>(low scale)</u>	H <sub>2</sub> S #2 <u>(high scale)</u>
Date of Audit	9/20/12	9/20/12
Audit Gas Cylinder No.	ALM060506	CC62458
Date of Audit Gas Cert.	9/11/12	9/11/12
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	76.4	164.0
CEM Response Value	72.3	154.3
Accuracy	5.3%	5.9%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: **H<sub>2</sub>S**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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

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

CEM Sampling Location: Area 6 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

## I. ACCURACY ASSESSMENT RESULTS (CGA):

	H <sub>2</sub> S #1 (low scale)	H <sub>2</sub> S #2 (high scale)
Date of Audit	9/24/12	9/24/12
Audit Gas Cylinder No.	ALM060506	CC62458
Date of Audit Gas Cert.	9/11/12	9/11/12
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	76.4	164.0
CEM Response Value	75.0	160.0
Accuracy	1.8%	2.4%
Standard	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: H<sub>2</sub>S

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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

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)

CEM Sampling Location: Area 6 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

## I. ACCURACY ASSESSMENT RESULTS (CGA):

	H <sub>2</sub> S #1 <u>(low scale)</u>	H <sub>2</sub> S #2 <u>(high scale)</u>
Date of Audit	9/24/12	9/24/12
Audit Gas Cylinder No.	ALM060506	CC62458
Date of Audit Gas Cert.	9/11/12	9/11/12
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	76.4	164.0
CEM Response Value	75.7	161.3
Accuracy	1.0%	1.6%
Standard	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: NO<sub>x</sub>

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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):

	NO <sub>x</sub> #1 <u>(low scale)</u>	NO <sub>x</sub> #2 <u>(high scale)</u>	O <sub>2</sub> #1 <u>(low scale)</u>	O <sub>2</sub> #2 <u>(high scale)</u>
Date of Audit	9/26/12	9/26/12	9/15/12	9/15/12
Audit Gas Cylinder No.	CC367708	CC357679	CC62176	ALM004031
Date of Audit Gas Cert.	1/23/12	1/23/12	8/31/12	8/30/12
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.9	55.9	6.1	10.1
CEM Response Value	23.9	54.9	6.1	10.1
Accuracy	4.0%	1.7%	0.0%	0.0%
Standard	<15%	<15%	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: **NO<sub>x</sub>**

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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):

	NO <sub>x</sub> #1 (low scale)	NO <sub>x</sub> #2 (high scale)	O <sub>2</sub> #1 (low scale)	O <sub>2</sub> #2 (high scale)
Date of Audit	9/26/12	9/26/12	9/15/12	9/15/12
Audit Gas Cylinder No.	CC367708	CC357679	CC62176	ALM004031
Date of Audit Gas Cert.	1/23/12	1/23/12	8/31/12	8/30/12
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.9	55.9	6.1	10.1
CEM Response Value	26.0	57.8	6.1	10.1
Accuracy	4.3%	3.3%	0.0%	0.0%
Standard	<15%	<15%	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

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# DATA ASSESSMENT REPORT

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

Pollutant: NO<sub>x</sub>

Reporting period dates: From 7/01/12 to 9/30/12

Date submitted: 10/30/12

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 (NO<sub>x</sub>)/(O<sub>2</sub>)

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):

	NO <sub>x</sub> #1 <u>(low scale)</u>	NO <sub>x</sub> #2 <u>(high scale)</u>	O <sub>2</sub> #1 <u>(low scale)</u>	O <sub>2</sub> #2 <u>(high scale)</u>
Date of Audit	9/25/12	9/25/12	9/15/12	9/15/12
Audit Gas Cylinder No.	CC285173	CC316885	CC62176	ALM004031
Date of Audit Gas Cert.	1/23/12	1/23/12	8/31/12	8/30/12
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	124.4	273.5	6.1	10.1
CEM Response Value	129.0	278.0	5.7	9.6
Accuracy	3.7%	1.6%	6.6%	5.0%
Standard	<15%	<15%	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: 9/16/12

2. Number of Days 1

B. Corrective Actions: During the automatic daily validation on 9/16/12, the system failed to apply the high span gas to the O<sub>2</sub> CEMS. On 9/17/12, Valero found that the pressure regulator on the bottle for the O<sub>2</sub> high span was not functioning properly and replaced it.