



April 30, 2016

CERTIFIED: 7011 2970 0002 0808 5020

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 – 1<sup>st</sup> Quarter 2016  
Valero Refining - Meraux LLC, Agency Interest # 1238  
2500 East St. Bernard Hwy., St. Bernard Parish, Meraux, LA  
Title V Permit Numbers: 2500-00001-V12

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 2016.

For this reporting period, no CEMS had excess emissions greater than 1 % of the total operating time and no CEMS had downtime greater than 5 % of the total operating time. Enclosed are the Data Assessment Reports for the appropriate CEMS and information required by NSPS Subpart Ja, 40 CFR 60.108a(d). Additionally, Valero has reviewed its records and could not find evidence that two root cause and corrective action analysis reports from the 4<sup>th</sup> Quarter 2015 were submitted with the 4<sup>th</sup> Quarter Excess Emissions and Monitoring Systems Reports; therefore, they are included with this submittal.

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, appearing to read 'Eric J. Brown'.

Eric Brown  
Director Refinery Operations  
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) and 60.108a(d))*

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

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/18/16 (SO<sub>2</sub> & O<sub>2</sub>)

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

Total source operating time in reporting period: 2,183 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	28
d. Other known causes	2
e. Unknown causes	0
2. Total CMS Downtime	30
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.

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

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

Pollutant: SO<sub>2</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/18/16 (SO<sub>2</sub> & O<sub>2</sub>)

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

Total source operating time in reporting period: 2,183 hours

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
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	5
e. Unknown causes	0
2. Total CMS Downtime	6
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.3 %

<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**

Applicable NSPS Subpart:   J  

Reporting period dates: From   1/1/16   to   3/31/16  

Date submitted:   4/30/16  

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 1/20/16  

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

  Product and Fractionator Heaters (EPN 2-92, EQT 0033)  

Total source operating time in reporting period:   EQT 0010- 2,035 hours, EQT 0011- 2,046 hours, EQT 0033-1,974 hours  

<b>Emissions Data Summary<sup>1</sup></b>			
1. Duration of excess emissions in reporting period due to:	<i>EQT 0010 (hours)</i>	<i>EQT 0011 (hours)</i>	<i>EQT 0033 (hours)</i>
a. Startup/shutdown	0	0	0
b. Control equipment problems	0	0	0
c. Process problems	0	0	0
d. Other known causes	0	0	0
e. Unknown causes	0	0	0
2. Total duration of excess emission	0	0	0
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	0.0 %	0.0 %	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>			
1. CMS downtime in reporting period due to:	<i>EQT 0010 (hours)</i>	<i>EQT 0011 (hours)</i>	<i>EQT 0033 (hours)</i>
a. Monitor equipment malfunctions	0	0	0
b. Non-Monitor equipment malfunctions	0	0	0
c. Quality assurance calibration	1	1	1
d. Other known causes	0	0	0
e. Unknown causes	0	0	0
2. Total CMS Downtime	2	2	2
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0 %	0.0 %	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. (Percentage based on the lowest operating time.)



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

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

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

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/20/16

Process Unit(s) Description: Area 2 Fuel Drum for: Vacuum Heater (EPN 1-76, EQT 0013); No.1 Crude Heater (EPN 12-72A, EQT 0022); 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); DHT Charge Heater (EPN 5-73, EQT 0058); ROSE Heater (EPN 1-80, EQT 0014)

Total source operating time in reporting period: EQT 0013-2,183 hours; EQT 0022-2,183 hours; EQT 0023-2,059 hours; EQT 0024-2,048 hours; EQT 0027-2,045 hours; EQT 0028-2,068; EQT 0029-2,021 hours; EQT 0058 – 2,154 hours; EQT 0014 - 2,183 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	1
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	1
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0 %

<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) and 60.108a(d))*

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

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/20/16

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

Total source operating time in reporting period: 1,849 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	1
d. Other known causes	0
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

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/19/16

Process Unit(s) Description: Area 4 Fuel Drum for Merox Disulfide Separator to Platformer Charge Heater

Total source operating time in reporting period: 2,052 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	1
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	1
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0 %

<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

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/19/16

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: 2,183 hours

<b>Emissions Data Summary<sup>1</sup></b>	
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] <sup>2</sup>	0.0 %

<b>CMS Performance Summary<sup>1</sup></b>	
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	1
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0 %

<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**

Applicable NSPS Subpart:   J  

Reporting period dates: From   1/1/16   to   3/31/16  

Date submitted:   4/30/16  

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 1/19/16

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

Total source operating time in reporting period: EQT 0030-2,180 hours; EQT 0048-2,176 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	6
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	6
3. Total duration of excess emissions x (100) [Total source operating time] <sup>2</sup>	0.3 %

<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	1
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	1
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0 %

<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>

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 Limas11 (NO<sub>x</sub>), Magnos27 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 1/21/16 (NO<sub>x</sub> & O<sub>2</sub>)

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

Total source operating time in reporting period: 2,180 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	2
d. Other known causes	0
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>**

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 Limas11 (NO<sub>x</sub>), Magnos27 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 1/21/16 (NO<sub>x</sub> & O<sub>2</sub>)

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

Total source operating time in reporting period: 2,176 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	2
d. Other known causes	0
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>**

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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

Date of Latest CMS Certification or Audit: CGA on 1/20/16 (NO<sub>x</sub> & O<sub>2</sub>)

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

Total source operating time in reporting period: 2,035 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	28
d. Other known causes	5
e. Unknown causes	0
2. Total CMS Downtime	33
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	1.6 %

<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) and 60.108a(d))*

Pollutant: NO<sub>x</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O<sub>2</sub> shall not exceed 40 ppm on a 30-day rolling average

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

Date of Latest CMS Certification or Audit: CGA on 1/25/16 (NO<sub>x</sub> & O<sub>2</sub>)

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

Total source operating time in reporting period: 1,849 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	55
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	1
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	56
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	3.0 %

<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) and 60.108a(d))*

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

Applicable NSPS Subpart: N/A (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 36.a)

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB Limas11( NO<sub>x</sub>), Magnos27 (O<sub>2</sub>)

Date of Latest CMS Certification or Audit: CGA on 1/19/16 (NO<sub>x</sub> & O<sub>2</sub>)

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

Total source operating time in reporting period: 2,183 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	3
d. Other known causes	1
e. Unknown causes	0
2. Total CMS Downtime	4
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) and 60.108a(d))*

Pollutant: **H2S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 5100

Date of Latest CMS Certification or Audit: Initial Certification RATA on 2/11/16

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

Total source operating time in reporting period: 2,183 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	28
d. Other known causes	2
e. Unknown causes	0
2. Total CMS Downtime	30
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.

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

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

Pollutant: **H2S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 5100

Date of Latest CMS Certification or Audit: Initial Certification RATA on 2/11/16

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

Total source operating time in reporting period: 2,138 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	1
d. Other known causes	5
e. Unknown causes	3
2. Total CMS Downtime	9
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.5 %

<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) and 60.108a(d))*

Pollutant: **H2S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 5100

Date of Latest CMS Certification or Audit: Initial Certification RATA on 2/10/16

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

Total source operating time in reporting period: 2,138 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	1
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0 %

<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) and 60.108a(d))*

Pollutant: **Total Sulfur**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/25/16

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

Total source operating time in reporting period: 2,138 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	8
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	8
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.4 %

<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.



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

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

Pollutant: **Total Sulfur**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/25/16

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

Total source operating time in reporting period: 2,138 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	2
d. Other known causes	18
e. Unknown causes	0
2. Total CMS Downtime	20
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) and 60.108a(d))*

Pollutant: **Total Sulfur**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 11/11/15

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

Total source operating time in reporting period: 2,138 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	7
d. Other known causes	36
e. Unknown causes	0
2. Total CMS Downtime	43
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	2.0 %

<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) and 60.108a(d))*

Pollutant: **Flow**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

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

Total source operating time in reporting period: 2,138 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	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0%

<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) and 60.108a(d))*

Pollutant: **Flow**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

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

Total source operating time in reporting period: 2,138 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	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0 %

<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) and 60.108a(d))*

Pollutant: **Flow**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

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

Total source operating time in reporting period: 2,138 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	0
e. Unknown causes	0
2. Total CMS Downtime	0
3. Total duration of CMS Downtime x (100) [Total source operating time] <sup>2</sup>	0.0 %

<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) and 60.108a(d))*

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

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/18/16 (SO<sub>2</sub> & O<sub>2</sub>)

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

Total source operating time in reporting period: 2,138 hours

**EXCESS EMISSIONS**

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

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

Date	Start	End	Duration (hours)	Cause	Corrective Action
1/18/16	09:50	11:50	2	SO <sub>2</sub> and O <sub>2</sub> Cylinder Gas Audit.	N/A
2/4/16	09:16	11:16	2	Adjusted for calibration drift.	N/A
2/16/16	07:13		26	Out of Control. SO <sub>2</sub> Calibration drift > 4 times the allowable limit on 2/17/16.	See Data Assessment Report #2 SRU Incinerator. (Page 36)
2/17/16		09:13			
TOTAL			30		

<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) and 60.108a(d))*

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

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/18/16 (SO<sub>2</sub> & O<sub>2</sub>)

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

Total source operating time in reporting period: 2,183 hours

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

CMS PERFORMANCE <sup>1</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/18/16	13:38	14:38	1	SO <sub>2</sub> and O <sub>2</sub> Cylinder Gas Audit.	N/A
1/25/16	08:43	13:43	5	SO <sub>2</sub> analyzer went into fault after performing a satisfactory calibration check.	Valero cleaned the cell windows, calibrated the analyzer, and returned it to service.
TOTAL			6		

<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) and 60.108a(d))*

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

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/20/16

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

Total source operating time in reporting period: 1,849 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE <sup>1</sup>						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
1/20/16	10:06	11:06	1	Cylinder Gas Audit.	N/A	
TOTAL			1			

<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) and 60.108a(d))*

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

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O<sub>2</sub> shall not exceed 40 ppm on a 30-day rolling average

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

Date of Latest CMS Certification or Audit: CGA on 1/25/16 (NO<sub>x</sub> & O<sub>2</sub>)

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

Total source operating time in reporting period: 1,849 hours

<b>Ja EXCESS EMISSIONS</b>						
Date	Start	End	Duration (hours)	Max 30-DRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE <sup>1</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/20/16	05:30		55	O <sub>2</sub> cell failed. Replacement spare stored on site was also bad.	Valero rush ordered a new cell and returned the O <sub>2</sub> analyzer to service.
1/22/16		12:30			
1/25/16	08:05	09:05	1	NOx/ O <sub>2</sub> Cylinder Gas Audit.	N/A
TOTAL			56		

<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) and 60.108a(d))*

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

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 5100

Date of Latest CMS Certification or Audit: Initial Certification RATA on 2/11/16

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), North Flare Header<sup>1</sup>

Total source operating time in reporting period: 2,183 hours

<b>Ja EXCESS EMISSIONS</b>						
Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
None						
TOTAL			0			

Ja CMS PERFORMANCE <sup>2</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
3/9/16	11:24		28	Analog output card failed. Analyzer remained in service, but data was not transmitted to the DCS and recorded by the refinery data historian. Valero monitored the analyzer output on the maintenance network. There was no flaring on this header after 3/10/16 14:04.	Valero replaced the analog card on 3/17/16.
3/10/16		15:24			
3/17/16	11:55	12:55	1	Adjusted for calibration drift.	N/A
3/17/16	13:57	14:57	1	Adjusted for calibration drift.	N/A
TOTAL			30		

<sup>1</sup>Due to the physical arrangement of the headers supplying the North Flare Stack (EPN 20-72, EQT 0035), two analyzers are required to measure H<sub>2</sub>S concentration of the gas combusted in the North Flare. Conservatively, excess emission on either of these analyzers will be considered excess emissions at the North Flare. However, the CEMS performance will be tracked separately.

<sup>2</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) and 60.108a(d))*

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

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 5100

Date of Latest CMS Certification or Audit: Initial Certification RATA on 2/11/16

Process Unit(s) Description: North Flare Stack (EPN 20-72, EQT 0035), Hydrocracker Flare Header<sup>1</sup>

Total source operating time in reporting period: 2,138 hours

<b>Ja EXCESS EMISSIONS</b>						
Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
None.						
TOTAL			190			

Ja CMS PERFORMANCE <sup>2</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/5/16	07:04	10:04	3	Analyzer malfunctioned during the daily calibration check and held the high span value for almost 2 hours before going offline.	Valero maintenance calibrated the analyzer and returned it to service.
2/11/16	10:15	13:15	3	Analyzer shut down due to an internal communication fault.	Valero maintenance rebooted that analyzer, calibrated it, and returned it to service.
2/28/16	13:06	14:06	1	Adjusted for calibration drift.	N/A
3/17/16	15:03	16:03	1	Offline to troubleshoot internal communication fault alarms with factory representative.	N/A
3/18/16	13:36	15:36	1		
TOTAL			9		

<sup>1</sup>Due to the physical arrangement of the headers supplying the North Flare Stack (EPN 20-72, EQT 0035), two analyzers are required to measure H<sub>2</sub>S concentration of the gas combusted in the North Flare. Conservatively, excess emission on either of these analyzers will be considered excess emissions at the North Flare. However, the CEMS performance will be tracked separately.

<sup>2</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) and 60.108a(d))*

Pollutant: **H2S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 5100

Date of Latest CMS Certification or Audit: Initial Certification RATA on 2/10/16

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

Total source operating time in reporting period: 2,183 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 3-HRA (ppm)	Cause	Corrective Action
None.						
TOTAL			0			

Ja CMS PERFORMANCE <sup>1</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
3/17/16	16:05	17:05	1	Offline for inspection by factory representative.	N/A
TOTAL			1		

<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) and 60.108a(d))*

Pollutant: **Total Sulfur**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/25/16

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

Total source operating time in reporting period: 2,138 hours

<b>Ja CMS PERFORMANCE<sup>1</sup></b>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/11/15	13:13	15:13	2	Adjusted for calibration drift.	N/A
1/11/15	17:23	16:23	1	Adjusted for calibration drift.	N/A
1/25/16	10:58	11:58	1	Cylinder Gas Audit	N/A
3/31/16	11:09	12:09	1	During the daily calibration check the automatic sequence skipped the low range, high span gas. The high range, low span gas was performed satisfactory. Both of these points use the same gas bottle for the reference gas.	Valero maintenance adjusted the sample flow rate to the analyzer and the problem did not reoccur.
3/31/16	12:33	17:43	3		
TOTAL			8		

<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) and 60.108a(d))*

Pollutant: **Total Sulfur**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/25/16

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

Total source operating time in reporting period: 2,138 hours

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

Date	Start	End	Duration (hours)	Cause	Corrective Action
1/5/16	00:00	11:00	11	Analyzer went offline due to low sample flow. Valero investigated and found that the analyzer building ventilation system had been left in continuous purge mode that constantly brought in outside air instead of auto. Ambient temperatures dropped low enough to affect this analyzers operation.	Valero restored the ventilations system to normal, started up and calibrated the analyzer, and returned it to service.
1/6/15	07:40	08:40	1	Adjusted for calibration drift.	N/A
1/25/16	10:09	11:09	1	Cylinder Gas Audit.	N/A
3/31/16	05:47	12:19	7	The circuit breaker that powers the sample pump and sample line heat trace tripped taking the analyzer offline. Valero could not determine the cause for the breaker trip.	Valero restored power and started up the analyzer. It was calibrated and returned to service. The breaker trip did not reoccur.
TOTAL			20		

<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) and 60.108a(d))*

Pollutant: **Total Sulfur**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 1/25/16

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

Total source operating time in reporting period: 2,138 hours

<b>Ja CMS PERFORMANCE<sup>1</sup></b>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/11/15	06:05	12:05	6	Analyzer malfunctioned while transitioning out of the daily calibration check sequence to sample due to low instrument air pressure.	Valero restored instrument air pressure and performed a second satisfactory calibration check
1/11/15	12:45	13:45	1	Adjusted for calibration drift.	N/A
1/11/15	18:05	19:05	1	Adjusted for calibration drift.	N/A
1/25/16	12:50	13:50	1	Cylinder Gas Audit.	N/A
3/4/16	12:15		29	During a unit start up, the MDH Fractionator PSV lifted causing liquids to enter the sample line and cause this analyzer to malfunction.	Valero extensively purged the liquids out of the sample system. Valero calibrated the analyzer and returned it to service.
3/5/16		17:15			
3/7/16	07:52	09:52	1	Adjusted for calibration drift.	N/A
3/9/16	08:32	10:32	2	Adjusted for calibration drift.	N/A
3/28/16	08:38	09:38	1	Second calibration check performed. Valero suspected that higher than normal H <sub>2</sub> S readings were due to an analyzer problem.	The higher than normal H <sub>2</sub> S reading were accurate and the analyzer was reading accurately.
TOTAL			43		

<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) and 60.108a(d))*

Pollutant: **Flow**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

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

Total source operating time in reporting period: 2,138 hours

Ja CMS PERFORMANCE <sup>1</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

<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) and 60.108a(d))*

Pollutant: **Flow**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

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

Total source operating time in reporting period: 2,138 hours

Ja CMS PERFORMANCE <sup>1</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

<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) and 60.108a(d))*

Pollutant: **Flow**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: GE Panametrics GF 868

Date of Latest CMS Certification or Audit: N/A

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

Total source operating time in reporting period: 2,138 hours

Ja CMS PERFORMANCE <sup>1</sup>					
Date	Start	End	Duration (hours)	Cause	Corrective Action
None.					
TOTAL			0		

<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.

# DATA ASSESSMENT REPORT

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

Pollutant: SO<sub>2</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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	1/18/16	1/18/16	1/18/16	1/18/16
Audit Gas Cylinder No.	LL41929	LL170749	LL53418	LL167062
Date of Audit Gas Cert.	11/11/14	2/10/14	1/28/14	1/28/14
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	125.7 ppmv	275.8 ppmv	6.01 vol %	10.01 vol %
CEM Response Value	136.3 ppmv	279.3 ppmv	6.33 vol %	10.40 vol %
Accuracy	8.4%	1.3%	5.3%	3.9%
Standard	<15%	<15%	<15%	<15%

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: 2/16/16, 07:13 - 2/17/16, 09:13

2. Number of Days 1.1 (26 hours)

B. Corrective Actions: On 2/17/15, the SO<sub>2</sub> analyzer's response to the span value was > 4 time the allowable limit below the reference gas due to restricted sample flow. Valero instrumentation technicians replaced sample line and probe filters and blew out the sample line.

# DATA ASSESSMENT REPORT

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

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

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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	1/18/16	1/18/16	1/18/16	1/18/16
Audit Gas Cylinder No.	LL41929	LL170749	LL53418	LL167062
Date of Audit Gas Cert.	11/11/14	2/10/14	1/28/14	1/28/14
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	125.7 ppmv	275.8 ppmv	6.01 vol %	10.01 vol %
CEM Response Value	133.3 ppmv	276.0 ppmv	5.60 vol %	9.76 vol %
Accuracy	6.0%	0.1%	6.8%	2.5%
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

# **DATA ASSESSMENT REPORT**

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

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

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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):**

	<b>H<sub>2</sub>S #1</b>	<b>H<sub>2</sub>S #2</b>
	<b><u>(low scale)</u></b>	<b><u>(high scale)</u></b>
Date of Audit	1/20/16	1/20/16
Audit Gas Cylinder No.	LL167084	LL167094
Date of Audit Gas Cert.	2/24/14	2/10/14
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	77.2	166.6
CEM Response Value (ppmv)	76.7	165.7
Accuracy	0.6%	0.5%
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**

Applicable NSPS Subpart: J and Ja (Benzene Recovery Unit Reboiler Subject to Ja)

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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(J and Ja) and 60 ppm on a 365 day rolling average (Ja only)

Monitor Manufacturer and Model No.: Ametek 4661

Source Unit: Area 2 Fuel Drum for: MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033); No.1 Crude Heater (EPN 12-72A, EQT 022); 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); Platformer Debut Reboiler (EPN 19-72, EQT 0029); NHT Charge Heater (EPN 14-72, EQT 0023); NHT Debut Reboiler (EPA 15-72, EQT 0024); NHT Depent Reboiler (EPA 16-72, EQT 0027); DHT Charge Heater (EPN 5-73, EQT 0058); 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 (low scale)	H <sub>2</sub> S #2 (high scale)
Date of Audit	1/20/16	1/20/16
Audit Gas Cylinder No.	LL167084	LL167094
Date of Audit Gas Cert.	2/24/14	2/10/14
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	77.2	166.6
CEM Response Value (ppmv)	75.8	164.2
Accuracy	1.7%	1.4%
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

# **DATA ASSESSMENT REPORT**

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

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

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 Merox Disulfide Separator to Platformer Charge Heater

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 (low scale)	H <sub>2</sub> S #2 (high scale)
Date of Audit	1/19/16	1/19/16
Audit Gas Cylinder No.	LL167084	LL167094
Date of Audit Gas Cert.	2/24/14	2/10/14
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	77.2	166.6
CEM Response Value (ppmv)	73.7	160.7
Accuracy	4.5%	3.5%
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

---

# **DATA ASSESSMENT REPORT**

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

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

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 <u>(low scale)</u>	H <sub>2</sub> S #2 <u>(high scale)</u>
Date of Audit	1/19/16	1/19/16
Audit Gas Cylinder No.	LL167084	LL167094
Date of Audit Gas Cert.	2/24/14	2/10/14
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	77.2	166.6
CEM Response Value (ppmv)	77.5	167.9
Accuracy	0.5%	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

---

# **DATA ASSESSMENT REPORT**

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

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

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 (low scale)	H <sub>2</sub> S #2 (high scale)
Date of Audit	1/19/16	1/19/16
Audit Gas Cylinder No.	LL167084	LL167094
Date of Audit Gas Cert.	2/24/14	2/10/14
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	77.2	166.6
CEM Response Value (ppmv)	77.1	165.7
Accuracy	0.1%	0.5%
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**

# **DATA ASSESSMENT REPORT**

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

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

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 Limas11( NOx), Magnos27 (O<sub>2</sub>)

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):**

	<b>NO<sub>x</sub> #1</b>	<b>NO<sub>x</sub> #2</b>	<b>O<sub>2</sub> #1</b>	<b>O<sub>2</sub> #2</b>
	<b><u>(low scale)</u></b>	<b><u>(high scale)</u></b>	<b><u>(low scale)</u></b>	<b><u>(high scale)</u></b>
Date of Audit	1/21/16	1/21/16	1/21/16	1/21/16
Audit Gas Cylinder No.	LL165998	LL167083	LL53418	LL167062
Date of Audit Gas Cert.	2/4/15	2/14/14	1/28/14	1/28/14
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.7 ppmv	55.1 ppmv	6.01 vol %	10.01 vol %
CEM Response Value	26.1 ppmv	56.2 ppmv	6.03 vol %	10.05 vol %
Accuracy	5.7%	2.0%	0.3%	0.4%
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

---

# **DATA ASSESSMENT REPORT**

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

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

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 Limas11( NO<sub>x</sub>), Magnos27 (O<sub>2</sub>)

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	1/21/16	1/21/16	1/21/16	1/21/16
Audit Gas Cylinder No.	LL165998	LL167083	LL53418	LL167062
Date of Audit Gas Cert.	2/4/15	2/14/14	1/28/14	1/28/14
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.7 ppmv	55.1 ppmv	6.01 vol %	10.01 vol %
CEM Response Value	24.7 ppmv	54.8 ppmv	6.04 vol %	10.06 vol %
Accuracy	0.0%	0.5%	0.5%	0.5%
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

---

# **DATA ASSESSMENT REPORT**

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

Pollutant: NO<sub>x</sub>

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 (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	1/20/16	1/20/16	1/20/16	1/20/16
Audit Gas Cylinder No.	LL170762	LL35027	LL53418	LL167062
Date of Audit Gas Cert.	2/7/14	2/11/14	1/28/14	1/28/14
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	139.4 ppmv	277.5 ppmv	6.01 vol %	10.01 vol %
CEM Response Value	137.8 ppmv	270.3 ppmv	5.57 vol %	9.33 vol %
Accuracy	1.1%	2.6%	7.3%	6.8%
Standard	<15%	<15%	<15%	<15%

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out-of Control Periods:**

1. Dates: 2/28/16, 07:09 - 2/29/16, 7:09

2. Number of Days 1.0 (24 hours)

B. Corrective Actions: The CEMS failed low on the high span calibration check on 2/29/16. Less than an hour later, Valero shut down this boiler due to a tube rupture that leaked steam into the firebox and exhaust stack. Valero believes that this excess steam interfered with the calibration check. The analyzer was check out and calibrated and the boiler was returned to service on 3/6/16. Subsequent calibration checks were satisfactory.



# DATA ASSESSMENT REPORT

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

Pollutant: NO<sub>x</sub>

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O<sub>2</sub> shall not exceed 40 ppm 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: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127)

CEM Sampling Location: Benzene Recovery Unit Reboiler

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

## I. ACCURACY ASSESSMENT RESULTS (CGA):

<u>CGA</u>	<u>NO<sub>x</sub> #1</u> <u>(low scale)</u>	<u>NO<sub>x</sub> #2</u> <u>(high scale)</u>	<u>O<sub>2</sub> #1</u> <u>(low scale)</u>	<u>O<sub>2</sub> #2</u> <u>(high scale)</u>
Date of Audit	1/25/16	1/25/16	1/25/16	1/25/16
Audit Gas Cylinder No.	LL165998	LL167083	LL53418	LL167062
Date of Audit Gas Cert.	2/4/15	2/14/14	1/28/14	1/28/14
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.7 ppmv	55.1 ppmv	6.01 vol %	10.01 vol %
CEM Response Value	24.5 ppmv	53.7 ppmv	5.69 vol %	9.71 vol %
Accuracy	0.8%	2.5%	5.3%	3.0%
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

# **DATA ASSESSMENT REPORT**

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

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

Applicable NSPS Subpart: N/A (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 36.a)

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

Company: Valero Refining - Meraux LLC

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

Emission Limitation: Nitrogen Oxide corrected to 0% O<sub>2</sub> shall not exceed 40 ppm 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: No.1 Crude Heater (EPN 12-72A, EQT 0022)

CEM Sampling Location: No.1 Crude Heater

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

## **I. ACCURACY ASSESSMENT RESULTS (CGA):**

<u>CGA</u>	<u>NO<sub>x</sub> #1</u> <u>(low scale)</u>	<u>NO<sub>x</sub> #2</u> <u>(high scale)</u>	<u>O<sub>2</sub> #1</u> <u>(low scale)</u>	<u>O<sub>2</sub> #2</u> <u>(high scale)</u>
Date of Audit	1/19/16	1/19/16	1/19/16	1/19/16
Audit Gas Cylinder No.	LL165998	LL167083	LL53418	LL167062
Date of Audit Gas Cert.	2/4/15	2/14/14	1/28/14	1/28/14
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	24.7 ppmv	55.1 ppmv	6.01 vol %	10.01 vol %
CEM Response Value	23.1 ppmv	61.8 ppmv	5.93 vol %	9.50 vol %
Accuracy	6.5%	12.2%	1.3%	5.1%
Standard	<15%	<15%	<15%	<15%

<sup>1</sup> Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm.

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out-of Control Periods:**

1. Dates: N/A

2. Number of Days N/A

### **B. Corrective Actions: N/A**

# **DATA ASSESSMENT REPORT**

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

Pollutant: **H2S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 5100

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

CEM Sampling Location: North Flare Stack, North Flare Header (Y-AT-801)

CEM Span Value: H<sub>2</sub>S, 0-300 ppm

## **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S #1</u>
Date of Audit	2/11/16
Reference Method	EPA Method 11
Average RM Value (ppmv)	2.39 ppmv
Average CEM Value (ppmv)	3.07 ppmv
Accuracy	2.47 %
Limit	< 10 %

## **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**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 5100

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

CEM Sampling Location: North Flare Stack, Hydrocracker Flare Header (Y-AT-800)

CEM Span Value: H<sub>2</sub>S, 0-300 ppm

### **I. ACCURACY ASSESSMENT RESULTS (RATA):**

	<u>H<sub>2</sub>S #1</u>
Date of Audit	2/11/16
Reference Method	EPA Method 11
Average RM Value (ppmv)	2.36 ppmv
Average CEM Value (ppmv)	2.32 ppmv
Accuracy	0.54 %
Limit	< 10 %

### **II. CALIBRATION DRIFT ASSESSMENT**

#### **A. Out-of Control Periods:**

1. Dates: N/A

2. Number of Days N/A

#### **B. Corrective Actions:** N/A

---

# DATA ASSESSMENT REPORT

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

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

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 5100

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

CEM Sampling Location: South Flare Stack (Y-AT-802)

CEM Span Value: H<sub>2</sub>S, 0-300 ppm

## I. ACCURACY ASSESSMENT RESULTS (RATA):

	<u>H<sub>2</sub>S #1</u>	<u>H<sub>2</sub>S #@</u>
Date of Audit	2/10/16	4/5/16
Reference Method	EPA Method 11	EPA Method 11
Average RM Value (ppmv)	6.49 ppmv	21.13 ppmv
Average CEM Value (ppmv)	24.28 ppmv	19.41 ppmv
Accuracy	14.62 % <sup>1</sup>	2.15 % <sup>1</sup>
Limit	< 10 %	< 10 %

## II. CALIBRATION DRIFT ASSESSMENT

### A. Out-of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

<sup>1</sup> Analyzer failed the initial RATA for certification due to a bad connection to the sample system. Valero performed the RATA again on 4/5/16 and the analyzer passed.

# DATA ASSESSMENT REPORT

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

Pollutant: **Total Sulfur**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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), North Flare Header

CEM Sampling Location: North Flare Stack, North Flare Header (Y-AT-303)

CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 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	1/25/16	1/25/16
Audit Gas Cylinder No.	LL54215	CC409041
Date of Audit Gas Cert.	2/11/13	11/24/15
Type of Certification	EPA Protocol 1	Certified Gas
Certified Audit Value (ppmv)	1021.0	10020.0
CEM Response Value (ppmv)	1041.7	10065.7
Accuracy	2.0%	0.5%
Standard	<15%	<15%

<sup>1</sup> Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm.

## 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: **Total Sulfur**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 (Y-AT-302)

CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 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	1/25/16	1/25/16
Audit Gas Cylinder No.	LL54215	CC409041
Date of Audit Gas Cert.	2/11/13	11/24/15
Type of Certification	EPA Protocol 1	Certified Gas
Certified Audit Value (ppmv)	1021.0	10020.0
CEM Response Value (ppmv)	1044.0	10254.3
Accuracy	2.3%	2.3%
Standard	<15%	<15%

<sup>1</sup> Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm.

## **II. CALIBRATION DRIFT ASSESSMENT**

### **A. Out-of Control Periods:**

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

---



# **DATA ASSESSMENT REPORT**

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

Pollutant: **Total Sulfur**

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

Reporting period dates: From 1/1/16 to 3/31/16

Date submitted: 4/30/16

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 (Y-AT-304)

CEM Span Value: Total Sulfur, Dual Range: 0-10,000 ppm, 10,000-1,000,000 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	1/25/16	1/25/16
Audit Gas Cylinder No.	LL54215	CC409041
Date of Audit Gas Cert.	2/11/13	11/24/15
Type of Certification	EPA Protocol 1	Certified Gas
Certified Audit Value (ppmv)	1021.0	10020.0
CEM Response Value (ppmv)	1057.0	10087.3
Accuracy	3.5%	0.7%
Standard	<15%	<15%

<sup>1</sup> Valero unable to obtain EPA Protocol 1 certified gases greater than 1000 ppm.

## **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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**Subpart Ja Root Cause / Corrective Action Analysis**Impact Incident Number: **162062***The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).***Source Information:**

Refinery: Valero (Meraux)

Incident Type: Flaring Date of Event: 11/22/2015

Emissions Source(s): North Flare (EPN 20-72, EQT 0035) Date Analysis Completed: 12/17/2015

South Flare (EPN 3-77, EQT 0049)

(1.) (60.108a(c)(6)(i))

**A description of the Discharge:***The North Flare exceeded the NSPS Ja standard for 24-hour flow (>500,000 scf) due to a malfunction of the Platformer Net Gas Compressor.*

(2.) (60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))

Date and Time the discharge was first identified 11/22/15 1:00

Date and Time the discharge had ceased. 11/22/15 16:03

Duration of Discharge (Calculated) 15.0 hrs

(3.) (60.108a(c)(6)(viii))

**The steps taken to limit the duration and/or quantity of SO<sub>2</sub> emissions associated with the Incident:***The loss of the compressor resulted in a high volume of hydrogen venting to the North Flare. There was no change in the amount of H<sub>2</sub>S venting to the flare header. Operations and Maintenance made several attempts to re-start the compressor. Valero called out additional Maintenance and Reliability personnel to troubleshoot and repair. The compressor was restarted at 14:35 hrs.*

(4.) (60.108a(c)(6)(xi))

**Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary based on the startup of a unit.**

Did the discharge result from a planned startup or shutdown? No (Yes/No)

Was the flare management plan followed? Yes (Yes/No)

Is the event exempt from an RC/CCA based on the answers above? No (Yes/No)

- If yes, skip section 8-10.

(5.) (60.108a(c)(6)(ix))

**Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:**Did this discharge result from root causes identified in a previous analysis? No (Yes/No)*The motor vibration probes on the inboard side of the compressor motor were faulty. A contributing factor was that the trip set points on the motor vibration probes were set very low compared to the vibration probes on the rest of the system.*

(6.) (60.108a(c)(6)(ix))

**Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is not**Is corrective action required? Yes (Yes/No)*(1) Change the alarm and trip set points on the Net Gas Compressor motor vibration probes.**(2) Revise OPS-P-ST-017 ("Startup of Net Gas Compressor") procedure to provide additional guidance on restarting the NGC after a trip.**(3) Install a grounding brush or strap to dissipate magnetism from the NGC shaft.*

(7.) (60.108a(c)(6)(x))

**Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.***(1) Change the alarm and trip set points on the Net Gas Compressor motor vibration probes. (Completed on 1/10/16)**(2) Revise OPS-P-ST-017 ("Startup of Net Gas Compressor") procedure to provide additional guidance on restarting the NGC after a trip. (Completed 1/5/16).**(3) Install a grounding brush or strap to dissipate magnetism from the NGC shaft. (To be installed during next Platformer Turnaround, estimated completion 3/3/17.)*

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
11/21/15 1:00	11/22/2015 0:00	28357	2372	12.4	0.1
11/21/15 2:00	11/22/2015 1:00	665882	2257	15.2	0.1
11/21/15 3:00	11/22/2015 2:00	845154	2144	14.6	0.1
11/21/15 4:00	11/22/2015 3:00	901857	2036	14.1	0.1
11/21/15 5:00	11/22/2015 4:00	1013883	1929	13.8	0.1
11/21/15 6:00	11/22/2015 5:00	1031705	1831	12.6	0.1
11/21/15 7:00	11/22/2015 6:00	1154601	1717	12.1	0.1
11/21/15 8:00	11/22/2015 7:00	1281310	1619	13.9	0.1
11/21/15 9:00	11/22/2015 8:00	1365585	1517	15.3	0.1
11/21/15 10:00	11/22/2015 9:00	1427309	1414	16.2	0.1
11/21/15 11:00	11/22/2015 10:00	1489480	1310	17.9	0.1
11/21/15 12:00	11/22/2015 11:00	1552692	1207	19.1	0.1
11/21/15 13:00	11/22/2015 12:00	1611288	1103	20.3	0.1
11/21/15 14:00	11/22/2015 13:00	1668921	993	21.0	0.1
11/21/15 15:00	11/22/2015 14:00	1691389	899	21.1	0.1
11/21/15 16:00	11/22/2015 15:00	1692640	798	21.0	0.1
11/21/15 17:00	11/22/2015 16:00	1692793	806	21.0	0.1
11/21/15 18:00	11/22/2015 17:00	1692242	707	20.8	0.1
11/21/15 19:00	11/22/2015 18:00	1691884	609	20.6	0.1
11/21/15 20:00	11/22/2015 19:00	1691889	548	20.6	0.1
11/21/15 21:00	11/22/2015 20:00	1691586	454	20.5	0.1
11/21/15 22:00	11/22/2015 21:00	1691670	405	20.5	0.1
11/21/15 23:00	11/22/2015 22:00	1691670	322	20.5	0.1
11/22/15 0:00	11/22/2015 23:00	1691681	275	20.5	0.1
11/22/15 1:00	11/23/2015 0:00	1691608	229	20.5	0.1
11/22/15 2:00	11/23/2015 1:00	1051491	264	16.4	0.1
11/22/15 3:00	11/23/2015 2:00	869491	300	15.7	0.1
11/22/15 4:00	11/23/2015 3:00	809859	333	14.9	0.1
11/22/15 5:00	11/23/2015 4:00	693462	368	13.1	0.1
11/22/15 6:00	11/23/2015 5:00	670981	396	12.2	0.1
11/22/15 7:00	11/23/2015 6:00	544989	438	11.2	0.1
11/22/15 8:00	11/23/2015 7:00	419226	471	9.0	0.1

Subpart Ja Root Cause / Corrective Action Analysis		Impact Incident Number: 162482												
<p><i>The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).</i></p>														
<p><b>Source Information:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Refinery:</td> <td style="width: 30%; border-bottom: 1px solid black;">Valero (Meraux)</td> <td style="width: 40%;"></td> </tr> <tr> <td>Incident Type:</td> <td style="border-bottom: 1px solid black;">Flaring</td> <td>Date of Event: <b>12/3/2015</b></td> </tr> <tr> <td>Emissions Source(s):</td> <td style="border-bottom: 1px solid black;">North Flare (EPN 20-72, EQT 0035)</td> <td>Date Analysis Completed: <b>1/8/2016</b></td> </tr> <tr> <td></td> <td style="border-bottom: 1px solid black;">South Flare (EPN 3-77, EQT 0049)</td> <td></td> </tr> </table>			Refinery:	Valero (Meraux)		Incident Type:	Flaring	Date of Event: <b>12/3/2015</b>	Emissions Source(s):	North Flare (EPN 20-72, EQT 0035)	Date Analysis Completed: <b>1/8/2016</b>		South Flare (EPN 3-77, EQT 0049)	
Refinery:	Valero (Meraux)													
Incident Type:	Flaring	Date of Event: <b>12/3/2015</b>												
Emissions Source(s):	North Flare (EPN 20-72, EQT 0035)	Date Analysis Completed: <b>1/8/2016</b>												
	South Flare (EPN 3-77, EQT 0049)													
<p>(1.) <span style="float: right;">(60.108a(c)(6)(i))</span></p> <p><b>A description of the Discharge:</b></p> <p><i>On the afternoon of 12/3/15, the Flare Gas Recovery Unit's compressors were switched from Y-C-002 to Y-C-001 due to low differential pressure on the injection oil system for the Y-C-002 compressor. At approximately 18:53, the Y-C-001 compressor experienced a system-initiated unplanned shutdown due to low suction pressure. Valero was unable to restart Y-C-002 due to the failure of the injection oil pump to provide enough pressure to give the start permissive for the compressor. Valero re-started compressor Y-C-001 several times, but it automatically shutdown shortly after on low suction pressure.</i></p>														
<p>(2.) <span style="float: right;">(60.108a(c)(6)(iii)) and (60.108a(c)(6)(ix))</span></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Date and Time the discharge was first identified</td> <td style="width: 50%; border-bottom: 1px solid black;">12/3/15 18:20</td> </tr> <tr> <td>Date/Time the discharge had ceased</td> <td style="border-bottom: 1px solid black;">12/4/15 17:50</td> </tr> <tr> <td>Duration of Discharge (Calculated)</td> <td style="border-bottom: 1px solid black;">23.5 hrs</td> </tr> </table>			Date and Time the discharge was first identified	12/3/15 18:20	Date/Time the discharge had ceased	12/4/15 17:50	Duration of Discharge (Calculated)	23.5 hrs						
Date and Time the discharge was first identified	12/3/15 18:20													
Date/Time the discharge had ceased	12/4/15 17:50													
Duration of Discharge (Calculated)	23.5 hrs													
<p>(3.) <span style="float: right;">(60.108a(c)(6)(viii))</span></p> <p><b>The steps taken to limit the emissions during the discharge:</b></p> <p><i>Valero did not perform any planned operations or maintenance that would increase flare emissions while the FGRU was down. Valero quickly began troubleshooting both FGRU compressors and re-started the FGRU as soon as was practicable.</i></p>														
<p>(4.) <span style="float: right;">(60.108a(c)(6)(xi))</span></p> <p><b>Necessity of RC/CAA:</b> Determine and state whether a RC/CAA is necessary:</p> <p><i>Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">Did the discharge result from a planned startup or shutdown?</td> <td style="width: 40%; text-align: right;">No <span style="float: right;">(Yes/No)</span></td> </tr> <tr> <td>Was the flare management plan followed?</td> <td style="text-align: right;">Yes <span style="float: right;">(Yes/No/N/A)</span></td> </tr> <tr> <td>Is the event exempt from a RC/CCA based on the answers above?</td> <td style="text-align: right;">No <span style="float: right;">(Yes/No)</span></td> </tr> </table> <p>- If yes, skip section 5-8.</p>			Did the discharge result from a planned startup or shutdown?	No <span style="float: right;">(Yes/No)</span>	Was the flare management plan followed?	Yes <span style="float: right;">(Yes/No/N/A)</span>	Is the event exempt from a RC/CCA based on the answers above?	No <span style="float: right;">(Yes/No)</span>						
Did the discharge result from a planned startup or shutdown?	No <span style="float: right;">(Yes/No)</span>													
Was the flare management plan followed?	Yes <span style="float: right;">(Yes/No/N/A)</span>													
Is the event exempt from a RC/CCA based on the answers above?	No <span style="float: right;">(Yes/No)</span>													
<p>(5.) <span style="float: right;">(60.108a(c)(6)(ix))</span></p> <p><b>Root Cause Analysis:</b> Describe in detail the Root Cause(s) of the Incident, to the extent determinable:</p> <p>Did this discharge result from root causes identified in a previous analysis? <span style="float: right;">No <span style="float: right;">(Yes/No)</span></span></p> <p><i>The initial running compressor, Y-C-002, was shutdown after Valero recognized indications that the injection oil system was plugging. Valero inspected the injection oil system and found that the suction strainer to the injection oil pump was fouled. This strainer was cleaned and re-installed into the system. Valero also inspected the flare gas suction lines to the Y-C-001 compressor and found that the inlet screen was heavily fouled with rust scale and dirt, even though the upstream duplex strainer, which has a finer mesh, was found to be clean with no evidence of debris contained in / on the screen. Valero determined that this material that plugged the inlet screen was due to using Mississippi River water as the hydro test fluid prior to commissioning the FGRU in November 2015.</i></p> <p><b>Root Cause(s):</b></p> <ol style="list-style-type: none"> <li>1) The medium used to conduct the hydro-test of this piping circuit was river water.</li> <li>2) No formal process in place to verify that piping is flushed post hydro-test.</li> <li>3) Y-M-001, the cone screen on the inlet to Y-C-001 became fouled, and there was no indication that it was fouling.</li> <li>4) Injection oil strainer, Y-M-017, for Y-C-002 was fouled.</li> </ol>														

(6.)

(60.108a(c)(6)(ix))

Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is Is corrective action required? Yes (Yes/No)

- 1) Compare existing refinery hydro-test procedure with the DEP's and API 686, and determine if changes are needed that pertain to flushing and cleaning of piping post-hydro-test.
- 2) Add a delta-pressure calculation indicator across each compressor's inlet screen to the DCS .

(7.)

(60.108a(c)(6)(x))

Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.

- 1) Compare existing refinery hydro-test procedure with the DEP's and API 686, and determine if changes are needed that pertain to flushing and cleaning of piping post-hydro-test.

Commencement Date: 1/8/16

Estimated Completion Date: 1/31/16

- 2) Add a delta-pressure calculation indicator across each compressor's inlet screen to the DCS .

Completed: 1/11/16

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
12/2/2015 18:00	12/3/2015 17:00	1041	523	11.3	0.0
12/2/2015 19:00	12/3/2015 18:00	17613	564	15.7	0.1
12/2/2015 20:00	12/3/2015 19:00	54879	620	20.2	0.1
12/2/2015 21:00	12/3/2015 20:00	90899	650	23.4	0.1
12/2/2015 22:00	12/3/2015 21:00	127311	682	27.5	0.1
12/2/2015 23:00	12/3/2015 22:00	155796	710	32.2	0.1
12/3/2015 0:00	12/3/2015 23:00	192807	739	36.4	0.2
12/3/2015 1:00	12/4/2015 0:00	228015	772	41.5	0.2
12/3/2015 2:00	12/4/2015 1:00	261658	803	47.2	0.2
12/3/2015 3:00	12/4/2015 2:00	294941	842	52.6	0.3
12/3/2015 4:00	12/4/2015 3:00	326283	889	58.7	0.3
12/3/2015 5:00	12/4/2015 4:00	357908	932	65.2	0.3
12/3/2015 6:00	12/4/2015 5:00	392758	976	71.8	0.4
12/3/2015 7:00	12/4/2015 6:00	427699	927	76.0	0.4
12/3/2015 8:00	12/4/2015 7:00	463715	853	80.1	0.4
12/3/2015 9:00	12/4/2015 8:00	506632	877	89.2	0.4
12/3/2015 10:00	12/4/2015 9:00	543160	906	96.6	0.5
12/3/2015 11:00	12/4/2015 10:00	629348	932	102.5	0.5
12/3/2015 12:00	12/4/2015 11:00	660392	993	106.0	0.6
12/3/2015 13:00	12/4/2015 12:00	693598	943	109.6	0.6
12/3/2015 14:00	12/4/2015 13:00	721267	975	115.9	0.6
12/3/2015 15:00	12/4/2015 14:00	752984	907	121.7	0.6
12/3/2015 16:00	12/4/2015 15:00	788983	849	123.9	0.7
12/3/2015 17:00	12/4/2015 16:00	821686	893	121.3	0.7
12/3/2015 18:00	12/4/2015 17:00	831927	939	113.0	0.7
12/3/2015 19:00	12/4/2015 18:00	815355	898	108.7	0.6
12/3/2015 20:00	12/4/2015 19:00	778089	950	104.2	0.6
12/3/2015 21:00	12/4/2015 20:00	742069	920	101.0	0.6
12/3/2015 22:00	12/4/2015 21:00	705657	889	96.8	0.5
12/3/2015 23:00	12/4/2015 22:00	677172	860	92.1	0.5
12/4/2015 0:00	12/4/2015 23:00	640161	832	88.0	0.5
12/4/2015 1:00	12/5/2015 0:00	604953	798	82.9	0.5
12/4/2015 2:00	12/5/2015 1:00	571310	855	77.1	0.4

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
12/4/2015 3:00	12/5/2015 2:00	538027	816	71.7	0.4
12/4/2015 4:00	12/5/2015 3:00	506684	770	65.7	0.4
12/4/2015 5:00	12/5/2015 4:00	475059	727	59.1	0.4

Subpart Ja Root Cause / Corrective Action Analysis		Impact Incident Number: <u>N/A</u>									
<p><i>The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).</i></p>											
<p><b>Source Information:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Refinery:</td> <td style="width: 30%; border-bottom: 1px solid black;"><u>Valero (Meraux)</u></td> <td style="width: 40%;"></td> </tr> <tr> <td>Incident Type:</td> <td style="border-bottom: 1px solid black;"><u>Flaring</u></td> <td>Date of Event: <u>12/11/2015</u></td> </tr> <tr> <td>Emissions Source(s):</td> <td style="border-bottom: 1px solid black;"><u>North Flare (EPN 20-72, EQT 0035)</u></td> <td>Date Analysis Completed: <u>N/A</u></td> </tr> </table>			Refinery:	<u>Valero (Meraux)</u>		Incident Type:	<u>Flaring</u>	Date of Event: <u>12/11/2015</u>	Emissions Source(s):	<u>North Flare (EPN 20-72, EQT 0035)</u>	Date Analysis Completed: <u>N/A</u>
Refinery:	<u>Valero (Meraux)</u>										
Incident Type:	<u>Flaring</u>	Date of Event: <u>12/11/2015</u>									
Emissions Source(s):	<u>North Flare (EPN 20-72, EQT 0035)</u>	Date Analysis Completed: <u>N/A</u>									
(1.)	<p><b>A description of the Discharge:</b>  <i>Valero conducted a planned shutdown the Benzene Recovery Unit (BRU) and purged the Reactor with hot nitrogen to reactivate the catalyst, followed by a planned start up.</i></p>										
(2.)	<p style="text-align: right;">(60.108a(c)(6)(i))</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 40%;">Date and Time the discharge was first identified</td> <td style="width: 20%; border-bottom: 1px solid black;"><u>12/11/15 22:25</u></td> <td style="width: 40%;"></td> </tr> <tr> <td>Date/Time the discharge had ceased</td> <td style="border-bottom: 1px solid black;"><u>12/14/15 19:35</u></td> <td></td> </tr> <tr> <td>Duration of Discharge (Calculated)</td> <td style="border-bottom: 1px solid black;"><u>69.2</u></td> <td>hrs</td> </tr> </table> <p style="text-align: right;">(60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))</p>		Date and Time the discharge was first identified	<u>12/11/15 22:25</u>		Date/Time the discharge had ceased	<u>12/14/15 19:35</u>		Duration of Discharge (Calculated)	<u>69.2</u>	hrs
Date and Time the discharge was first identified	<u>12/11/15 22:25</u>										
Date/Time the discharge had ceased	<u>12/14/15 19:35</u>										
Duration of Discharge (Calculated)	<u>69.2</u>	hrs									
(3.)	<p style="text-align: right;">(60.108a(c)(6)(viii))</p> <p><b>The steps taken to limit the emissions during the discharge:</b>  <i>Valero isolated the affected header from the Flare Gas Recovery Unit (FGRU). This allowed only the BRU and Hydrocracker Unit to vent to the flare while the remaining refinery units vented to the FGRU.</i></p>										
(4.)	<p style="text-align: right;">(60.108a(c)(6)(xi))</p> <p><b>Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:</b>  <i>Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">Did the discharge result from a planned startup or shutdown?</td> <td style="width: 20%; border-bottom: 1px solid black;"><u>Yes</u></td> <td style="width: 20%;">(Yes/No)</td> </tr> <tr> <td>Was the flare management plan followed?</td> <td style="border-bottom: 1px solid black;"><u>Yes</u></td> <td>(Yes/No/N/A)</td> </tr> <tr> <td>Is the event exempt from a RC/CCA based on the answers above?</td> <td style="border-bottom: 1px solid black;"><u>Yes</u></td> <td>(Yes/No)</td> </tr> </table> <p>- If yes, skip section 5-8.</p>		Did the discharge result from a planned startup or shutdown?	<u>Yes</u>	(Yes/No)	Was the flare management plan followed?	<u>Yes</u>	(Yes/No/N/A)	Is the event exempt from a RC/CCA based on the answers above?	<u>Yes</u>	(Yes/No)
Did the discharge result from a planned startup or shutdown?	<u>Yes</u>	(Yes/No)									
Was the flare management plan followed?	<u>Yes</u>	(Yes/No/N/A)									
Is the event exempt from a RC/CCA based on the answers above?	<u>Yes</u>	(Yes/No)									
(5.)	<p style="text-align: right;">(60.108a(c)(6)(ix))</p> <p><b>Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:</b>  Did this discharge result from root causes identified in a previous analysis? <u>No</u> (Yes/No)  <u>N/A</u></p>										
(6.)	<p style="text-align: right;">(60.108a(c)(6)(ix))</p> <p><b>Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is not</b>  Is corrective action required? <u>No</u> (Yes/No)  <u>N/A</u></p>										
(7.)	<p style="text-align: right;">(60.108a(c)(6)(x))</p> <p><b>Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.</b>  <u>N/A</u></p>										



(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
12/10/15 22:00	12/11/15 21:00	0	0	0.2	0.0
12/10/15 23:00	12/11/15 22:00	7,231	3	0.4	0.0
12/11/15 0:00	12/11/15 23:00	21,800	5	0.5	0.0
12/11/15 1:00	12/12/15 0:00	90,872	6	0.6	0.0
12/11/15 2:00	12/12/15 1:00	217,991	6	0.8	0.0
12/11/15 3:00	12/12/15 2:00	345,109	6	1.2	0.0
12/11/15 4:00	12/12/15 3:00	472,226	6	1.5	0.0
12/11/15 5:00	12/12/15 4:00	599,343	7	1.7	0.0
12/11/15 6:00	12/12/15 5:00	726,461	8	1.8	0.0
12/11/15 7:00	12/12/15 6:00	853,579	8	1.9	0.0
12/11/15 8:00	12/12/15 7:00	980,697	9	2.1	0.0
12/11/15 9:00	12/12/15 8:00	1,107,815	9	2.2	0.0
12/11/15 10:00	12/12/15 9:00	1,234,932	9	2.3	0.0
12/11/15 11:00	12/12/15 10:00	1,362,049	9	2.4	0.0
12/11/15 12:00	12/12/15 11:00	1,489,165	9	2.5	0.0
12/11/15 13:00	12/12/15 12:00	1,616,281	10	2.6	0.0
12/11/15 14:00	12/12/15 13:00	1,743,398	10	2.8	0.0
12/11/15 15:00	12/12/15 14:00	1,870,514	10	2.9	0.0
12/11/15 16:00	12/12/15 15:00	1,997,630	10	3.1	0.0
12/11/15 17:00	12/12/15 16:00	2,124,745	11	3.2	0.0
12/11/15 18:00	12/12/15 17:00	2,251,861	11	3.3	0.0
12/11/15 19:00	12/12/15 18:00	2,378,977	11	3.4	0.0
12/11/15 20:00	12/12/15 19:00	2,506,094	11	3.5	0.0
12/11/15 21:00	12/12/15 20:00	2,633,211	12	3.5	0.0
12/11/15 22:00	12/12/15 21:00	2,760,328	12	3.5	0.0
12/11/15 23:00	12/12/15 22:00	2,880,213	9	3.5	0.0
12/12/15 0:00	12/12/15 23:00	2,992,761	7	3.5	0.0
12/12/15 1:00	12/13/15 0:00	3,050,804	7	3.5	0.0
12/12/15 2:00	12/13/15 1:00	3,050,802	7	3.4	0.0
12/12/15 3:00	12/13/15 2:00	3,050,801	7	3.3	0.0
12/12/15 4:00	12/13/15 3:00	3,050,800	7	3.2	0.0
12/12/15 5:00	12/13/15 4:00	3,050,799	7	3.2	0.0
12/12/15 6:00	12/13/15 5:00	3,050,798	6	3.2	0.0
12/12/15 7:00	12/13/15 6:00	3,050,796	6	3.2	0.0
12/12/15 8:00	12/13/15 7:00	3,050,794	6	3.2	0.0
12/12/15 9:00	12/13/15 8:00	3,050,792	6	3.2	0.0
12/12/15 10:00	12/13/15 9:00	3,050,790	6	3.2	0.0
12/12/15 11:00	12/13/15 10:00	3,050,787	6	3.2	0.0
12/12/15 12:00	12/13/15 11:00	3,050,784	6	3.2	0.0
12/12/15 13:00	12/13/15 12:00	3,050,782	6	3.2	0.0
12/12/15 14:00	12/13/15 13:00	3,050,780	6	3.2	0.0
12/12/15 15:00	12/13/15 14:00	3,050,779	6	3.2	0.0
12/12/15 16:00	12/13/15 15:00	3,050,777	6	3.1	0.0
12/12/15 17:00	12/13/15 16:00	3,050,775	6	3.1	0.0
12/12/15 18:00	12/13/15 17:00	3,050,773	6	3.0	0.0
12/12/15 19:00	12/13/15 18:00	3,050,771	6	3.0	0.0
12/12/15 20:00	12/13/15 19:00	3,050,768	6	3.0	0.0
12/12/15 21:00	12/13/15 20:00	3,050,765	6	2.9	0.0
12/12/15 22:00	12/13/15 21:00	3,050,762	6	2.9	0.0
12/12/15 23:00	12/13/15 22:00	3,049,895	6	2.9	0.0
12/13/15 0:00	12/13/15 23:00	3,049,892	6	2.9	0.0
12/13/15 1:00	12/14/15 0:00	3,049,888	6	2.8	0.0

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
12/13/15 2:00	12/14/15 1:00	3,049,883	6	2.8	0.0
12/13/15 3:00	12/14/15 2:00	3,049,877	6	2.8	0.0
12/13/15 4:00	12/14/15 3:00	3,049,871	6	2.8	0.0
12/13/15 5:00	12/14/15 4:00	3,049,864	6	2.7	0.0
12/13/15 6:00	12/14/15 5:00	3,049,856	6	2.7	0.0
12/13/15 7:00	12/14/15 6:00	3,049,847	5	2.7	0.0
12/13/15 8:00	12/14/15 7:00	3,049,836	5	2.7	0.0
12/13/15 9:00	12/14/15 8:00	3,041,218	5	2.7	0.0
12/13/15 10:00	12/14/15 9:00	2,962,407	6	2.8	0.0
12/13/15 11:00	12/14/15 10:00	2,879,217	6	2.7	0.0
12/13/15 12:00	12/14/15 11:00	2,789,714	7	2.7	0.0
12/13/15 13:00	12/14/15 12:00	2,677,072	8	2.7	0.0
12/13/15 14:00	12/14/15 13:00	2,563,498	10	2.7	0.0
12/13/15 15:00	12/14/15 14:00	2,449,606	12	2.7	0.0
12/13/15 16:00	12/14/15 15:00	2,335,304	14	2.7	0.0
12/13/15 17:00	12/14/15 16:00	2,225,227	15	2.7	0.0
12/13/15 18:00	12/14/15 17:00	2,113,187	17	2.7	0.0
12/13/15 19:00	12/14/15 18:00	1,999,917	18	2.6	0.0
12/13/15 20:00	12/14/15 19:00	1,881,223	20	2.5	0.0
12/13/15 21:00	12/14/15 20:00	1,754,109	20	2.5	0.0
12/13/15 22:00	12/14/15 21:00	1,626,996	20	2.3	0.0
12/13/15 23:00	12/14/15 22:00	1,500,746	19	2.2	0.0
12/14/15 0:00	12/14/15 23:00	1,373,633	19	2.2	0.0
12/14/15 1:00	12/15/15 0:00	1,246,521	19	2.1	0.0
12/14/15 2:00	12/15/15 1:00	1,119,409	19	2.0	0.0
12/14/15 3:00	12/15/15 2:00	992,298	19	1.7	0.0
12/14/15 4:00	12/15/15 3:00	865,188	19	1.5	0.0
12/14/15 5:00	12/15/15 4:00	738,078	18	1.4	0.0
12/14/15 6:00	12/15/15 5:00	610,970	18	1.3	0.0
12/14/15 7:00	12/15/15 6:00	483,863	17	1.2	0.0
12/14/15 8:00	12/15/15 7:00	356,758	17	1.1	0.0

Subpart Ja Root Cause / Corrective Action Analysis		Impact Incident Number: <u>N/A</u>												
<p><i>The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).</i></p>														
<p><b>Source Information:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Refinery:</td> <td style="width: 30%;"><u>Valero (Meraux)</u></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td>Incident Type:</td> <td><u>Flaring</u></td> <td>Date of Event:</td> <td><u>2/25/2016</u></td> </tr> <tr> <td>Emissions Source(s):</td> <td><u>South Flare (EPN 3-77, EQT 0049)</u></td> <td>Date Analysis Completed:</td> <td><u>N/A</u></td> </tr> </table>			Refinery:	<u>Valero (Meraux)</u>			Incident Type:	<u>Flaring</u>	Date of Event:	<u>2/25/2016</u>	Emissions Source(s):	<u>South Flare (EPN 3-77, EQT 0049)</u>	Date Analysis Completed:	<u>N/A</u>
Refinery:	<u>Valero (Meraux)</u>													
Incident Type:	<u>Flaring</u>	Date of Event:	<u>2/25/2016</u>											
Emissions Source(s):	<u>South Flare (EPN 3-77, EQT 0049)</u>	Date Analysis Completed:	<u>N/A</u>											
<p>(1.) <span style="float: right;">(60.108a(c)(6)(i))</span></p> <p><b>A description of the Discharge:</b></p> <p><i>The Middle Distillate Hydrotreater was pulse purged with H2 prior to start up.</i></p>														
<p>(2.) <span style="float: right;">(60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))</span></p> <p>and Time the discharge was first identified <u>2/25/16 17:28</u></p> <p>Date/Time the discharge had ceased <u>2/26/16 21:17</u></p> <p>Duration of Discharge (Calculated) <u>27.8</u> hrs</p>														
<p>(3.) <span style="float: right;">(60.108a(c)(6)(viii))</span></p> <p><b>The steps taken to limit the emissions during the discharge:</b></p> <p><i>Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume of this discharge.</i></p>														
<p>(4.) <span style="float: right;">(60.108a(c)(6)(xi))</span></p> <p><b>Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:</b></p> <p><i>Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">Did the discharge result from a planned startup or shutdown?</td> <td style="width: 10%; text-align: center;"><u>Yes</u></td> <td style="width: 30%; text-align: right;">(Yes/No)</td> </tr> <tr> <td>Was the flare management plan followed?</td> <td style="text-align: center;"><u>Yes</u></td> <td style="text-align: right;">(Yes/No/N/A)</td> </tr> <tr> <td>Is the event exempt from a RC/CCA based on the answers above?</td> <td style="text-align: center;"><u>Yes</u></td> <td style="text-align: right;">(Yes/No)</td> </tr> </table> <p>- If yes, skip section 5-7.</p>			Did the discharge result from a planned startup or shutdown?	<u>Yes</u>	(Yes/No)	Was the flare management plan followed?	<u>Yes</u>	(Yes/No/N/A)	Is the event exempt from a RC/CCA based on the answers above?	<u>Yes</u>	(Yes/No)			
Did the discharge result from a planned startup or shutdown?	<u>Yes</u>	(Yes/No)												
Was the flare management plan followed?	<u>Yes</u>	(Yes/No/N/A)												
Is the event exempt from a RC/CCA based on the answers above?	<u>Yes</u>	(Yes/No)												
<p>(5.) <span style="float: right;">(60.108a(c)(6)(ix))</span></p> <p><b>Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:</b></p> <p>Did this discharge result from root causes identified in a previous analysis? <u>No</u> (Yes/No)</p> <p><i>N/A</i></p>														
<p>(6.) <span style="float: right;">(60.108a(c)(6)(ix))</span></p> <p><b>Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is</b></p> <p>Is corrective action required? <u>No</u> (Yes/No)</p> <p><i>N/A</i></p>														
<p>(7.) <span style="float: right;">(60.108a(c)(6)(x))</span></p> <p><b>Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.</b></p> <p><i>N/A</i></p>														

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
2/24/2016 17:00	2/25/2016 16:00	1083	55	1.4	0.0
2/24/2016 18:00	2/25/2016 17:00	7873	67	1.9	0.0
2/24/2016 19:00	2/25/2016 18:00	34938	77	2.1	0.0
2/24/2016 20:00	2/25/2016 19:00	57030	82	9.1	0.0
2/24/2016 21:00	2/25/2016 20:00	66816	87	12.0	0.0
2/24/2016 22:00	2/25/2016 21:00	172647	104	12.4	0.1
2/24/2016 23:00	2/25/2016 22:00	222543	119	14.7	0.1
2/25/2016 0:00	2/25/2016 23:00	231928	128	18.6	0.1
2/25/2016 1:00	2/26/2016 0:00	281060	140	20.1	0.1
2/25/2016 2:00	2/26/2016 1:00	373134	150	20.7	0.1
2/25/2016 3:00	2/26/2016 2:00	414956	160	24.2	0.1
2/25/2016 4:00	2/26/2016 3:00	451091	164	26.7	0.1
2/25/2016 5:00	2/26/2016 4:00	563076	172	28.0	0.1
2/25/2016 6:00	2/26/2016 5:00	635949	180	29.8	0.2
2/25/2016 7:00	2/26/2016 6:00	669220	190	31.1	0.2
2/25/2016 8:00	2/26/2016 7:00	720440	199	31.5	0.2
2/25/2016 9:00	2/26/2016 8:00	763900	206	33.6	0.2
2/25/2016 10:00	2/26/2016 9:00	793858	210	35.6	0.2
2/25/2016 11:00	2/26/2016 10:00	843843	195	36.4	0.2
2/25/2016 12:00	2/26/2016 11:00	899987	204	37.5	0.2
2/25/2016 13:00	2/26/2016 12:00	932701	210	39.0	0.2
2/25/2016 14:00	2/26/2016 13:00	974090	217	39.8	0.2
2/25/2016 15:00	2/26/2016 14:00	1037477	223	40.4	0.2
2/25/2016 16:00	2/26/2016 15:00	1075788	228	40.4	0.2
2/25/2016 17:00	2/26/2016 16:00	1114301	203	39.5	0.2
2/25/2016 18:00	2/26/2016 17:00	1124003	195	39.2	0.2
2/25/2016 19:00	2/26/2016 18:00	1099930	194	39.0	0.2
2/25/2016 20:00	2/26/2016 19:00	1085687	195	32.0	0.2
2/25/2016 21:00	2/26/2016 20:00	1076131	202	29.1	0.2
2/25/2016 22:00	2/26/2016 21:00	970526	193	28.8	0.2
2/25/2016 23:00	2/26/2016 22:00	920667	194	26.4	0.2
2/26/2016 0:00	2/26/2016 23:00	911371	199	22.6	0.1
2/26/2016 1:00	2/27/2016 0:00	862239	186	21.0	0.1
2/26/2016 2:00	2/27/2016 1:00	770194	190	20.4	0.1
2/26/2016 3:00	2/27/2016 2:00	728372	181	16.9	0.1
2/26/2016 4:00	2/27/2016 3:00	692894	184	14.4	0.1
2/26/2016 5:00	2/27/2016 4:00	580908	183	13.2	0.1
2/26/2016 6:00	2/27/2016 5:00	508036	174	11.4	0.1
2/26/2016 7:00	2/27/2016 6:00	474764	164	10.1	0.1

**Subpart Ja Root Cause / Corrective Action Analysis**Impact Incident Number: N/A*The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).***Source Information:**Refinery: Valero (Meraux)Incident Type: FlaringDate of Event: 2/29/2016Emissions Source(s): North Flare (EPN 20-72, EQT 0035)Date Analysis Completed: N/ASouth Flare (EPN 3-77, EQT 0049)

(1.)

(60.108a(c)(6)(i))

**A description of the Discharge:**

*This discharge was the concurrent release of gases produced during a Benzene Reduction Unit shutdown and Middle Distillate Hydrotreater (MDH) start up. This discharge was composed primarily of Hydrogen and Nitrogen. Additionally, a small upset during the MDH start up caused two pressure relief valves to lift briefly.*

(2.)

(60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))

Date and Time the discharge was first identified 2/29/16 14:02Date/Time the discharge had ceased 3/4/16 14:03Duration of Discharge (Calculated) 96.0 hrs

(3.)

(60.108a(c)(6)(viii))

**The steps taken to limit the emissions during the discharge:**

*Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume of this discharge.*

(4.)

(60.108a(c)(6)(xi))

**Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:**

*Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.*

Did the discharge result from a planned startup or shutdown?

Yes (Yes/No)

Was the flare management plan followed?

Yes (Yes/No/N/A)

Is the event exempt from a RC/CAA based on the answers above?

Yes (Yes/No)

- If yes, skip section 5-7.

(5.)

(60.108a(c)(6)(ix))

**Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:**

Did this discharge result from root causes identified in a previous analysis?

No (Yes/No)N/A

(6.)

(60.108a(c)(6)(ix))

**Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is not**Is corrective action required? No (Yes/No)N/A

(7.)

(60.108a(c)(6)(x))

**Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.**

N/A

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
2/28/2016 14:00	2/29/2016 13:00	4	66	0.4	0.0
2/28/2016 15:00	2/29/2016 14:00	12,428	69	0.5	0.0
2/28/2016 16:00	2/29/2016 15:00	31,116	73	0.5	0.0
2/28/2016 17:00	2/29/2016 16:00	38,337	76	0.6	0.0
2/28/2016 18:00	2/29/2016 17:00	38,344	256	0.8	0.0
2/28/2016 19:00	2/29/2016 18:00	45,685	259	1.0	0.0
2/28/2016 20:00	2/29/2016 19:00	60,632	262	1.1	0.0
2/28/2016 21:00	2/29/2016 20:00	79,326	265	1.4	0.0
2/28/2016 22:00	2/29/2016 21:00	94,947	267	1.5	0.0
2/28/2016 23:00	2/29/2016 22:00	116,650	270	1.7	0.0
2/29/2016 0:00	2/29/2016 23:00	193,326	270	1.8	0.0
2/29/2016 1:00	3/1/2016 0:00	301,367	271	1.8	0.0
2/29/2016 2:00	3/1/2016 1:00	422,900	271	1.8	0.0
2/29/2016 3:00	3/1/2016 2:00	555,285	271	2.0	0.0
2/29/2016 4:00	3/1/2016 3:00	689,333	271	2.2	0.0
2/29/2016 5:00	3/1/2016 4:00	830,117	271	2.3	0.0
2/29/2016 6:00	3/1/2016 5:00	972,295	272	2.4	0.0
2/29/2016 7:00	3/1/2016 6:00	1,114,690	272	2.5	0.0
2/29/2016 8:00	3/1/2016 7:00	1,257,703	272	2.6	0.0
2/29/2016 9:00	3/1/2016 8:00	1,401,720	272	2.7	0.0
2/29/2016 10:00	3/1/2016 9:00	1,547,814	272	2.9	0.0
2/29/2016 11:00	3/1/2016 10:00	1,694,312	273	3.0	0.0
2/29/2016 12:00	3/1/2016 11:00	1,841,202	273	3.1	0.0
2/29/2016 13:00	3/1/2016 12:00	1,987,824	273	3.1	0.0
2/29/2016 14:00	3/1/2016 13:00	2,132,068	207	3.0	0.0
2/29/2016 15:00	3/1/2016 14:00	2,263,315	204	3.2	0.0
2/29/2016 16:00	3/1/2016 15:00	2,389,101	201	3.3	0.0
2/29/2016 17:00	3/1/2016 16:00	2,531,819	198	3.4	0.0
2/29/2016 18:00	3/1/2016 17:00	2,680,561	19	3.4	0.0
2/29/2016 19:00	3/1/2016 18:00	2,822,031	16	6.9	0.0
2/29/2016 20:00	3/1/2016 19:00	2,956,606	13	7.1	0.0
2/29/2016 21:00	3/1/2016 20:00	3,088,811	16	7.0	0.0
2/29/2016 22:00	3/1/2016 21:00	3,222,397	15	7.0	0.0
2/29/2016 23:00	3/1/2016 22:00	3,348,746	12	7.1	0.0
3/1/2016 0:00	3/1/2016 23:00	3,420,687	12	7.1	0.0
3/1/2016 1:00	3/2/2016 0:00	3,461,907	12	7.3	0.0
3/1/2016 2:00	3/2/2016 1:00	3,491,831	12	7.4	0.0
3/1/2016 3:00	3/2/2016 2:00	3,509,741	12	7.5	0.0
3/1/2016 4:00	3/2/2016 3:00	3,524,955	13	7.6	0.0
3/1/2016 5:00	3/2/2016 4:00	3,532,160	13	7.6	0.0
3/1/2016 6:00	3/2/2016 5:00	3,537,684	13	7.7	0.0
3/1/2016 7:00	3/2/2016 6:00	3,543,930	13	7.7	0.0
3/1/2016 8:00	3/2/2016 7:00	3,549,793	13	7.7	0.0
3/1/2016 9:00	3/2/2016 8:00	3,555,596	13	7.7	0.0
3/1/2016 10:00	3/2/2016 9:00	3,556,693	13	7.7	0.0
3/1/2016 11:00	3/2/2016 10:00	3,557,485	13	7.8	0.0
3/1/2016 12:00	3/2/2016 11:00	3,560,581	13	7.8	0.0
3/1/2016 13:00	3/2/2016 12:00	3,559,816	13	7.8	0.0
3/1/2016 14:00	3/2/2016 13:00	3,558,630	13	7.8	0.0
3/1/2016 15:00	3/2/2016 14:00	3,556,111	13	7.8	0.0
3/1/2016 16:00	3/2/2016 15:00	3,552,976	13	7.8	0.0
3/1/2016 17:00	3/2/2016 16:00	3,552,905	13	7.8	0.0



(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
3/1/2016 18:00	3/2/2016 17:00	3,552,992	13	7.6	0.0
3/1/2016 19:00	3/2/2016 18:00	3,551,758	13	3.9	0.0
3/1/2016 20:00	3/2/2016 19:00	3,474,093	13	3.6	0.0
3/1/2016 21:00	3/2/2016 20:00	3,363,985	7	3.4	0.0
3/1/2016 22:00	3/2/2016 21:00	3,255,570	6	3.3	0.0
3/1/2016 23:00	3/2/2016 22:00	3,147,937	6	3.1	0.0
3/2/2016 0:00	3/2/2016 23:00	3,039,756	6	2.9	0.0
3/2/2016 1:00	3/3/2016 0:00	2,922,971	5	2.7	0.0
3/2/2016 2:00	3/3/2016 1:00	2,787,467	5	2.6	0.0
3/2/2016 3:00	3/3/2016 2:00	2,653,518	5	2.3	0.0
3/2/2016 4:00	3/3/2016 3:00	2,517,330	4	2.0	0.0
3/2/2016 5:00	3/3/2016 4:00	2,369,341	4	1.8	0.0
3/2/2016 6:00	3/3/2016 5:00	2,221,639	3	1.7	0.0
3/2/2016 7:00	3/3/2016 6:00	2,072,998	3	1.6	0.0
3/2/2016 8:00	3/3/2016 7:00	1,924,122	3	1.4	0.0
3/2/2016 9:00	3/3/2016 8:00	1,774,302	3	1.3	0.0
3/2/2016 10:00	3/3/2016 9:00	1,627,112	3	1.2	0.0
3/2/2016 11:00	3/3/2016 10:00	1,520,404	2	1.1	0.0
3/2/2016 12:00	3/3/2016 11:00	1,422,986	2	0.9	0.0
3/2/2016 13:00	3/3/2016 12:00	1,344,413	2	0.7	0.0
3/2/2016 14:00	3/3/2016 13:00	1,276,417	2	0.5	0.0
3/2/2016 15:00	3/3/2016 14:00	1,192,903	1	0.4	0.0
3/2/2016 16:00	3/3/2016 15:00	1,092,737	1	0.1	0.0
3/2/2016 17:00	3/3/2016 16:00	994,162	1	0.0	0.0
3/2/2016 18:00	3/3/2016 17:00	900,044	0	0.0	0.0
3/2/2016 19:00	3/3/2016 18:00	768,639	0	0.0	0.0
3/2/2016 20:00	3/3/2016 19:00	696,782	0	0.0	0.0
3/2/2016 21:00	3/3/2016 20:00	655,991	0	0.0	0.0
3/2/2016 22:00	3/3/2016 21:00	615,200	0	0.0	0.0
3/2/2016 23:00	3/3/2016 22:00	574,781	0	0.0	0.0
3/3/2016 0:00	3/3/2016 23:00	534,344	0	0.0	0.0
3/3/2016 1:00	3/4/2016 0:00	501,868	0	0.0	0.0
3/3/2016 2:00	3/4/2016 1:00	485,916	0	0.0	0.0

Subpart Ja Root Cause / Corrective Action Analysis		Impact Incident Number: <u>N/A</u>									
<p><i>The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).</i></p>											
<p><b>Source Information:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Refinery:</td> <td style="width: 30%; border-bottom: 1px solid black;">Valero (Meraux)</td> <td style="width: 40%;"></td> </tr> <tr> <td>Incident Type:</td> <td style="border-bottom: 1px solid black;">Flaring</td> <td>Date of Event: <u>3/7/2016</u></td> </tr> <tr> <td>Emissions Source(s):</td> <td style="border-bottom: 1px solid black;">North Flare (EPN 20-72, EQT 0035)</td> <td>Date Analysis Completed: <u>N/A</u></td> </tr> </table>			Refinery:	Valero (Meraux)		Incident Type:	Flaring	Date of Event: <u>3/7/2016</u>	Emissions Source(s):	North Flare (EPN 20-72, EQT 0035)	Date Analysis Completed: <u>N/A</u>
Refinery:	Valero (Meraux)										
Incident Type:	Flaring	Date of Event: <u>3/7/2016</u>									
Emissions Source(s):	North Flare (EPN 20-72, EQT 0035)	Date Analysis Completed: <u>N/A</u>									
(1.)	<p><b>A description of the Discharge:</b></p> <p><i>This discharge was the concurrent release of gases produced during the Naphtha Hydrotreater (NHT) Unit shutdown and Benzene Reduction Unit (BRU) start up followed by the NHT start up and BRU catalyst activation. This discharge was composed primarily of Hydrogen and Nitrogen.</i></p>										
(2.)	<p style="text-align: right;">(60.108a(c)(6)(ii)) and (60.108a(c)(6)(ix))</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Date and Time the discharge was first identified</td> <td style="width: 50%; border-bottom: 1px solid black;">3/7/16 0:09</td> </tr> <tr> <td>Date/Time the discharge had ceased</td> <td style="border-bottom: 1px solid black;">3/13/16 3:30</td> </tr> <tr> <td>Duration of Discharge (Calculated)</td> <td style="border-bottom: 1px solid black;">147.4 hrs</td> </tr> </table>		Date and Time the discharge was first identified	3/7/16 0:09	Date/Time the discharge had ceased	3/13/16 3:30	Duration of Discharge (Calculated)	147.4 hrs			
Date and Time the discharge was first identified	3/7/16 0:09										
Date/Time the discharge had ceased	3/13/16 3:30										
Duration of Discharge (Calculated)	147.4 hrs										
(3.)	<p style="text-align: right;">(60.108a(c)(6)(viii))</p> <p><b>The steps taken to limit the emissions during the discharge:</b></p> <p><i>Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume of this discharge.</i></p>										
(4.)	<p style="text-align: right;">(60.108a(c)(6)(xi))</p> <p><b>Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:</b></p> <p><i>Note: If the discharge was a result of a planned startup or shutdown, a RC/CAA analysis is not required if the flare management plan was followed.</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">Did the discharge result from a planned startup or shutdown?</td> <td style="width: 40%; text-align: right;">Yes (Yes/No)</td> </tr> <tr> <td>Was the flare management plan followed?</td> <td style="text-align: right;">Yes (Yes/No/N/A)</td> </tr> <tr> <td>Is the event exempt from a RC/CCA based on the answers above?</td> <td style="text-align: right;">Yes (Yes/No)</td> </tr> </table> <p>- If yes, skip section 5-7.</p>		Did the discharge result from a planned startup or shutdown?	Yes (Yes/No)	Was the flare management plan followed?	Yes (Yes/No/N/A)	Is the event exempt from a RC/CCA based on the answers above?	Yes (Yes/No)			
Did the discharge result from a planned startup or shutdown?	Yes (Yes/No)										
Was the flare management plan followed?	Yes (Yes/No/N/A)										
Is the event exempt from a RC/CCA based on the answers above?	Yes (Yes/No)										
(5.)	<p style="text-align: right;">(60.108a(c)(6)(ix))</p> <p><b>Root Cause Analysis: Describe in detail the Root Cause(s) of the Incident, to the extent determinable:</b></p> <p>Did this discharge result from root causes identified in a previous analysis? <u>No</u> (Yes/No)</p> <p><i>N/A</i></p>										
(6.)	<p style="text-align: right;">(60.108a(c)(6)(ix))</p> <p><b>Corrective Action Analysis: Include a description of the recommended corrective action(s) or an explanation of why corrective action is</b></p> <p>Is corrective action required? <u>No</u> (Yes/No)</p> <p><i>N/A</i></p>										
(7.)	<p style="text-align: right;">(60.108a(c)(6)(x))</p> <p><b>Corrective Action Schedule: Include corrective actions already completed within the first 45 days following the discharge. For those not completed, provide a schedule for implementation, including proposed commencement and completion dates.</b></p> <p><i>N/A</i></p>										



(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
3/6/2016 0:00	3/6/2016 23:00	1,142	563	1.1	0.0
3/6/2016 1:00	3/7/2016 0:00	1,168	594	1.3	0.0
3/6/2016 2:00	3/7/2016 1:00	10,443	610	1.4	0.0
3/6/2016 3:00	3/7/2016 2:00	13,977	625	1.4	0.0
3/6/2016 4:00	3/7/2016 3:00	18,283	528	1.7	0.0
3/6/2016 5:00	3/7/2016 4:00	26,030	426	2.4	0.0
3/6/2016 6:00	3/7/2016 5:00	37,447	432	2.8	0.0
3/6/2016 7:00	3/7/2016 6:00	39,465	413	3.0	0.0
3/6/2016 8:00	3/7/2016 7:00	63,140	417	3.2	0.0
3/6/2016 9:00	3/7/2016 8:00	84,086	420	3.8	0.0
3/6/2016 10:00	3/7/2016 9:00	97,064	424	4.4	0.0
3/6/2016 11:00	3/7/2016 10:00	138,974	427	4.8	0.0
3/6/2016 12:00	3/7/2016 11:00	231,095	429	5.2	0.0
3/6/2016 13:00	3/7/2016 12:00	347,773	430	5.6	0.0
3/6/2016 14:00	3/7/2016 13:00	496,507	430	5.9	0.0
3/6/2016 15:00	3/7/2016 14:00	670,869	312	6.1	0.0
3/6/2016 16:00	3/7/2016 15:00	848,749	312	6.5	0.0
3/6/2016 17:00	3/7/2016 16:00	952,536	313	6.8	0.0
3/6/2016 18:00	3/7/2016 17:00	1,046,420	314	7.1	0.0
3/6/2016 19:00	3/7/2016 18:00	1,222,575	314	7.3	0.0
3/6/2016 20:00	3/7/2016 19:00	1,412,979	314	7.6	0.0
3/6/2016 21:00	3/7/2016 20:00	1,522,430	315	7.9	0.0
3/6/2016 22:00	3/7/2016 21:00	1,573,855	316	8.1	0.0
3/6/2016 23:00	3/7/2016 22:00	1,624,655	318	8.3	0.0
3/7/2016 0:00	3/7/2016 23:00	1,675,729	319	7.9	0.0
3/7/2016 1:00	3/8/2016 0:00	1,727,455	175	7.8	0.0
3/7/2016 2:00	3/8/2016 1:00	1,756,635	160	7.6	0.0
3/7/2016 3:00	3/8/2016 2:00	1,767,215	147	7.4	0.0
3/7/2016 4:00	3/8/2016 3:00	1,764,982	138	7.1	0.0
3/7/2016 5:00	3/8/2016 4:00	1,756,694	130	6.3	0.0
3/7/2016 6:00	3/8/2016 5:00	1,745,276	124	6.0	0.0
3/7/2016 7:00	3/8/2016 6:00	1,743,144	33	5.7	0.0
3/7/2016 8:00	3/8/2016 7:00	1,719,468	29	5.5	0.0
3/7/2016 9:00	3/8/2016 8:00	1,698,522	26	5.0	0.0
3/7/2016 10:00	3/8/2016 9:00	1,685,545	22	4.4	0.0
3/7/2016 11:00	3/8/2016 10:00	1,643,634	19	3.9	0.0
3/7/2016 12:00	3/8/2016 11:00	1,551,513	17	3.5	0.0
3/7/2016 13:00	3/8/2016 12:00	1,434,835	16	3.2	0.0
3/7/2016 14:00	3/8/2016 13:00	1,286,101	16	2.9	0.0
3/7/2016 15:00	3/8/2016 14:00	1,111,684	15	2.6	0.0
3/7/2016 16:00	3/8/2016 15:00	933,805	15	2.2	0.0
3/7/2016 17:00	3/8/2016 16:00	830,017	14	1.9	0.0
3/7/2016 18:00	3/8/2016 17:00	736,133	13	2.0	0.0
3/7/2016 19:00	3/8/2016 18:00	559,978	12	1.9	0.0
3/7/2016 20:00	3/8/2016 19:00	392,786	16	1.8	0.0
3/7/2016 21:00	3/8/2016 20:00	327,157	16	1.6	0.0
3/7/2016 22:00	3/8/2016 21:00	335,799	15	1.5	0.0
3/7/2016 23:00	3/8/2016 22:00	349,491	15	1.3	0.0
3/8/2016 0:00	3/8/2016 23:00	346,982	14	1.2	0.0
3/8/2016 1:00	3/9/2016 0:00	342,154	13	1.2	0.0
3/8/2016 2:00	3/9/2016 1:00	373,871	12	1.3	0.0

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
3/8/2016 3:00	3/9/2016 2:00	420,728	10	1.4	0.0
3/8/2016 4:00	3/9/2016 3:00	462,439	8	1.4	0.0
3/8/2016 5:00	3/9/2016 4:00	511,358	9	1.4	0.0
3/8/2016 6:00	3/9/2016 5:00	579,968	9	1.4	0.0
3/8/2016 7:00	3/9/2016 6:00	625,020	9	1.4	0.0
3/8/2016 8:00	3/9/2016 7:00	641,183	9	1.4	0.0
3/8/2016 9:00	3/9/2016 8:00	683,312	9	1.4	0.0
3/8/2016 10:00	3/9/2016 9:00	754,563	9	1.4	0.0
3/8/2016 11:00	3/9/2016 10:00	821,951	9	1.4	0.0
3/8/2016 12:00	3/9/2016 11:00	880,923	9	1.4	0.0
3/8/2016 13:00	3/9/2016 12:00	916,276	9	1.4	0.0
3/8/2016 14:00	3/9/2016 13:00	939,889	9	1.4	0.0
3/8/2016 15:00	3/9/2016 14:00	958,709	9	1.4	0.0
3/8/2016 16:00	3/9/2016 15:00	962,710	9	1.4	0.0
3/8/2016 17:00	3/9/2016 16:00	982,762	9	1.4	0.0
3/8/2016 18:00	3/9/2016 17:00	1,004,893	9	1.1	0.0
3/8/2016 19:00	3/9/2016 18:00	1,027,205	9	0.9	0.0
3/8/2016 20:00	3/9/2016 19:00	1,021,154	5	0.8	0.0
3/8/2016 21:00	3/9/2016 20:00	978,257	4	0.7	0.0
3/8/2016 22:00	3/9/2016 21:00	918,189	4	0.6	0.0
3/8/2016 23:00	3/9/2016 22:00	853,698	3	0.5	0.0
3/9/2016 0:00	3/9/2016 23:00	809,137	3	0.4	0.0
3/9/2016 1:00	3/10/2016 0:00	817,991	2	0.3	0.0
3/9/2016 2:00	3/10/2016 1:00	869,558	2	0.2	0.0
3/9/2016 3:00	3/10/2016 2:00	930,625	1	0.0	0.0
3/9/2016 4:00	3/10/2016 3:00	1,009,757	1	0.0	0.0
3/9/2016 5:00	3/10/2016 4:00	1,084,366	0	0.0	0.0
3/9/2016 6:00	3/10/2016 5:00	1,138,686	0	0.0	0.0
3/9/2016 7:00	3/10/2016 6:00	1,216,404	0	0.0	0.0
3/9/2016 8:00	3/10/2016 7:00	1,324,683	0	0.0	0.0
3/9/2016 9:00	3/10/2016 8:00	1,429,936	0	0.0	0.0
3/9/2016 10:00	3/10/2016 9:00	1,386,874	0	0.0	0.0
3/9/2016 11:00	3/10/2016 10:00	1,356,012	0	0.0	0.0
3/9/2016 12:00	3/10/2016 11:00	1,314,120	0	0.0	0.0
3/9/2016 13:00	3/10/2016 12:00	1,295,294	0	0.0	0.0
3/9/2016 14:00	3/10/2016 13:00	1,288,009	0	0.0	0.0
3/9/2016 15:00	3/10/2016 14:00	1,282,035	0	0.0	0.0
3/9/2016 16:00	3/10/2016 15:00	1,278,034	0	0.0	0.0
3/9/2016 17:00	3/10/2016 16:00	1,257,982	0	0.0	0.0
3/9/2016 18:00	3/10/2016 17:00	1,235,851	0	0.0	0.0
3/9/2016 19:00	3/10/2016 18:00	1,213,539	0	0.0	0.0
3/9/2016 20:00	3/10/2016 19:00	1,196,379	0	0.0	0.0
3/9/2016 21:00	3/10/2016 20:00	1,215,712	0	0.0	0.0
3/9/2016 22:00	3/10/2016 21:00	1,405,320	0	0.0	0.0
3/9/2016 23:00	3/10/2016 22:00	1,538,409	0	0.0	0.0
3/10/2016 0:00	3/10/2016 23:00	1,668,074	0	0.0	0.0
3/10/2016 1:00	3/11/2016 0:00	1,770,287	0	0.0	0.0
3/10/2016 2:00	3/11/2016 1:00	1,795,571	0	0.0	0.0
3/10/2016 3:00	3/11/2016 2:00	1,825,963	0	0.0	0.0
3/10/2016 4:00	3/11/2016 3:00	1,867,173	0	0.0	0.0
3/10/2016 5:00	3/11/2016 4:00	1,911,715	0	0.0	0.0

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
3/10/2016 6:00	3/11/2016 5:00	1,955,859	0	0.0	0.0
3/10/2016 7:00	3/11/2016 6:00	2,001,848	0	0.0	0.0
3/10/2016 8:00	3/11/2016 7:00	2,029,747	0	0.0	0.0
3/10/2016 9:00	3/11/2016 8:00	2,025,695	0	0.0	0.0
3/10/2016 10:00	3/11/2016 9:00	2,142,504	0	0.0	0.0
3/9/2016 13:00	3/10/2016 12:00	1,295,294	0	0.0	0.0
3/10/2016 12:00	3/11/2016 11:00	2,376,280	0	0.0	0.0
3/10/2016 13:00	3/11/2016 12:00	2,511,586	0	0.0	0.0
3/10/2016 14:00	3/11/2016 13:00	2,655,570	0	0.0	0.0
3/10/2016 15:00	3/11/2016 14:00	2,824,641	0	0.0	0.0
3/10/2016 16:00	3/11/2016 15:00	3,009,365	0	0.0	0.0
3/10/2016 17:00	3/11/2016 16:00	3,195,027	0	0.0	0.0
3/10/2016 18:00	3/11/2016 17:00	3,377,124	0	0.0	0.0
3/10/2016 19:00	3/11/2016 18:00	3,559,391	0	0.0	0.0
3/10/2016 20:00	3/11/2016 19:00	3,740,752	0	0.0	0.0
3/10/2016 21:00	3/11/2016 20:00	3,902,071	0	0.0	0.0
3/10/2016 22:00	3/11/2016 21:00	3,893,627	0	0.0	0.0
3/10/2016 23:00	3/11/2016 22:00	3,939,967	0	0.0	0.0
3/11/2016 0:00	3/11/2016 23:00	3,983,740	0	0.0	0.0
3/11/2016 1:00	3/12/2016 0:00	4,003,040	0	0.0	0.0
3/11/2016 2:00	3/12/2016 1:00	4,033,942	0	0.0	0.0
3/11/2016 3:00	3/12/2016 2:00	4,057,249	0	0.0	0.0
3/11/2016 4:00	3/12/2016 3:00	4,069,131	0	0.0	0.0
3/11/2016 5:00	3/12/2016 4:00	4,078,210	0	0.0	0.0
3/11/2016 6:00	3/12/2016 5:00	4,088,324	0	0.0	0.0
3/11/2016 7:00	3/12/2016 6:00	4,088,235	0	0.0	0.0
3/11/2016 8:00	3/12/2016 7:00	4,095,844	0	0.0	0.0
3/11/2016 9:00	3/12/2016 8:00	4,111,949	0	0.0	0.0
3/11/2016 10:00	3/12/2016 9:00	4,126,799	0	0.0	0.0
3/11/2016 11:00	3/12/2016 10:00	4,141,426	0	0.0	0.0
3/11/2016 12:00	3/12/2016 11:00	4,157,585	0	0.0	0.0
3/11/2016 13:00	3/12/2016 12:00	4,164,614	0	0.0	0.0
3/11/2016 14:00	3/12/2016 13:00	4,162,262	0	0.0	0.0
3/11/2016 15:00	3/12/2016 14:00	4,139,479	0	0.0	0.0
3/11/2016 16:00	3/12/2016 15:00	4,142,849	0	0.0	0.0
3/11/2016 17:00	3/12/2016 16:00	4,129,236	0	0.0	0.0
3/11/2016 18:00	3/12/2016 17:00	4,106,441	0	0.0	0.0
3/11/2016 19:00	3/12/2016 18:00	4,082,343	0	0.0	0.0
3/11/2016 20:00	3/12/2016 19:00	4,066,535	0	0.0	0.0
3/11/2016 21:00	3/12/2016 20:00	4,015,486	0	0.0	0.0
3/11/2016 22:00	3/12/2016 21:00	3,878,192	0	0.0	0.0
3/11/2016 23:00	3/12/2016 22:00	3,726,527	0	0.0	0.0
3/12/2016 0:00	3/12/2016 23:00	3,562,782	0	0.0	0.0
3/12/2016 1:00	3/13/2016 0:00	3,397,315	0	0.0	0.0
3/12/2016 2:00	3/13/2016 1:00	3,232,158	0	0.0	0.0
3/12/2016 3:00	3/13/2016 3:00	3,060,884	0	0.0	0.0
3/12/2016 4:00	3/13/2016 4:00	2,884,552	0	0.0	0.0
3/12/2016 5:00	3/13/2016 5:00	2,707,402	0	0.0	0.0
3/12/2016 6:00	3/13/2016 6:00	2,530,214	0	0.0	0.0
3/12/2016 7:00	3/13/2016 7:00	2,361,544	0	0.0	0.0
3/11/2016 10:00	3/12/2016 9:00	4,126,799	0	0.0	0.0

(8.)

The measured or calculated cumulative quantity of gas discharged over the discharge duration.

Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.

		(60.108a(c)(6)(iii))	(60.108a(c)(6)(iv))	(60.108a(c)(6)(vii))	(60.108a(c)(6)(vii))
First hour of 24-hr Period	Last hour of 24-hr Period	24-hr cumulative volume of flared gas above Baseline	TRS or H2S ppm (24-hr average, flow-weighted)	24-hr cumulative SO2	24-hr cumulative reduced sulfur
		SCF	ppmv	lbs	lbs as H2S
3/12/2016 9:00	3/13/2016 9:00	2,042,159	0	0.0	0.0
3/12/2016 10:00	3/13/2016 10:00	1,882,312	0	0.0	0.0
3/12/2016 11:00	3/13/2016 11:00	1,723,448	0	0.0	0.0
3/12/2016 12:00	3/13/2016 12:00	1,564,142	0	0.0	0.0
3/12/2016 13:00	3/13/2016 13:00	1,405,281	0	0.0	0.0
3/12/2016 14:00	3/13/2016 14:00	1,247,322	0	0.0	0.0
3/12/2016 15:00	3/13/2016 15:00	1,088,187	0	0.0	0.0
3/12/2016 16:00	3/13/2016 16:00	900,094	0	0.0	0.0
3/12/2016 17:00	3/13/2016 17:00	728,044	0	0.0	0.0
3/12/2016 18:00	3/13/2016 18:00	568,742	0	0.0	0.0
3/12/2016 19:00	3/13/2016 19:00	410,573	0	0.0	0.0