



SYNTHETIC MINOR OPERATING PERMIT

PERMITEE: Crosbys Creek Oil & Gas LLC

FACILITY: Crosbys Creek Oil & Gas Field

LOCATION: Section 34, T8N, R4W, Washington Co., AL

PERMIT NUMBER

108-0011-X001

DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE

Sarah Middleton 34-11 Injection Well and CCGU 34-14 Well, with:
One (1) – Emergency Flare

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, Ala. Code §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, Ala. Code §§ 22-22A-1 to 22-22A-17, as amended, and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE : **DRAFT**

Alabama Department of Environmental Management

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X001

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.
2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.
3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
4. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the permit readily available for inspection by any or all persons who may request to see it.
5. Each point of emission, which requires testing, will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.
6. All air pollution control equipment shall be operated at all times while this process is operational. In the event of scheduled maintenance, unscheduled maintenance, or a breakdown of the pollution control equipment, the process shall be shutdown as expeditiously as possible (unless this act and subsequent re-start would clearly cause greater emissions than continuing operations of the process for a short period). The Department shall be notified of all such events within 24 hours. The notification shall include all pertinent facts, including the duration of the process operating without the control device and the level of excess emissions which have occurred. Records of all such events, regardless of reporting requirements, shall be made and maintained for a period of five years. These records shall be available for inspection.
7. This process, including all air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.
8. This permit expires and the application is cancelled if construction has not begun within 24 months of the date of issuance of the permit.
9. On completion of construction of the device(s) for which this permit is issued, written notification of the fact is to be submitted to the Chief of the Air Division. The notification shall indicate whether the device(s) was constructed as proposed in the application. The device(s) shall not be operated until authorization to operate is granted by the Chief of the Air Division. Failure to notify the Chief of the Air

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X001

Division of completion of construction and/or operation without authorization could result in revocation of this permit.

10. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.
11. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.
12. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.
13. The Air Division must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter.

- a. The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.
- b. A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).
- c. A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.
- d. A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Air Division within 60 days of the actual completion of the test, unless an extension of time is specifically approved by the Air Division.

14. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X001

use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.

15. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.
16. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

- a. by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;
- b. by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;
- c. by paving;
- d. by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

17. Precautions shall be taken by the permittee and its personnel to ensure that no person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.
18. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.
19. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.
20. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X001

permit readily available for inspection by any or all persons who may request to see it.

21. In accordance with ADEM Admin. Code. r. 335-3-4-.01(1), any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.
22. The SO₂ emissions from this facility shall not exceed 95 tons in any 12 month period.
23. Natural gas shall not be emitted into the atmosphere unless it is properly burned.
 - a. Flared gas shall be properly burned to maintain the ground level concentrations of hydrogen sulfide to less than twenty (20) parts per billion beyond plant property limits, averaged over a thirty (30) minute period.
 - b. Flaring events that exceed thirty (30) minutes in duration shall be reported to the Department within 48 hours or two work days. Reports shall include volume and composition of flared gas in addition to the duration of the flaring event.
 - c. Venting of sour gas to the atmosphere with an H₂S content greater than 160 ppmv is a violation and triggers an immediate inspection, corrective action, and reporting to the Department within 48 hours or two work days.
24. Compliance with the opacity standards specified in Proviso 21 shall be shown by performing *daily visual inspections* and *visible emissions observations* on emission sources as specified below:
 - a. Provided that the facility is operating, a *daily visual inspection* of each emission source shall be performed to determine the presence or absence of visible emissions.
 - b. Provided that facility personnel observes visible emissions as specified in Proviso 24(a) and the visible emissions have not been corrected within a period of 1 hour, a *visible emissions observation* shall be performed on that source using Method 9 procedures for at least 15 minutes.
 - c. Both *daily visual inspections* and *visible emissions observations* shall only be conducted during daylight hours. Records of time, date, and duration of each *daily visual inspection* or *visible emissions observation* as well as records of corrective actions taken to eliminate visible emissions shall be maintained.
25. To demonstrate compliance with facility-wide SO₂ limit of Proviso 22 of the permit, the following requirements must be met.

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X001

- a. The volumetric flow rate of each gas stream that is to be vented to the flare shall be monitored, recorded, and summed:
- [Stream (MScf/day)]
[Facility (MScf/day)]
- i. When possible and practicable, a continuous monitoring system meeting the following requirements shall be utilized:
1. In the event that multiple streams share a point of commonality, a single meter at this common point shall be utilized as representative of all streams, OR a single meter shall be utilized for each stream.
 2. Calibration, maintenance and operation of metering system shall be performed in accordance to manufacturer's specification.
- ii. Other flow measurement methods as approved by the Department may be utilized.
- b. The gas properties of each process stream that can be sent to a flare shall be determined according to the requirements specified below:
- i. Testing shall consist of capturing one representative sample of each stream at a frequency of no less than once every month.
 - ii. Provided that multiple process streams can be sent to the flare and that it is possible to capture a common stream whose contents would be representative of all the streams, that common stream may be measured in lieu of the individual process streams.
 - iii. The hydrogen sulfide content (mol% H₂S) of the gas stream shall be determined by utilizing the Tutwiler procedures in 40 CFR §60.648 or the chromatographic analysis procedures in ASTM E-260 or the stain tube procedures in GPA 2377-86 or those provided by the stain tube manufacture or equivalent methods and procedures.

[Stream (H₂S Mole %)]
 - iv. The gas molecular weight (MW), VOC content (mol% VOC), and heat content (btu/scf) of the gas stream shall be determined utilizing the chromatographic analysis procedures in 40 CFR Part 60 Appendix A, Method 3, Method 18, Method 19, Method 25A, or equivalent methods and procedures.

[Stream (VOC Mole%)]
[Stream (Mole Wt)]
[Stream (BTU/Scf)]
 - v. The frequency of testing, the components tested for, and the methods and procedures to be used may be modified upon receipt of Department approval.

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X001

- c. Tons of facility-wide SO₂ emissions shall be calculated on a monthly and rolling-twelve-month basis in accordance to the requirements specified in Proviso 20.
26. The following data shall be measured, recorded, and kept on file in a form suitable for inspection for a period of two (2) years:
- a. As per Proviso 24, records of daily visual inspections and visible emissions observations performed on emission sources including time, date, and observation notes.
- b. As per Proviso 25(a), volume of gas flared at the facility, accounting for all process streams on a monthly and rolling-twelve-month basis.
[MMScf/month]
[MMScf/12-months]
- c. As per Proviso 25(b), gas analyses of process gas streams.
[Stream (H₂S Mole %)]
[Stream (VOC Mole%)]
[Stream (Mole Wt)]
[Stream (BTU/Scf)]
- d. As per Proviso 25(c), facility-wide emissions of SO₂.
[Tons/month]
[Tons/twelve-consecutive-months]
27. Periodic Monitoring Reports should be submitted to the Department as follows:
- a. A summary of monthly measurements and calculations required by Provisos 26(b) & (d) shall be included in all reports.
- b. The most recent analyses required to be recorded by Proviso 26(c).
- c. Any deviations from permit conditions that occurred during the reporting period shall be included in Periodic Monitoring Reports.
- d. Reports shall be quarterly and submitted on the following schedule, or as otherwise approved by the Department:

| | | | |
|--------------------------|--------------------------|----------------------|-------------------|
| <i>Reporting Period:</i> | <i>Jan. 1 – March 31</i> | <i>Submitted by:</i> | <i>April 30</i> |
| | <i>April 1 – June 30</i> | | <i>July 31</i> |
| | <i>July 1 – Sept. 30</i> | | <i>October 31</i> |
| | <i>Oct. 1 – Dec. 31</i> | | <i>January 31</i> |



SYNTHETIC MINOR OPERATING PERMIT

PERMITEE: Crosbys Creek Oil & Gas LLC
FACILITY: Crosbys Creek Oil & Gas Field
LOCATION: Section 34, T8N, R4W, Washington Co., AL

PERMIT NUMBER

108-0011-X002

DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE

Common Production Facility, with:
One (1) – 0.5 MMBtu/hr heater treater
One (1) – 0.413 MMBtu/hr oil stabilizer
Seven (7) – 400 BBL crude storage tanks
One (1) – 400 BBL salt water storage tank
One (1) – Collection of fugitive emissions components
One (1) – Closed vent system & Flare

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, Ala. Code §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, Ala. Code §§ 22-22A-1 to 22-22A-17, as amended, and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE : **DRAFT**

Alabama Department of Environmental Management

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X002

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.
2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.
3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
4. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the permit readily available for inspection by any or all persons who may request to see it.
5. Each point of emission, which requires testing, will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.
6. All air pollution control equipment shall be operated at all times while this process is operational. In the event of scheduled maintenance, unscheduled maintenance, or a breakdown of the pollution control equipment, the process shall be shutdown as expeditiously as possible (unless this act and subsequent re-start would clearly cause greater emissions than continuing operations of the process for a short period). The Department shall be notified of all such events within 24 hours. The notification shall include all pertinent facts, including the duration of the process operating without the control device and the level of excess emissions which have occurred. Records of all such events, regardless of reporting requirements, shall be made and maintained for a period of five years. These records shall be available for inspection.
7. This process, including all air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.
8. This permit expires and the application is cancelled if construction has not begun within 24 months of the date of issuance of the permit.
9. On completion of construction of the device(s) for which this permit is issued, written notification of the fact is to be submitted to the Chief of the Air Division. The notification shall indicate whether the device(s) was constructed as proposed in the application. The device(s) shall not be operated until authorization to operate is granted by the Chief of the Air Division. Failure to notify the Chief of the Air

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X002

Division of completion of construction and/or operation without authorization could result in revocation of this permit.

10. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.
11. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.
12. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.
13. The Air Division must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter.

- a. The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.
- b. A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).
- c. A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.
- d. A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Air Division within 60 days of the actual completion of the test, unless an extension of time is specifically approved by the Air Division.

14. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X002

use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.

15. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.
16. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

- a. by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;
- b. by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;
- c. by paving;
- d. by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

17. Precautions shall be taken by the permittee and its personnel to ensure that no person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.
18. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.
19. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.
20. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X002

permit readily available for inspection by any or all persons who may request to see it.

21. In accordance with ADEM Admin. Code. r. 335-3-4-.01(1), any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.
22. The SO₂ emissions from this facility shall not exceed 95 tons in any 12 month period.
23. Natural gas shall not be emitted into the atmosphere unless it is properly burned.
 - a. Flared gas shall be properly burned to maintain the ground level concentrations of hydrogen sulfide to less than twenty (20) parts per billion beyond facility property limits, averaged over a thirty (30) minute period.
 - b. Flaring events that exceed thirty (30) minutes in duration shall be reported to the Department within 48 hours or two work days. Reports shall include volume and composition of flared gas in addition to the duration of the flaring event.
 - c. Venting of sour gas to the atmosphere with an H₂S content greater than 160 ppmv is a violation and triggers an immediate inspection, corrective action, and reporting to the Department within 48 hours or two work days.
24. Compliance with the opacity standards specified in Proviso 21 shall be shown by *daily visual inspections* and *visible emissions observations* on emission sources as specified below:
 - a. Provided that the facility is operating, a *daily visual inspection* of each emission source shall be performed to determine the presence or absence of visible emissions.
 - b. Provided that facility personnel observes visible emissions as specified in Proviso 24(a) and the visible emissions have not been corrected within a period of 1 hour, a *visible emissions observation* shall be performed on that source using Method 9 procedures for at least 15 minutes.
 - c. Both *daily visual inspections* and *visible emissions observations* shall only be conducted during daylight hours. Records of time, date, and duration of each *daily visual inspection* or *visible emissions observation* as well as records of corrective actions taken to eliminate visible emissions shall be maintained.
25. The heater shall not burn fuel other than propane unless approval is granted by the Department for an alternative fuel.

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X002

26. The requirements of 40 CFR Part 60, Subpart OOOOa pertaining to the well apply as follows:
- a. Applicable definitions are listed in §60.5430a. The Common Production Facility is defined as a well site.
 - b. Table 3 of the regulation lists the applicable portions of the General Provisions.
 - c. The Common Production Facility's collection of fugitive emissions components, which is defined in §60.5430a as the site-wide grouping of valves, connectors, flares, pressure relief devices, covers, closed vent systems, tank hatches, compressors, and other equipment in VOC use, shall comply with the requirements of §60.5397a.
 - d. All identified sources of fugitive emissions, defined as any visible emission from a *fugitive emissions component* observed using optical gas imaging or as an instrument reading of 500 ppm (methane or VOC) or greater using Method 21, observed from any *collection of fugitive emissions components* shall be repaired as per §60.5397a(h).
27. To demonstrate compliance with facility-wide SO₂ limit of Proviso 22 of the permit, the following requirements must be met.
- a. The volumetric flow rate of each gas stream that is to be vented to the flare shall be monitored, recorded, and summed:
 - [Stream (MScf/day)]
 - [Facility (MScf/day)]
 - i. When possible and practicable, a continuous monitoring system meeting the following requirements shall be utilized:
 - 1. In the event that multiple streams share a point of commonality, a single meter at this common point shall be utilized as representative of all streams, OR a single meter shall be utilized for each stream.
 - 2. Calibration, maintenance and operation of metering system shall be performed in accordance to manufacturer's specification.
 - ii. Other flow measurement methods as approved by the Department may be utilized.
 - b. The gas properties of each process stream that can be sent to a flare shall be determined according to the requirements specified below:
 - i. Testing shall consist of capturing one representative sample of each stream at a frequency of no less than once every month.
 - ii. Provided that multiple process streams can be sent to the flare and that it is possible to capture a common stream whose contents would be

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X002

representative of all the streams, that common stream may be measured in lieu of the individual process streams.

- iii. The hydrogen sulfide content (mol% H₂S) of the gas stream shall be determined by utilizing the Tutwiler procedures in 40 CFR §60.648 or the chromatographic analysis procedures in ASTM E-260 or the stain tube procedures in GPA 2377-86 or those provided by the stain tube manufacture or equivalent methods and procedures.
[Stream (H₂S Mole %)]
 - iv. The gas molecular weight (MW), VOC content (mol% VOC), and heat content (Btu/scf) of the gas stream shall be determined utilizing the chromatographic analysis procedures in 40 CFR Part 60, Appendix A, Method 3, Method 18, Method 19, Method 25A, or equivalent methods and procedures.
[Stream (VOC Mole%)]
[Stream (Mole Wt)]
[Stream (Btu/Scf)]
 - v. The frequency of testing, the components tested for, and the methods and procedures to be used may be modified upon receipt of Department approval.
- c. Vapors from the storage tanks shall be routed through a closed vent system to either a flare or a process stream.
 - d. Operating hours of each heater shall be monitored and recorded monthly.
 - e. Tons of facility-wide SO₂ emissions shall be calculated on a monthly and rolling-twelve-month basis in accordance to the requirements specified in Proviso 20.
28. To demonstrate compliance with fugitive emissions monitoring requirements of Proviso 26, the site's collection of fugitive emissions components shall be monitored initially within 60 days of startup as specified in §60.5397a(f)(1) and semiannually thereafter as specified in §60.5397a(g) using the methods specified in §60.5397a(b)-(e).
29. The following data shall be measured, recorded, and kept on file in a form suitable for inspection for a period of two (2) years:
- a. As per Proviso 24, records of daily visual inspections and visible emissions observations performed on emission sources including time, date, and observation notes.
 - b. Records of the fugitive emissions monitoring plan and of each survey required by Proviso 28 [§60.5420a(c)(15)].

Crosbys Creek Oil & Gas LLC, Crosbys Creek Oil & Gas Field
Permit No.: 108-0011-X002

- c. As per Proviso 27(a), volume of gas flared at the facility, accounting for all process streams on a monthly and rolling-twelve-month basis.
[MMScf/month]
[MMScf/12-months]
- d. As per Proviso 27(b), gas analyses of process gas streams.
[Stream (H₂S Mole %)]
[Stream (VOC Mole%)]
[Stream (Mole Wt)]
[Stream (BTU/Scf)]
- e. As per Proviso 26(d), monthly operating hours of each heater.
[Hrs/month]
- f. As per Proviso 26(e), facility-wide emissions of SO₂.
[Tons/month]
[Tons/twelve-consecutive-months]
30. Periodic Monitoring Reports should be submitted to the Department as follows:
- a. A summary of monthly measurements and calculations required by Provisos 29(c) & (f) shall be included in all reports.
- b. The most recent analyses required to be recorded by Proviso 28(d).
- c. Any deviations from permit conditions that occurred during the reporting period shall be included in Periodic Monitoring Reports.
- d. Reports shall be quarterly and submitted on the following schedule, or as otherwise approved by the Department:
- | | | | |
|--------------------------|--------------------------|----------------------|-------------------|
| <i>Reporting Period:</i> | <i>Jan. 1 – March 31</i> | <i>Submitted by:</i> | <i>April 30</i> |
| | <i>April 1 – June 30</i> | | <i>July 31</i> |
| | <i>July 1 – Sept. 30</i> | | <i>October 31</i> |
| | <i>Oct. 1 – Dec. 31</i> | | <i>January 31</i> |
31. An Annual LDAR Report should be submitted to the Department and EPA as follows:
- a. A copy of each fugitive emissions survey performed as stipulated by Proviso 26 within the reporting period specified in Proviso 31(c).
- b. Each Annual LDAR report shall include the information listed in §60.5420a(b)(7)(i)-(xii).
- c. LDAR reports shall be annual and submitted to the Department by mail and to EPA by their CEDRI website (<https://cdx.epa.gov/>) as per §60.5420a(b)(11) on the following schedule or as otherwise approved by the Department:

Reporting Period: July 1 – June 30 *Submitted by:* Sept 28

DRAFT