



April 27, 2020

CERTIFIED: 7016 2710 0001 0589 4003

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

Re: NSPS Excess Emissions & CEM Performance Report – 1st Quarter 2020
Valero Refining - Meraux LLC, Agency Interest # 1238
2235 Jacob Drive, St. Bernard Parish, Meraux, LA
Title V Permit Numbers: 2500-00001-V17

Gentlemen,

Valero Refining, Meraux LLC is submitting 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 2020.

For this reporting period, the SO₂ and O₂ CEMS on the #3 SRU (EPN 5-00, EQT 0079) had excess emissions greater than 1% of the total operating time and the NO_x and O₂ CEMS on the NHT Charge Heater (EPN 14-72, EQT 0023) 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). Subpart Ja root cause and corrective action analysis reports are included with this submittal. Updates to previously submitted Subpart Ja root cause and corrective action analysis reports are also included if corrective actions were completed in this reporting period.

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

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

Regards,

A handwritten signature in black ink that reads 'Leslie Sullivan'.

Leslie Sullivan 4/27/2020
Vice President and General Manager
Meraux Refinery

Enclosures

cc: Mr. Brian Tusa, 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: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

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

Date of Latest CMS Certification or Audit: CGA on 2/19/20 (SO₂), 2/20/20 (O₂)

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

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

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>(hours)</i>
a. Monitor equipment malfunctions	0
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	0
d. Other known causes	2
e. Unknown causes	0
2. Total CMS Downtime	2
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.1 %

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

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

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

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

Pollutant: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(SO₂)/ Magnos 206 (O₂)

Date of Latest CMS Certification or Audit: CGA on 3/3/20

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

Total source operating time in reporting period: 1,589 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	18
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	18
3. Total duration of excess emissions x (100) [Total source operating time] ²	1.1 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

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

(per 40 CFR 60.7(d))

Pollutant: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek, #4661

Date of Latest CMS Certification or Audit: CGA on 2/14/20

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); DHT Charge Heater (EPN 5-73, EQT 0058)

Total source operating time in reporting period: EQT 0010-2,164 hours, EQT 0011-2,173 hours, EQT 0033-2,183 hours, EQT 0058-2,183 hours

Emissions Data Summary¹				
1. Duration of excess emissions in reporting period due to:	<i>EQT 0010</i> (hours)	<i>EQT 0011</i> (hours)	<i>EQT 0033</i> (hours)	<i>EQT 0058</i> (hours)
a. Startup/shutdown	0	0	0	0
b. Control equipment problems	0	0	0	0
c. Process problems	0	0	0	0
d. Other known causes	0	0	0	0
e. Unknown causes	0	0	0	0
2. Total duration of excess emission	0	0	0	0
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0 %	0.0 %	0.0 %	0.0 %

CMS Performance Summary¹				
1. CMS downtime in reporting period due to:	<i>EQT 0010</i> (hours)	<i>EQT 0011</i> (hours)	<i>EQT 0033</i> (hours)	<i>EQT 0058</i> (hours)
a. Monitor equipment malfunctions	0	0	0	0
b. Non-Monitor equipment malfunctions	0	0	0	0
c. Quality assurance calibration	0	0	0	0
d. Other known causes	0	0	0	0
e. Unknown causes	0	0	0	0
2. Total CMS Downtime	0	0	0	0
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.0 %	0.0 %	0.0 %	0.0 %

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

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

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS AND

MONITORING SYSTEMS PERFORMANCE

(per 40 CFR 60.7(d))

Pollutant: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/13/20

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 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); 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 0024-2,183 hours; EQT 0027-2,183 hours; EQT 0028-2,183 hours; EQT 0029-2,183 hours; EQT 0014-1,577 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>All EQT's (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] ²	0.0 %

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>All EQT's (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] ²	0.0 %

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

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

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 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/13/20

Process Unit(s) Description: Area 2 Fuel Drum for: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127); NHT Charge Heater (EPN 1-17, EQT 0159)

Total source operating time in reporting period: EQT 0127-1,854 hours; EQT 0159-2,183 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>All EQT's (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] ²	0.0 %

CMS Performance Summary¹	
1. CMS downtime in reporting period due to:	<i>All EQT's (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] ²	0.0 %

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

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

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

(per 40 CFR 60.7(d))

Pollutant: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 3/11/20

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

Total source operating time in reporting period: 0 hours

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

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

(per 40 CFR 60.7(d))

Pollutant: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/14/20

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

Total source operating time in reporting period: 1,584 hours

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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	12
e. Unknown causes	0
2. Total CMS Downtime	12
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.8 %

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

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

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

(per 40 CFR 60.7(d))

Pollutant: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/18/20

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 0030-1,937 hours; EQT 0048-0 hours³

Emissions Data Summary¹		
	<i>EQT 0030 (hours)</i>	<i>EQT 0048 (hours)</i>
1. Duration of excess emissions in reporting period due to:		
a. Startup/shutdown	0	0
b. Control equipment problems	0	0
c. Process problems	0	0
d. Other known causes	0	0
e. Unknown causes	0	0
2. Total duration of excess emission	0	0
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.0 %	0.0 %

CMS Performance Summary¹		
	<i>EQT 0030 (hours)</i>	<i>EQT 0048 (hours)</i>
1. CMS downtime in reporting period due to:		
a. Monitor equipment malfunctions	0	0
b. Non-Monitor equipment malfunctions	0	0
c. Quality assurance calibration	0	0
d. Other known causes	0	0
e. Unknown causes	0	0
2. Total CMS Downtime	0	0
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.0 %	0.0 %

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

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

³ Boiler B-6 ran on purchased natural gas for the entire Quarter.

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

(per 40 CFR 60.7(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/26/20

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

Total source operating time in reporting period: 1,937 hours

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

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

(per 40 CFR 60.7(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/26/20

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

Total source operating time in reporting period: 1,760 hours

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

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

(per 40 CFR 60.7(d))

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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_x)/(O₂)

Date of Latest CMS Certification or Audit: CGA on 2/24/20

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

Total source operating time in reporting period: 2,164 hours

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

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

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

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

Date of Latest CMS Certification or Audit: CGA on 2/6/20

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

Total source operating time in reporting period: 1,854 hours

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

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

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: ABB Limas11(NOx), Magnos27 (O₂)

Date of Latest CMS Certification or Audit: CGA on 1/6/20

Process Unit(s) Description: NHT Charge Heater (EPN 1-17, EQT 0159)

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

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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	128
e. Unknown causes	0
2. Total CMS Downtime	129
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	5.9 %

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

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

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

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

Pollutant: **NO_x**

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

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB Limas11(NOx), Magnos27 (O₂)

Date of Latest CMS Certification or Audit: CGA on 2/18/20

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

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

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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	46
e. Unknown causes	0
2. Total CMS Downtime	47
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	2.2 %

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

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

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

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

Pollutant: **NO_x**

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

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

Emission Limitation: None

Monitor Manufacturer and Model No.: ABB Limas11(NOx), Magnos27 (O₂)

Date of Latest CMS Certification or Audit: CGA on 1/7/20

Process Unit(s) Description: MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033)

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

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: CGA on 2/13/20

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

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: CGA on 2/14/20

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

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

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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	9
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	9
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.4 %

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

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

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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: CGA on 2/13/20

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

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

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 2/5/20

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

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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	8
e. Unknown causes	0
2. Total CMS Downtime	9
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.4 %

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

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 2/5/20

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

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

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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	5
d. Other known causes	24
e. Unknown causes	0
2. Total CMS Downtime	29
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	1.3 %

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

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

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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 2/5/20

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

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

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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	8
e. Unknown causes	0
2. Total CMS Downtime	10
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.5 %

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

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

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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: 2,183 hours

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: 2,183 hours

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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] ²	0.0 %

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

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

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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: 2,183 hours

Emissions Data Summary¹	
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] ²	0.0 %

CMS Performance Summary¹	
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	6
e. Unknown causes	0
2. Total CMS Downtime	6
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.3 %

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

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

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

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

For all CMS covered in this report, no changes were made in the 1st Quarter 2020 to CMS, process, or controls.

I certify that the information contained in this report is true, accurate, and complete.

Daniel Patnoord
Name


Signature

Env. Eng.
Title

**GASEOUS AND OPACITY EXCESS EMISSIONS AND
MONITORING SYSTEMS PERFORMANCE**

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

Pollutant: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

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

Date of Latest CMS Certification or Audit: CGA on 2/19/20 (SO₂), 2/20/20 (O₂)

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

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

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

Ja CMS PERFORMANCE ¹						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
2/27/20	11:00	13:00	2	Offline for annual preventative maintenance.	Analyzer calibrated and returned to service.	
TOTAL			2			

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

**GASEOUS AND OPACITY EXCESS EMISSIONS AND
MONITORING SYSTEMS PERFORMANCE**

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

Pollutant: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(SO₂)/ Magnos 206 (O₂)

Date of Latest CMS Certification or Audit: CGA on 3/3/20

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

Total source operating time in reporting period: 1,589 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
1/9/20	17:00		7	1145	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with combined SO ₂ emissions from the #2 and #3 SRU less than 500 lbs/day above allowable during a planned shutdown with no acid gas feed to the unit and the Tail Gas Treater bypassed..	Valero completed the shutdown of the #3 SRU.
1/10/20		00:00				
2/4/20	15:00		11	385	SO ₂ at 0% O ₂ greater than 250 ppm, 12-HRA, with combined SO ₂ emissions from the #2 and #3 SRU less than 500 lbs/day above allowable during a planned startup with no acid gas feed to the unit and the Tail Gas Treater bypassed.	Valero shut the Tail Gas Treater bypass valve prior to sending acid gas feed to the unit and completed the startup of the #3 SRU.
2/5/20		02:00				
TOTAL			18			

Ja CMS PERFORMANCE¹						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
None.						
TOTAL			0			

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: Ametek 4661

Date of Latest CMS Certification or Audit: CGA on 2/13/20

Process Unit(s) Description: Area 2 Fuel Drum for: Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127); NHT Charge Heater (EPN 1-17, EQT 0159)

Total source operating time in reporting period: EQT 0127-1,854 hours; EQT 0159-2,183 hours

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

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

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

**GASEOUS AND OPACITY EXCESS EMISSIONS AND
MONITORING SYSTEMS PERFORMANCE**

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

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

Date of Latest CMS Certification or Audit: CGA on 2/6/20

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

Total source operating time in reporting period: 1,854 hours

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

Ja CMS PERFORMANCE¹						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
None.						
TOTAL			0			

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

**GASEOUS AND OPACITY EXCESS EMISSIONS AND
MONITORING SYSTEMS PERFORMANCE**

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: ABB Limas11(NOx), Magnos27 (O₂)

Date of Latest CMS Certification or Audit: CGA on 1/6/20

Process Unit(s) Description: NHT Charge Heater (EPN 1-17, EQT 0159)

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

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

Ja CMS PERFORMANCE ¹						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
1/6/20	10:00	11:00	1	NOx and O ₂ Cylinder Gas Audit.	N/A	
2/19/20	09:00		128	While a factory technician was performing annual preventative maintenance, the NOx analyzer was inadvertently damaged. The damaged components were not included in the recommended spare parts inventory that Valero maintains on site.	The necessary repair parts were ordered and the factory technician returned with the repair parts and rebuilt the NOx analyzer.	
2/24/20		17:00				
TOTAL			129			

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: CGA on 2/13/20

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

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

Ja CMS PERFORMANCE ²						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
None.						
TOTAL			0			

¹Due to the physical arrangement of the headers supplying the North Flare Stack (EPN 20-72, EQT 0035), two analyzers are required to measure H₂S 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.

²In 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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: CGA on 2/14/20

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

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 ²						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
1/2/20	10:00	15:00	5	H ₂ S analyzer offline while adjusting RSR Net Heating Value and Hydrogen analyzers after the sample lines for the RSR analyzers were replaced on 12/30/19.	N/A	
1/3/20	12:00	14:00	2			
1/13/20	10:00	11:00	1	RSR analyzers adjusted for calibration drift.	N/A	
1/13/20	13:00	14:00	1	RSR analyzers Cylinder Gas Audit.	N/A	
TOTAL			9			

¹Due to the physical arrangement of the headers supplying the North Flare Stack (EPN 20-72, EQT 0035), two analyzers are required to measure H₂S 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.

²In 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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: CGA on 2/13/20

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 ²						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
None.						
TOTAL			0			

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 2/5/20

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

Ja CMS PERFORMANCE ¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/30/20	09:00	17:00	8	Analyzer shutdown and electrical power de-energized to perform maintenance on the electrical distribution system.	Electrical power was restored and the analyzer was returned to service.
2/12/20	08:00	09:00	1	Analyzer adjusted for calibration drift.	Calibrated and returned to service.
TOTAL			9		

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 2/5/20

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

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

Ja CMS PERFORMANCE ¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/30/20	09:00	17:00	8	Analyzer shutdown and electrical power de-energized to perform maintenance on the electrical distribution system.	Electrical power was restored and the analyzer was returned to service.
2/9/20	13:00	17:00	4	Series of offline periods for adjustment and troubleshooting of intermittent improper operation on the high range and delay of shifting back to low range during daily calibration check.	Valero cleaned analyzer components and tubing, replaced parts, and made software adjustments recommended by the manufacture. The exact cause of the problem was not determined, but did not recur after 2/27/20.
2/10/20	09:00	14:00	5		
2/12/20	08:00	09:00	1		
2/20/20	09:00	10:00	1		
2/21/20	14:00	15:00	1		
2/24/20	08:00	09:00	1		
2/24/20	11:00	12:00	1		
2/24/20	13:00	14:00	1		
2/27/20	04:00	07:00	3		
2/27/20	08:00	09:00	1		
2/27/20	12:00	15:00	2		
TOTAL			29		

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 2/5/20

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

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

Ja CMS PERFORMANCE ¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
1/30/20	09:00	17:00	8	Analyzer shutdown and electrical power de-energized to perform maintenance on the electrical distribution system.	Electrical power was restored and the analyzer was returned to service.
2/12/20	08:00	09:00	1	Analyzer adjusted for calibration drift.	Calibrated and returned to service.
3/20/20	10:00	11:00	1	Analyzer failed to perform automatic calibration check on the high range. The standard gas bottle was replaced the previous day, but was not lined up correctly	High range standard gas bottle lined up correctly and the analyzer high range was re-checked.
TOTAL			10		

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: 2,183 hours

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

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: 2,183 hours

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

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

**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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: 2,183 hours

Ja CMS PERFORMANCE ¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
3/11/20	13:00	18:00	5	Annual preventative maintenance by factory technician.	Flow meter returned to service.
3/13/20	09:00	10:00	1		
TOTAL			6		

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

DATA ASSESSMENT REPORT

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

Pollutant: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

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

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

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

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	SO ₂ #1 <u>(low scale)</u>	SO ₂ #2 <u>(high scale)</u>	O ₂ #1 <u>(low scale)</u>	O ₂ #2 <u>(high scale)</u>
Date of Audit	2/19/20	2/19/20	2/20/20	2/20/20
Audit Gas Cylinder No.	SG9150051BAL	CC125741	CC483689	SG9152263BAL
Date of Audit Gas Cert.	5/27/16	5/27/16	5/23/16	5/23/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	124.9 ppmv	274.5 ppmv	5.99 vol %	10.05 vol %
CEM Response Value	128.7 ppmv	262.7 ppmv	6.00 vol %	10.10 vol %
Accuracy	3.0%	4.3%	0.2%	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: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: ABB AO2000 Uras 26(SO₂)/ Magnos 206 (O₂)

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

CEM Sampling Location: #3 SRU Incinerator (#5-00)

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	SO ₂ #1 <u>(low scale)</u>	SO ₂ #2 <u>(high scale)</u>	O ₂ #1 <u>(low scale)</u>	O ₂ #2 <u>(high scale)</u>
Date of Audit	3/3/20	3/3/20	3/3/20	3/3/20
Audit Gas Cylinder No.	XC022957B	CC94008	CC483694	EB0063979
Date of Audit Gas Cert.	5/27/16	5/27/16	5/23/16	5/23/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	125.3 ppmv	275.3 ppmv	5.99 vol %	9.98 vol %
CEM Response Value	127.1 ppmv	278.3 ppmv	5.97 vol %	9.98 vol %
Accuracy	1.4%	1.1%	0.3%	0.0%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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); Boiler B-7 (EPN 1-07, EQT 0011); MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033); DHT Charge Heater (EPN 5-73, EQT 0058)

CEM Sampling Location: Area 1 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/14/20	2/14/20
Audit Gas Cylinder No.	LL41203	BLM001397
Date of Audit Gas Cert.	9/24/19	9/24/19
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	75.6	163.7
CEM Response Value (ppmv)	70.3	153.0
Accuracy	7.0%	6.5%
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: **H₂S**

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

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: 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); Benzene Recovery Unit Reboiler (EPN 1-09, EQT 0127); NHT Charge Heater (EPN 1-17, EQT 0159)

CEM Sampling Location: Area 2 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/13/20	2/13/20
Audit Gas Cylinder No.	CC58723	APL001013
Date of Audit Gas Cert.	9/18/19	9/18/19
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	77.1	177.6
CEM Response Value (ppmv)	71.3	167.3
Accuracy	7.5%	5.8%
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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 ₂ S #1	H ₂ S #2
	<u>(low scale)</u>	<u>(high scale)</u>
Date of Audit	3/11/20	3/11/20
Audit Gas Cylinder No.	XL000609B	LL62684
Date of Audit Gas Cert.	9/24/19	9/24/19
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	75.6	165.5
CEM Response Value (ppmv)	71.7	159.0
Accuracy	5.2%	3.9%
Standard	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 1-00, EQT 0009)

CEM Sampling Location: Area 6 Fuel Drum

CEM Span Value: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/14/20	2/14/20
Audit Gas Cylinder No.	BLM001939	LL71653
Date of Audit Gas Cert.	9/24/19	9/24/19
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	75.3	165.9
CEM Response Value (ppmv)	74.3	154.7
Accuracy	1.3%	6.8%
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: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/18/20	2/18/20
Audit Gas Cylinder No.	ALM040395	ALM040542
Date of Audit Gas Cert.	9/18/19	9/18/19
Type of Certification	EPA Protocol 1	EPA Protocol 1
Certified Audit Value (ppmv)	75.0	175.7
CEM Response Value (ppmv)	74.3	172.0
Accuracy	0.9%	2.1%
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_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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_x), Magnos27 (O₂)

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

CEM Sampling Location: Boiler B-5

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NO _x #1 <u>(low scale)</u>	NO _x #2 <u>(high scale)</u>	O ₂ #1 <u>(low scale)</u>	O ₂ #2 <u>(high scale)</u>
Date of Audit	2/26/20	2/26/20	2/26/20	2/26/20
Audit Gas Cylinder No.	LL67453	LL64747	LL53418	LL167062
Date of Audit Gas Cert.	5/1/16	5/3/16	1/28/14	1/28/14
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.0 ppmv	54.5 ppmv	6.01 vol %	10.01 vol %
CEM Response Value	26.4 ppmv	54.4 ppmv	6.00 vol %	10.00 vol %
Accuracy	5.6%	0.2%	0.2%	0.1%
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_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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_x), Magnos27 (O₂)

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 _x #1 <u>(low scale)</u>	NO _x #2 <u>(high scale)</u>	O ₂ #1 <u>(low scale)</u>	O ₂ #2 <u>(high scale)</u>
Date of Audit	2/26/20	2/26/20	2/26/20	2/26/20
Audit Gas Cylinder No.	LL67453	LL64747	LL53418	LL167062
Date of Audit Gas Cert.	5/1/16	5/3/16	1/28/14	1/28/14
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.0 ppmv	54.5 ppmv	6.01 vol %	10.01 vol %
CEM Response Value	25.6 ppmv	53.7 ppmv	6.00 vol %	10.00 vol %
Accuracy	2.4%	1.5%	0.2%	0.1%
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_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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_x)/(O₂)

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

CEM Sampling Location: Boiler TB-01

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

	NO _x #1 (low scale)	NO _x #2 (high scale)	O ₂ #1 (low scale)	O ₂ #2 (high scale)
Date of Audit	2/24/20	2/24/20	2/24/20	2/24/20
Audit Gas Cylinder No.	SG9167966	CC89303	LL269	LL168197
Date of Audit Gas Cert.	5/31/16	5/31/16	4/26/16	4/25/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	126.9 ppmv	270.5 ppmv	6.03 vol %	10.10 vol %
CEM Response Value	142.7 ppmv	275.7 ppmv	5.50 vol %	9.40 vol %
Accuracy	12.5%	1.9%	8.8%	6.9%
Standard	<15%	<15%	<15%	<15%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

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

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_x #1</u> <u>(low scale)</u>	<u>NO_x #2</u> <u>(high scale)</u>	<u>O₂ #1</u> <u>(low scale)</u>	<u>O₂ #2</u> <u>(high scale)</u>
Date of Audit	2/6/20	2/6/20	2/6/20	2/6/20
Audit Gas Cylinder No.	LL67453	CC307733	CC483658	CC87078
Date of Audit Gas Cert.	5/1/19	6/2/16	5/23/16	5/23/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.2 ppmv	55.8 ppmv	5.96 vol %	9.94 vol %
CEM Response Value	24.5 ppmv	52.6 ppmv	5.57 vol %	9.40 vol %
Accuracy	2.8%	5.7%	6.5%	5.4%
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_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

Company: Valero Refining - Meraux LLC

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

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

Monitor Manufacturer and Model No.: ABB Limas11 (NO_x), Magnos27 (O₂)

Process Unit(s) Description: NHT Charge Heater (EPN 1-17, EQT 0159)

CEM Sampling Location: NHT Charge Heater

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

<u>CGA</u>	<u>NO_x #1</u> <u>(low scale)</u>	<u>NO_x #2</u> <u>(high scale)</u>	<u>O₂ #1</u> <u>(low scale)</u>	<u>O₂ #2</u> <u>(high scale)</u>
Date of Audit	1/6/20	1/6/20	1/6/20	1/6/20
Audit Gas Cylinder No.	LL67453	CC416948	CC483649	CC148318
Date of Audit Gas Cert.	5/1/19	6/2/16	5/23/16	5/23/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.2 ppmv	55.5 ppmv	6.00 vol %	9.99 vol %
CEM Response Value	24.8 ppmv	51.9 ppmv	5.95 vol %	9.98 vol %
Accuracy	1.7%	6.5%	0.8%	0.1%
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_x**

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

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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_x), Magnos27 (O₂)

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_x #1</u> <u>(low scale)</u>	<u>NO_x #2</u> <u>(high scale)</u>	<u>O₂ #1</u> <u>(low scale)</u>	<u>O₂ #2</u> <u>(high scale)</u>
Date of Audit	2/18/20	2/18/20	2/18/20	2/18/20
Audit Gas Cylinder No.	BLM000328	CC319153	CC483638	CC222165
Date of Audit Gas Cert.	10/4/19	6/2/16	5/23/16	5/23/16
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.2 ppmv	55.4 ppmv	5.99 vol %	9.96 vol %
CEM Response Value	24.1 ppmv	54.5 ppmv	6.00 vol %	10.00 vol %
Accuracy	4.4%	1.6%	0.1%	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_x**

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

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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_x), Magnos27 (O₂)

Process Unit(s) Description: MDH Product and Fractionator Heaters (EPN 2-92, EQT 0033)

CEM Sampling Location: MDH Product and Fractionator Heaters

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

I. ACCURACY ASSESSMENT RESULTS (CGA):

<u>CGA</u>	<u>NO_x #1 (low scale)</u>	<u>NO_x #2 (high scale)</u>	<u>O₂ #1 (low scale)</u>	<u>O₂ #2 (high scale)</u>
Date of Audit	1/7/20	1/7/20	1/7/20	1/7/20
Audit Gas Cylinder No.	LL67453	BLM002251	LL100497	LL67009
Date of Audit Gas Cert.	5/1/19	5/6/19	4/22/19	4/22/19
Type of Certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
Certified Audit Value	25.2 ppmv	55.0 ppmv	6.02 vol %	10.03 vol %
CEM Response Value	25.7 ppmv	52.8 ppmv	6.01 vol %	9.95 vol %
Accuracy	1.9%	4.1%	0.2%	0.8%
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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/13/20	2/13/20
Audit Gas Cylinder No.	CC416499	XC012872B
Date of Audit Gas Cert.	12/10/19	12/16/19
Type of Certification	Certified Gas ¹	Certified Gas ¹
Certified Audit Value	79.5 ppmv	172.7 ppmv
CEM Response Value	89.3 ppmv	178.3 ppmv
Accuracy	12.3%	3.2%
Standard	<15%	<15%

¹ Valero unable to obtain EPA Protocol 1 certified gases for the Methane balanced audit gas required by this analyzer.

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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/14/20	2/14/20
Audit Gas Cylinder No.	CC416499	XC012872B
Date of Audit Gas Cert.	12/10/19	12/16/19
Type of Certification	Certified Gas ¹	Certified Gas ¹
Certified Audit Value (ppmv)	79.5 ppmv	172.7 ppmv
CEM Response Value (ppmv)	85.0 ppmv	179.0 ppmv
Accuracy	6.9%	3.6%
Standard	<15%	<15%

¹ Valero unable to obtain EPA Protocol 1 certified gases for the Methane balanced audit gas required by this analyzer.

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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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: Hydrogen Sulfide, 300 ppm

I. ACCURACY ASSESSMENT RESULTS (CGA):

	H ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/13/20	2/13/20
Audit Gas Cylinder No.	CC416499	XC012872B
Date of Audit Gas Cert.	12/10/19	12/16/19
Type of Certification	Certified Gas ¹	Certified Gas ¹
Certified Audit Value	79.5 ppmv	172.7 ppmv
CEM Response Value	78.0 ppmv	172.3 ppmv
Accuracy	1.9%	0.2%
Standard	<15%	<15%

¹ Valero unable to obtain EPA Protocol 1 certified gases for the Methane balanced audit gas required by this analyzer.

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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/5/20	2/5/20
Audit Gas Cylinder No.	CC305316	XC015936B
Date of Audit Gas Cert.	5/27/16	6/27/19
Type of Certification	EPA Protocol 1	Primary Standard1
Certified Audit Value (ppmv)	1013.0 ppmv	10040.0 ppmv
CEM Response Value (ppmv)	1056.3 ppmv	9948.3 ppmv
Accuracy	4.3%	0.9%
Standard	<15%	<15%

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

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: 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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/5/20	2/5/20
Audit Gas Cylinder No.	CC305316	XC015936B
Date of Audit Gas Cert.	5/27/16	6/27/19
Type of Certification	EPA Protocol 1	Primary Standard1
Certified Audit Value (ppmv)	1013.0 ppmv	10040.0 ppmv
CEM Response Value (ppmv)	1011.7 ppmv	9925.3 ppmv
Accuracy	0.1%	1.1%
Standard	<15%	<15%

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

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: 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 1/1/20 to 3/31/20

Date submitted: 4/30/20

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 ₂ S #1 <u>(low scale)</u>	H ₂ S #2 <u>(high scale)</u>
Date of Audit	2/5/20	2/5/20
Audit Gas Cylinder No.	CC305316	XC015936B
Date of Audit Gas Cert.	5/27/16	6/27/19
Type of Certification	EPA Protocol 1	Primary Standard ¹
Certified Audit Value	1013.0 ppmv	10040.0 ppmv
CEM Response Value	1092.0 ppmv	10023.7 ppmv
Accuracy	7.8%	0.2%
Standard	<15%	<15%

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

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

Appendix A

Ja Root Cause and Corrective Action Analysis

Subpart Ja Root Cause / Corrective Action AnalysisIncident Number: 386425*The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*
 Report: Final
 Refinery: Valero (Meraux)
 Incident Type: Flaring (Flow and SO2)
 Emissions Source(s): North Flare (EPN 20-72, EQT 0035)

 Date of Event: 11/18/18
 Date Analysis Completed: 1/10/19
(1.) (60.108a(c)(6)(i))**A description of the Discharge:**

On November 18, 2018 at approximately 19:40, the Hydrocracker Unit experienced an automatic safety shutdown following an unplanned trip of the Recycle Gas Compressor (RGC). A controlled depressurization to the North Flare immediately followed causing the release of SO2 emissions greater than 500 lbs and volume greater than 500,000 SCF in a 24 hour period. The gas flared during this depressurization was primarily hydrogen with hydrogen sulfide (H2S) also present in low concentration.

(2.) (60.108a(c)(6)(ii) and (60.108a(c)(6)(ix))
 Date and Time the discharge was first identified 11/18/18 19:40
 Date/Time the discharge had ceased 11/19/18 15:50
 Duration of Discharge (Calculated) 20.2 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 the maximum extent possible to minimize the volume and SO2 emissions 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? No (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? No (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)

Valero has determined the root causes of the shutdown of the RGC was that it tripped on low lube oil pressure caused by an over-speed trip of the steam turbine driven lube oil pump combined with a slow or inadequate response of the standby electric lube oil pump. Due to the limited instrumentation available on the RGC lube oil system, Valero could not determine the exact cause of the over-speed of the turbine driven lube oil pump. However, a malfunctioning or "sticking" pressure control valve in the lube oil system was identified as the likely cause of the over-speed, as well as, a contributor to the delayed response of the electric lube oil pump. Valero has also determined that the design of the RGC lube oil control system was unnecessarily fast acting in initiating a RGC trip and slower acting in initiating the auto start of the electric lube oil pump.

(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) *Add a time delay to the RGC low lube oil pressure trip to allow additional time for the electric lube oil pump to restore pressure and stabilize the lube oil system.*
- 2) *Replace the pressure control valve that is suspected of "sticking".*
- 3) *Upgrade the pressure switches that provide the auto start signal to the electric lube oil pump to faster acting pressure transmitters.*

(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) *Add a time delay to the RGC low lube oil pressure trip to allow additional time for the electric lube oil pump to restore pressure and stabilize the lube oil system.*

Commencement Date: 1/10/19

Completed: 1/16/19

- 2) *Replace the pressure control valve that is suspected of "sticking".*

Commencement Date: 1/10/19

Completed: 1/31/20

- 3) *Upgrade the pressure switches that provide the auto start signal to the electric lube oil pump to faster acting pressure transmitters.*

Commencement Date: 1/10/19

Completed: 2/10/20

(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
11/17/2018 19:00	11/18/2018 18:00	2,775	8	0.2	0.0
11/17/2018 20:00	11/18/2018 19:00	1,021,441	4768	803.7	4.3
11/17/2018 21:00	11/18/2018 20:00	2,023,462	654	912.1	4.9
11/17/2018 22:00	11/18/2018 21:00	2,723,619	23	914.8	4.9
11/17/2018 23:00	11/18/2018 22:00	3,542,182	16	916.9	4.9
11/18/2018 0:00	11/18/2018 23:00	3,599,467	342	920.4	4.9
11/18/2018 1:00	11/19/2018 0:00	3,599,437	40	920.4	4.9
11/18/2018 2:00	11/19/2018 1:00	3,599,386	26	920.4	4.9
11/18/2018 3:00	11/19/2018 2:00	3,863,424	711	951.9	5.1
11/18/2018 4:00	11/19/2018 3:00	4,145,070	339	967.9	5.2
11/18/2018 5:00	11/19/2018 4:00	4,419,430	65	970.9	5.2
11/18/2018 6:00	11/19/2018 5:00	4,682,013	346	986.1	5.3
11/18/2018 7:00	11/19/2018 6:00	4,754,221	5860	1060.2	5.7
11/18/2018 8:00	11/19/2018 7:00	4,838,569	5819	1145.5	6.2
11/18/2018 9:00	11/19/2018 8:00	5,276,528	13	1146.4	6.2
11/18/2018 10:00	11/19/2018 9:00	5,769,416	25	1148.4	6.2
11/18/2018 11:00	11/19/2018 10:00	6,225,387	22	1150.1	6.2
11/18/2018 12:00	11/19/2018 11:00	6,784,859	20	1151.9	6.2
11/18/2018 13:00	11/19/2018 12:00	7,340,616	11	1152.9	6.2
11/18/2018 14:00	11/19/2018 13:00	7,772,218	10	1153.7	6.2
11/18/2018 15:00	11/19/2018 14:00	8,215,771	9	1154.4	6.2
11/18/2018 16:00	11/19/2018 15:00	8,416,196	9	1154.7	6.2
11/18/2018 17:00	11/19/2018 16:00	8,417,389	12	1154.7	6.2
11/18/2018 18:00	11/19/2018 17:00	8,417,965	12	1154.7	6.2
11/18/2018 19:00	11/19/2018 18:00	8,418,561	14	1154.7	6.2
11/18/2018 20:00	11/19/2018 19:00	7,400,468	16	351.1	1.9
11/18/2018 21:00	11/19/2018 20:00	6,399,004	16	242.7	1.3
11/18/2018 22:00	11/19/2018 21:00	5,699,406	11	240.1	1.3
11/18/2018 23:00	11/19/2018 22:00	4,881,411	11	237.9	1.3
11/19/2018 0:00	11/19/2018 23:00	4,824,703	13	234.5	1.3
11/19/2018 1:00	11/20/2018 0:00	4,825,300	10	234.4	1.3
11/19/2018 2:00	11/20/2018 1:00	4,825,914	10	234.4	1.3
11/19/2018 3:00	11/20/2018 2:00	4,562,447	9	203.0	1.1
11/19/2018 4:00	11/20/2018 3:00	4,281,373	10	187.0	1.0
11/19/2018 5:00	11/20/2018 4:00	4,007,573	11	184.0	1.0
11/19/2018 6:00	11/20/2018 5:00	3,745,560	13	168.8	0.9
11/19/2018 7:00	11/20/2018 6:00	3,673,913	12	94.6	0.5
11/19/2018 8:00	11/20/2018 7:00	3,590,131	11	9.4	0.1
11/19/2018 9:00	11/20/2018 8:00	3,152,747	11	8.5	0.0
11/19/2018 10:00	11/20/2018 9:00	2,660,458	9	6.4	0.0
11/19/2018 11:00	11/20/2018 10:00	2,205,095	8	4.8	0.0
11/19/2018 12:00	11/20/2018 11:00	1,646,223	10	3.0	0.0
11/19/2018 13:00	11/20/2018 12:00	1,091,059	12	1.9	0.0
11/19/2018 14:00	11/20/2018 13:00	660,052	12	1.2	0.0
11/19/2018 15:00	11/20/2018 14:00	217,100	12	0.5	0.0

Subpart Ja Root Cause / Corrective Action AnalysisIncident Number: **418809***The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*

Report: Final
 Refinery: Valero (Meraux)
 Incident Type: Flaring (Flow)
 Emissions Source(s): North Flare (EPN 20-72, EQT 0035)

Date of Event: 8/23/19
 Date Analysis Completed: 10/3/19

(1.) (60.108a(c)(6)(i))**A description of the Discharge:**

On August 23, 2019 at approximately 19:14, the Reformer recycle gas flow indication dropped below the set point that initiates an automatic unit shutdown. Reformer Hydrogen, containing virtually no sulfur compounds, was flared due to this shutdown and subsequent start up. Some additional minor flaring had occurred prior to this incident from the Gas Con unit that contributed to the overall 24 hour flared volume, but would not have required an investigation on it's own.

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

Date and Time the discharge was first identified 8/23/19 16:30
 Date/Time the discharge had ceased 8/24/19 0:56
 Duration of Discharge (Calculated) 8.4 hrs.

(3.) (60.108a(c)(6)(viii))**The steps taken to limit the emissions during the discharge:**

Valero followed its Flare Management 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? No (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? No (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)

Valero determined the root cause of the low recycle gas flow indication that activated the shutdown to be plugged taps on the flow meters. There are two flow meters measuring the recycle gas flow and both are required to read below the set point to initiate the unit shutdown; however, both flow meters use the same taps so that plugged taps affect both meters. Valero also determined that the material plugging the taps was caused by a previous change in catalyst composition in the unit that provides feed to the Reformer, the Naphtha Hydrotreater (NHT). Cobalt/Molybdenum catalyst is currently installed whereas Nickel/Molybdenum has been the norm.

(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) *Establish a low flow alarm with an adequate margin above the automatic unit shutdown set point. If this alarm is activated, Valero will blow clear the flow meter taps to remove any pluggage.*

2) *Upgrade the current system (two out of two) to a two out of three system with separate taps for each flow meter during the next unit turnaround.*

3) *Load Nickel/Molybdenum catalyst in the NHT Reactor at the next catalyst change out.*

(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) *Establish a low flow alarm with an adequate margin above the automatic unit shutdown set point. If this alarm is activated, Valero will blow clear the flow meter taps to remove any pluggage.*

Commencement Date: 10/3/19

Completed: 3/30/20

Estimated completion date extended to allow time to evaluate compressor performance following water wash of the compressor.

2) *Submit the turnaround scope item for the next turnaround, currently scheduled for 2023, to upgrade the current two out of two configuration to a two out of three configuration, with separate taps for each flow meter.*

Commencement Date: 10/3/19

Completed: 12/9/19

3) *Load Nickel/Molybdenum catalyst in the NHT Reactor at the next catalyst change out.*

Commencement Date: 10/3/19

Completed: 1/15/20

NiMo catalyst was loaded into the NHT Reactor in December 2019.

(8.)					
The measured or calculated cumulative quantity of gas discharged over the discharge duration.					
<i>Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.</i>					
		(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
8/22/2019 16:00	8/23/2019 15:00	939	16	0.3	0.0
8/22/2019 17:00	8/23/2019 16:00	16,469	12	0.3	0.0
8/22/2019 18:00	8/23/2019 17:00	17,539	12	0.3	0.0
8/22/2019 19:00	8/23/2019 18:00	30,049	21	0.4	0.0
8/22/2019 20:00	8/23/2019 19:00	30,046	15	0.4	0.0
8/22/2019 21:00	8/23/2019 20:00	43,557	127	0.7	0.0
8/22/2019 22:00	8/23/2019 21:00	87,620	845	7.5	0.0
8/22/2019 23:00	8/23/2019 22:00	122,250	407	10.1	0.1
8/23/2019 0:00	8/23/2019 23:00	442,429	30	11.7	0.1
8/23/2019 1:00	8/24/2019 0:00	929,887	19	13.2	0.1
8/23/2019 2:00	8/24/2019 1:00	930,305	21	13.2	0.1
8/23/2019 3:00	8/24/2019 2:00	930,296	27	13.2	0.1
8/23/2019 4:00	8/24/2019 3:00	930,294	26	13.3	0.1
8/23/2019 5:00	8/24/2019 4:00	930,291	26	13.3	0.1
8/23/2019 6:00	8/24/2019 5:00	930,289	23	13.3	0.1
8/23/2019 7:00	8/24/2019 6:00	930,296	23	13.3	0.1
8/23/2019 8:00	8/24/2019 7:00	930,296	22	13.3	0.1
8/23/2019 9:00	8/24/2019 8:00	930,274	24	13.3	0.1
8/23/2019 10:00	8/24/2019 9:00	930,246	32	13.3	0.1
8/23/2019 11:00	8/24/2019 10:00	930,226	29	13.3	0.1
8/23/2019 12:00	8/24/2019 11:00	930,209	25	13.3	0.1
8/23/2019 13:00	8/24/2019 12:00	930,193	23	13.3	0.1
8/23/2019 14:00	8/24/2019 13:00	930,187	21	13.3	0.1
8/23/2019 15:00	8/24/2019 14:00	930,184	18	13.3	0.1
8/23/2019 16:00	8/24/2019 15:00	930,184	16	13.3	0.1
8/23/2019 17:00	8/24/2019 16:00	914,649	21	13.3	0.1
8/23/2019 18:00	8/24/2019 17:00	913,588	25	13.3	0.1
8/23/2019 19:00	8/24/2019 18:00	901,094	30	13.3	0.1
8/23/2019 20:00	8/24/2019 19:00	901,098	26	13.3	0.1
8/23/2019 21:00	8/24/2019 20:00	887,592	24	12.9	0.1
8/23/2019 22:00	8/24/2019 21:00	843,530	23	6.2	0.0
8/23/2019 23:00	8/24/2019 22:00	808,900	21	3.5	0.0
8/24/2019 0:00	8/24/2019 23:00	488,719	21	2.0	0.0
8/24/2019 1:00	8/25/2019 0:00	1,252	20	0.4	0.0

Subpart Ja Root Cause / Corrective Action Analysis Incident Number: N/A

The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).

Report:	<u>Final</u>		Date of Event:	<u>1/7/20</u>
Refinery:	<u>Valero (Meraux)</u>		Date Analysis Completed:	<u>N/A</u>
Incident Type:	<u>Flaring (Flow)</u>			
Emissions Source(s):	<u>North Flare (EPN 20-72, EQT 0035)</u>			

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

A description of the Discharge:
This discharge resulted from the normal shutdown of the Hydrocracker Unit for catalyst replacement and maintenance. The discharge included activities such as depressurization, catalyst cooldown, and Nitrogen sweeping of the unit.

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

Date and Time the discharge was first identified	<u>1/7/20 10:38</u>
Date/Time the discharge had ceased	<u>1/12/20 0:38</u>
Duration of Discharge (Calculated)	<u>110.0</u> 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. Additional purges and Nitrogen volume was required to comply with the maintenance vent provisions of 40 CFR 63.643 as well as additional supplemental natural gas required to comply with the Net Heating Value of the Combustion Zone limit (> 270 Btu/scf) of 40 CFR 63.670, that became effective on January 30, 2019.

(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?	<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? - If yes, skip section 5-7.	<u>Yes</u>	(Yes/No)

(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
1/6/2020 10:00	1/7/2020 9:00	1,369	3	0.1	0.0
1/6/2020 11:00	1/7/2020 10:00	110,938	92	1.8	0.0
1/6/2020 12:00	1/7/2020 11:00	312,818	77	4.4	0.0
1/6/2020 13:00	1/7/2020 12:00	321,463	18	4.5	0.0
1/6/2020 14:00	1/7/2020 13:00	321,479	17	4.5	0.0
1/6/2020 15:00	1/7/2020 14:00	321,489	14	4.5	0.0
1/6/2020 16:00	1/7/2020 15:00	321,496	14	4.5	0.0
1/6/2020 17:00	1/7/2020 16:00	321,493	13	4.5	0.0
1/6/2020 18:00	1/7/2020 17:00	328,489	29	4.6	0.0
1/6/2020 19:00	1/7/2020 18:00	329,046	17	4.6	0.0
1/6/2020 20:00	1/7/2020 19:00	415,142	80	5.8	0.0
1/6/2020 21:00	1/7/2020 20:00	415,180	19	5.8	0.0
1/6/2020 22:00	1/7/2020 21:00	415,220	13	5.8	0.0
1/6/2020 23:00	1/7/2020 22:00	415,283	11	5.8	0.0
1/7/2020 0:00	1/7/2020 23:00	415,326	11	5.8	0.0
1/7/2020 1:00	1/8/2020 0:00	419,136	10	5.8	0.0
1/7/2020 2:00	1/8/2020 1:00	419,407	8	5.8	0.0
1/7/2020 3:00	1/8/2020 2:00	423,761	23	5.8	0.0
1/7/2020 4:00	1/8/2020 3:00	722,863	27	7.1	0.0
1/7/2020 5:00	1/8/2020 4:00	1,052,809	4	7.3	0.0
1/7/2020 6:00	1/8/2020 5:00	1,462,792	10	8.0	0.0
1/7/2020 7:00	1/8/2020 6:00	1,872,715	9	8.6	0.0
1/7/2020 8:00	1/8/2020 7:00	2,490,250	3	8.9	0.0
1/7/2020 9:00	1/8/2020 8:00	3,221,222	5	9.5	0.1
1/7/2020 10:00	1/8/2020 9:00	3,634,043	5	9.8	0.1
1/7/2020 11:00	1/8/2020 10:00	3,830,377	3	8.3	0.0
1/7/2020 12:00	1/8/2020 11:00	3,928,792	3	5.8	0.0
1/7/2020 13:00	1/8/2020 12:00	4,235,320	3	6.0	0.0
1/7/2020 14:00	1/8/2020 13:00	4,541,407	3	6.1	0.0
1/7/2020 15:00	1/8/2020 14:00	4,875,170	9	6.6	0.0
1/7/2020 16:00	1/8/2020 15:00	5,207,990	10	7.1	0.0
1/7/2020 17:00	1/8/2020 16:00	5,549,507	16	8.0	0.0
1/7/2020 18:00	1/8/2020 17:00	5,918,466	26	9.6	0.1
1/7/2020 19:00	1/8/2020 18:00	6,223,129	27	10.9	0.1
1/7/2020 20:00	1/8/2020 19:00	6,445,616	43	12.0	0.1
1/7/2020 21:00	1/8/2020 20:00	6,782,032	83	16.6	0.1
1/7/2020 22:00	1/8/2020 21:00	7,060,266	28	17.9	0.1
1/7/2020 23:00	1/8/2020 22:00	7,425,275	21	19.2	0.1
1/8/2020 0:00	1/8/2020 23:00	7,770,961	209	31.2	0.2
1/8/2020 1:00	1/9/2020 0:00	8,085,331	100	36.5	0.2
1/8/2020 2:00	1/9/2020 1:00	8,524,472	74	41.9	0.2
1/8/2020 3:00	1/9/2020 2:00	8,746,515	31	43.0	0.2
1/8/2020 4:00	1/9/2020 3:00	8,666,947	34	42.9	0.2
1/8/2020 5:00	1/9/2020 4:00	8,551,441	37	44.0	0.2
1/8/2020 6:00	1/9/2020 5:00	8,337,115	40	44.7	0.2
1/8/2020 7:00	1/9/2020 6:00	8,128,729	30	45.1	0.2
1/8/2020 8:00	1/9/2020 7:00	7,730,280	61	47.1	0.3
1/8/2020 9:00	1/9/2020 8:00	7,305,604	39	48.5	0.3

(8.)					
The measured or calculated cumulative quantity of gas discharged over the discharge duration.					
<i>Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.</i>					
		(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
1/8/2020 10:00	1/9/2020 9:00	7,101,175	33	49.3	0.3
1/8/2020 11:00	1/9/2020 10:00	7,012,441	41	50.6	0.3
1/8/2020 12:00	1/9/2020 11:00	6,931,758	42	52.0	0.3
1/8/2020 13:00	1/9/2020 12:00	6,903,134	29	53.2	0.3
1/8/2020 14:00	1/9/2020 13:00	6,921,670	37	55.1	0.3
1/8/2020 15:00	1/9/2020 14:00	6,930,318	17	55.6	0.3
1/8/2020 16:00	1/9/2020 15:00	6,936,102	16	55.9	0.3
1/8/2020 17:00	1/9/2020 16:00	6,915,776	21	56.1	0.3
1/8/2020 18:00	1/9/2020 17:00	6,853,544	13	55.2	0.3
1/8/2020 19:00	1/9/2020 18:00	6,964,597	11	54.6	0.3
1/8/2020 20:00	1/9/2020 19:00	7,533,076	9	53.7	0.3
1/8/2020 21:00	1/9/2020 20:00	8,144,394	24	52.8	0.3
1/8/2020 22:00	1/9/2020 21:00	8,090,541	15	52.1	0.3
1/8/2020 23:00	1/9/2020 22:00	7,944,901	15	51.3	0.3
1/9/2020 0:00	1/9/2020 23:00	7,825,503	15	39.9	0.2
1/9/2020 1:00	1/10/2020 0:00	7,721,271	15	35.1	0.2
1/9/2020 2:00	1/10/2020 1:00	7,497,427	16	30.3	0.2
1/9/2020 3:00	1/10/2020 2:00	7,468,179	17	29.7	0.2
1/9/2020 4:00	1/10/2020 3:00	7,441,278	22	29.2	0.2
1/9/2020 5:00	1/10/2020 4:00	7,419,710	19	28.5	0.2
1/9/2020 6:00	1/10/2020 5:00	7,415,844	21	27.8	0.1
1/9/2020 7:00	1/10/2020 6:00	7,331,943	12	27.1	0.1
1/9/2020 8:00	1/10/2020 7:00	7,223,186	28	25.3	0.1
1/9/2020 9:00	1/10/2020 8:00	7,036,353	9	23.5	0.1
1/9/2020 10:00	1/10/2020 9:00	6,957,170	69	23.9	0.1
1/9/2020 11:00	1/10/2020 10:00	6,917,821	31	23.3	0.1
1/9/2020 12:00	1/10/2020 11:00	6,790,846	14	22.0	0.1
1/9/2020 13:00	1/10/2020 12:00	6,620,241	29	21.2	0.1
1/9/2020 14:00	1/10/2020 13:00	6,390,828	28	19.7	0.1
1/9/2020 15:00	1/10/2020 14:00	6,179,132	37	19.5	0.1
1/9/2020 16:00	1/10/2020 15:00	5,931,557	20	18.9	0.1
1/9/2020 17:00	1/10/2020 16:00	6,044,155	22	19.4	0.1
1/9/2020 18:00	1/10/2020 17:00	5,988,310	6	18.9	0.1
1/9/2020 19:00	1/10/2020 18:00	5,736,939	13	18.5	0.1
1/9/2020 20:00	1/10/2020 19:00	5,116,397	11	17.7	0.1
1/9/2020 21:00	1/10/2020 20:00	4,576,836	12	14.7	0.1
1/9/2020 22:00	1/10/2020 21:00	4,824,741	12	15.1	0.1
1/9/2020 23:00	1/10/2020 22:00	5,129,941	10	15.5	0.1
1/10/2020 0:00	1/10/2020 23:00	5,460,834	7	15.5	0.1
1/10/2020 1:00	1/11/2020 0:00	5,813,731	6	15.6	0.1
1/10/2020 2:00	1/11/2020 1:00	6,169,757	6	15.5	0.1
1/10/2020 3:00	1/11/2020 2:00	6,560,970	5	15.5	0.1
1/10/2020 4:00	1/11/2020 3:00	6,978,394	5	15.2	0.1
1/10/2020 5:00	1/11/2020 4:00	7,391,608	4	15.1	0.1
1/10/2020 6:00	1/11/2020 5:00	7,815,124	11	15.5	0.1
1/10/2020 7:00	1/11/2020 6:00	8,313,263	7	15.9	0.1
1/10/2020 8:00	1/11/2020 7:00	8,812,965	5	15.8	0.1
1/10/2020 9:00	1/11/2020 8:00	9,292,075	4	16.1	0.1

(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
1/10/2020 10:00	1/11/2020 9:00	9,753,631	4	15.0	0.1
1/10/2020 11:00	1/11/2020 10:00	10,134,212	7	14.7	0.1
1/10/2020 12:00	1/11/2020 11:00	10,390,729	6	14.8	0.1
1/10/2020 13:00	1/11/2020 12:00	10,723,921	13	15.2	0.1
1/10/2020 14:00	1/11/2020 13:00	10,964,681	9	15.2	0.1
1/10/2020 15:00	1/11/2020 14:00	11,205,483	9	15.0	0.1
1/10/2020 16:00	1/11/2020 15:00	11,499,316	12	15.4	0.1
1/10/2020 17:00	1/11/2020 16:00	11,372,980	6	14.1	0.1
1/10/2020 18:00	1/11/2020 17:00	11,485,124	8	14.4	0.1
1/10/2020 19:00	1/11/2020 18:00	11,735,589	7	14.5	0.1
1/10/2020 20:00	1/11/2020 19:00	11,919,892	27	16.0	0.1
1/10/2020 21:00	1/11/2020 20:00	11,909,482	18	16.4	0.1
1/10/2020 22:00	1/11/2020 21:00	11,704,907	12	15.9	0.1
1/10/2020 23:00	1/11/2020 22:00	11,314,699	6	15.2	0.1
1/11/2020 0:00	1/11/2020 23:00	10,847,992	6	14.7	0.1
1/11/2020 1:00	1/12/2020 0:00	10,330,152	5	14.1	0.1
1/11/2020 2:00	1/12/2020 1:00	9,758,622	7	13.6	0.1
1/11/2020 3:00	1/12/2020 2:00	9,170,337	6	13.1	0.1
1/11/2020 4:00	1/12/2020 3:00	8,560,374	4	12.6	0.1
1/11/2020 5:00	1/12/2020 4:00	7,954,384	4	12.1	0.1
1/11/2020 6:00	1/12/2020 5:00	7,339,187	7	11.1	0.1
1/11/2020 7:00	1/12/2020 6:00	6,723,492	6	10.4	0.1
1/11/2020 8:00	1/12/2020 7:00	6,113,541	6	9.9	0.1
1/11/2020 9:00	1/12/2020 8:00	5,515,039	5	9.5	0.1
1/11/2020 10:00	1/12/2020 9:00	4,924,345	5	9.1	0.0
1/11/2020 11:00	1/12/2020 10:00	4,366,045	6	8.4	0.0
1/11/2020 12:00	1/12/2020 11:00	4,016,974	8	8.1	0.0
1/11/2020 13:00	1/12/2020 12:00	3,567,918	13	7.2	0.0
1/11/2020 14:00	1/12/2020 13:00	3,232,013	10	6.7	0.0
1/11/2020 15:00	1/12/2020 14:00	2,860,565	11	6.1	0.0
1/11/2020 16:00	1/12/2020 15:00	2,475,777	12	5.4	0.0
1/11/2020 17:00	1/12/2020 16:00	2,168,393	12	5.1	0.0
1/11/2020 18:00	1/12/2020 17:00	1,798,397	10	4.6	0.0
1/11/2020 19:00	1/12/2020 18:00	1,383,046	9	4.1	0.0
1/11/2020 20:00	1/12/2020 19:00	942,231	9	2.1	0.0
1/11/2020 21:00	1/12/2020 20:00	544,423	10	1.0	0.0
1/11/2020 22:00	1/12/2020 21:00	276,671	10	0.4	0.0

Subpart Ja Root Cause / Corrective Action Analysis

Incident Number: N/A

The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).

Report: Final
Refinery: Valero (Meraux)
Incident Type: Flaring (Flow)
Emissions Source(s): North Flare (EPN 20-72, EQT 0035)

Date of Event: 2/4/20
Date Analysis Completed: N/A

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

A description of the Discharge:

This discharge resulted from the normal startup of the Hydrocracker Unit following catalyst replacement and maintenance. The discharge included activities such as purging vessels to remove Oxygen and compressor starting.

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

Date and Time the discharge was first identified 2/4/20 8:05
Date/Time the discharge had ceased 2/6/20 21:43
Duration of Discharge (Calculated) 61.6 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. Additional purges and Nitrogen volume was required to comply with the maintenance vent provisions of 40 CFR 63.643 as well as additional supplemental natural gas required to comply with the Net Heating Value of the Combustion Zone limit (> 270 Btu/scf) of 40 CFR 63.670, that became effective on January 30, 2019.

(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/CCA 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.					
<i>Note: Measured sulfur concentrations are shown as flow-weighted averages if multiple measurement devices were used.</i>					
		(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
2/3/2020 8:00	2/4/2020 7:00	198,554	26	1.6	0.0
2/3/2020 9:00	2/4/2020 8:00	275,775	13	1.8	0.0
2/3/2020 10:00	2/4/2020 9:00	371,222	11	1.9	0.0
2/3/2020 11:00	2/4/2020 10:00	470,560	2	2.0	0.0
2/3/2020 12:00	2/4/2020 11:00	578,934	3	2.0	0.0
2/3/2020 13:00	2/4/2020 12:00	681,376	1	2.0	0.0
2/3/2020 14:00	2/4/2020 13:00	781,702	4	2.1	0.0
2/3/2020 15:00	2/4/2020 14:00	834,709	3	2.1	0.0
2/3/2020 16:00	2/4/2020 15:00	890,011	5	2.2	0.0
2/3/2020 17:00	2/4/2020 16:00	1,019,436	2	2.2	0.0
2/3/2020 18:00	2/4/2020 17:00	1,157,517	1	2.2	0.0
2/3/2020 19:00	2/4/2020 18:00	1,301,662	1	2.3	0.0
2/3/2020 20:00	2/4/2020 19:00	1,446,117	1	2.3	0.0
2/3/2020 21:00	2/4/2020 20:00	1,592,296	2	2.3	0.0
2/3/2020 22:00	2/4/2020 21:00	1,738,630	3	2.4	0.0
2/3/2020 23:00	2/4/2020 22:00	1,877,505	3	2.4	0.0
2/4/2020 0:00	2/4/2020 23:00	2,037,753	3	2.5	0.0
2/4/2020 1:00	2/5/2020 0:00	2,250,072	3	2.6	0.0
2/4/2020 2:00	2/5/2020 1:00	2,455,373	2	2.6	0.0
2/4/2020 3:00	2/5/2020 2:00	2,688,933	2	2.4	0.0
2/4/2020 4:00	2/5/2020 3:00	2,945,348	2	2.1	0.0
2/4/2020 5:00	2/5/2020 4:00	3,200,961	4	1.9	0.0
2/4/2020 6:00	2/5/2020 5:00	3,459,488	12	2.3	0.0
2/4/2020 7:00	2/5/2020 6:00	3,718,874	7	2.5	0.0
2/4/2020 8:00	2/5/2020 7:00	3,981,991	2	2.6	0.0
2/4/2020 9:00	2/5/2020 8:00	4,196,510	2	2.5	0.0
2/4/2020 10:00	2/5/2020 9:00	4,414,993	2	2.4	0.0
2/4/2020 11:00	2/5/2020 10:00	4,626,471	2	2.4	0.0
2/4/2020 12:00	2/5/2020 11:00	4,816,182	2	2.5	0.0
2/4/2020 13:00	2/5/2020 12:00	5,014,729	3	2.6	0.0
2/4/2020 14:00	2/5/2020 13:00	5,214,209	3	2.7	0.0
2/4/2020 15:00	2/5/2020 14:00	5,471,220	5	2.9	0.0
2/4/2020 16:00	2/5/2020 15:00	5,846,351	2	3.0	0.0
2/4/2020 17:00	2/5/2020 16:00	6,087,224	6	3.3	0.0
2/4/2020 18:00	2/5/2020 17:00	6,282,905	7	3.7	0.0
2/4/2020 19:00	2/5/2020 18:00	6,462,479	8	4.1	0.0
2/4/2020 20:00	2/5/2020 19:00	6,664,073	8	4.6	0.0
2/4/2020 21:00	2/5/2020 20:00	6,871,610	10	5.1	0.0
2/4/2020 22:00	2/5/2020 21:00	7,074,478	9	5.6	0.0
2/4/2020 23:00	2/5/2020 22:00	7,287,233	9	6.0	0.0
2/5/2020 0:00	2/5/2020 23:00	7,494,981	12	6.7	0.0
2/5/2020 1:00	2/6/2020 0:00	7,645,707	13	7.4	0.0
2/5/2020 2:00	2/6/2020 1:00	7,770,340	14	8.1	0.0
2/5/2020 3:00	2/6/2020 2:00	7,863,394	14	8.9	0.0
2/5/2020 4:00	2/6/2020 3:00	7,951,669	13	9.6	0.1
2/5/2020 5:00	2/6/2020 4:00	8,046,408	11	10.2	0.1
2/5/2020 6:00	2/6/2020 5:00	8,151,442	21	11.0	0.1
2/5/2020 7:00	2/6/2020 6:00	8,267,746	13	11.5	0.1

(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
2/5/2020 8:00	2/6/2020 7:00	8,382,333	22	12.8	0.1
2/5/2020 9:00	2/6/2020 8:00	8,497,745	31	14.8	0.1
2/5/2020 10:00	2/6/2020 9:00	8,576,630	14	15.6	0.1
2/5/2020 11:00	2/6/2020 10:00	8,689,082	27	17.4	0.1
2/5/2020 12:00	2/6/2020 11:00	8,815,433	29	19.4	0.1
2/5/2020 13:00	2/6/2020 12:00	8,967,422	22	20.9	0.1
2/5/2020 14:00	2/6/2020 13:00	9,112,977	17	22.0	0.1
2/5/2020 15:00	2/6/2020 14:00	9,228,074	17	23.0	0.1
2/5/2020 16:00	2/6/2020 15:00	9,174,358	21	24.1	0.1
2/5/2020 17:00	2/6/2020 16:00	8,931,282	37	24.6	0.1
2/5/2020 18:00	2/6/2020 17:00	8,662,270	46	24.7	0.1
2/5/2020 19:00	2/6/2020 18:00	8,393,901	66	24.9	0.1
2/5/2020 20:00	2/6/2020 19:00	8,090,943	85	25.1	0.1
2/5/2020 21:00	2/6/2020 20:00	7,789,557	132	25.8	0.1
2/5/2020 22:00	2/6/2020 21:00	7,483,621	140	26.3	0.1
2/5/2020 23:00	2/6/2020 22:00	7,132,017	8	25.8	0.1
2/6/2020 0:00	2/6/2020 23:00	6,764,042	9	25.1	0.1
2/6/2020 1:00	2/7/2020 0:00	6,396,336	9	24.3	0.1
2/6/2020 2:00	2/7/2020 1:00	6,029,965	7	23.5	0.1
2/6/2020 3:00	2/7/2020 2:00	5,667,776	8	22.6	0.1
2/6/2020 4:00	2/7/2020 3:00	5,290,552	8	21.8	0.1
2/6/2020 5:00	2/7/2020 4:00	4,916,024	9	21.1	0.1
2/6/2020 6:00	2/7/2020 5:00	4,534,322	7	19.7	0.1
2/6/2020 7:00	2/7/2020 6:00	4,134,693	6	18.9	0.1
2/6/2020 8:00	2/7/2020 7:00	3,735,835	8	17.4	0.1
2/6/2020 9:00	2/7/2020 8:00	3,328,693	9	15.4	0.1
2/6/2020 10:00	2/7/2020 9:00	2,935,885	14	14.5	0.1
2/6/2020 11:00	2/7/2020 10:00	2,512,619	14	12.6	0.1
2/6/2020 12:00	2/7/2020 11:00	2,088,183	14	10.5	0.1
2/6/2020 13:00	2/7/2020 12:00	1,635,205	17	8.9	0.0
2/6/2020 14:00	2/7/2020 13:00	1,189,844	16	7.7	0.0
2/6/2020 15:00	2/7/2020 14:00	764,731	15	6.4	0.0
2/6/2020 16:00	2/7/2020 15:00	388,013	15	5.1	0.0