



July 30, 2020

CERTIFIED: 7016 2710 0001 0589 4294

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 – 2nd 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 Second Quarter 2020.

For this reporting period, the SO₂ and O₂ CEMS on the #2 SRU (EPN 5-00, EQT 0079) had excess emissions greater than 1% of the total operating time and no CEMS had downtime greater than 5% of the total operating time.

Enclosed are the Data Assessment Reports for the appropriate CEMs and information required by NSPS Subpart Ja, 40 CFR 60.108a(d). 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 blue ink that reads 'Will Degenhart'.

Will Degenhart
Director Refinery Operations
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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/6/20

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

Total source operating time in reporting period: 2,176 hours

Emissions Data Summary¹	
1. Duration of excess emissions in reporting period due to:	<i>(hours)</i>
a. Startup/shutdown	38
b. Control equipment problems	0
c. Process problems	0
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	38
3. Total duration of excess emissions x (100) [Total source operating time] ²	1.7 %

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	1
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: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/7/20

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

Total source operating time in reporting period: 2,160 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/7/20

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 0010-2,130 hours, EQT 0011-2,184 hours, EQT 0033-2,150 hours, EQT 0058-1,233 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	5	5	1	1
e. Unknown causes	0	0	0	0
2. Total CMS Downtime	5	5	1	1
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.2 %	0.2 %	0.0 %	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. (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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/7/20

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 0013-2,126 hours; EQT 0022-2,140 hours; EQT 0024-2,015 hours; EQT 0027-2,019 hours; EQT 0028-2,052 hours; EQT 0029-1,990 hours; EQT 0014-2,184 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	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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/7/20

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 0127-1,613 hours; EQT 0159-2,036 hours

Emissions Data Summary¹		
	<i>EQT 0127 (hours)</i>	<i>EQT 0159 (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 0127 (hours)</i>	<i>EQT 0159 (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	1	2
e. Unknown causes	0	0
2. Total CMS Downtime	1	2
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.1 %	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))

Pollutant: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/6/20

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/7/20

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: 1,498 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	2
d. Other known causes	0
e. Unknown causes	0
2. Total duration of excess emission	2
3. Total duration of excess emissions x (100) [Total source operating time] ²	0.1 %

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	0.1 %

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))

Pollutant: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/6/20

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 0030-2,184 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	2	0
d. Other known causes	5	0
e. Unknown causes	0	0
2. Total CMS Downtime	7	0
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.3 %	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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/7/20

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

Total source operating time in reporting period: 2,184 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	8
e. Unknown causes	0
2. Total CMS Downtime	8
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))

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/7/20

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

Total source operating time in reporting period: 2,184 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	5
e. Unknown causes	0
2. Total CMS Downtime	5
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.2 %

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))

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 5/18/20

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

Total source operating time in reporting period: 2,130 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	5
e. Unknown causes	0
2. Total CMS Downtime	5
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.2 %

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: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/6/20

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

Total source operating time in reporting period: 1,613 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/8/20

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

Total source operating time in reporting period: 2,036 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: N/A (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 36.a)

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/9/20

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

Total source operating time in reporting period: 2,140 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: N/A (Required by Consent Decree: 3:10-cv-00563-bbc, Paragraph 36.a)

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 5/20/20

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

Total source operating time in reporting period: 2,150 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 5/19/20

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

Total source operating time in reporting period: 2,184 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	10
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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 5/18/20

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

Total source operating time in reporting period: 2,184 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	10
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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/8/20

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

Total source operating time in reporting period: 2,184 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	10
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: **Total Sulfur**

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

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/9/20

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

Total source operating time in reporting period: 2,184 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	14
e. Unknown causes	0
2. Total CMS Downtime	14
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.6 %

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

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

**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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/9/20

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

Total source operating time in reporting period: 2,184 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	14
e. Unknown causes	0
2. Total CMS Downtime	16
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.7 %

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

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

**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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/9/20

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

Total source operating time in reporting period: 2,184 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	15
e. Unknown causes	0
2. Total CMS Downtime	16
3. Total duration of CMS Downtime x (100) [Total source operating time] ²	0.7 %

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

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

**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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: 2,184 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	10
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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: 2,184 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	10
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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: 2,184 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	10
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))

For all CMS covered in this report, no changes were made in the 2nd Quarter 2020 to CMS, process, or controls.

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

Daniel Patnoad

Name

D. Patnoad

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/6/20

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

Total source operating time in reporting period: 2,176 hours

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 12-HRA (ppm)	Cause	Corrective Action
4/15/20	04:00	20:00	16	846	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 startup with no acid gas feed to the unit and the Tail Gas Treater (TGT) bypassed. The startup was after a unit trip caused by high liquid level in the Acid Gas Knock Out Pot. The high liquid level occurred while transferring amine contaminated with hydrocarbons from the Hydrocracker Unit to the #1 Amine Unit. Lastly, a malfunctioning TGT feed valve actuator delayed the startup.	Valero repaired the TGT feed valve actuator and completed the startup. Valero determined the root causes of the high liquid level were multiple instrumentation failures that prevented the #1 Amine Unit from indicating the presence of excessive hydrocarbons to operators and preventing the automatic draining of the Acid Gas Knock Out Pot. Valero will repair these instruments or evaluate upgrading their installation.
4/16/20	01:00	23:00	22	681		
TOTAL			38			

Ja CMS PERFORMANCE¹						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
4/20/20	19:00	20:00	1	Changed sample filter and cleaned out sample probe.	Analyzer calibrated and returned to service.	
TOTAL			1			

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

**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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/7/20

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

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

Ja EXCESS EMISSIONS						
Date	Start	End	Duration (hours)	Max 12-HRA (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: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/7/20

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 0127-1,613 hours; EQT 0159-2,036 hours

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

Ja CMS PERFORMANCE ¹ – EQT 0127						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
4/7/20	10:00	11:00	1	Relative Accuracy Test Audit.	N/A	
TOTAL			1			

Ja CMS PERFORMANCE ¹ – EQT 0159						
Date	Start	End	Duration (hours)	Cause	Corrective Action	
4/7/20	10:00	11:00	1	Relative Accuracy Test Audit.	N/A	
5/3/20	13:00	14:00	1	Preventative maintenance and changed filters.	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: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/6/20

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

Total source operating time in reporting period: 1,613 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/8/20

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

Total source operating time in reporting period: 2,036 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	
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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 5/19/20

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

Total source operating time in reporting period: 2,184 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
4/10/20	01:00	11:00	10	Loss of all flare monitoring data from Distributed Control System (DCS) due to damage to connections resulting from fire in Hydrocracker Unit.	Valero restored DCS functionality.
TOTAL			10		

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 5/18/20

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

Total source operating time in reporting period: 2,184 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	
4/10/20	01:00	11:00	10	Loss of all flare monitoring data from Distributed Control System (DCS) due to damage to connections resulting from fire in Hydrocracker Unit.	Valero restored DCS functionality.	
TOTAL			10			

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 2/13/20

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

Total source operating time in reporting period: 2,184 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	
4/10/20	01:00	11:00	10	Loss of all flare monitoring data from Distributed Control System (DCS) due to damage to connections resulting from fire in Hydrocracker Unit.	Valero restored DCS functionality.	
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: **Total Sulfur**

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

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/9/20

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

Total source operating time in reporting period: 2,184 hours

Ja CMS PERFORMANCE¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/10/20	01:00	11:00	10	Loss of all flare monitoring data from Distributed Control System (DCS) due to damage to connections resulting from fire in Hydrocracker Unit.	Valero restored DCS functionality.
6/2/20	08:00	12:00	4	Annual preventative maintenance by manufacturer.	Calibrated and returned to service.
TOTAL			14		

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/9/20

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

Total source operating time in reporting period: 2,184 hours

Ja CMS PERFORMANCE ¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/10/20	01:00	11:00	10	Loss of all flare monitoring data from Distributed Control System (DCS) due to damage to connections resulting from fire in Hydrocracker Unit.	Valero restored DCS functionality.
5/16/20	12:00	14:00	2	Analyzer adjusted for calibration drift and range change functionality.	Calibrated and returned to service.
6/1/20	13:00	17:00	4	Annual preventative maintenance by manufacturer.	Calibrated and returned to service.
TOTAL			16		

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: RATA on 4/9/20

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

Total source operating time in reporting period: 2,184 hours

Ja CMS PERFORMANCE¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/9/20	13:00	14:00	1	Relative Accuracy Test Audit.	N/A
4/10/20	01:00	11:00	10	Loss of all flare monitoring data from Distributed Control System (DCS) due to damage to connections resulting from fire in Hydrocracker Unit.	Valero restored DCS functionality.
6/2/20	12:00	17:00	5	Annual preventative maintenance by manufacturer.	Calibrated and returned to service.
TOTAL			16		

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: 2,184 hours

Ja CMS PERFORMANCE ¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/10/20	01:00	11:00	10	Loss of all flare monitoring data from Distributed Control System (DCS) due to damage to connections resulting from fire in Hydrocracker Unit.	Valero restored DCS functionality.
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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: 2,184 hours

Ja CMS PERFORMANCE¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/10/20	01:00	11:00	10	Loss of all flare monitoring data from Distributed Control System (DCS) due to damage to connections resulting from fire in Hydrocracker Unit.	Valero restored DCS functionality.
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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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: 2,184 hours

Ja CMS PERFORMANCE ¹					
Date	Start	End	Duration (hours)	Cause	Corrective Action
4/10/20	01:00	11:00	10	Loss of all flare monitoring data from Distributed Control System (DCS) due to damage to connections resulting from fire in Hydrocracker Unit.	Valero restored DCS functionality.
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.

DATA ASSESSMENT REPORT

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

Pollutant: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

SO ₂ corrected to 0% O ₂	
Date of Audit	4/6/20
Reference Method	EPA Method 6C/ EPA Method 3A
Average RM Value (ppmv)	49.53
Average CEM Value (ppmv)	49.07
Accuracy	1.25 %
Limit	< 10%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **SO₂**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

SO ₂ corrected to 0% O ₂	
Date of Audit	4/7/20
Reference Method	EPA Method 6C/ EPA Method 3A
Average RM Value (ppmv)	31.07
Average CEM Value (ppmv)	27.85
Accuracy	1.86 %
Limit	< 10%

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **H₂S**

Applicable NSPS Subpart: J

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S #1</u>	<u>H₂S #2</u>
Date of Audit	4/7/20	4/7/20
Reference Method	EPA Method 11 (Alternate RATA)	EPA Method 11 (Alternate RATA)
Average RM Value (ppmv)	81.94	172.10
Average CEM Value (ppmv)	82.10	170.09
Accuracy	0.20 %	1.17 %
Limit	< 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S #1</u>	<u>H₂S #2</u>
Date of Audit	4/7/20	4/7/20
Reference Method	EPA Method 11 (Alternate RATA)	EPA Method 11 (Alternate RATA)
Average RM Value (ppmv)	81.94	172.10
Average CEM Value (ppmv)	86.51	179.68
Accuracy	5.57 %	4.40%
Limit	< 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S #1</u>	<u>H₂S #2</u>
Date of Audit	4/6/20	4/6/20
Reference Method	EPA Method 11 (Alternate RATA)	EPA Method 11 (Alternate RATA)
Average RM Value (ppmv)	81.94	172.10
Average CEM Value (ppmv)	75.53	157.08
Accuracy	7.82 %	8.73 %
Limit	< 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S #1</u>	<u>H₂S #2</u>
Date of Audit	4/7/20	4/7/20
Reference Method	EPA Method 11 (Alternate RATA)	EPA Method 11 (Alternate RATA)
Average RM Value (ppmv)	81.94	172.10
Average CEM Value (ppmv)	76.35	156.70
Accuracy	6.83 %	8.95 %
Limit	< 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S #1</u>	<u>H₂S #2</u>
Date of Audit	4/6/20	4/6/20
Reference Method	EPA Method 11 (Alternate RATA)	EPA Method 11 (Alternate RATA)
Average RM Value (ppmv)	81.94	172.10
Average CEM Value (ppmv)	80.75	169.13
Accuracy	1.46 %	1.72 %
Limit	< 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

NO _x lb/MMBtu	
Date of Audit	4/7/20
Reference Method	EPA Method 7E / EPA Method 3A
Average RM Value	0.02409 lb/MMBtu
Average CEM Value	0.03251 lb/MMBtu
Accuracy	4.39 %
Limit	< 10 %

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

NO _x lb/MMBtu	
Date of Audit	4/7/20
Reference Method	EPA Method 7E / EPA Method 3A
Average RM Value	0.02065 lb/MMBtu
Average CEM Value	0.02261 lb/MMBtu
Accuracy	1.04 %
Limit	< 10 %

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Db

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

NO _x lb/MMBtu	
Date of Audit	5/18/20
Reference Method	EPA Method 7E / EPA Method 3A
Average RM Value	0.04273 lb/MMBtu
Average CEM Value	0.04054 lb/MMBtu
Accuracy	1.23 %
Limit	< 10 %

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **NO_x**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	NO _x at 0% O ₂	O ₂
Date of Audit	4/6/20	4/6/20
Reference Method	EPA Method 7E	EPA Method 3A
Average RM Value	24.74 ppmv at 0% O ₂	7.349 vol %
Average CEM Value	24.09 ppmv at 0% O ₂	7.323 vol %
Accuracy	3.72 %	N/A
Limit	< 20 %	N/A

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	NO _x at 0% O ₂	O ₂
Date of Audit	4/8/20	4/8/20
Reference Method	EPA Method 7E	EPA Method 3A
Average RM Value	24.15 ppmv at 0% O ₂	4.736 vol %
Average CEM Value	26.63 ppmv at 0% O ₂	4.721 vol %
Accuracy	11.22 %	N/A
Limit	< 20 %	N/A

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	NO _x at 0% O ₂	O ₂
Date of Audit	4/9/20	4/9/20
Reference Method	EPA Method 7E	EPA Method 3A
Average RM Value	15.41 ppmv at 0% O ₂	5.374 vol %
Average CEM Value	15.96 ppmv at 0% O ₂	5.479 vol %
Accuracy	0.82 %	N/A
Limit	< 10 %	N/A

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	NO _x at 0% O ₂	O ₂
Date of Audit	5/20/20	5/20/20
Reference Method	EPA Method 7E	EPA Method 3A
Average RM Value	17.92 ppmv at 0% O ₂	8.748 vol %
Average CEM Value	18.79 ppmv at 0% O ₂	8.515 vol %
Accuracy	6.85 %	N/A
Limit	< 20 %	N/A

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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S</u>
Date of Audit	5/19/20
Reference Method	EPA Method 11
Average RM Value (ppmv)	11.54 ppmv
Average CEM Value (ppmv)	7.54 ppmv
Accuracy	5.20 %
Limit	< 10 %

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S</u>
Date of Audit	5/18/20
Reference Method	EPA Method 11
Average RM Value (ppmv)	72.95 ppmv
Average CEM Value (ppmv)	80.25 ppmv
Accuracy	9.28 %
Limit	< 10 %

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **H₂S**

Applicable NSPS Subpart: Ja

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S</u>
Date of Audit	4/8/20
Reference Method	EPA Method 11
Average RM Value (ppmv)	6.58 ppmv
Average CEM Value (ppmv)	7.37 ppmv
Accuracy	1.10 %
Limit	< 10 %

II. CALIBRATION DRIFT ASSESSMENT

A. Out of Control Periods:

1. Dates: N/A

2. Number of Days N/A

B. Corrective Actions: N/A

DATA ASSESSMENT REPORT

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

Pollutant: **Total Sulfur**

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

Reporting period dates: From 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S #1</u>	<u>H₂S #2</u>
Date of Audit	4/9/20	4/9/20
Reference Method	PS 2	PS 2
	Alternate RATA	Alternate RATA
Average RM Value (ppmv)	1113	10040
Average CEM Value (ppmv)	1152	9883
Accuracy	3.50 %	1.56 %
Limit	< 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S #1</u>	<u>H₂S #2</u>
Date of Audit	4/9/20	4/9/20
Reference Method	PS 2	PS 2
	Alternate RATA	Alternate RATA
Average RM Value (ppmv)	1113	10040 ¹
Average CEM Value (ppmv)	1134	9924
Accuracy	1.90 %	1.16 %
Limit	< 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 4/1/20 to 6/30/20

Date submitted: 7/30/20

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 (RATA):

	<u>H₂S #1</u>	<u>H₂S #2</u>
Date of Audit	4/9/20	4/9/20
Reference Method	PS 2	PS 2
	Alternate RATA	Alternate RATA
Average RM Value (ppmv)	1113	10040 ¹
Average CEM Value (ppmv)	1159	10015
Accuracy	4.13 %	0.24 %
Limit	< 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 Analysis

Incident Number: 419653

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

Report: Final
 Refinery: Valero (Meraux)
 Incident Type: SRU (SO2)
 Emissions Source(s): #2 SRU Incinerator (EPN 1-93, EQT 0019)
#3 SRU Incinerator (EPN 5-00, EQT 0079)

Date of Event: 9/13/19
 Date Analysis Completed: 10/24/19

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

A description of the Discharge:

On September 13, 2019 a contractor operating an extended boom forklift on the roadway running along the refinery's east fenceline struck an overhead cable tray containing the east plant electrical feed, causing a partial loss of power in the refinery. Multiple refinery units were upset and the #2 Sulfur Recovery Unit (SRU) immediately tripped offline. Valero quickly initiated its sulfur shedding procedures and transferred all the acid gas feed to the #3 SRU, which had remained operating through the power loss. During the upset some hydrocarbons carried over into the amine system and upset the #3 SRU. The #3 SRU remained operating, but with elevated SO2 emissions. The combined SO2 emissions from the #3 SRU while it was upset and the #2 SRU while it was in hot standby or starting up exceeded 500 lbs above allowed in a 24 hour period. Flaring from this event did not exceed 500 lbs or 500,000 scf in a 24 hour period.

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

	#2 SRU	#3 SRU
Date/Time discharge was first identified	<u>9/13/19 13:36</u>	<u>9/13/19 11:31</u>
Date/Time discharge had ceased	<u>9/14/19 23:33</u>	<u>9/13/19 20:46</u>
Duration of Discharge (Calculated)	<u>33.9</u>	<u>9.2 hrs</u>

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

The steps taken to limit the emissions during the discharge:

Valero followed its Operations Procedures to the maximum extent possible to minimize the 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 determined the root cause of this incident to be the forklift collision with the cable tray. The cable tray crossed over the roadway with a 12 foot clearance and was not brightly painted and there was not a sign displaying the clearance. The forklift was carrying a load of coiled hoses hung from the forks and the boom was elevated to keep the hoses from dragging on the ground. This obstructed the view of the driver and exceeded the 12 ft clearance.

Valero also determined that the hydrocarbon carryover that caused a large portion of the SO2 emissions from the #3 SRU was caused by a stuck level indication in the #1 Amine Unit and a surge in hydrocarbon flow from overflowing the Naphtha Hydrotreater (NHT) Feed Surge Drum. The NHT feed pumps were lost from the power failure, but the naphtha feed to the NHT from the Hydrocracker Unit was not secured in a timely manner.

(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 necessary.

Is corrective action required? Yes (Yes/No)

- 1) *Remove the cable tray where it crosses the road and reroute the electrical feed through an underground duct bank.*
- 2) *Verify that all refinery roadway overhead clearances are brightly painted and have signs indicating the clearance height.*
- 3) *Update site procedures with requirements for the safe operation of extended boom forklifts, including the use of governors to limit the maximum speed these vehicles can achieve.*
- 4) *Evaluate forklift training for the proper transportation of equipment and materials.*
- 5) *Evaluate the access points to the east refinery roadway and protection of the 13.8 kV transmission lines along the east fence.*
- 6) *Evaluate the Rich Amine Flash Drum Level transmitter to determine if it is the correct device for that service and check the calibration.*
- 7) *Evaluate the NHT emergency shutdown procedures to ensure feed sources from other units are properly secured.*

(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) *Remove the cable tray where it crosses the road and reroute the electrical feed through an underground duct bank.*
Commencement Date: 10/24/19
Completed: 12/6/19
- 2) *Verify that all refinery roadway overhead clearances are brightly painted and have signs indicating the clearance height.*
Commencement Date: 10/24/19
Completed: 4/22/20
- 3) *Update site procedures with requirements for the safe operation of extended boom forklifts, including the use of governors to limit the maximum speed these vehicles can achieve.*
Commencement Date: 10/24/19
Completed: 1/20/20
- 4) *Evaluate forklift training for the proper transportation of equipment and materials.*
Commencement Date: 10/24/19
Completed: 1/19/20
- 5) *Evaluate the access points to the east refinery roadway and protection of the 13.8 kV transmission lines along the east fence.*
Commencement Date: 10/24/19
Completed: 12/3/19
- 6) *Evaluate the Rich Amine Flash Drum Level transmitter to determine if it is the correct device for that service and check the calibration.*
Commencement Date: 10/24/19
Completed: 12/16/19
- 7) *Evaluate the NHT emergency shutdown procedures to ensure feed sources from other units are properly secured.*
Commencement Date: 10/24/19
Completed: 1/14/20

(8.) #2 and #3 SRU

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)(vi))	(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	SO2 ppm (24-hr average, flow-weighted) ¹	24-hr cumulative SO2 above allowable ²	24-hr cumulative reduced sulfur above allowable
		SCF	ppmv	lbs	lbs as H2S
9/12/19 12:00	9/13/19 11:00	654,979	33	0.0	0.0
9/12/19 13:00	9/13/19 12:00	772,254	41	7.4	0.0
9/12/19 14:00	9/13/19 13:00	675,323	45	14.7	0.0
9/12/19 15:00	9/13/19 14:00	660,843	92	101.4	0.0
9/12/19 16:00	9/13/19 15:00	608,866	120	148.8	0.1
9/12/19 17:00	9/13/19 16:00	552,136	124	152.4	0.1
9/12/19 18:00	9/13/19 17:00	552,818	149	196.7	0.2
9/12/19 19:00	9/13/19 18:00	668,064	203	325.4	0.3
9/12/19 20:00	9/13/19 19:00	688,823	255	441.6	0.4
9/12/19 21:00	9/13/19 20:00	677,689	273	470.8	0.5
9/12/19 22:00	9/13/19 21:00	656,787	279	474.7	0.6
9/12/19 23:00	9/13/19 22:00	623,447	283	478.0	0.6
9/13/19 0:00	9/13/19 23:00	626,628	285	478.6	0.6
9/13/19 1:00	9/14/19 0:00	640,391	284	478.6	0.6
9/13/19 2:00	9/14/19 1:00	679,915	283	478.6	0.6
9/13/19 3:00	9/14/19 2:00	681,033	285	478.6	0.6
9/13/19 4:00	9/14/19 3:00	657,059	287	478.6	0.6
9/13/19 5:00	9/14/19 4:00	668,047	287	478.6	0.6
9/13/19 6:00	9/14/19 5:00	672,207	287	478.6	0.6
9/13/19 7:00	9/14/19 6:00	695,319	286	478.6	0.6
9/13/19 8:00	9/14/19 7:00	732,441	284	478.6	0.6
9/13/19 9:00	9/14/19 8:00	748,911	284	478.6	0.6
9/13/19 10:00	9/14/19 9:00	830,899	281	478.6	0.6
9/13/19 11:00	9/14/19 10:00	901,700	279	478.6	0.6
9/13/19 12:00	9/14/19 11:00	911,987	278	478.3	0.6
9/13/19 13:00	9/14/19 12:00	903,982	291	492.0	0.7
9/13/19 14:00	9/14/19 13:00	831,482	296	508.8	0.8
9/13/19 15:00	9/14/19 14:00	815,623	273	443.4	0.9
9/13/19 16:00	9/14/19 15:00	803,358	264	406.8	0.9
9/13/19 17:00	9/14/19 16:00	834,029	277	414.3	1.0
9/13/19 18:00	9/14/19 17:00	806,390	261	398.1	1.0
9/13/19 19:00	9/14/19 18:00	823,771	207	297.2	1.0
9/13/19 20:00	9/14/19 19:00	823,898	163	208.9	1.1
9/13/19 21:00	9/14/19 20:00	800,657	149	207.3	1.1
9/13/19 22:00	9/14/19 21:00	797,416	155	230.9	1.2
9/13/19 23:00	9/14/19 22:00	805,452	161	255.1	1.4
9/14/19 0:00	9/14/19 23:00	805,459	165	266.7	1.4
9/14/19 1:00	9/15/19 0:00	701,928	169	266.7	1.4

¹ SRU SO2 CEMS are spanned to 500 ppm. For emissions calculations, Valero assumes 2 times the span, 1000 ppm, for CEMS readings >= 500 ppm.

² Tail Gas Treater bypass emissions are calculated using a mass balance method, not using the flow and concentration values listed here.

Subpart Ja Root Cause / Corrective Action AnalysisIncident Number: **431400***The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*

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

Date of Event: 4/9/20
 Date Analysis Completed: 5/18/20

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

On April 10, 2020 at approximately 00:45, the Hydrocracker Unit experienced a loss of containment, resulting in a vapor release and ignition, followed by a fire. Valero immediately shut down the unit, per written operating procedures.

Valero has determined the root causes. At approximately 11:40 PM on April 9th, a brief, but intense rainstorm passed over the refinery. Shortly afterwards, a vessel in the Hydrocracker Unit began relieving to the North Flare via a Pressure Safety Valve (PSV). It was determined that the elevated pressure had subsided, but the PSV had not fully reseated. A plan was developed to briefly close an inlet valve at the PSV to reseat the PSV. This plan was approved by Operations management and documented through Meraux's Process Safety Management program.

However, due to concerns regarding access and egress at the targeted valve, several operators changed the plan in the field, instead opting for the closure of the outlet valve of the PSV. The outlet valve is intended to isolate the PSV from the downstream flare gas header (low pressure system). It is not designed for the upstream process side of the PSV (high pressure system). When the decision was made to change the plan, the hazards introduced by using the outlet valve were not identified or discussed. It was not recognized that additional review and approval by Operations management was necessary to authorize this change. A review of the new plan would have revealed that the closure of the outlet valve only would result in it being exposed to pressure in excess of its design. When the outlet valve was closed, it immediately failed, resulting in a release of a pressurized hydrogen/hydrocarbon mix which quickly ignited.

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

Date and Time the discharge was first identified 4/9/20 23:39
 Date/Time the discharge had ceased 4/10/20 3:58
 Duration of Discharge (Calculated) 4.3 hrs.

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

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

(4.) (60.108a(c)(6)(xi))**Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:**

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

Did the discharge result from a planned startup or shutdown? 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)

The root cause of this incident was the closing of the downstream block valve for the discharging PSV. This led to the containment failure and required the emergency depressurization of the Hydrocracker Unit.

(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. *Update the PSM "Critical Safety Device Disabling Procedure" to emphasize the appropriate operation of PSV inlet and outlet valves.*
2. *Revise the "PSV Isolation Approval Form" to account for any changes made to the procedure and to highlight potential hazards.*
3. *Train all affected personnel on the updates, and incorporate in Basic Operator Training materials.*

(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) *Update the PSM "Critical Safety Device Disabling Procedure" to emphasize the appropriate operation of PSV inlet and outlet valves.*

Commencement Date: 5/18/20

Estimated Completion Date: 9/22/20

- 2) *Revise the "PSV Isolation Approval Form" to account for any changes made to the procedure and to highlight potential hazards. Timing of this may be affected by a company-wide effort to update the performance standard, which could affect wording on the form.*

Commencement Date: 5/18/20

Estimated Completion Date: 9/22/20

- 3) *Train all affected personnel on the updates, and incorporate in Basic Operator Training materials.*

Commencement Date: 5/18/20

Estimated Completion Date: 11/24/20

(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
4/8/20 23:00	4/9/20 22:00	54,143	15	0.6	0.0
4/9/20 0:00	4/9/20 23:00	87,240	1864	12.2	0.1
4/9/20 1:00	4/10/20 0:00	238,978	2588	78.8	0.4
4/9/20 2:00	4/10/20 1:00	Flare monitoring data lost due to damage to the Distributed Control System from the fire. Estimated flared gas volume is 1,000,000 SCF and estimated SO2 and reduced sulfur emissions were 3000 lbs and 16 lbs, respectively.			
4/9/20 3:00	4/10/20 2:00				
4/9/20 4:00	4/10/20 3:00				
4/9/20 5:00	4/10/20 4:00				
4/9/20 6:00	4/10/20 5:00				
4/9/20 7:00	4/10/20 6:00				
4/9/20 8:00	4/10/20 7:00				
4/9/20 9:00	4/10/20 8:00				
4/9/20 10:00	4/10/20 9:00				
4/9/20 11:00	4/10/20 10:00				
4/9/20 12:00	4/10/20 11:00	195,679	265	79.0	0.4
4/9/20 13:00	4/10/20 12:00	195,775	251	79.2	0.4

Subpart Ja Root Cause / Corrective Action AnalysisIncident 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: 4/11/20
 Date Analysis Completed: N/A

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

A description of the Discharge:*This discharge resulted from the shutdown of the Hydrocracker Unit following the fire and emergency depressurization on 4/10/20. 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 4/11/20 20:33
 Date/Time the discharge had ceased 4/19/20 5:33
 Duration of Discharge (Calculated) 177.0 hrs.

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

The steps taken to limit the emissions during the discharge:*Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume of this discharge. 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
4/10/20 20:00	4/11/20 19:00	471,102	116	17.6	0.1
4/10/20 21:00	4/11/20 20:00	487,218	263	18.4	0.1
4/10/20 22:00	4/11/20 21:00	551,314	294	21.7	0.1
4/10/20 23:00	4/11/20 22:00	650,984	1856	58.6	0.3
4/11/20 0:00	4/11/20 23:00	803,959	1279	95.2	0.5
4/11/20 1:00	4/12/20 0:00	965,715	541	111.1	0.6
4/11/20 2:00	4/12/20 1:00	1,133,195	530	127.2	0.7
4/11/20 3:00	4/12/20 2:00	1,312,432	389	139.8	0.8
4/11/20 4:00	4/12/20 3:00	1,525,655	299	151.1	0.8
4/11/20 5:00	4/12/20 4:00	1,729,058	309	162.2	0.9
4/11/20 6:00	4/12/20 5:00	1,921,127	377	175.0	0.9
4/11/20 7:00	4/12/20 6:00	2,107,406	407	188.2	1.0
4/11/20 8:00	4/12/20 7:00	2,292,397	406	201.2	1.1
4/11/20 9:00	4/12/20 8:00	2,480,167	414	214.8	1.2
4/11/20 10:00	4/12/20 9:00	2,661,286	442	229.0	1.2
4/11/20 11:00	4/12/20 10:00	2,841,879	438	243.1	1.3
4/11/20 12:00	4/12/20 11:00	3,025,839	422	256.9	1.4
4/11/20 13:00	4/12/20 12:00	3,217,073	407	270.8	1.5
4/11/20 14:00	4/12/20 13:00	3,420,365	393	284.9	1.5
4/11/20 15:00	4/12/20 14:00	3,625,722	368	298.0	1.6
4/11/20 16:00	4/12/20 15:00	3,853,131	350	311.9	1.7
4/11/20 17:00	4/12/20 16:00	4,083,132	336	325.2	1.7
4/11/20 18:00	4/12/20 17:00	4,304,975	324	337.5	1.8
4/11/20 19:00	4/12/20 18:00	4,570,971	487	359.4	1.9
4/11/20 20:00	4/12/20 19:00	4,893,760	1263	430.7	2.3
4/11/20 21:00	4/12/20 20:00	5,152,692	1854	519.3	2.8
4/11/20 22:00	4/12/20 21:00	5,255,268	374	526.8	2.8
4/11/20 23:00	4/12/20 22:00	5,387,143	290	501.3	2.7
4/12/20 0:00	4/12/20 23:00	5,478,028	297	477.1	2.6
4/12/20 1:00	4/13/20 0:00	5,553,244	304	473.7	2.5
4/12/20 2:00	4/13/20 1:00	5,657,290	296	471.4	2.5
4/12/20 3:00	4/13/20 2:00	5,763,636	303	473.8	2.5
4/12/20 4:00	4/13/20 3:00	5,791,026	290	474.8	2.6
4/12/20 5:00	4/13/20 4:00	5,809,702	277	474.4	2.5
4/12/20 6:00	4/13/20 5:00	5,840,032	258	471.5	2.5
4/12/20 7:00	4/13/20 6:00	5,873,227	252	467.5	2.5
4/12/20 8:00	4/13/20 7:00	5,907,363	244	463.3	2.5
4/12/20 9:00	4/13/20 8:00	5,940,812	232	458.3	2.5
4/12/20 10:00	4/13/20 9:00	5,979,870	230	452.5	2.4
4/12/20 11:00	4/13/20 10:00	6,021,213	227	446.8	2.4
4/12/20 12:00	4/13/20 11:00	6,059,521	217	441.0	2.4
4/12/20 13:00	4/13/20 12:00	6,093,224	211	435.1	2.3
4/12/20 14:00	4/13/20 13:00	6,112,707	207	428.7	2.3
4/12/20 15:00	4/13/20 14:00	6,123,881	192	422.3	2.3
4/12/20 16:00	4/13/20 15:00	6,111,844	182	415.0	2.2
4/12/20 17:00	4/13/20 16:00	6,098,611	173	407.7	2.2
4/12/20 18:00	4/13/20 17:00	6,094,603	156	400.9	2.2
4/12/20 19:00	4/13/20 18:00	6,046,668	141	383.7	2.1

(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
4/12/20 20:00	4/13/20 19:00	5,936,221	129	317.0	1.7
4/12/20 21:00	4/13/20 20:00	6,011,549	107	233.4	1.3
4/12/20 22:00	4/13/20 21:00	6,224,222	92	227.7	1.2
4/12/20 23:00	4/13/20 22:00	6,377,057	102	222.4	1.2
4/13/20 0:00	4/13/20 23:00	6,512,699	92	215.4	1.2
4/13/20 1:00	4/14/20 0:00	6,665,912	89	208.4	1.1
4/13/20 2:00	4/14/20 1:00	6,787,439	77	199.3	1.1
4/13/20 3:00	4/14/20 2:00	6,902,898	74	189.0	1.0
4/13/20 4:00	4/14/20 3:00	7,118,510	128	186.5	1.0
4/13/20 5:00	4/14/20 4:00	7,450,194	114	186.1	1.0
4/13/20 6:00	4/14/20 5:00	7,773,112	76	182.8	1.0
4/13/20 7:00	4/14/20 6:00	8,092,338	59	178.1	1.0
4/13/20 8:00	4/14/20 7:00	8,412,298	49	172.9	0.9
4/13/20 9:00	4/14/20 8:00	8,701,004	43	167.3	0.9
4/13/20 10:00	4/14/20 9:00	8,995,233	43	161.7	0.9
4/13/20 11:00	4/14/20 10:00	9,303,671	39	155.9	0.8
4/13/20 12:00	4/14/20 11:00	9,647,795	37	150.6	0.8
4/13/20 13:00	4/14/20 12:00	10,045,885	34	145.5	0.8
4/13/20 14:00	4/14/20 13:00	10,468,533	30	140.3	0.8
4/13/20 15:00	4/14/20 14:00	10,904,153	28	135.7	0.7
4/13/20 16:00	4/14/20 15:00	11,345,539	26	131.5	0.7
4/13/20 17:00	4/14/20 16:00	11,784,439	25	127.4	0.7
4/13/20 18:00	4/14/20 17:00	12,226,271	23	123.8	0.7
4/13/20 19:00	4/14/20 18:00	12,684,431	23	121.0	0.7
4/13/20 20:00	4/14/20 19:00	13,142,928	22	118.5	0.6
4/13/20 21:00	4/14/20 20:00	13,442,918	23	114.5	0.6
4/13/20 22:00	4/14/20 21:00	13,718,425	21	110.7	0.6
4/13/20 23:00	4/14/20 22:00	13,997,274	19	106.1	0.6
4/14/20 0:00	4/14/20 23:00	14,286,739	18	102.0	0.5
4/14/20 1:00	4/15/20 0:00	14,546,022	19	98.1	0.5
4/14/20 2:00	4/15/20 1:00	14,767,915	18	94.7	0.5
4/14/20 3:00	4/15/20 2:00	15,004,917	17	91.4	0.5
4/14/20 4:00	4/15/20 3:00	15,189,942	15	82.9	0.4
4/14/20 5:00	4/15/20 4:00	15,284,577	15	73.7	0.4
4/14/20 6:00	4/15/20 5:00	15,399,249	25	69.4	0.4
4/14/20 7:00	4/15/20 6:00	15,537,271	24	66.8	0.4
4/14/20 8:00	4/15/20 7:00	15,664,069	27	65.3	0.4
4/14/20 9:00	4/15/20 8:00	15,825,270	21	64.0	0.3
4/14/20 10:00	4/15/20 9:00	15,978,980	17	62.1	0.3
4/14/20 11:00	4/15/20 10:00	16,112,087	15	60.3	0.3
4/14/20 12:00	4/15/20 11:00	16,223,014	15	58.4	0.3
4/14/20 13:00	4/15/20 12:00	16,278,926	14	56.5	0.3
4/14/20 14:00	4/15/20 13:00	16,288,853	14	54.7	0.3
4/14/20 15:00	4/15/20 14:00	16,299,857	13	53.0	0.3
4/14/20 16:00	4/15/20 15:00	16,174,193	13	51.2	0.3
4/14/20 17:00	4/15/20 16:00	15,841,373	15	49.3	0.3
4/14/20 18:00	4/15/20 17:00	15,451,138	15	47.4	0.3
4/14/20 19:00	4/15/20 18:00	15,057,532	186	54.0	0.3

(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
4/14/20 20:00	4/15/20 19:00	14,671,878	60	54.5	0.3
4/14/20 21:00	4/15/20 20:00	14,312,349	40	54.0	0.3
4/14/20 22:00	4/15/20 21:00	13,947,315	25	52.9	0.3
4/14/20 23:00	4/15/20 22:00	13,565,555	21	51.8	0.3
4/15/20 0:00	4/15/20 23:00	13,170,277	19	50.7	0.3
4/15/20 1:00	4/16/20 0:00	12,727,005	22	49.4	0.3
4/15/20 2:00	4/16/20 1:00	12,318,244	20	48.3	0.3
4/15/20 3:00	4/16/20 2:00	11,887,301	18	47.1	0.3
4/15/20 4:00	4/16/20 3:00	11,445,849	15	46.0	0.2
4/15/20 5:00	4/16/20 4:00	10,996,226	14	44.9	0.2
4/15/20 6:00	4/16/20 5:00	10,535,031	24	42.9	0.2
4/15/20 7:00	4/16/20 6:00	10,061,608	17	40.7	0.2
4/15/20 8:00	4/16/20 7:00	9,601,678	13	38.2	0.2
4/15/20 9:00	4/16/20 8:00	9,137,250	12	36.2	0.2
4/15/20 10:00	4/16/20 9:00	8,671,271	12	34.7	0.2
4/15/20 11:00	4/16/20 10:00	8,213,359	12	33.4	0.2
4/15/20 12:00	4/16/20 11:00	7,737,432	11	32.1	0.2
4/15/20 13:00	4/16/20 12:00	7,241,280	10	30.8	0.2
4/15/20 14:00	4/16/20 13:00	6,764,212	10	29.6	0.2
4/15/20 15:00	4/16/20 14:00	6,279,472	11	28.5	0.2
4/15/20 16:00	4/16/20 15:00	5,927,774	11	27.6	0.1
4/15/20 17:00	4/16/20 16:00	5,754,432	11	27.1	0.1
4/15/20 18:00	4/16/20 17:00	5,615,551	11	26.6	0.1
4/15/20 19:00	4/16/20 18:00	5,430,707	8	17.6	0.1
4/15/20 20:00	4/16/20 19:00	5,264,173	8	14.8	0.1
4/15/20 21:00	4/16/20 20:00	5,103,914	9	13.0	0.1
4/15/20 22:00	4/16/20 21:00	4,913,702	11	11.9	0.1
4/15/20 23:00	4/16/20 22:00	4,719,526	12	11.1	0.1
4/16/20 0:00	4/16/20 23:00	4,513,819	13	10.3	0.1
4/16/20 1:00	4/17/20 0:00	4,374,236	14	9.7	0.1
4/16/20 2:00	4/17/20 1:00	4,234,561	13	9.1	0.0
4/16/20 3:00	4/17/20 2:00	4,094,634	13	8.7	0.0
4/16/20 4:00	4/17/20 3:00	3,962,200	14	8.3	0.0
4/16/20 5:00	4/17/20 4:00	3,830,022	13	8.0	0.0
4/16/20 6:00	4/17/20 5:00	3,699,197	23	7.5	0.0
4/16/20 7:00	4/17/20 6:00	3,564,525	17	7.1	0.0
4/16/20 8:00	4/17/20 7:00	3,410,709	14	6.8	0.0
4/16/20 9:00	4/17/20 8:00	3,196,718	10	6.3	0.0
4/16/20 10:00	4/17/20 9:00	2,972,017	13	5.9	0.0
4/16/20 11:00	4/17/20 10:00	2,743,761	17	5.5	0.0
4/16/20 12:00	4/17/20 11:00	2,519,611	17	5.0	0.0
4/16/20 13:00	4/17/20 12:00	2,313,911	19	4.7	0.0
4/16/20 14:00	4/17/20 13:00	2,112,564	20	4.4	0.0
4/16/20 15:00	4/17/20 14:00	1,910,878	22	4.1	0.0
4/16/20 16:00	4/17/20 15:00	1,732,241	187	4.5	0.0
4/16/20 17:00	4/17/20 16:00	1,632,498	158	6.1	0.0
4/16/20 18:00	4/17/20 17:00	1,596,121	102	7.8	0.0
4/16/20 19:00	4/17/20 18:00	1,625,067	86	9.6	0.1

(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)(viii))
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
4/16/20 20:00	4/17/20 19:00	1,573,838	2209	41.9	0.2
4/16/20 21:00	4/17/20 20:00	1,513,698	714	52.4	0.3
4/16/20 22:00	4/17/20 21:00	1,402,991	286	52.8	0.3
4/16/20 23:00	4/17/20 22:00	1,296,680	106	52.7	0.3
4/17/20 0:00	4/17/20 23:00	1,209,646	105	52.6	0.3
4/17/20 1:00	4/18/20 0:00	1,124,092	105	52.4	0.3
4/17/20 2:00	4/18/20 1:00	1,038,575	104	52.3	0.3
4/17/20 3:00	4/18/20 2:00	952,222	105	52.2	0.3
4/17/20 4:00	4/18/20 3:00	865,875	103	52.1	0.3
4/17/20 5:00	4/18/20 4:00	779,181	101	51.9	0.3
4/17/20 6:00	4/18/20 5:00	692,008	105	51.7	0.3
4/17/20 7:00	4/18/20 6:00	604,342	104	51.5	0.3
4/17/20 8:00	4/18/20 7:00	533,272	97	51.4	0.3
4/17/20 9:00	4/18/20 8:00	521,609	79	51.4	0.3
4/17/20 10:00	4/18/20 9:00	521,609	71	51.5	0.3
4/17/20 11:00	4/18/20 10:00	521,609	57	51.5	0.3
4/17/20 12:00	4/18/20 11:00	521,609	47	51.5	0.3
4/17/20 13:00	4/18/20 12:00	523,167	56	51.5	0.3
4/17/20 14:00	4/18/20 13:00	621,781	152	54.1	0.3
4/17/20 15:00	4/18/20 14:00	734,142	109	56.2	0.3
4/17/20 16:00	4/18/20 15:00	916,585	63	57.6	0.3
4/17/20 17:00	4/18/20 16:00	1,143,350	27	56.9	0.3
4/17/20 18:00	4/18/20 17:00	1,151,198	26	55.5	0.3
4/17/20 19:00	4/18/20 18:00	1,143,875	31	54.2	0.3
4/17/20 20:00	4/18/20 19:00	1,146,500	28	22.2	0.1
4/17/20 21:00	4/18/20 20:00	1,093,171	41	11.8	0.1
4/17/20 22:00	4/18/20 21:00	1,115,392	121	11.8	0.1
4/17/20 23:00	4/18/20 22:00	1,149,641	260	13.4	0.1
4/18/20 0:00	4/18/20 23:00	1,186,593	282	15.2	0.1
4/18/20 1:00	4/19/20 0:00	1,230,509	219	16.9	0.1
4/18/20 2:00	4/19/20 1:00	1,656,179	52	20.5	0.1
4/18/20 3:00	4/19/20 2:00	2,144,580	16	21.7	0.1
4/18/20 4:00	4/19/20 3:00	2,456,576	14	22.4	0.1
4/18/20 5:00	4/19/20 4:00	2,509,174	18	22.5	0.1
4/18/20 6:00	4/19/20 5:00	2,522,557	237	23.1	0.1
4/18/20 7:00	4/19/20 6:00	2,522,557	12	23.0	0.1
4/18/20 8:00	4/19/20 7:00	2,522,557	11	23.0	0.1
4/18/20 9:00	4/19/20 8:00	2,522,559	13	22.9	0.1
4/18/20 10:00	4/19/20 9:00	2,522,559	16	22.9	0.1
4/18/20 11:00	4/19/20 10:00	2,522,559	19	22.9	0.1
4/18/20 12:00	4/19/20 11:00	2,522,559	22	22.8	0.1
4/18/20 13:00	4/19/20 12:00	2,521,001	22	22.8	0.1
4/18/20 14:00	4/19/20 13:00	2,422,387	20	20.2	0.1
4/18/20 15:00	4/19/20 14:00	2,310,026	21	18.1	0.1
4/18/20 16:00	4/19/20 15:00	2,106,830	20	16.0	0.1
4/18/20 17:00	4/19/20 16:00	1,809,397	20	14.7	0.1
4/18/20 18:00	4/19/20 17:00	1,690,003	19	14.2	0.1
4/18/20 19:00	4/19/20 18:00	1,559,228	18	13.5	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
4/18/20 20:00	4/19/20 19:00	1,471,855	16	13.1	0.1
4/18/20 21:00	4/19/20 20:00	1,439,254	15	12.8	0.1
4/18/20 22:00	4/19/20 21:00	1,407,167	15	12.1	0.1
4/18/20 23:00	4/19/20 22:00	1,372,919	16	10.5	0.1
4/19/20 0:00	4/19/20 23:00	1,335,966	13	8.6	0.0
4/19/20 1:00	4/20/20 0:00	1,292,051	14	6.8	0.0
4/19/20 2:00	4/20/20 1:00	866,380	19	3.2	0.0
4/19/20 3:00	4/20/20 2:00	377,979	20	1.9	0.0

Subpart Ja Root Cause / Corrective Action AnalysisIncident 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: 5/8/20
 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. 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 5/8/20 22:40
 Date/Time the discharge had ceased 5/9/20 4:05
 Duration of Discharge (Calculated) 5.4 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.
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
5/7/20 22:00	5/8/20 21:00	82,939	7	3.4	0.0
5/7/20 23:00	5/8/20 22:00	125,826	570	7.8	0.0
5/8/20 0:00	5/8/20 23:00	420,555	56	10.5	0.1
5/8/20 1:00	5/9/20 0:00	735,744	22	11.7	0.1
5/8/20 2:00	5/9/20 1:00	1,026,518	12	12.3	0.1
5/8/20 3:00	5/9/20 2:00	1,311,026	26	13.5	0.1
5/8/20 4:00	5/9/20 3:00	1,544,885	24	14.5	0.1
5/8/20 5:00	5/9/20 4:00	1,544,889	6	14.5	0.1
5/8/20 6:00	5/9/20 5:00	1,544,895	6	14.5	0.1
5/8/20 7:00	5/9/20 6:00	1,544,912	6	14.5	0.1
5/8/20 8:00	5/9/20 7:00	1,544,938	5	14.5	0.1
5/8/20 9:00	5/9/20 8:00	1,544,964	5	14.5	0.1
5/8/20 10:00	5/9/20 9:00	1,533,327	5	14.1	0.1
5/8/20 11:00	5/9/20 10:00	1,500,030	7	12.4	0.1
5/8/20 12:00	5/9/20 11:00	1,470,664	7	11.3	0.1
5/8/20 13:00	5/9/20 12:00	1,462,218	5	11.2	0.1
5/8/20 14:00	5/9/20 13:00	1,462,236	5	11.2	0.1
5/8/20 15:00	5/9/20 14:00	1,462,251	6	11.2	0.1
5/8/20 16:00	5/9/20 15:00	1,462,257	6	11.2	0.1
5/8/20 17:00	5/9/20 16:00	1,462,264	5	11.2	0.1
5/8/20 18:00	5/9/20 17:00	1,462,269	6	11.2	0.1
5/8/20 19:00	5/9/20 18:00	1,462,285	7	11.2	0.1
5/8/20 20:00	5/9/20 19:00	1,462,312	6	11.2	0.1
5/8/20 21:00	5/9/20 20:00	1,462,774	8	11.2	0.1
5/8/20 22:00	5/9/20 21:00	1,468,482	12	11.3	0.1
5/8/20 23:00	5/9/20 22:00	1,425,604	8	6.8	0.0
5/9/20 0:00	5/9/20 23:00	1,130,880	6	4.1	0.0
5/9/20 1:00	5/10/20 0:00	821,644	13	2.9	0.0
5/9/20 2:00	5/10/20 1:00	532,292	8	2.3	0.0
5/9/20 3:00	5/10/20 2:00	247,792	8	1.1	0.0

Subpart Ja Root Cause / Corrective Action AnalysisIncident 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: 5/10/20
 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. 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 5/10/20 4:32
 Date/Time the discharge had ceased 5/10/20 18:36
 Duration of Discharge (Calculated) 14.1 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.

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
5/9/20 4:00	5/10/20 3:00	13,932	7	0.1	0.0
5/9/20 5:00	5/10/20 4:00	27,811	30	0.2	0.0
5/9/20 6:00	5/10/20 5:00	289,114	66	3.1	0.0
5/9/20 7:00	5/10/20 6:00	635,165	45	5.7	0.0
5/9/20 8:00	5/10/20 7:00	795,257	17	6.2	0.0
5/9/20 9:00	5/10/20 8:00	856,882	36	6.6	0.0
5/9/20 10:00	5/10/20 9:00	1,085,568	58	8.8	0.0
5/9/20 11:00	5/10/20 10:00	1,400,714	59	11.9	0.1
5/9/20 12:00	5/10/20 11:00	1,717,092	59	15.0	0.1
5/9/20 13:00	5/10/20 12:00	2,032,336	100	20.3	0.1
5/9/20 14:00	5/10/20 13:00	2,187,763	88	22.6	0.1
5/9/20 15:00	5/10/20 14:00	2,292,720	71	23.9	0.1
5/9/20 16:00	5/10/20 15:00	2,404,660	75	25.3	0.1
5/9/20 17:00	5/10/20 16:00	2,519,248	75	26.8	0.1
5/9/20 18:00	5/10/20 17:00	2,632,527	81	28.4	0.2
5/9/20 19:00	5/10/20 18:00	2,675,639	78	29.0	0.2
5/9/20 20:00	5/10/20 19:00	2,675,612	10	29.0	0.2
5/9/20 21:00	5/10/20 20:00	2,675,150	7	29.0	0.2
5/9/20 22:00	5/10/20 21:00	2,669,443	8	28.9	0.2
5/9/20 23:00	5/10/20 22:00	2,669,427	8	28.9	0.2
5/10/20 0:00	5/10/20 23:00	2,669,409	11	28.9	0.2
5/10/20 1:00	5/11/20 0:00	2,663,452	14	28.9	0.2
5/10/20 2:00	5/11/20 1:00	2,662,029	17	28.9	0.2
5/10/20 3:00	5/11/20 2:00	2,662,027	16	28.9	0.2
5/10/20 4:00	5/11/20 3:00	2,662,032	18	29.0	0.2
5/10/20 5:00	5/11/20 4:00	2,648,160	16	28.9	0.2
5/10/20 6:00	5/11/20 5:00	2,386,867	16	26.0	0.1
5/10/20 7:00	5/11/20 6:00	2,040,825	16	23.4	0.1
5/10/20 8:00	5/11/20 7:00	1,885,605	13	23.0	0.1
5/10/20 9:00	5/11/20 8:00	1,823,966	12	22.6	0.1
5/10/20 10:00	5/11/20 9:00	1,595,258	14	20.4	0.1
5/10/20 11:00	5/11/20 10:00	1,296,939	140	17.7	0.1
5/10/20 12:00	5/11/20 11:00	1,009,886	199	15.7	0.1
5/10/20 13:00	5/11/20 12:00	713,307	168	11.1	0.1
5/10/20 14:00	5/11/20 13:00	557,861	14	8.8	0.0
5/10/20 15:00	5/11/20 14:00	452,890	10	7.5	0.0
5/10/20 16:00	5/11/20 15:00	340,943	11	6.1	0.0
5/10/20 17:00	5/11/20 16:00	226,348	11	4.6	0.0
5/10/20 18:00	5/11/20 17:00	193,763	1717	27.2	0.1
5/10/20 19:00	5/11/20 18:00	252,865	1868	59.4	0.3

Subpart Ja Root Cause / Corrective Action AnalysisIncident 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: 5/11/20
 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. 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 5/11/20 10:40
 Date/Time the discharge had ceased 5/12/20 19:40
 Duration of Discharge (Calculated) 33.0 hrs.

(3.) (60.108a(c)(6)(viii))**The steps taken to limit the emissions during the discharge:***Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume of this discharge. 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
5/10/20 10:00	5/11/20 9:00	1,595,258	14	20.4	0.1
5/10/20 11:00	5/11/20 10:00	1,296,939	140	17.7	0.1
5/10/20 12:00	5/11/20 11:00	1,009,886	199	15.7	0.1
5/10/20 13:00	5/11/20 12:00	713,307	168	11.1	0.1
5/10/20 14:00	5/11/20 13:00	557,861	14	8.8	0.0
5/10/20 15:00	5/11/20 14:00	452,890	10	7.5	0.0
5/10/20 16:00	5/11/20 15:00	340,943	11	6.1	0.0
5/10/20 17:00	5/11/20 16:00	226,348	11	4.6	0.0
5/10/20 18:00	5/11/20 17:00	193,763	1717	27.2	0.1
5/10/20 19:00	5/11/20 18:00	252,865	1868	59.4	0.3
5/10/20 20:00	5/11/20 19:00	252,865	102	59.5	0.3
5/10/20 21:00	5/11/20 20:00	320,820	175	61.6	0.3
5/10/20 22:00	5/11/20 21:00	499,838	1545	108.3	0.6
5/10/20 23:00	5/11/20 22:00	726,481	1777	176.0	0.9
5/11/20 0:00	5/11/20 23:00	980,873	1857	255.2	1.4
5/11/20 1:00	5/12/20 0:00	1,230,260	1878	333.7	1.8
5/11/20 2:00	5/12/20 1:00	1,494,283	1936	419.4	2.3
5/11/20 3:00	5/12/20 2:00	1,753,552	1984	505.6	2.7
5/11/20 4:00	5/12/20 3:00	2,007,110	2043	592.5	3.2
5/11/20 5:00	5/12/20 4:00	2,255,547	2097	679.8	3.7
5/11/20 6:00	5/12/20 5:00	2,481,621	2210	763.8	4.1
5/11/20 7:00	5/12/20 6:00	2,688,689	2339	845.3	4.5
5/11/20 8:00	5/12/20 7:00	2,884,568	2425	927.3	5.0
5/11/20 9:00	5/12/20 8:00	3,068,433	2529	1005.8	5.4
5/11/20 10:00	5/12/20 9:00	3,234,566	2745	1083.0	5.8
5/11/20 11:00	5/12/20 10:00	3,388,838	2765	1162.5	6.2
5/11/20 12:00	5/12/20 11:00	3,515,371	2958	1239.6	6.7
5/11/20 13:00	5/12/20 12:00	3,628,554	3329	1313.7	7.1
5/11/20 14:00	5/12/20 13:00	3,724,786	3964	1379.5	7.4
5/11/20 15:00	5/12/20 14:00	3,778,677	3408	1412.3	7.6
5/11/20 16:00	5/12/20 15:00	3,795,428	2644	1421.6	7.6
5/11/20 17:00	5/12/20 16:00	3,812,134	1029	1425.2	7.7
5/11/20 18:00	5/12/20 17:00	3,748,193	320	1402.2	7.5
5/11/20 19:00	5/12/20 18:00	3,668,293	266	1370.5	7.4
5/11/20 20:00	5/12/20 19:00	3,683,472	243	1371.2	7.4
5/11/20 21:00	5/12/20 20:00	3,615,518	66	1369.2	7.4
5/11/20 22:00	5/12/20 21:00	3,436,499	63	1322.5	7.1
5/11/20 23:00	5/12/20 22:00	3,209,855	60	1254.9	6.7
5/12/20 0:00	5/12/20 23:00	2,955,464	60	1175.7	6.3
5/12/20 1:00	5/13/20 0:00	2,706,069	60	1097.2	5.9
5/12/20 2:00	5/13/20 1:00	2,442,029	61	1011.6	5.4
5/12/20 3:00	5/13/20 2:00	2,182,741	63	925.4	5.0
5/12/20 4:00	5/13/20 3:00	1,929,162	62	838.6	4.5
5/12/20 5:00	5/13/20 4:00	1,680,699	62	751.2	4.0
5/12/20 6:00	5/13/20 5:00	1,458,234	53	667.3	3.6
5/12/20 7:00	5/13/20 6:00	1,251,132	57	585.8	3.1
5/12/20 8:00	5/13/20 7:00	1,050,356	54	503.8	2.7
5/12/20 9:00	5/13/20 8:00	866,478	47	425.3	2.3

(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
5/12/20 10:00	5/13/20 9:00	700,344	42	348.2	1.9
5/12/20 11:00	5/13/20 10:00	529,222	41	268.2	1.4
5/12/20 12:00	5/13/20 11:00	373,353	41	190.1	1.0
5/12/20 13:00	5/13/20 12:00	245,690	26	115.3	0.6
5/12/20 14:00	5/13/20 13:00	176,567	533	52.3	0.3
5/12/20 15:00	5/13/20 14:00	294,558	8591	269.3	1.4
5/12/20 16:00	5/13/20 15:00	561,776	9036	689.5	3.7
5/12/20 17:00	5/13/20 16:00	545,071	178	686.1	3.7
5/12/20 18:00	5/13/20 17:00	528,313	115	685.0	3.7
5/12/20 19:00	5/13/20 18:00	505,978	110	683.9	3.7
5/12/20 20:00	5/13/20 19:00	490,799	110	683.2	3.7

Subpart Ja Root Cause / Corrective Action AnalysisIncident Number: 432409*The information contained below satisfies the requirements of the NSPS Subpart Ja 60.108a(c)(6).*
 Report: Initial
 Refinery: Valero (Meraux)
 Incident Type: Flaring (Flow)
 Emissions Source(s): North Flare (EPN 20-72, EQT 0035)
 South Flare (EPN 3-77, EQT 0049)

 Date of Event: 5/13/20
 Date Analysis Completed: 6/18/20
(1.) (60.108a(c)(6)(i))**A description of the Discharge:**

On May 13, 2020 at approximately 14:09, during a planned startup of the Hydrocracker Unit, a Pressure Safety Valve (PSV) on the Cold Separator vessel relieved to the flare header. Later, at approximately 14:45, this same PSV opened further, increasing the flow rate to the flare header. From 13:17-15:30, an unrelated maintenance activity affecting the South Flare contributed to this discharge.

(2.) (60.108a(c)(6)(ii) and (60.108a(c)(6)(ix))
 Date and Time the discharge was first identified 5/13/20 13:17
 Date/Time the discharge had ceased 5/13/20 15:50
 Duration of Discharge (Calculated) 2.5 hrs.
(3.) (60.108a(c)(6)(viii))**The steps taken to limit the emissions during the discharge:**

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

(4.) (60.108a(c)(6)(xi))**Necessity of RC/CAA: Determine and state whether a RC/CAA is necessary:**

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

 Did the discharge result from a planned startup or shutdown? 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 investigated this incident and concluded that the PSV (HC-PSV-006A) relieved prematurely. At the time of the release, the Cold Separator was operating at 95% of the PSV's Final Test Pressure (FTP). The PSV was designed and configured to comply with an ASME code allowing a unit to operate up to 97% of FTP.

(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) Operate the Cold Separator at a lower pressure, in the short term.

2) Remove the PSV from service and send it to a specialty shop for assessment and to adjust it back to its original FTP.

(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) Operate the Cold Separator at a lower pressure, in the short term.

Commencement Date: 6/18/20

Estimated Completion Date: 7/31/20

2) Remove the PSV from service and send it to a specialty shop for assessment and to adjust it back to its original FTP.

Commencement Date: 6/18/20

Estimated Completion Date: 10/31/21

(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
5/12/20 13:00	5/13/20 12:00	245,690	26	115.3	0.6
5/12/20 14:00	5/13/20 13:00	176,567	533	52.3	0.3
5/12/20 15:00	5/13/20 14:00	294,558	8591	269.3	1.4
5/12/20 16:00	5/13/20 15:00	561,776	9036	689.5	3.7
5/12/20 17:00	5/13/20 16:00	545,071	178	686.1	3.7
5/12/20 18:00	5/13/20 17:00	528,313	115	685.0	3.7
5/12/20 19:00	5/13/20 18:00	505,978	110	683.9	3.7
5/12/20 20:00	5/13/20 19:00	490,799	110	683.2	3.7
5/12/20 21:00	5/13/20 20:00	490,799	108	683.2	3.7
5/12/20 22:00	5/13/20 21:00	490,804	105	683.3	3.7
5/12/20 23:00	5/13/20 22:00	490,811	103	683.3	3.7
5/13/20 0:00	5/13/20 23:00	490,825	97	683.3	3.7
5/13/20 1:00	5/14/20 0:00	490,848	93	683.4	3.7
5/13/20 2:00	5/14/20 1:00	490,873	84	683.4	3.7
5/13/20 3:00	5/14/20 2:00	490,885	74	683.4	3.7
5/13/20 4:00	5/14/20 3:00	490,890	62	683.4	3.7
5/13/20 5:00	5/14/20 4:00	490,890	52	683.4	3.7
5/13/20 6:00	5/14/20 5:00	487,263	43	683.3	3.7
5/13/20 7:00	5/14/20 6:00	487,273	37	683.3	3.7
5/13/20 8:00	5/14/20 7:00	487,273	33	683.3	3.7
5/13/20 9:00	5/14/20 8:00	487,273	33	683.3	3.7
5/13/20 10:00	5/14/20 9:00	487,273	32	683.3	3.7
5/13/20 11:00	5/14/20 10:00	487,273	30	683.3	3.7
5/13/20 12:00	5/14/20 11:00	487,273	25	683.3	3.7
5/13/20 13:00	5/14/20 12:00	483,071	23	683.2	3.7
5/13/20 14:00	5/14/20 13:00	455,962	23	680.5	3.7
5/13/20 15:00	5/14/20 14:00	284,080	20	430.7	2.3

Subpart Ja Root Cause / Corrective Action AnalysisIncident 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: 5/31/20
 Date Analysis Completed: N/A

(1.) (60.108a(c)(6)(i))**A description of the Discharge:***This discharge resulted from the normal shutdown of the Naphtha Hydrotreater Unit for the planned replacement of reactor catalyst. The discharge included activities such as reactor cooldown, depressurization, and Nitrogen purging.***(2.)** (60.108a(c)(6)(ii) and (60.108a(c)(6)(ix))

Date and Time the discharge was first identified 5/31/20 7:11
 Date/Time the discharge had ceased 6/1/20 7:12
 Duration of Discharge (Calculated) 24.0 hrs.

(3.) (60.108a(c)(6)(viii))**The steps taken to limit the emissions during the discharge:***Valero followed its Flare Minimization Plan and Operations Procedures to minimize the volume of this discharge. 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
5/30/20 7:00	5/31/20 6:00	581,655	5	1.5	0.0
5/30/20 8:00	5/31/20 7:00	646,469	77	2.4	0.0
5/30/20 9:00	5/31/20 8:00	689,120	75	3.0	0.0
5/30/20 10:00	5/31/20 9:00	730,024	62	3.4	0.0
5/30/20 11:00	5/31/20 10:00	768,540	12	3.5	0.0
5/30/20 12:00	5/31/20 11:00	807,632	26	3.7	0.0
5/30/20 13:00	5/31/20 12:00	842,156	70	4.1	0.0
5/30/20 14:00	5/31/20 13:00	877,721	47	4.4	0.0
5/30/20 15:00	5/31/20 14:00	916,409	75	5.0	0.0
5/30/20 16:00	5/31/20 15:00	961,844	98	5.8	0.0
5/30/20 17:00	5/31/20 16:00	1,006,006	71	6.3	0.0
5/30/20 18:00	5/31/20 17:00	1,044,072	7	6.4	0.0
5/30/20 19:00	5/31/20 18:00	983,393	57	6.3	0.0
5/30/20 20:00	5/31/20 19:00	999,304	56	6.7	0.0
5/30/20 21:00	5/31/20 20:00	1,041,697	54	7.4	0.0
5/30/20 22:00	5/31/20 21:00	1,142,000	45	8.5	0.0
5/30/20 23:00	5/31/20 22:00	1,246,752	37	9.3	0.1
5/31/20 0:00	5/31/20 23:00	1,340,003	38	10.1	0.1
5/31/20 1:00	6/1/20 0:00	1,427,969	36	10.8	0.1
5/31/20 2:00	6/1/20 1:00	1,524,357	31	11.4	0.1
5/31/20 3:00	6/1/20 2:00	1,638,318	27	12.1	0.1
5/31/20 4:00	6/1/20 3:00	1,760,713	23	12.6	0.1
5/31/20 5:00	6/1/20 4:00	1,835,829	40	13.3	0.1
5/31/20 6:00	6/1/20 5:00	1,870,276	47	13.9	0.1
5/31/20 7:00	6/1/20 6:00	1,867,059	70	14.3	0.1
5/31/20 8:00	6/1/20 7:00	1,808,516	25	13.5	0.1
5/31/20 9:00	6/1/20 8:00	1,766,148	18	12.9	0.1
5/31/20 10:00	6/1/20 9:00	1,725,530	18	12.5	0.1
5/31/20 11:00	6/1/20 10:00	1,687,296	20	12.4	0.1
5/31/20 12:00	6/1/20 11:00	1,648,478	17	12.2	0.1
5/31/20 13:00	6/1/20 12:00	1,614,240	17	11.8	0.1
5/31/20 14:00	6/1/20 13:00	1,578,959	22	11.5	0.1
5/31/20 15:00	6/1/20 14:00	1,540,542	27	11.0	0.1
5/31/20 16:00	6/1/20 15:00	1,495,398	22	10.2	0.1
5/31/20 17:00	6/1/20 16:00	1,451,521	17	9.6	0.1
5/31/20 18:00	6/1/20 17:00	1,412,526	11	9.6	0.1
5/31/20 19:00	6/1/20 18:00	1,358,135	10	9.0	0.0
5/31/20 20:00	6/1/20 19:00	1,294,020	10	8.4	0.0
5/31/20 21:00	6/1/20 20:00	1,212,203	11	7.6	0.0
5/31/20 22:00	6/1/20 21:00	1,072,955	10	6.6	0.0
5/31/20 23:00	6/1/20 22:00	929,902	9	5.7	0.0
6/1/20 0:00	6/1/20 23:00	798,721	7	4.8	0.0
6/1/20 1:00	6/2/20 0:00	673,652	8	4.1	0.0
6/1/20 2:00	6/2/20 1:00	540,199	9	3.4	0.0
6/1/20 3:00	6/2/20 2:00	389,292	12	2.7	0.0