



March 26, 2025

VIA ELECTRONIC DELIVERY – AQD_APU@deq.ok.gov

Ms. Kendal Stegmann, Director
Air Quality Division
Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73101-1677

**Re: Air Quality Minor Source Operating Permit Application
ET Gathering & Processing LLC
Foster Compressor Station
Garvin County, Oklahoma**

Dear Ms. Stegmann:

ET Gathering & Processing LLC (ETGP) is submitting an Air Quality Minor Source Operating Permit Application (Application) via electronic delivery for the Foster Compressor Station (Facility), which is located in Garvin County, Oklahoma. This Application has been prepared in accordance with the requirements of Oklahoma Administrative Code (OAC) 252:100-7 and is considered to be a Tier 1 application.

ETGP submitted an Air Quality Minor Source General Permit for Oil and Gas Facilities (GP-OGF) Notice of Intent (NOI) to Construct Application to the Oklahoma Department of Environmental Quality (ODEQ) on May 1, 2024 requesting authorization to replace three (3) of the compressor engines located at the Facility and to revise the emission limitations for specific equipment at the Facility to allow for operational flexibility. Based on the GP-OGF NOI Application, ODEQ issued Construction Permit No. 2024-0330-NOI (Permit) on June 4, 2024. A copy of the current Permit is included in Attachment 1 of this Application. A copy of the current Permit is included in Attachment 1 of this Application.

As authorized under the Permit, ETGP completed the construction and began operation on October 1, 2024. This document serves as the request for issuance of a Minor Source Operating Permit for the Facility. Since issuance of the Permit, ETGP has added compressor blowdown and maintenance, startup, and shutdown (MSS) emissions. Additionally, ETGP requests a separate limit allowing uncontrolled operation of the one (1) glycol dehydration unit for up to 125 hours per year in order to provide operational flexibility and as a result of the changes to OAC 252:100-9. Please refer to Attachment 2 for the facility-wide emissions summary table.

The Facility, which falls under the North American Industrial Classification System (NAICS) code 486210 (formerly Standard Industrial Classification (SIC) 4922), provides compression and dehydration of natural gas. The Facility is not subject to any existing Title 40 Code of Federal Regulations (40 CFR) Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP), Prevention of Significant Deterioration (PSD) permitting, or Title V operating permits required under OAC 252:100-8. However, specific compressor engines located at the Facility are

subject to 40 CFR Part 60 New Source Performance Standards (NSPS) Subpart JJJJ, as well as area source standards under 40 CFR Part 63 NESHAP Subpart ZZZZ. Additionally, specific equipment at the Facility is subject to NSPS Subparts OOOO & OOOOa. Further, recordkeeping requirements under 40 CFR Part 63 NESHAP Subpart HH for area sources and certain OAC air quality rules are applicable to the Facility. ETGP will continue to operate the Facility in compliance with all applicable federal and state air quality regulations.

Facility Location

The Facility is located near the town of Elmore City in Garvin County, Oklahoma. The legal description of the Facility is the northwest quarter of Section 20, Township 2N, and Range 3W. From the Junction of SH-74 and SH-29 in Elmore City, travel approximately eight (8) miles west. The Facility will be located on the north side of the road.

Facility Description

The Facility is a natural gas gathering compressor station responsible for the compression of natural gas into a pipeline. Natural gas dehydration and storage of condensate occur on-site as well. Natural gas is transported to the Facility via a pipeline gathering system. The gas stream enters the Facility through an inlet separator, where water and condensate are removed from the inlet stream. The liquids then flow from the inlet separator into the four (4) 400-barrel (bbl) condensate storage tanks (TANK1, TANK2, TANK3, and TANK4). The atmospheric tank vents of the condensate storage tanks are routed to the condensate flare (FLARE1), which destructs most working, breathing, and flashing losses. The liquids are removed from the Facility via trucks (LOAD1).

The gas stream is then compressed by four (4) Caterpillar 3516B LE natural gas-fired engine (COMP1, COMP2, COMP3, and COMP4) driven compressors rated at 1,380-horsepower (Hp) each and two (2) Caterpillar 3516TAL natural gas-fired engine (COMP5 and COMP6) driven compressors rated at 1,340-Hp. Each compressor engine is equipped with an oxidation catalyst. After the inlet gas passes through the compressors, the gas then enters the glycol dehydration unit before exiting the Facility for transmission via pipeline.

The glycol dehydration unit is used to remove water from the gas before the gas exits the Facility. In the dehydration process, gas passes through the contactor vessel where water will be absorbed by the glycol. The "rich" glycol containing water goes to the triethylene glycol (TEG) reboiler, where heat is used to boil off the water. The heat in the reboiler is supplied by a 1.0 million British Thermal Units per hour (MMBtu/hr) burner, which exhausts to the atmosphere (HEAT1). The dehydrator still vent (DEHY1) is equipped with a condenser and combustion device to reduce volatile organic compounds (VOC) and hazardous air pollutant (HAP) emissions.

Potential Emissions Calculations

The primary pollutants from the Facility are nitrogen oxides (NO_x), carbon monoxide (CO), and VOC. Refer to Attachment 2 for a summary of potential emissions from the Facility.

Potential emission calculations for compressor engines COMP1, COMP2, COMP3, COMP4, COMP5, and COMP6 are included in Attachment 3. The potential NO_x, CO, VOC, and formaldehyde emissions from COMP1, COMP2, COMP3, COMP4, COMP5, and COMP6 are

based on emission factors obtained from manufacturer's data, assuming 8,760 hours of operation per year (hrs/yr) and an oxidation catalyst in operation on each engine. Please note that the VOC emission factors include the formaldehyde emissions.

Potential controlled VOC and HAP emissions from DEHY1 are based on GRI-GLYCalc Version 4.0 software, "Atmospheric Rich/Lean" (ARL) data, extended gas analysis data, a maximum natural gas throughput of 50 million standard cubic feet per day (MMScf/d), a maximum glycol circulation rate of 15.0 gallons per minute (gpm), a condenser and combustion device in service on the still vent, and a 100% safety factor to allow for variability in the composition of the natural gas stream. The glycol dehydration unit is equipped with a flash tank. The flash tank vents back to the process (e.g. station inlet) resulting in 100% control of VOC and HAP emissions. The controlled VOC and HAP emissions summary table (Table 1), GRI-GLYCalc output, and supporting data are included in Attachment 4 of this Application.

Potential uncontrolled VOC and HAP emissions from DEHY1 are based on GRI-GLYCalc Version 4.0 software, ARL data, extended gas analysis data, a maximum natural gas throughput of 50 MMScf/d, and a maximum glycol circulation rate of 15.0 gpm, assuming 125 hours of uncontrolled operation per year. The uncontrolled VOC and HAP emissions summary table (Table 2), GRI-GLYCalc output, and supporting data are included in Attachment 4 of this Application.

The potential emissions from HEAT1 are based on the actual burner rating of 1.0 MMBtu/hr, current AP-42 factors for commercial boilers, and 8,760 hrs/yr. The calculations are summarized in Attachment 5 of this Application.

Potential VOC emissions (breathing/working losses) from TANK1, TANK2, TANK3, and TANK4 were estimated using AP-42, Section 7.1, assuming a maximum annual condensate throughput value. The potential VOC emissions (flash losses) from the condensate storage tanks were calculated using the HYSYS Process Simulator method, assuming a maximum annual condensate throughput value. VOC emissions from the condensate storage tanks will be routed to the condensate flare for emissions control, which has a capture efficiency of 98%. Therefore, most of the emissions from the condensate storage tanks will be destructed by the flare and are accounted for and associated with FLARE1. The condensate storage tank VOC emissions summary (Table 1) and AP-42 detail report (Table 2) are included in Attachment 6. Copies of the HYSYS output files are available upon request. Please note that ETGP is requesting federally enforceable limits of less than six (6) tons per year (T/yr) of VOC for each of the four (4) condensate storage tanks (TANK1, TANK2, TANK3, and TANK4).

Potential NO_x and CO emissions from the condensate flare (FLARE1) were estimated using the calculated heat value of 0.36 MMBtu/hr, current AP-42 factors for industrial flares, and 8,760 hrs/yr. Potential VOC emissions from FLARE1 were calculated based on the flare pilot feed rate, emissions routed to flare from the four (4) condensate storage tanks, and a 98% destruction efficiency. The calculations are summarized in Attachment 6, Tables 3 and 4.

Potential VOC emissions from LOAD1 are estimated using AP-42, Section 5.2, Equation 1 and a maximum annual condensate throughput. The calculations are summarized in Attachment 7.

Potential VOC emissions from process piping fugitives (FUG1) are estimated based on EPA's natural gas process factors for process piping fugitive emissions, component counts from a similar

facility, and gas analysis data from the Facility. The calculations are summarized in Attachment 8.

Potential VOC emissions from compressor blowdowns (MSS-BD) were estimated using mass balance and are summarized in Attachment 9, Table 1. Potential VOC emissions from other maintenance, startup, and shutdown activities (MSS), including pipeline pigging, were estimated using defaults from the Texas Commission on Environmental Quality MSS spreadsheet and are summarized in Attachment 9, Table 2.

Please note the ODEQ Oil & Gas Representative Sample Information Forms for sample analyses utilized for specific emissions calculations referenced above are included in Attachment 10.

Federal Regulatory Applicability

➤ **PSD and New Source Review Regulations (NSR)**

The ODEQ has full authority to conduct the technical review of permit applications and issue permits under both PSD and NSR regulations. A new or modified source is subject to PSD or NSR if it is either a “major stationary source” or a “major modification” to an already existing major stationary source based on the potential to emit (PTE). The Facility is not an existing “major stationary source” and this permitting action results in the PTE of each criteria pollutants remaining less than 250 T/yr. Therefore, the Facility is not subject to PSD and NSR permitting requirements and is considered a minor source under the PSD rules.

➤ **New Source Performance Standards (NSPS)**

NSPS regulate specific new, modified or reconstructed sources of emissions. NSPS Subparts K, Ka, and Kb regulate volatile organic liquid (VOL) storage vessels. Specifically, the Subparts regulate hydrocarbon storage tanks that are larger than 19,813 gallon (gal) capacity and that were built after July 23, 1984. The four (4) 16,800-gal condensate storage tanks are below this de minimis level. Therefore, the tanks are not subject to these Subparts

NSPS Subpart KKK requires fugitive emissions monitoring at gas processing plants that are defined as any site engaged in the extraction of natural gas liquids from field gas, fractionation of natural gas liquids, or both. This site will not engage in this type of activity. Therefore, Subpart KKK is not applicable.

NSPS Subpart JJJJ regulates stationary spark ignition (SI) internal combustion engines (ICE). This subpart was proposed on June 12, 2006, and was published in the Federal Register as final on January 18, 2008. For the purposes of this subpart, the date of construction is the date the engine is ordered by the owner or operator. This subpart affects owners and operators of lean burn SI ICE with a maximum engine power of greater than or equal to 500 Hp and less than 1,350 Hp ordered after June 12, 2006 and manufactured on or after January 1, 2008, but prior to July 1, 2010 will be subject to the following standards: 2.0 g/hp-hr NO_x, 4.0 g/hp-hr CO, and 1.0 g/hp-hr VOC. SI ICE with a maximum engine power greater than or equal to 500 Hp that are manufactured on or after July 1, 2010, will be subject to the following standards: 1.0 g/hp-hr NO_x, 2.0 g/hp-hr CO, and 0.7 g/hp-hr VOC. Compliance with the emission limitations can be achieved by purchasing a certified engine, installing and operating the engine according to the manufacturer’s written instructions, and using fuels within the fuel

specifications allowed by the manufacturer. In lieu of purchasing a certified engine, an owner or operator can conduct performance testing in accordance with §60.4243(b)(2). Compressor engines COMP5 and COMP6 were manufactured prior to the applicability dates of this Subpart and have been in operation prior to July 1, 2010. Therefore, COMP5 and COMP6 are not subject to this Subpart. However, compressor engines COMP1, COMP2, COMP3, and COMP4 were manufactured after July 1, 2010, and are Subject to this Subpart.

NSPS Subpart OOOO was published as final in the Federal Register on August 16, 2012. NSPS Subpart OOOO regulates equipment at crude oil and natural gas production, transmission and distribution facilities that commenced construction, reconstruction, or modification after August 23, 2011, and on or before September 18, 2015. This subpart regulates single well heads, centrifugal and reciprocating compressors, single continuous bleed natural gas driven pneumatic controllers with a natural gas bleed rate greater than 6 standard cubic feet per hour (SCFH), storage vessels with the potential for VOC emissions greater than 6 T/yr after federally enforceable conditions, onshore natural gas processing plants and sweetening units. The four (4) condensate storage tanks were previously constructed and permitted with federally enforceable limits of less than six (6) T/yr of VOC and ETGP is requesting that these federally enforceable limits continue in this Application; therefore, they are not subject to this Subpart. The two (2) reciprocating compressors associated with compressor engines COMP5 and COMP6 commenced construction prior to August 23, 2011; therefore, they are not subject to this Subpart. However, the two (2) reciprocating compressors associated with compressor engines COMP2 and COMP4 commenced construction after August 23, 2011, but before September 18, 2015, and are subject to this Subpart. ETGP will comply with the requirements of this subpart as applicable.

NSPS Subpart OOOOa was published as final in the Federal Register on June 3, 2016, with an effective date of August 2, 2016. NSPS Subpart OOOOa regulates equipment at crude oil and natural gas production, transmission and distribution facilities that commenced construction, reconstruction, or modification after September 18, 2015, and on or before December 6, 2022. This subpart regulates single well heads, centrifugal and reciprocating compressors, single continuous bleed natural gas driven pneumatic controllers with a natural gas bleed rate greater than 6 SCFH, storage vessels with the potential for VOC emissions greater than 6 T/yr after federally enforceable conditions, onshore natural gas processing plants, sweetening units, single natural gas driven pneumatic diaphragm pumps located at onshore natural gas processing plants, and fugitive emission components located at a compressor station. The two (2) reciprocating compressors associated with compressor engines COMP1 and COMP3 commenced construction after September 18, 2015, and on or before December 6, 2022, and are subject to this Subpart. ETGP will comply with the requirements of this subpart as applicable.

NSPS Subpart OOOOb was published as final in the Federal Register on March 8, 2024, with an effective date of May 7, 2024. NSPS Subpart OOOOb regulates equipment at crude oil and natural gas production, transmission and distribution facilities that commenced construction, reconstruction, or modification after December 6, 2022. This subpart regulates single well heads, centrifugal and reciprocating compressors, process controllers, pumps, storage vessels, onshore natural gas processing plants, sweetening units, and fugitive emission components located at a compressor station. The compressors associated with the replacement compressor engines COMP1, COMP2, and COMP3 were replaced by compressors of equal total horsepower; therefore, ETGP did not modify the Facility and the

fugitive emission components located at the Facility are not subject to this Subpart. The process controllers at the Facility are designed and operated with zero methane and VOC emissions to the atmosphere; therefore, these pieces of equipment are not subject to this Subpart.

➤ **National Emission Standards for Hazardous Air Pollutants (NESHAP)**

The Facility is not subject to current NESHAP at 40 CFR Part 61. However, Maximum Achievable Control Technology (MACT) standards were promulgated June 17, 1999 for oil and natural gas production facilities (i.e., 40 CFR Part 63 Subpart HH). This subpart applies to affected emission points that are located at facilities that are major sources of HAPs and either process, upgrade, or store hydrocarbons prior to the point of custody transfer or prior to which the natural gas enters the natural gas transmission and storage source category. The potential HAP emissions at the Facility are below the 10/25 T/yr threshold.

This MACT was extended to area sources on January 3, 2007. The affected source is defined as each TEG dehydration unit located at an area source at an oil and natural gas production facility. Since the TEG dehydration unit at this Facility was constructed after July 8, 2005, and is not located within an Urban-1 County or in an Urban Area plus offset or Urban Cluster, it is considered an affected new source. However, it is exempt from the requirements of §63.764(d) per §63.764(e). ETGP will maintain records of the exemption determination as required by this Subpart.

MACT standards for reciprocating internal combustion engines (RICE MACT), 40 CFR Part 63 Subpart ZZZZ, were promulgated June 15, 2004. These standards apply to major sources of HAP emissions and regulate emissions from RICE with a site rating greater than 500 brake horsepower. The potential HAP emissions at the Facility are below the 10/25 T/yr threshold.

Changes to Subpart ZZZZ which affect area sources of HAP were proposed on March 5, 2009, and published in the Federal Register as final on August 20, 2010. Additional changes to Subpart ZZZZ were proposed on June 7, 2012, and published in the Federal Register as final on January 30, 2013 with the effective date of April 1, 2013. This subpart now affects new and existing stationary RICE located at an area source of HAPs. New stationary RICE (constructed after June 12, 2006) must meet the requirements of this Subpart by meeting the requirements of NSPS Subpart JJJJ. No further requirements apply for new stationary RICE. Affected existing stationary RICE with a maximum engine power greater than 500 Hp are subject to emission limitations unless they meet the definition of remote stationary RICE. Existing remote stationary RICE will be subject to management practices. Compressor engines COMP1, COMP2, COMP3, COMP4, COMP5, and COMP6 are considered new affected sources under this subpart and are required to comply with NSPS Subpart JJJJ.

State Regulatory Applicability

➤ **OAC 252:100-2 – Incorporation by Reference**

The purpose of OAC 252:100-2 is to incorporate by reference the applicable provisions of Title 40 of the Code of Federal Regulations, which includes NSPS and NESHAP requirements. The list of applicable 40 CFR regulations that are incorporated by reference

are listed in OAC 252:100, Appendix Q. Potentially applicable Federal regulations are addressed in this Application.

➤ **OAC 252:100-7 – Permits for Minor Facilities**

OAC 252:100-7-15 states that sources must obtain a construction permit from the ODEQ before beginning construction or modification activities if the modification causes an existing facility to no longer qualify for its current permit category, to add a piece of equipment or process that is subject to NSPS or NESHAP, or to add or physically modify a piece of equipment or a process that results in an increase in actual emissions of any one (1) regulated air pollutant by more than five (5) tons per year.

According to OAC 252:100-7-18, within 180 days of starting operations the source must apply for an operating permit but may continue to operate during permit processing. The purpose of this Application is to request issuance of a Minor Source Operating Permit for the Facility within 180 days of starting operations. Therefore, ETGP is in compliance with OAC 252:100-7.

➤ **OAC 252:100-9 - Excess Emission Reporting Requirements**

OAC 252:100-9 applies to any air pollution source, which results in excess emissions caused by malfunction, shutdown, startup or regularly scheduled maintenance. Verbal notification to the ODEQ is required no later than 4:30 p.m. the next working day of the first occurrence of excess emission in each excess emission event. Excess emission event report is then required no later than thirty (30) calendar days after the start of any excess emission event. If excess emissions occur, ETGP will notify the ODEQ to maintain compliance with this regulation.

➤ **OAC 252:100-19 – Control of Emission of Particulate Matter**

The purpose of OAC 252:100-19 is to control the emission of particulate matter (PM) from the use of fuel-burning equipment. Since pipeline-grade natural gas is used as fuel, potential PM emissions from the fuel-burning equipment at the Facility are considered to be negligible.

➤ **OAC 252:100-25 – Smoke, Visible Emissions and Particulates**

OAC 252:100-25 applies to emissions from an air contaminant source setting a limitation of twenty (20) percent opacity with certain allowances for higher opacity percentages. ETGP will maintain compliance with this regulation by ensuring complete combustion utilizing pipeline-grade natural gas as fuel in the fuel-burning equipment at the Facility.

➤ **OAC 252:100-29 - Control of Fugitive Dust**

The purpose of OAC 252:100-29 is to limit the handling, transporting or disposition of any material which is likely to be scattered by the air or wind. ETGP will maintain compliance with this regulation by not conducting activities that would produce fugitive dust beyond the Facility property line.

➤ **OAC 252:100-31 – Control of Emission of Sulfur Compounds**

OAC 252:100-31 controls emissions of sulfur compounds from stationary sources. The fuel burning equipment located at the Facility is subject to this regulation. The fuel used to operate the equipment has negligible hydrogen sulfide (H₂S) or sulfur content. Therefore, the equipment will maintain compliance with OAC 252:100-31.

➤ **OAC 252:100-33 - Control of Emission of Nitrogen Oxides**

OAC 252:100-33 controls the emission of nitrogen oxides from new stationary sources. This regulation applies to new fuel-burning equipment with rated heat input of 50 MMBtu's per hour or more. Since the fuel-burning equipment at the Facility is below the rated heat input level, the Facility is not subject to OAC 252:100-33.

➤ **OAC 252:100-35 - Control of Emission of Carbon Monoxide**

The purpose of OAC 252:100-35 is to control the emission of carbon monoxide from stationary sources. None of the following affected processes are located at this Facility: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit. Therefore, the Facility is not subject to this regulation.

➤ **OAC 252:100-37-15 – Storage of VOCs**

For VOC storage vessels with capacities greater than 400-gal, OAC 252:100-15(b) requires that the tanks be equipped with permanent submerged fill pipes. The four (4) 16,800-gal condensate storage tanks at the Facility are equipped with permanent submerged fill pipes. Therefore, the Facility is in compliance with this regulation.

➤ **OAC 252:100-37-36 – Fuel Burning and Refuse Burning Equipment**

OAC 252:100-37-36 requires that all fuel burning equipment be operated to minimize emissions of VOC. ETGP will operate the combustion sources according to manufacturer's specifications in order to minimize VOC emissions.

➤ **OAC 252:100-39 – Emission of VOCs in Nonattainment Areas and Former Nonattainment Areas**

OAC 252:100, Subchapter 39 applies additional standards to VOC storage vessels that are located in nonattainment areas or former nonattainment areas. At this time, this Subchapter is only applicable to VOC storage vessels located in Tulsa and Oklahoma counties. Since the Facility is located in Garvin County, OAC 252:100-39 is not applicable.

➤ **OAC 252:100-42 – Control of Toxic Air Contaminants (TAC)**

All parts of OAC 252:100-41, with the exception of Part 3, have been superseded by this Subchapter. OAC 252:100-42-4 states that any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. To date, the ODEQ has not identified and/or designated an area of concern (AOC), and ETGP has not been notified that

emissions from the Facility cause or contribute to any such AOC. Additionally, ETGP is not currently subject to work practice material substitution or control equipment requirements to control TAC emissions from equipment within the Facility. Therefore, the Facility is not subject to this subchapter at this time.

Supporting Documentation and Attachments

To facilitate the ODEQ's review of this Application, ETGP has included the following information:

- Attachment 1 – Copy of GP-OGF Authorization to Operate No. 2024-0330-NOI
- Attachment 2 – Facility-Wide Emissions Summary Table
- Attachment 3 – Compressor Engine Emissions Calculations
- Attachment 4 – Glycol Dehydrator Emissions and Supporting Documentation
- Attachment 5 – Glycol Dehydrator Reboiler Emissions Calculations
- Attachment 6 – Condensate Storage Tank and Flare Emissions Calculations
- Attachment 7 – Condensate Loading Emissions Calculations
- Attachment 8 – Process Piping Fugitive Emissions Calculations
- Attachment 9 – MSS Emission Calculations
- Attachment 10 – ODEQ Oil & Gas Representative Sample Information Forms
- Attachment 11 – Engine Compliance Testing Results
- Attachment 12 – ODEQ Permit Application Forms

A fee in the amount of \$2,250 has been paid via credit card to the Financial and Human Resources Division of the ODEQ to be applied to the cost associated with preparing the permit. Additionally, ETGP owns the land on which the Facility will be located, and a completed landowner notification identifying the same is included in this Application.

Prior to issuance of the final permit, ETGP is requesting the opportunity to review and comment on the draft permit.

If you have any questions or need additional information, please feel free to contact me at (405) 557-5235.

Sincerely,
ET Gathering & Processing LLC



Sean Walker
Senior Specialist – Environmental

Attachments

From: [Oklahoma](#)
To: [Walker, Sean P](#)
Subject: DEQ - Receipt
Date: Wednesday, March 26, 2025 10:27:59 AM

Your Receipt

PURCHASE RECEIPT

**Oklahoma Department of Environmental Quality
DEQ OKC**

707 N Robinson
Oklahoma City OK 73102
(405)702-1130
OTC Local Ref ID: 131333734
3/26/2025 10:27 AM

Thank you for your payment to the Department of Environmental Quality.

Status: **APPROVED**
Customer Name: SEAN P WALKER ENERGY TRANSFER
Type: Visa
Credit Card Number: **** * 5030

Items	Location	Quantity	TPE Order ID	Total Amount
Invoice	DEQ OKC	1	127565148	\$2,250.00
Invoice Number: AQD FOSTER COMPRESSOR STATION				
Additional Information: ET GATHERING PROCESSING				
Sub-Activity: 59342				
Total remitted to the Oklahoma Department of Environmental Quality				\$2,250.00
Service Fee	DEQ OKC	1	127565150	\$52.67
Total amount charged				\$2,302.67

ATTACHMENT 1

Copy of GP-OGF Authorization to Operate No. 2024-0330-NOI

ET GATHERING PROCESSING, LLC
Attn.: Sean Walker
8111 WESTCHESTER DR
Dallas, TX 75225

Authorization No. **2024-0330-NOI**
Permit Writer: Mohammed Ansari
Facility ID: 9948
Date: June 4, 2024

SUBJECT: GP-OGF Authorization to Construct
Facility: FOSTER COMPRESSOR STATION (SIC 4922/NAICS 486210)
Latitude 34.63044°N, Longitude 97.53776°W
Section 20, Township 2N, Range 3W, Garvin County, OK
Date Received: May 1, 2024

RECEIVED

By Sean Walker at 9:14 am, Jun 05, 2024

Dear Mr. Walker:

The Air Quality Division has received your Notice of Intent (NOI) to construct the facility referenced above. The permit application for a Class II facility has been determined to be **Tier I**. The application has been given a permit number and assigned to the permit writer referenced above. The fee for this NOI is \$500 and \$500 has been received. AQD hereby acknowledges receipt of a complete application, and you are authorized to construct and operate the facility in accordance with the GP-OGF dated December 1, 2023. A copy of the GP-OGF can be found on our ODEQ website at https://www.deq.ok.gov/wp-content/uploads/air-division/GP_oil_and_gas_facilities_permit.pdf. If you are unable to obtain a copy and need to have a copy mailed to you, you can request it by letter or by calling our office at (405) 702-4100.

Per applicant's request, to not be considered a "storage vessel affected facility" and avoid applicability under NSPS Subpart OOOOa for the storage tanks (TANK1 through TANK4), applicable storage tanks shall be limited to below 6 TPY of VOC by 30 days after startup.

NSPS OOOOb may also be triggered for storage tank batteries constructed, modified, or reconstructed on or after December 6, 2022, with a tank battery total potential to emit (PTE) greater than 20 TPY of methane and/or 6 TPY of VOC. As per NSPS OOOOb, a tank battery is one or more tanks connected by a liquid manifold. The 2022 GP-OGF Version 2 does not currently provide for federally enforceable limits to avoid applicability to NSPS OOOOb. As provided in Part 1, Section III(C)16 of the 2022 GP-OGF Version 2, a facility must obtain an individual minor source construction permit to obtain federally enforceable limits not otherwise allowed or required under the general permit. Limits obtained in the individual construction permit may be incorporated into an authorization to operate under the GP-OGF.

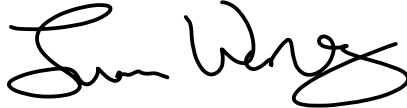
The applicant may rely on PTE calculations based on the applicable requirements of NSPS OOOOb to demonstrate potential methane and VOC emissions are below the NSPS OOOOb thresholds or comply with NSPS OOOOb as a storage vessel affected facility.

Note that you must submit a completed application for an Authorization to Operate, i.e. DEQ Form #100-810, and applicable Forms #100-306A – N with a \$500 fee, within 180 days of commencing operation of the proposed facility. A copy of the application packet for the GP-OGF is available

on the DEQ website at <https://www.deq.ok.gov/>. In addition, you are required to submit performance testing results for any engines with the application for an Authorization to Operate.

Thank you for your cooperation. If you have any questions, please refer to the NOI number above and contact the permit writer at (405) 702-4194.

Sincerely,



Junru Wang, P.E.

Permit Group

AIR QUALITY DIVISION

ATTACHMENT 2

Facility-Wide Emissions Summary Table

ATTACHMENT 2

**FACILITY-WIDE POTENTIAL EMISSIONS SUMMARY
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Emissions Source	Emission Point Identification	Criteria Pollutants ¹						Hazardous Air Pollutants													
		NO _x		VOC		CO		Formaldehyde		n-Hexane		Benzene		Toluene		Ethyl-Benzene		Xylene		Total HAPs	
		lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Caterpillar 3516B LE (w/ oxidation catalyst) ^{2,3}	COMP1	2.13	9.33	2.13	9.33	3.04	13.33	0.32	1.40	--	--	--	--	--	--	--	--	--	--	0.32	1.40
Caterpillar 3516B LE (w/ oxidation catalyst) ^{2,3}	COMP2	2.13	9.33	2.13	9.33	3.04	13.33	0.32	1.40	--	--	--	--	--	--	--	--	--	--	0.32	1.40
Caterpillar 3516B LE (w/ oxidation catalyst) ^{2,3}	COMP3	2.13	9.33	2.13	9.33	3.04	13.33	0.32	1.40	--	--	--	--	--	--	--	--	--	--	0.32	1.40
Caterpillar 3516B LE (w/ oxidation catalyst) ^{2,3}	COMP4	2.13	9.33	2.13	9.33	3.04	13.33	0.32	1.40	--	--	--	--	--	--	--	--	--	--	0.32	1.40
Caterpillar 3516TALE (w/ oxidation catalyst) ^{2,3}	COMP5	5.91	25.88	1.48	6.47	2.66	11.65	0.26	1.13	--	--	--	--	--	--	--	--	--	--	0.26	1.13
Caterpillar 3516TALE (w/ oxidation catalyst) ^{2,3}	COMP6	5.91	25.88	1.48	6.47	2.66	11.65	0.26	1.13	--	--	--	--	--	--	--	--	--	--	0.26	1.13
Glycol Dehydrator (w/ condenser and combustion device) ^{2,4}	DEHY1	--	--	1.82	7.99	--	--	--	--	0.05	0.24	0.10	0.44	0.08	0.34	0.01	0.01	0.04	0.19	0.28	1.22
Glycol Dehydrator (uncontrolled 125 hours) ^{2,4}	DEHY1	--	--	154.98	9.69	--	--	--	--	2.95	0.18	3.11	0.19	5.49	0.34	0.16	0.01	9.91	0.62	21.62	1.34
Glycol Dehydrator Reboiler (1.0 MMBtu/hr) ^{2,5}	HEAT1	0.10	0.43	0.01	0.02	0.08	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Condensate Storage Tank (400 bbl.) ^{2,6}	TANK1	--	--	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Condensate Storage Tank (400 bbl.) ^{2,6}	TANK2	--	--	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Condensate Storage Tank (400 bbl.) ^{2,6}	TANK3	--	--	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Condensate Storage Tank (400 bbl.) ^{2,6}	TANK4	--	--	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Condensate Flare ^{2,6}	FLARE1	0.02	0.11	0.21	0.91	0.11	0.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Condensate Truck Loading ^{2,7}	LOAD1	--	--	--	3.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fugitive VOC Emissions ^{2,8}	FUG1	--	--	1.79	7.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Compressor Blowdowns ⁹	MSS-BD	--	--	--	4.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MSS Emissions ⁹	MSS	--	--	--	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Facility Emissions		20.46	89.62	170.29	86.17	17.67	77.47	1.80	7.86	3.00	0.42	3.21	0.63	5.57	0.68	0.17	0.02	9.95	0.81	23.70	10.42

Notes:

1. Emissions of SO₂ and PM are assumed to be negligible since pipeline-quality natural gas is used as fuel.
2. Emissions as represented in the NOI Application Permit No. 2024-0330-NOI.
3. Refer to Attachment 3 for compressor engine emission calculations.
4. Refer to Attachment 4 for glycol dehydrator emission calculations.
5. Refer to Attachment 5 for glycol dehydrator reboiler emission calculations.
6. Refer to Attachment 6 for condensate storage tank and condensate flare emission calculations.
7. Refer to Attachment 7 for condensate loading emission calculations.
8. Refer to Attachment 8 for process piping fugitive emission calculations.
9. Refer to Attachment 9 for MSS emission calculations.

ATTACHMENT 3

Compressor Engine Emissions Calculations

**ATTACHMENT 3
TABLE 1**

**POTENTIAL EMISSIONS SUMMARY
CATERPILLAR 3516B LE W/OXIDATION CATALYST (COMP1)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Pollutant ¹	Rated Horsepower	Emission Factors ²	Potential Emission Rate ³	
		(grams/Hp-hr)	lb/hr	T/yr
NO _x	1,380	0.70	2.13	9.33
VOC	1,380	0.70	2.13	9.33
CO	1,380	1.00	3.04	13.33
Formaldehyde	1,380	0.105	0.32	1.40

Notes:

1. Emissions of SO₂ and PM are assumed to be negligible and not reportable.
2. Emission factors for NO_x, CO, VOC, and formaldehyde obtained from manufacturer data, assuming a 70% control efficiency for CO and formaldehyde. Please note that the VOC emission factor includes the formaldehyde emissions.
3. Potential emissions based on manufacturer emission factors, maximum horsepower, and 8,760 hrs/yr with an oxidation catalyst in service.

**ATTACHMENT 3
TABLE 2**

**POTENTIAL EMISSIONS SUMMARY
CATERPILLAR 3516B LE W/OXIDATION CATALYST (COMP2)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Pollutant ¹	Rated Horsepower	Emission Factors ²	Potential Emission Rate ³	
		(grams/Hp-hr)	lb/hr	T/yr
NO _x	1,380	0.70	2.13	9.33
VOC	1,380	0.70	2.13	9.33
CO	1,380	1.00	3.04	13.33
Formaldehyde	1,380	0.105	0.32	1.40

Notes:

1. Emissions of SO₂ and PM are assumed to be negligible and not reportable.
2. Emission factors for NO_x, CO, VOC, and formaldehyde obtained from manufacturer data, assuming a 70% control efficiency for CO and formaldehyde. Please note that the VOC emission factor includes the formaldehyde emissions.
3. Potential emissions based on manufacturer emission factors, maximum horsepower, and 8,760 hrs/yr with an oxidation catalyst in service.

**ATTACHMENT 3
TABLE 3**

**POTENTIAL EMISSIONS SUMMARY
CATERPILLAR 3516B LE W/OXIDATION CATALYST (COMP3)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Pollutant ¹	Rated Horsepower	Emission Factors ²	Potential Emission Rate ³	
		(grams/Hp-hr)	lb/hr	T/yr
NO _x	1,380	0.70	2.13	9.33
VOC	1,380	0.70	2.13	9.33
CO	1,380	1.00	3.04	13.33
Formaldehyde	1,380	0.105	0.32	1.40

Notes:

1. Emissions of SO₂ and PM are assumed to be negligible and not reportable.
2. Emission factors for NO_x, CO, VOC, and formaldehyde obtained from manufacturer data, assuming a 70% control efficiency for CO and formaldehyde. Please note that the VOC emission factor includes the formaldehyde emissions.
3. Potential emissions based on manufacturer emission factors, maximum horsepower, and 8,760 hrs/yr with an oxidation catalyst in service.

ATTACHMENT 3
TABLE 4

POTENTIAL EMISSIONS SUMMARY
CATERPILLAR 3516B LE W/OXIDATION CATALYST (COMP4)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC

Pollutant ¹	Rated Horsepower	Emission Factors ²	Potential Emission Rate ³	
		(grams/Hp-hr)	lb/hr	T/yr
NO _x	1,380	0.70	2.13	9.33
VOC	1,380	0.70	2.13	9.33
CO	1,380	1.00	3.04	13.33
Formaldehyde	1,380	0.105	0.32	1.40

Notes:

1. Emissions of SO₂ and PM are assumed to be negligible and not reportable.
2. Emission factors for NO_x, CO, VOC, and formaldehyde obtained from manufacturer data, assuming a 70% control efficiency for CO and formaldehyde. Please note that the VOC emission factor includes the formaldehyde emissions.
3. Potential emissions based on manufacturer emission factors, maximum horsepower, and 8,760 hrs/yr with an oxidation catalyst in service.

**ATTACHMENT 3
TABLE 5**

**POTENTIAL EMISSIONS SUMMARY
CATERPILLAR 3516TALE W/OXIDATION CATALYST (COMP5)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Pollutant ¹	Rated Horsepower	Emission Factors ²	Potential Emission Rate ³	
		(grams/Hp-hr)	lb/hr	T/yr
NO _x	1,340	2.00	5.91	25.88
VOC	1,340	0.50	1.48	6.47
CO	1,340	0.90	2.66	11.65
Formaldehyde	1,340	0.087	0.26	1.13

Notes:

1. Emissions of SO₂ and PM are assumed to be negligible and not reportable.
2. Emission factors for NO_x, CO, VOC, and formaldehyde obtained from manufacturer data, assuming a 70% control efficiency for CO and formaldehyde. Please note that the VOC emission factor includes the formaldehyde emissions.
3. Potential emissions based on manufacturer emission factors, maximum horsepower, and 8,760 hrs/yr with an oxidation catalyst in service.

**ATTACHMENT 3
TABLE 6**

**POTENTIAL EMISSIONS SUMMARY
CATERPILLAR 3516TALE W/OXIDATION CATALYST (COMP6)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Pollutant ¹	Rated Horsepower	Emission Factors ²	Potential Emission Rate ³	
		(grams/Hp-hr)	lb/hr	T/yr
NO _x	1,340	2.00	5.91	25.88
VOC	1,340	0.50	1.48	6.47
CO	1,340	0.90	2.66	11.65
Formaldehyde	1,340	0.087	0.26	1.13

Notes:

1. Emissions of SO₂ and PM are assumed to be negligible and not reportable.
2. Emission factors for NO_x, CO, VOC, and formaldehyde obtained from manufacturer data, assuming a 70% control efficiency for CO and formaldehyde. Please note that the VOC emission factor includes the formaldehyde emissions.
3. Potential emissions based on manufacturer emission factors, maximum horsepower, and 8,760 hrs/yr with an oxidation catalyst in service.

ATTACHMENT 4

Glycol Dehydrator Emissions and Supporting Documentation

**ATTACHMENT 4
TABLE 1**

**POTENTIAL EMISSIONS SUMMARY
GLYCOL DEHYDRATOR (DEHY1)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Pollutant	Potential Emissions ¹		Flash Tank Control Efficiency ³	Safety Factor	Total Emission Rates ⁴	
	Controlled Still Vent ²	Uncontrolled Flash Tank			lb/hr	T/yr
	T/yr	T/yr	%	%		
n-hexane	0.12	7.94	100%	100%	0.05	0.24
benzene	0.22	0.62	100%	100%	0.10	0.44
toluene	0.17	0.67	100%	100%	0.08	0.34
ethyl-benzene	0.002	0.01	100%	100%	0.001	0.004
xylene	0.10	0.45	100%	100%	0.04	0.19
Total HAPS	0.61	9.69	100%	100%	0.28	1.22
Total VOC	3.99	487.68	100%	100%	1.82	7.99

Notes:

1. Potential VOC and HAP emissions based on GRI-GLYCalc, representative extended gas analysis, maximum glycol circulation rate (15.0 gpm), and the maximum gas throughput (50.0 MMSCFD).
2. The glycol dehydrator still vent is equipped with a condenser and combustion device.
3. Flash tank vents back to the process (e.g., station inlet) resulting in 100% control of VOC and HAP emissions.
4. Emission rates equal controlled emissions and a 100% safety factor.

$$\text{Total Emission Rate (T/yr)} = \text{Still Vent (T/yr)} + [\text{Flash Tank (T/yr)} \times (1 - \text{Control Efficiency})] \times (1 + \text{Safety Factor})$$

$$\text{Total Emission Rate (lb/hr)} = \text{Total Emission Rate (T/yr)} \times 2000 \text{ (lbs/T)} / 8760 \text{ (hrs/yr)}$$

ATTACHMENT 4
TABLE 2

POTENTIAL EMISSIONS SUMMARY
UNCONTROLLED GLYCOL DEHYDRATOR (DEHY1)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC

Pollutant	Potential Uncontrolled Emissions ¹		Uncontrolled Hours hr/yr	Uncontrolled Emission Rates ²	
	Still Vent lb/hr	Flash Tank lb/hr		lb/hr	T/yr
n-hexane	1.14	1.81	125	2.95	0.18
benzene	2.97	0.14	125	3.11	0.19
toluene	5.34	0.15	125	5.49	0.34
ethyl-benzene	0.15	0.002	125	0.16	0.01
xylene	9.81	0.10	125	9.91	0.62
Total HAPS	19.40	2.21	125	21.61	1.35
Total VOC	43.64	111.34	125	154.98	9.69

Notes:

1. Potential VOC and HAP emissions based on GRI-GLYCalc, ARL and extended gas analysis, maximum glycol circulation rate (15.0 gpm), and the maximum gas throughput (50.0 MMSCFD).
2. Uncontrolled emission rates equal potential uncontrolled emissions (lb/hr) x 125 uncontrolled hours (hr/yr).

Uncontrolled Emission Rates (T/yr) = Uncontrolled Emission Rate (lb/hr) x Uncontrolled Hours (hrs/yr) / 2000 lbs/ton
Uncontrolled Emission Rate (lb/hr) = Still Vent (lb/hr) + Flash Tank (lb/hr)

Case Name: Foster Compressor Station - PTE

File Name: N:\AIR QUALITY NEW\OKLAHOMA\Foster\Applications\2025 Op App\Foster PTE.ddf

Date: March 21, 2025

CONTROLLED REGENERATOR EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	0.0972	2.332	0.4257
Ethane	0.1559	3.741	0.6826
Propane	0.2763	6.631	1.2101
Isobutane	0.0410	0.985	0.1798
n-Butane	0.2318	5.563	1.0153
Isopentane	0.0420	1.009	0.1841
n-Pentane	0.0868	2.084	0.3803
n-Hexane	0.0275	0.659	0.1203
Cyclohexane	0.0379	0.910	0.1660
Other Hexanes	0.0322	0.772	0.1410
Heptanes	0.0241	0.579	0.1056
Benzene	0.0507	1.218	0.2222
Toluene	0.0390	0.935	0.1706
Ethylbenzene	0.0004	0.010	0.0018
Xylenes	0.0220	0.529	0.0965
C8+ Heavies	0.0002	0.004	0.0008
Total Emissions	1.1650	27.960	5.1027
Total Hydrocarbon Emissions	1.1650	27.960	5.1027
Total VOC Emissions	0.9120	21.887	3.9944
Total HAP Emissions	0.1396	3.350	0.6114
Total BTEX Emissions	0.1121	2.691	0.4911

UNCONTROLLED REGENERATOR EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	1.9467	46.720	8.5264
Ethane	3.1412	75.389	13.7585
Propane	5.7522	138.053	25.1946
Isobutane	0.8917	21.401	3.9057
n-Butane	5.2067	124.961	22.8053
Isopentane	1.1083	26.600	4.8544
n-Pentane	2.4528	58.867	10.7432
n-Hexane	1.1356	27.254	4.9739
Cyclohexane	1.8804	45.129	8.2361
Other Hexanes	1.1226	26.943	4.9171
Heptanes	2.0660	49.584	9.0490
Benzene	2.9654	71.170	12.9885
Toluene	5.3378	128.107	23.3796
Ethylbenzene	0.1530	3.671	0.6700
Xylenes	9.8068	235.363	42.9537
C8+ Heavies	3.7558	90.139	16.4504
Total Emissions	48.7229	1169.350	213.4064
Total Hydrocarbon Emissions	48.7229	1169.350	213.4064
Total VOC Emissions	43.6350	1047.241	191.1215
Total HAP Emissions	19.3986	465.566	84.9657

Total BTEX Emissions	18.2630	438.312	Page: 2 79.9919
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FLASH GAS EMISSIONS

Note: Flash Gas Emissions are zero with the
Recycle/recompression control option.

FLASH TANK OFF GAS

Component	lbs/hr	lbs/day	tons/yr
Methane	180.7551	4338.122	791.7073
Ethane	74.1460	1779.505	324.7597
Propane	61.1235	1466.964	267.7210
Isobutane	5.8349	140.038	25.5568
n-Butane	25.1843	604.424	110.3073
Isopentane	4.4485	106.764	19.4845
n-Pentane	7.6533	183.680	33.5217
n-Hexane	1.8138	43.532	7.9446
Cyclohexane	0.7273	17.456	3.1858
Other Hexanes	2.4327	58.384	10.6551
Heptanes	1.4776	35.463	6.4720
Benzene	0.1423	3.415	0.6232
Toluene	0.1521	3.651	0.6664
Ethylbenzene	0.0023	0.056	0.0103
Xylenes	0.1020	2.447	0.4466
C8+ Heavies	0.2472	5.934	1.0829
Total Emissions	366.2432	8789.836	1604.1451
Total Hydrocarbon Emissions	366.2432	8789.836	1604.1451
Total VOC Emissions	111.3420	2672.209	487.6782
Total HAP Emissions	2.2126	53.101	9.6910
Total BTEX Emissions	0.3987	9.570	1.7465

GRI-GLYCalc VERSION 4.0 - SUMMARY OF INPUT VALUES

Case Name: Foster Compressor Station - PTE

File Name: N:\AIR QUALITY NEW\OKLAHOMA\Foster\Applications\2025 Op App\Foster PTE.ddf

Date: March 21, 2025

DESCRIPTION:

Description: Max Gas Throughput = 50.0 mmscfd
 Max Glycol Circ. Rate = 15.0 gpm (450-20
 PV)
 BTEX eliminator (95% control)
 Flash Tank Routed to Fuel/Suction
 Extended Gas Analysis (8/31/2022)

Annual Hours of Operation: 8760.0 hours/yr

WET GAS:

Temperature: 90.00 deg. F
 Pressure: 900.00 psig
 Wet Gas Water Content: Saturated

Component	Conc. (vol %)
Carbon Dioxide	0.8023
Nitrogen	2.7455
Methane	72.2962
Ethane	13.4528
Propane	7.0652
Isobutane	0.4870
n-Butane	1.9537
Isopentane	0.2948
n-Pentane	0.4743
n-Hexane	0.0915
Cyclohexane	0.0251
Other Hexanes	0.1284
Heptanes	0.0650
Benzene	0.0042
Toluene	0.0049
Ethylbenzene	0.0001
Xylenes	0.0049
C8+ Heavies	0.0245

DRY GAS:

Flow Rate: 50.0 MMSCF/day
 Water Content: 7.0 lbs. H2O/MMSCF

LEAN GLYCOL:

Glycol Type: TEG
 Water Content: 1.5 wt% H2O
 Flow Rate: 15.0 gpm

PUMP:

Glycol Pump Type: Gas Injection
Gas Injection Pump Volume Ratio: 0.080 acfm gas/gpm glycol

FLASH TANK:

Flash Control: Recycle/recompression
Temperature: 100.0 deg. F
Pressure: 75.0 psig

REGENERATOR OVERHEADS CONTROL DEVICE:

Control Device: Condenser
Temperature: 100.0 deg. F
Pressure: 14.7 psia

Control Device: Combustion Device
Destruction Efficiency: 95.0 %
Excess Oxygen: 5.0 %
Ambient Air Temperature: 71.0 deg. F

**Winn Analytical LLC**

44 South 122nd E Ave

Tulsa OK 74128

918-645-5238

Company Name:	ENERGY TRANSFER-AIR GROUP LANCE LODS	Component	Norm Amount %	GPM@14.73(PSIA)		
District Name:	ENERGY TRANSFER -AIR GROUP LANCE LODS	Methane	72.2962	0.000		
Station No:	FOSTER	Ethane	13.4528	3.611		
Cylinder No:	12967	Propane	7.0652	1.953		
Producer:	ET	Iso-Butane	0.4870	0.160		
Station Name:	FOSTER	Normal-Butane	1.9537	0.618		
Assoc Meters		Iso-Pentane	0.2948	0.108		
Area:	CHICKASHA	Normal-Pentane	0.4743	0.173		
Sampled Date:	8/31/2022 9:00 AM	Nitrogen	2.7455	0.000		
Analysis Date:	9/22/2022	Carbon-Dioxide	0.8023	0.000		
Effective Date:	9/1/2022	Oxygen	0.0002	0.000		
Pressure:	760	Helium	0.0795	0.000		
Temperature:	92	Benzene	0.0042	0.001		
Sampled By:	JUAN M	2,2,4 trimethylpentane	0.0000	0.000		
State:		Toluene	0.0049	0.002		
		Ethylbenzene	0.0000	0.000		
		O-xylene	0.0007	0.000		
		M-xylene/P-xylene	0.0042	0.002		
		Cyclopentane	0.0000	0.000		
		Methylcyclohexane	0.0000	0.000		
		Normal-Heptane	0.0237	0.011		
		Normal-Hexane	0.0915	0.038		
		Cyclohexane	0.0251	0.009		
		C6's	0.1284	0.052		
		C7's	0.0413	0.017		
		C8's	0.0182	0.007		
		C9's	0.0042	0.002		
		C10's	0.0021	0.000		
		C11's	0.0000	0.000		
		C12's	0.0000	0.000		
		C13's	0.0000	0.000		
		Total Norm Amt:	100.0000	6.764		
		Component Plus:				
		Ethane Plus	24.0763	6.764		
		Propane Plus	10.6235	3.153		
		Butane Plus	3.5583	1.200		
		Pentane Plus	1.1176	0.422		
BTU @	Ideal GPM	Real GPM	Ideal BTU Sat	Real BTU Sat	Ideal BTU Dry	Real BTU Dry

Gas Analysis performed in accordance with GPA 2286

Good

Disclaimer: Component GPMs of this reconstructed Analysis Report were computed based on the latest factors prescribed by the Gas Processors Association.



Winn Analytical LLC

44 South 122nd E Ave

Tulsa OK 74128

918-645-5238

14.65	6.705	6.729	1,247.45	1,252.77	1,269.67	1,274.55
14.696	6.726	6.749	1,251.44	1,256.79	1,273.66	1,278.57
14.73	6.741	6.764	1,254.38	1,259.76	1,276.60	1,281.54
15.025	6.876	6.899	1,279.95	1,285.54	1,302.17	1,307.31

ATTACHMENT 5

Glycol Dehydrator Reboiler Emissions Calculations

ATTACHMENT 5

POTENTIAL EMISSIONS SUMMARY GLYCOL DEHYDRATOR REBOILER (HEAT1) FOSTER COMPRESSOR STATION ET GATHERING & PROCESSING LLC

Pollutant ¹	Emission Factors (lb/MMSCF) ²	Potential Emission Rates ³	
		lb/hr	T/yr
NO _x	100.0	0.10	0.43
VOC	5.5	0.01	0.02
CO	84.0	0.08	0.36

Notes:

1. Emissions of SO₂ and PM are assumed to be negligible and not reportable.
2. Emission factors obtained from AP-42 Table 1.4-1 through 1.4-3 for commercial boilers.
3. Potential emissions based on AP-42 emission factors, maximum firing rate of 1.0 MMBtu/hr, 1,020 Btu/scf fuel heating value, and 8,760 hrs/yr.

ATTACHMENT 6

Condensate Storage Tank and Flare Emissions Calculations

**ATTACHMENT 6
TABLE 1**

**POTENTIAL EMISSIONS SUMMARY
CONDENSATE STORAGE TANKS (TANK1 - TANK4)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Source	Annual Throughput (gallons/year)	Tank Capacity (gallons)	Potential VOC Emissions ¹					
			Annual Breathing Losses ² (T/yr)	Annual Working Losses ² (T/yr)	Annual Flash Losses ³ (T/yr)	Potential Annual Emissions (T/yr)	Flare Capture Efficiency ⁴ (%)	Total Annual Emissions ⁵ (T/yr)
Condensate Storage Tank (400 bbl)	315,000	16,800	0.67	1.38	9.08	11.12	98%	0.22
Condensate Storage Tank (400 bbl)	315,000	16,800	0.67	1.38	9.08	11.12	98%	0.22
Condensate Storage Tank (400 bbl)	315,000	16,800	0.67	1.38	9.08	11.12	98%	0.22
Condensate Storage Tank (400 bbl)	315,000	16,800	0.67	1.38	9.08	11.12	98%	0.22

Notes:

1. Based on maximum annual condensate throughput value of 30,000-bbls/yr.
2. Annual working and breathing losses were determined using AP-42, Section 7.1. Refer to Attachment 6, Table 2.
3. Annual flash losses were based on the HYSYS process simulation method. Emission factors predicted by simulation model equals 2.42 lbs VOC/bbl condensate throughput. Copy of HYSYS output files available upon request.
4. Breathing/working/flash emissions from the storage tanks are routed to the condensate flare which has a capture efficiency of 98%. Refer to Attachment 6, Tables 3 and 4 for condensate flare emission calculations.
5. ETGP is requesting federally enforceable limits of less than six (6) tons per year (T/yr) of VOC for each of the four (4) condensate storage tanks.

ATTACHMENT 6

TABLE 2

**POTENTIAL EMISSIONS SUMMARY
AP-42 SECTION 7 FIXED-ROOF TANK EMISSIONS
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Tank Identification	TANK1	TANK2	TANK3	TANK4
Actual Location	FOSTER COMPRESSOR STATION	FOSTER COMPRESSOR STATION	FOSTER COMPRESSOR STATION	FOSTER COMPRESSOR STATION
Location for Calculation Purposes	Oklahoma City, Oklahoma	Oklahoma City, Oklahoma	Oklahoma City, Oklahoma	Oklahoma City, Oklahoma
Contents of Tank	Gasoline (RVP 10)	Gasoline (RVP 10)	Gasoline (RVP 10)	Gasoline (RVP 10)
Tank/Roof Type	Dome	Dome	Dome	Dome
Underground?	Aboveground	Aboveground	Aboveground	Aboveground
Will flashing occur at the tank?	Yes	Yes	Yes	Yes
Are the tanks vapor balanced?	Yes	Yes	Yes	Yes
Diameter, ft	12.0	12.0	12.0	12.0
Shell Height or Length, ft	20.0	20.0	20.0	20.0
Nominal Capacity, gal	16,800	16,800	16,800	16,800
Throughput, gallons/yr	315,000	315,000	315,000	315,000
Tank Paint Color	Beige/Cream	Beige/Cream	Beige/Cream	Beige/Cream
Tank Paint Condition	Average	Average	Average	Average
Effective Diameter, ft	12.0	12.0	12.0	12.0
Geometric Capacity, gal	16,074	16,074	16,074	16,074
Maximum Liquid Height, ft	19.0	19.0	19.0	19.0
Average Liquid Height, ft	14.25	14.25	14.25	14.25
Minimum Liquid Height, ft	1	1	1	1
Cone Tank Roof Slope, ft/ft	0.0625	0.0625	0.0625	0.0625
Dome Tank Roof Radius, ft	12.00	12.00	12.00	12.00
Dome Tank Roof Height, ft	1.608	1.608	1.608	1.608
Roof Outage, ft	0.823	0.823	0.823	0.823
Vapor Space Outage, ft	6.57	6.57	6.57	6.57
Vapor Space Volume, ft ³	743	743	743	743
Average Daily Minimum Ambient Temperature, F	50.30	50.30	50.30	50.30
Average Daily Maximum Ambient Temperature, F	71.10	71.10	71.10	71.10
Daily Maximum Ambient Temperature, F	92.80	92.80	92.80	92.80
Daily Total Solar Insolation Factor, Btu/ft ² /day	1479	1479	1479	1479
Daily Average Ambient Temperature, F	60.7	60.7	60.7	60.7
Tank Paint Solar Absorbance, dimensionless	0.420	0.420	0.420	0.420
Daily Vapor Temperature Range, R	27.3	27.3	27.3	27.3
Daily Average Liquid Surf. Temperature, F	64.1	64.1	64.1	64.1
Daily Minimum Liquid Surf. Temperature, F	57.3	57.3	57.3	57.3
Daily Maximum Liquid Surf. Temperature, F	71.0	71.0	71.0	71.0
Liquid Bulk Temperature	62.56	62.56	62.56	62.56
Vapor Molecular Weight, lb/lbmol	66.0	66.0	66.0	66.0
Antoine's Coefficient A	0.0	0.0	0.0	0.0
Antoine's Coefficient B	0.0	0.0	0.0	0.0
Antoine's Coefficient C	0.000	0.000	0.000	0.000
Type of Substance (for use in calculations)	Gas	Gas	Gas	Gas
Vapor Pressure at Daily Av. Liquid Surf. Temp., psia	5.617	5.617	5.617	5.617
Vapor Pressure at Daily Min. Liquid Surf. Temp., psia	4.921	4.921	4.921	4.921
Vapor Pressure at Daily Max. Liquid Surf. Temp., psia	6.389	6.389	6.389	6.389
Vapor Pressure Calculation Method	AP-42 Figure 7.1-14b; RVP=10 ASTM Slope=3	AP-42 Figure 7.1-14b; RVP=10 ASTM Slope=3	AP-42 Figure 7.1-14b; RVP=10 ASTM Slope=3	AP-42 Figure 7.1-14b; RVP=10 ASTM Slope=3
Vapor Density, lb/ft ³	0.065950	0.065950	0.065950	0.065950
Daily Vapor Pressure range, psi	1.467	1.467	1.467	1.467
Breather Vent Pressure Setting, psig	0.0300	0.0300	0.0300	0.0300
Breather Vent Vacuum Setting, psig	-0.0300	-0.0300	-0.0300	-0.0300
Breather Vent Pressure Setting Range, psi	0.0600	0.0600	0.0600	0.0600
Ambient Pressure, psia	14.0	14.0	14.0	14.0
Vapor Space Expansion Factor	0.2198	0.2198	0.2198	0.2198
Vented Vapor Saturation Factor	0.338	0.338	0.338	0.338
Annual Turnovers	20.68	20.68	20.68	20.68
Turnover Factor	1.00	1.00	1.00	1.00
Working Loss K _g Factor	0.99	0.99	0.99	0.99
Working Loss Product Factor	1.00	1.00	1.00	1.00
Standing Storage Loss, lb/yr	1,330.57	1,330.57	1,330.57	1,330.57
Working Loss, lb/yr	2,758.58	2,758.58	2,758.58	2,758.58
Total Losses, lb/yr	4,089.16	4,089.16	4,089.16	4,089.16
Standing Storage Loss, TPY	0.66529	0.66529	0.66529	0.66529
Working Loss, TPY	1.37929	1.37929	1.37929	1.37929
Total Losses, TPY	2.04458	2.04458	2.04458	2.04458

Based on AP-42, June 2020, Section 7.1.3.1.

**ATTACHMENT 6
TABLE 3**

**POTENTIAL EMISSIONS SUMMARY
CONDENSATE FLARE (FLARE1)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Pollutant	Emission Factors ¹ (lb/MMBtu)	Potential Emissions ²	Flare Destruction Efficiency	Total Controlled Emission Rates ³	
		lb/hr	%	lb/hr	T/yr
NOx	0.068	--	--	0.02	0.11
CO	0.31	--	--	0.11	0.49
VOC	--	10.39	98%	0.21	0.91

Notes:

1. Emission factors for NO_x and CO obtained from AP-42 Table 13.5-1 for industrial flares.
2. VOC emissions estimated based on the flare pilot feed rate, gas analysis, and emissions routed to flare from the condensate storage tanks. Refer to Attachment 6, Table 4.
3. NOx and CO emissions based on AP-42 emission factors and a heat value of 0.36 MMBtu/hr (refer to Attachment 6 Table 4). Controlled emissions for VOC based on flare pilot feed rate, emissions routed to flare from the condensate storage tanks, a 98% destruction efficiency from the flare, and 8,760 hrs/yr.

ATTACHMENT 6

TABLE 4

POTENTIAL EMISSIONS SUMMARY CALCULATION OF VOC/HAP TO CONDENSATE FLARE FOSTER COMPRESSOR STATION ET GATHERING & PROCESSING LLC

				Waste Streams to Flare				Flare Capture Efficiency 98%			
Flare Pilot Gas - Inlet Gas Composition				Condensate Storage Tanks: (4) 400 bbl ¹ (working/breathing/flash losses)				Total Streams Burned (Pilot + Waste Streams)		Pure Component Heat Value	Gross Btu Value ² (if burned)
30 SCFH				TANK1	TANK2	TANK3	TANK4	lb/hr	scfd	Btu/scf	Btu/hr
	Mol Wt	Mole %	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr				
N2	28.01	2.7455	0.061	0.000	0.000	0.000	0.000	0.0607	19.8	0.00	0.00
CO2	44.01	0.8023	0.028	0.050	0.050	0.050	0.050	0.2289	47.4	0.00	0.00
H2S	34.076	0.0000	0.000	0.000	0.000	0.000	0.000	0.0000	0.0	637.02	0.00
C1	16.04	72.2962	0.915	0.498	0.498	0.498	0.498	2.9064	1,652.5	1,009.70	69,522.15
C2	30.07	13.4528	0.319	0.745	0.745	0.745	0.745	3.2986	1,000.4	1,768.70	73,728.92
C3	44.1	7.0652	0.246	0.769	0.769	0.769	0.769	3.3219	687.0	2,517.20	72,052.65
iC4	58.12	0.4870	0.022	0.138	0.138	0.138	0.138	0.5758	90.3	3,252.60	12,244.56
nC4	58.12	1.9537	0.090	0.433	0.433	0.433	0.433	1.8224	286.0	3,262.00	38,868.09
iC5	72.15	0.2948	0.017	0.151	0.151	0.151	0.151	0.6222	78.7	3,999.70	13,107.97
nC5	72.15	0.4743	0.027	0.247	0.247	0.247	0.247	1.0157	128.4	4,008.70	21,445.41
C6	84.162	0.2492	0.017	0.000	0.000	0.000	0.000	0.0166	1.8	4,481.60	335.04
C7+	100.2	0.1790	0.014	0.750	0.750	0.750	0.750	3.0133	274.3	5,503.00	62,886.50
Totals								16.88	4,267	Btu/hr	364,191.30
				Total Potential VOC				10.388		Heat Value ³ (Btu/scf)	2,049

Notes:

- Working/breathing losses were determined using AP-42, Section 7.1 and a maximum annual condensate throughput of 30,000-bbls/yr. Unspeciated working/breathing components were included with C7+.
Flash losses from the four (4) condensate storage tanks are based on HYSYS process simulation method using the maximum annual condensate throughput value. Emission factor predicted by simulation model equals 2.42 lbs VOC/bbl condensate throughput. Copy of HYSYS output files available upon request.
- Gross Btu Value (Btu/hr) = Total Streams Burned in Flare (lb/hr) / Mol Wt (lb/mol) * 380 (scf/mol) * Pure Component Heat Value (Btu/scf)
- Heat Value (Btu/scf) = Total Gross Btu Value (Btu/hr) / Total Streams Burned (scfd) * 24 (hrs/day)

ATTACHMENT 7

Condensate Loading Emissions Calculations

ATTACHMENT 7

POTENTIAL EMISSIONS SUMMARY CONDENSATE LOADING (LOAD1) FOSTER COMPRESSOR STATION ET GATHERING & PROCESSING LLC

Material Name	Constituent	Saturation Factor ¹ (S)	True Vapor Pressure (P)	Molecular Weight of Vapors (M) (lb/lb-mole)	Temp of Loaded Liquid (F)	Emission Factor ¹ (lb VOC/10 ³ gal)	Annual Throughput ² (gals)	Annual Emissions ³ (T/yr)
Condensate	VOC	0.6	6.39	66	62.56	6.032	1,260,000	3.80

1. Per AP-42, 5th Edition (6/08), Section 5.2, Equation 1

$$\text{Emission Factor (lb VOC/10}^3\text{gal)} = \frac{S \times P \times M}{F + 460} \times 12.46$$

2. Annual Throughput is the amount of condensate loaded out from tanks.

3. Annual Emissions = Annual Throughput / 1000 x Emission Factor / 2000 lb/T

ATTACHMENT 8

Process Piping Fugitive Emissions Calculations

**ATTACHMENT 8
TABLE 1**

**POTENTIAL EMISSIONS SUMMARY
PROCESS PIPING FUGITIVES (FUG1)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Component Type	Type of Service ¹	Number of Components ¹	Oil and Gas Production Emission Factors (lb/hr-component) ²	Percent VOC ³	Potential VOC Emission Rates ⁴	
					lb/hr	T/yr
Valves	Gas/Vapor	200	0.00992	24.77%	0.49	2.15
Flanges	Gas/Vapor	220	0.00086	24.77%	0.05	0.21
Compressor Seals	Gas/Vapor	80	0.0194	24.77%	0.38	1.68
Relief Valves	Gas/Vapor	50	0.0194	24.77%	0.24	1.05
Valves	Light Liquid	20	0.0055	100.00%	0.11	0.48
Flanges	Light Liquid	22	0.0002	100.00%	0.01	0.02
Pump Seals	Light Liquid	12	0.0287	100.00%	0.34	1.51
Relief Valves	Light Liquid	10	0.0165	100.00%	0.17	0.72
Totals:	--	614	--	--	1.79	7.83

Notes:

1. Number of each component and type of service estimated based on a similar compressor station.
2. Emission factors based on EPA's natural gas processing factors for process piping fugitive emissions.
3. Percent VOC for Gas/Vapor service based on a facility gas analysis (refer to attached Gas Analysis).
4. Emission rates based on 8,760 hrs/yr.

ATTACHMENT 8

TABLE 2

GAS ANALYSIS FOSTER COMPRESSOR STATION ET GATHERING & PROCESSING LLC

Component ¹	Molecular Weight	Mol % ²	Molar Weight ³	Average Mass % ⁴
Hydrogen Sulfide	34	0.0000%	0.00	0.00%
Nitrogen	28	2.7455%	0.77	3.46%
Carbon Dioxide	44	0.8023%	0.35	1.59%
Methane	16	72.2962%	11.57	52.03%
Ethane	30	13.4528%	4.04	18.15%
Propane	44	7.0652%	3.11	13.98%
i-Butane	58	0.4870%	0.28	1.27%
n-Butane	58	1.9537%	1.13	5.10%
i-Pentane	72	0.2948%	0.21	0.95%
n-Pentane	72	0.4743%	0.34	1.54%
Hexanes	86	0.2492%	0.21	0.96%
Heptanes +	120	0.1790%	0.21	0.97%
Totals:		100.00%	22.23	100.00%
⁵ VOC Totals:		10.70%	5.51	24.77%

Notes:

1. Typical components listed in gas analysis for field gas.
2. Mol % values obtained from the gas analysis.
3. Molar weight = Molecular weight x Mol % /100.
4. Average mass % = Molar weight / Total molar weight.
5. VOC Totals include the following components (C3+):
 - Propane
 - i-Butane
 - n-Butane
 - i-Pentane
 - n-Pentane
 - Hexanes
 - Heptanes +

ATTACHMENT 9

MSS Emissions Calculations

ATTACHMENT 9

TABLE 1

POTENTIAL EMISSIONS SUMMARY COMPRESSOR BLOWDOWNS (MSS-BD) FOSTER COMPRESSOR STATION ET GATHERING & PROCESSING LLC

Volume of Gas (Mcf/Hr) ¹	2.0	Number of Compressors		6
Volume of Gas (Mcf/Yr) ²	624	Blowdowns per Compressor		52
Component	Mol Wt	Mole % ³	lb/hr ⁴	T/yr ⁵
Hydrogen Sulfide	34	0.0000%	0.00	0.00
Nitrogen	28	2.7455%	4.05	0.63
Carbon Dioxide	44	0.8023%	1.858	0.290
Methane	16	72.2962%	60.88	9.50
Ethane	30	13.4528%	21.24	3.31
Propane	44	7.0652%	16.36	2.55
i-Butane	58	0.4870%	1.49	0.232
n-Butane	58	1.9537%	5.96	0.930
i-Pentane	72	0.2948%	1.117	0.1743
n-Pentane	72	0.4743%	1.80	0.28
Hexanes	86	0.2492%	1.13	0.176
Heptanes +	120	0.1790%	1.13	0.18
Total		100.0%	117.01	18.25
Total Potential VOC			28.99	4.52

Notes:

1. It is estimated that up to 2,000 cubic feet of gas could be vented to atmosphere during a blowdown event and one event could occur per hour.
2. It is estimated that up to 624 mcf of gas could be released per year from blowdowns.
3. Components and mole % based on representative gas analysis.
4. Blowdown lb/hr = Blowdown rate (SCFH) * [Component Mole Fraction (%) / 100] / 380 (SCF/mol) * Molecular Weight (lb/mol)
5. Blowdown T/yr = Blowdown rate (SCFY) * [Component Mole Fraction (%) / 100] / 380 (SCF/mol) * Molecular Weight (lb/mol) * 2000 lb/ton

**ATTACHMENT 9
TABLE 2**

**POTENTIAL EMISSIONS SUMMARY
MSS EMISSIONS (MSS)
FOSTER COMPRESSOR STATION
ET GATHERING & PROCESSING LLC**

Summary of MSS Activities		
Activity	VOC ¹	
	(lb/hr)	(T/yr)
Engine, compressor, turbine and other combustion facilities maintenance	0.06	0.25
Repair, adjustment, calibration, lubrication and cleaning of site process equipment		
Replacement of piping components, pneumatic controllers, boiler refractories, wet and dry seals, meters, instruments, analyzers, screens and filters		
Turbine or engine component swaps		
Piping used to bypass a facility during maintenance	0.58	0.02
Pigging and purging of piping		
Total =	0.64	0.27

MSS - Pigging Operations

Description	Pigging
Number of Events per Year	52
Number of Events per hour	1
Volume per Event, scf	40.00
Stream Specific Gravity	0.77
Air MW, lb/mole	28.96
Fuel Stream Density, lb/scf	0.059
VOC Percentage in Gas Stream, wt%	24.77%
VOC Hourly Emission Rate (lb/hr):	0.58
VOC Annual Emission Rate (T/yr):	0.02

Notes:

1. Defaults from Texas Commission on Environmental Quality (TCEQ) emissions spreadsheet.

ATTACHMENT 10

ODEQ Oil & Gas Representative Sample Information Forms

OIL & GAS REPRESENTATIVE SAMPLE INFORMATION FORM

Please complete this form for each sample used to estimate emissions at the facility and attach to sample lab analysis.

☒	Sample Follows Representative Sampling Guidance Document	OR	☐	Requesting a Case-By-Case Determination*
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* - Please fill out Additional Justification on Page 3.

1	ACTUAL FACILITY INFORMATION				
Company Name		ET Gathering & Processing LLC			
Facility Name		Foster Compressor Station			
Latitude / Longitude (to 5 decimal places)		Latitude	34.63062	Longitude	-97.54297
List All Current Air Quality Permit Numbers At This Facility		2024-0330-NOI, 2012-1198-O (M-1)			
Please select the Facility Type:					
☐	Well Site	☒	Natural Gas Compressor Station (Gathering)	☐	Natural Gas Compressor Station (Transmission)
☐	Natural Gas Processing Plant				
Permit Action					
☐	Construction*		☐	Modification*	
☐			☒	Operation	

* - If application is submitted prior to new construction or modification, Box 4 (Facility-Specific Operating Data) and considerations following (Pages 2-3) may be left blank.

2	REPRESENTATIVE FACILITY INFORMATION				
Company Name					
Facility Name					
Latitude / Longitude (to 5 decimal places)		Latitude		Longitude	
List All Current Air Quality Permit Numbers At This Facility					
Please select the Facility Type:					
☐	Well Site	☐	Natural Gas Compressor Station (Gathering)	☐	Natural Gas Compressor Station (Transmission)
☐	Natural Gas Processing Plant				

3	SAMPLE INFORMATION				
Sample Being Utilized		☒	Facility-Specific Sample		☐
				Representative Facility Sample	
Sample is Used to Estimate Emissions for Which Units		DEHY1, FLARE1, FUG1, MSS-BD, & MSS			
Sample Date	8/31/2022	Sample Name or Number	FOSTER		
Sample Point	Inlet	Type of Sample	Extended Gas Analysis		
Sample Conditions	Pressure (psig)	760	Temperature (°F)	92	
Please Select and Specify the Sampling Method:					
☐	ASTM	☒	GPA	☐	Other
		Specify Method: 2286			

4	FACILITY-SPECIFIC OPERATING DATA				
Operating Conditions		Pressure (psig)	760	Temperature (°F)	92
API Gravity of Sales Oil		Type of Control & Efficiency			
Mark the Following That Apply (Based on Calculated Emission Estimates):					
☒	Facility-Wide VOC Emissions > 80 TPY	☐	Facility-Wide VOC Emissions > 200 TPY	☐	Tank and Loading VOC emissions > 50% Total VOC Emissions
☐	Storage Tanks, w/o control, with VOC Emissions > 4 TPY per Tank				
Is Facility-Wide Throughput:					
☐	< 10 bbl/day	☒	< 1,200 bbl/day and controlled by > 95%	☐	> 10 bbl/day and uncontrolled
☐	> 1,200 bbl/day				

If requesting a case-by-case determination, the following considerations are not required.

No.	All Sample Considerations	Yes	No
1	Is sample more than three (3) calendar years old?		✓
If the above answer is yes, a new sample is required or the sample shall be evaluated on a case-by-case basis.			

Only fill out the following tables when using a representative sample.

No.	Calculated Emission Considerations	Yes	No
2a	For true minor and synthetic minor facilities, are VOC emissions more than 80 TPY and then do storage tank and truck loading VOC emissions account for more than 50% of facility-wide VOC emissions?		
2b	For major facilities, are VOC emissions more than 200 TPY?		
3	Are individual storage tank emissions, not controlled by a combustion device, more than 4 TPY VOC?		
4	Are facility-wide emissions of a single HAP greater than 8 TPY or are total HAP emissions greater than 20 TPY? (Excluding HAP emissions from engines)		
If any of the above answers are yes, a facility-specific sample is required.			

No.	Throughput Considerations	Yes	No
5a	Is facility-wide throughput less than 10 bbl/day? ¹		
5b	Is facility-wide throughput less than 1,200 bbl/day and controlled by more than 95% with a VRU and/or combustion device? ²		
If either of the above answers are yes, the representative sample does not have to meet the requirements of distance, sampling point and operating parameters.			

Only fill out the following tables for the facility type being represented.

No.	Well Site Considerations	Yes	No
6a	Is Representative Facility less than 10 miles from the Actual Facility and produced in the same formation?		
7a	Is the sample point of the Representative Facility within $\pm 20^{\circ}\text{C}$ (36°F) of the Actual Facility?		
8a	Is the sample point of the Representative Facility within ± 20 psig of the Actual Facility if greater than 30 psig or is the sample pressure greater than half that of the actual facility if the actual facility operates at less than 30 psig.		
9a	Is the sales oil of the Representative Facility within $\pm 5^{\circ}$ API gravity of the Actual Facility?		
10a	Was the representative sample taken at or before the last stage of separation of the actual facility, comparatively?		
If any of the above answers are no, a facility-specific sample is required.			

¹ – This applies to Well Sites and Natural Gas Compressor Stations (Gathering and Transmissions);

² – This applies to Well Sites and Natural Gas Compressor Station (Gathering).

No.	Natural Gas Compressor Station (Gathering) Considerations	Yes	No
6b	Is Representative Facility less than 10 miles from the Actual Facility?		
7b	Is the sample point of the Representative Facility within $\pm 20^{\circ}\text{C}$ (36°F) of the Actual Facility?		
8b	Is the sample point of the Representative Facility within ± 20 psig of the Actual Facility if greater than 30 psig or is the sample pressure greater than half that of the actual facility if the actual facility operates at less than 30 psig.		
9b	Is the sales oil of the Representative Facility within $\pm 5^{\circ}$ API gravity of the Actual Facility?		
10b	Was the representative sample taken at or before the last stage of separation of the actual facility, comparatively?		
If any of the above answers are no, a facility-specific sample is required. ³			

No.	Natural Gas Compressor Station (Transmission) Considerations	Yes	No
6c	Is Representative Facility upstream from the Actual Facility and on the same pipeline?		
If any of the above answers are no, a facility-specific sample is required.			

No.	Natural Gas Processing Plant Considerations	Yes	No
6d	Is the condensate treated in a condensate stabilizer prior to entering storage tanks or are storage tanks controlled by greater than 95% with a VRU and/or combustion device?		
If any of the above answers are no, a facility-specific sample is required.			

Additional Justification: _____

³ - A representative sample may be use if all the criteria identified above are met except that the representative facility is located at a distance greater than 10 miles from the actual facility, provided a strong written justification is given for the specific instances where no representative facility that meets the above criteria may exist.

OIL & GAS REPRESENTATIVE SAMPLE INFORMATION FORM

Please complete this form for each sample used to estimate emissions at the facility and attach to sample lab analysis.

☒ Sample Follows Representative Sampling Guidance Document	OR	☐ Requesting a Case-By-Case Determination
--	----	--

1	ACTUAL FACILITY INFORMATION				
Company Name		ET Gathering & Processing LLC			
Facility Name		Foster Compressor Station			
Latitude / Longitude (to 5 decimal places)		Latitude	34.63062	Longitude	-97.54297
List All Current Air Quality Permit Numbers At This Facility		2024-0330-NOI, 2012-1198-O (M-1)			
Please select the Facility Type:					
☐	Well Site	☒	Natural Gas Compressor Station (Gathering)	☐	Natural Gas Compressor Station (Transmission)
☐		☐		☐	Natural Gas Processing Plant
Permit Action					
☐	Construction*	☐	Modification*	☒	Operation

* - If application is submitted prior to new construction or modification, Box 4 (Facility-Specific Operating Data) and considerations following may be left blank.

2	REPRESENTATIVE FACILITY INFORMATION				
Company Name					
Facility Name					
Latitude / Longitude (to 5 decimal places)		Latitude		Longitude	
List All Current Air Quality Permit Numbers At This Facility					
Please select the Facility Type:					
☐	Well Site	☐	Natural Gas Compressor Station (Gathering)	☐	Natural Gas Compressor Station (Transmission)
☐		☐		☐	Natural Gas Processing Plant

3	SAMPLE INFORMATION				
Sample Being Utilized		☐ Facility-Specific Sample	☒	Representative Facility Sample	
Sample is Used to Estimate Emissions for Which Units		TANK1, TANK2, TANK3, & TANK4			
Sample Date	3/29/2013	Sample Name or Number	Lab Ref # G7946CX/V - FT2384		
Sample Point	Foster Comp Inlet Separator	Type of Sample	Condensate Extended		
Sample Conditions	Pressure (psig)	48	Temperature (°F)	64	
Please Select and Specify the Sampling Method:					
☐	ASTM	☒	GPA	☐	Other
		Specify Method: 2145-09 & 2186-03			

4	FACILITY-SPECIFIC OPERATING DATA				
Operating Conditions		Pressure (psig)		Temperature (°F)	
API Gravity of Sales Oil		Type of Control & Efficiency			
Mark the Following That Apply (Based on Calculated Emission Estimates):					
☐	Facility-Wide VOC Emissions > 80 TPY	☐	Facility-Wide VOC Emissions > 200 TPY	☐	Tank and Loading VOC emissions > 50% Total VOC Emissions
☐		☐		☐	Storage Tanks, w/o control, with VOC Emissions > 4 TPY per Tank
Is Facility-Wide Throughput:					
☐	< 10 bbl/day	☐	< 1,200 bbl/day and controlled by > 95%	☐	> 10 bbl/day and uncontrolled
☐		☐		☐	> 1,200 bbl/day

If requesting a case-by-case determination, the following forms are not required.

No.	All Sample Considerations	Yes	No
1	Is sample more than three (3) calendar years old?	✓	
If the above answer is yes, a new sample is required or the sample shall be evaluated on a case-by-case basis.			

Only fill out the following tables when using a representative sample.

No.	Calculated Emission Considerations	Yes	No
2a	For true minor and synthetic minor facilities, are VOC emissions more than 80 TPY and then do storage tank and truck loading VOC emissions account for more than 50% of facility-wide VOC emissions?		
2b	For major facilities, are VOC emissions more than 200 TPY?		
3	Are individual storage tank emissions, not controlled by a combustion device, more than 4 TPY VOC?		
4	Are facility-wide emissions of a single HAP greater than 8 TPY or are total HAP emissions greater than 20 TPY? (Excluding HAP emissions from engines)		
If any of the above answers are yes, a facility-specific sample is required.			

No.	Throughput Considerations	Yes	No
5a	Is facility-wide throughput less than 10 bbl/day? ¹		
5b	Is facility-wide throughput less than 1,200 bbl/day and controlled by more than 95% with a VRU and/or combustion device? ²		
If either of the above answers are yes, the representative sample does not have to meet the requirements of age, distance, and operating parameters.			

Only fill out the following tables for the facility type being represented.

No.	Well Site Considerations	Yes	No
6a	Is Representative Facility less than 10 miles from the Actual Facility and produced in the same formation?		
7a	Is the sample point of the Representative Facility within $\pm 20^{\circ}\text{C}$ (36°F) of the Actual Facility?		
8a	Is the sample point of the Representative Facility within ± 20 psig of the Actual Facility if greater than 30 psig or is the sample pressure greater than half that of the actual facility if the actual facility operates at less than 30 psig.		
9a	Is the sales oil of the Representative Facility within $\pm 5^{\circ}$ API gravity of the Actual Facility?		
10a	Was the representative sample taken at or before the last stage of separation of the actual facility, comparatively?		
If any of the above answers are no, a facility-specific sample is required.			

¹ – This applies to Well Sites and Natural Gas Compressor Station (Gathering);

² – This applies to Well Sites and Natural Gas Compressor Stations (Gathering and Transmissions).

No.	Natural Gas Compressor Station (Gathering) Considerations	Yes	No
6b	Is Representative Facility less than 10 miles from the Actual Facility?		
7b	Is the sample point of the Representative Facility within $\pm 20^{\circ}\text{C}$ (36°F) of the Actual Facility?		
8b	Is the sample point of the Representative Facility within ± 20 psig of the Actual Facility if greater than 30 psig or is the sample pressure greater than half that of the actual facility if the actual facility operates at less than 30 psig.		
9b	Is the sales oil of the Representative Facility within $\pm 5^{\circ}$ API gravity of the Actual Facility?		
10b	Was the representative sample taken at or before the last stage of separation of the actual facility, comparatively?		
If any of the above answers are no, a facility-specific sample is required. ³			

No.	Natural Gas Compressor Station (Transmission) Considerations	Yes	No
6c	Is Representative Facility upstream from the Actual Facility and on the same pipeline?		
If any of the above answers are no, a facility-specific sample is required.			

No.	Natural Gas Processing Plant Considerations	Yes	No
11	Is the condensate treated in a condensate stabilizer prior to entering storage tanks or are storage tanks controlled by greater than 95% with a VRU and/or combustion device?		
If any of the above answers are no, a facility-specific sample is required.			

Additional Justification: _____

The purpose for this permitting action was to replace three (3) compressor engines. No physical modifications are being requested for the condensate storage tanks or loading. The only emission changes are related to using the new AP-42 emission calculation methodology rather than EPA TANKS 4.0. Therefore, per the Representative Sampling Guidance, we are not required to pull a new sample.

³ - A representative sample may be use if all the criteria identified above are met except that the representative facility is located at a distance greater than 10 miles from the actual facility, provided a strong written justification is given for the specific instances where no representative facility that meets the above criteria may exist.

SHAMROCK GAS ANALYSIS

LABORATORY REFERENCE NUMBER : G7946CX/V - FT2384

ENOGEX

ID: FOSTER COMP INLET SLUG
AREA: NOT/REC
METER: FOSTER COMP INLET SLUG
LEASE: FOSTER COMP INLET SLUG
OPERATOR: ENOGEX
STATION: FOSTER COMP INLET SLUG
SAMPLE DATE: 3/29/2013
SAMPLE OF: LIQUID

LINE PRESSURE: 48 PSI
LINE TEMPERATURE: 64 F
CYLINDER NUMBER: WD641/E855
EFFECTIVE DATE:
SAMPLED BY: J. GALVEZ
ANALYZED BY: BRENNAN
ANALYZED DATE: 3/31/2013
SAMPLE TYPE: CONDENSATE EXTENDED

For: ENOGEX
Attn: ELK CITY
1316 AIRPORT ROAD
ELK CITY, OK 73644

Physical Properties per GPA 2145-09

Calculations per GPA 2186-03

Note: Zero = Less than detection limit

	<u>MOL%</u>	<u>WEIGHT%</u>	<u>LIQUID VOL.%</u>
NITROGEN	0.000	0.000	0.000
CARBON DIOXIDE	0.074	0.035	0.030
METHANE	1.682	0.290	0.674
ETHANE	2.112	0.683	1.336
PROPANE	3.401	1.614	2.218
ISOBUTANE	1.067	0.667	0.826
N-BUTANE	4.678	2.926	3.492
ISOPENTANE	3.391	2.632	2.935
N-PENTANE	7.538	5.852	6.468
HEXANES	15.460	14.335	15.108
HEPTANES PLUS	60.597	70.966	66.913
	<u>100.000</u>	<u>100.000</u>	<u>100.000</u>

<u>Calculated Value</u>	<u>Total Sample</u>	<u>Heptanes Plus</u>
Molecular Weight	92.938	108.840
Relative Density	0.6971	0.7393
Liquid Density (lbs/gal Absolute Density)	5.812	6.164
Liquid Density (lbs/gal Weight in Air)	5.806	6.158
Cu.Ft./Vapor / Gal. @ 14.696	23.732	21.492
Vapor Pressure (PSIA) @ 100° F	115.110	1.252
API Gravity at 60° F	71.5	59.9
BTU / LB	20588	20384
BTU / GAL.	119648	146525
BTU / Cu. FT. (Vol. IDEAL Gas Fuel @ 14.696)	5042.3	5846.7
Specific Gravity as a Vapor @ 14.696	3.2088	3.7577

Remarks: RUSH SAMPLE
Remarks:

SHAMROCK GAS ANALYSIS

LABORATORY REFERENCE NUMBER : G7946CX/V - FT2384

COMPANY: ENOGEX
AREA / FIELD: NOT/REC
LEASE: FOSTER COMP INLET SLUG CATCHER

SAMPLE DATE: 3/29/2013

	<u>MOL%</u>	<u>WEIGHT%</u>	<u>LIQUID VOL.%</u>
NITROGEN	0.000	0.000	0.000
CARBON DIOXIDE	0.074	0.035	0.030
METHANE	1.682	0.290	0.674
ETHANE	2.112	0.683	1.336
PROPANE	3.401	1.614	2.218
ISOBUTANE	1.067	0.667	0.826
N-BUTANE	4.678	2.926	3.492
ISOPENTANE	3.391	2.632	2.935
N-PENTANE	7.538	5.852	6.468
2,2-Dimethylbutane	1.101	1.021	1.088
2,3-Dimethylbutane & Cyclopentane	0.743	0.689	0.721
2-Methylpentane	7.236	6.710	7.104
3-Methylpentane	1.810	1.678	1.747
n-Hexane	4.570	4.237	4.448
2,2-Dimethylpentane	2.141	2.308	2.370
Methylcyclopentane	0.786	0.712	0.658
2,4-Dimethylpentane	0.000	0.000	0.000
2,2,3- Trimethylbutane	0.727	0.784	0.787
Benzene	0.107	0.090	0.071
3,3-Dimethylpentane	0.256	0.276	0.276
Cyclohexane	0.935	0.847	0.753
2-Methylhexane	2.257	2.433	2.481
2,3-Dimethylpentane	0.624	0.673	0.670
1,1-Dimethylcyclopentane	0.000	0.000	0.000
3-Methylhexane	2.768	2.984	3.005
1,t-3-Dimethylcyclopentane	1.049	1.108	1.025
1,c-3-Dimethylcyclopentane & 3-Ethylpentane	0.165	0.174	0.162
1,t-2-Dimethylcyclopentane & 2,2,4- Trimethylpentane	0.705	0.745	0.687
n-Heptane	9.338	10.066	10.197
Methylcyclohexane	5.692	6.014	5.414
1,1,3- Trimethylcyclopentane & 2,2-Dimethylhexane	0.356	0.430	0.398
2,5-Dimethylhexane & 2,4-Dimethylhexane	0.208	0.256	0.254
Ethylcyclopentane	0.535	0.565	0.510
2,2,3- Trimethylpentane & 1,t-2,c-4- Trimethylcyclopentane	0.332	0.408	0.395
3,3-Dimethylhexane & 1,t-2,c-3- Trimethylcyclopentane	0.000	0.000	0.000
2,3,4- Trimethylpentane & 2,3-Dimethylhexane	2.889	3.551	3.421
Toluene	1.052	1.043	0.833
1,1,2- Trimethylcyclopentane	0.400	0.483	0.433
3,4-Dimethylhexane	0.000	0.000	0.000
2-Methylheptane	1.541	1.894	1.879
4-Methylheptane	1.553	1.909	1.876
1,c-2,t-4- Trimethylcyclopentane	0.068	0.082	0.074
3-Methylheptane & 3,4-Dimethylhexane	2.470	3.036	2.979

SHAMROCK GAS ANALYSIS

LABORATORY REFERENCE NUMBER : G7946CX/V - FT2384

COMPANY: ENOGEX
AREA / FIELD: NOT/REC
LEASE: FOSTER COMP INLET SLUG CATCHER

SAMPLE DATE: 3/29/2013

	<u>MOL%</u>	<u>WEIGHT%</u>	<u>LIQUID VOL. %</u>
1,c-3-Dimethylcyclohexane & 3-Ethylhexane	0.491	0.593	0.536
1,t-4-Dimethylcyclohexane & 1,c2,t3- Trimethylcyclopentane	0.591	0.714	0.648
2,2,5-Trimethylhexane & 1,1-Dimethylcyclohexane	0.000	0.000	0.000
Methyl-Ethylcyclopentane's & 2,2,4- Trimethylhexane	0.426	0.516	0.463
n-Octane	4.061	4.991	4.924
1,t2 Dimethylcyclohexane & 2,2,4,4- Tetramethylpentane	0.583	0.704	0.629
1,t-3-Dimethylcyclohexane & 1,c-4-Dimethylcyclohexane	0.239	0.289	0.255
Dimethylheptanes & 1 ,c-2,c-3- Trimethylcyclopentane	0.233	0.295	0.268
Isopropylcyclopentane	0.264	0.319	0.285
Dimethylheptanes & Trimethylhexanes	1.145	1.541	1.377
1,c-2-Dimethylcyclohexane	1.857	2.242	1.951
Dimethylheptanes	0.000	0.000	0.000
Ethylcyclohexane	0.910	1.099	0.966
n-Propylcyclopentane	0.000	0.000	0.000
Trimethylcyclohexanes	0.097	0.133	0.124
Ethylbenzene	0.173	0.198	0.158
Dimethylheptanes & Trimethylhexanes	0.310	0.424	0.390
m-Xylene & p-Xylene	2.571	2.937	2.360
2 & 4 Methyloctane & 3,4-Dimethylheptane	0.000	0.000	0.000
Trimethylcyclohexanes	0.000	0.000	0.000
3-Methyloctane	0.766	1.057	1.016
Trimethylcyclohexanes	0.804	1.092	0.967
o-Xylene	0.157	0.179	0.141
Trimethylcyclohexanes & Isobutylcyclopentane	0.303	0.412	0.364
n-Nonane	1.021	1.409	1.360
C9 Naphthenes & C10 Paraffins & Trimethylcyclohexanes	0.083	0.118	0.105
Isopropylbenzene & Trimethylcyclohexanes	0.116	0.150	0.121
C9 Naphthenes & C10 Paraffins	0.263	0.403	0.385
Isopropylcyclohexane	0.000	0.000	0.000
C9 Naphthenes & C10 Paraffins & Cyclooctane	0.211	0.271	0.232
N-Propylcyclohexane	0.256	0.348	0.304
C9 Naphthenes & C10 Paraffins & n-Butylcyclopentane	0.184	0.282	0.265
n-Propylbenzene	0.421	0.544	0.437
C9 Naphthenes & C10 Paraffins & EthylBenzenes	0.000	0.000	0.000
m-Ethyltoluene	0.000	0.000	0.000
p-Ethyltoluene	0.229	0.296	0.238
1,3,5- Trimethylbenzene & 4 & 5 Methylnonane	0.437	0.643	0.581
2-Methylnonane & 3-Ethylloctane	0.000	0.000	0.000
C9 Naphthenes & C10 Paraffins	0.000	0.000	0.000
O-Ethyltoluene & 3-Methylnonane	0.152	0.215	0.185
C9 Naphthenes & C10 Paraffins	0.079	0.121	0.114
tert-Butylbenzene	0.007	0.010	0.008
1,2,4 Trimethylbenzene & Methylcyclooctane	0.351	0.465	0.377
Isobutylcyclohexane & tert- Butylcyclohexane	0.000	0.000	0.000
n-Decane	0.220	0.337	0.320

SHAMROCK GAS ANALYSIS

LABORATORY REFERENCE NUMBER : G7946CX/V - FT2384

COMPANY: ENOGEX
AREA / FIELD: NOT/REC
LEASE: FOSTER COMP INLET SLUG CATCHER

SAMPLE DATE: 3/29/2013

	MOL%	WEIGHT%	LIQUID VOL.%
C10 Aromatics & C11 Paraffins	0.000	0.000	0.000
Isobutylbenzene	0.057	0.082	0.067
sec-Butylbenzene	0.000	0.000	0.000
C10 Aromatics & C11 Paraffins	0.052	0.075	0.059
1,2,3-Trimethylbenzene	0.042	0.054	0.042
C10 Aromatics & C11 Paraffins	0.090	0.145	0.129
n-Butylcyclohexane	0.045	0.068	0.059
C10 Aromatics & C11 Paraffins	0.000	0.000	0.000
1,3-Diethylbenzene & 1-Methyl-3-propylbenzene	0.027	0.039	0.031
1,2-Diethylbenzene & n-Butylbenzene	0.053	0.077	0.061
1,4-Diethylbenzene & 1-Methyl-4-propylbenzene	0.110	0.159	0.128
C10 Aromatics & C11 Paraffins	0.184	0.285	0.241
n-Undecane	0.115	0.193	0.181
Dodecane +	0.857	1.571	1.453
	100.000	100.000	100.000

Heavy End Grouping Breakdown

HEXANES	C6	15.460
HEPTANES	C7	21.858
OCTANES	C8	22.665
NONANES	C9	11.433
DECANES	C10	3.009
UNDECANES	C11	0.775
ISODODECANES+	C12+	0.857
Total		76.057 Mol%

BTEX BREAKDOWN

	Mol%	WT. %
BENZENE	0.107	0.090
TOLUENE	1.052	1.043
ETHYLBENZENE	0.173	0.198
XYLENES	2.728	3.116
Total BTEX	4.060	4.447

Calculated Value

Total Sample

Heptanes Plus

Molecular Weight	92.938	108.840
Relative Density	0.6971	0.7393
Liquid Density (lbs/gal Absolute Density)	5.812	6.164
Liquid Density (lbs/gal Weight in Air)	5.806	6.158
Cu.Ft./Vapor / Gal. @ 14.696	23.732	21.492
Vapor Pressure (PSIA) @ 100° F	115.110	1.252
API Gravity at 60° F	71.5	59.9
BTU / LB	20588	20384
BTU / GAL.	119648	146525
BTU / Cu. FT. (Vol. IDEAL Gas Fuel @ 14.696)	5042.3	5846.7
Specific Gravity as a Vapor @ 14.696	3.2088	3.7577

SHAMROCK GAS ANALYSIS

LABORATORY REFERENCE NUMBER : G7946CX/V - FT2384

ENOGEX

ID: FOSTER COMP INLET SLUG
AREA: NOT/REC
METER: FOSTER COMP INLET SLUG
LEASE: FOSTER COMP INLET SLUG
OPERATOR: ENOGEX
STATION: FOSTER COMP INLET SLUG
SAMPLE DATE: 3/29/2013
SAMPLE OF: LIQUID

LINE PRESSURE: 48 PSI
LINE TEMPERATURE: 64 F
CYLINDER NUMBER: WD641/E855
EFFECTIVE DATE:
SAMPLED BY: J. GALVEZ
ANALYZED BY: BRENNAN
ANALYZED DATE: 3/31/2013
SAMPLE TYPE: CONDENSATE EXTENDED

For: ENOGEX
Attn: ELK CITY
1316 AIRPORT ROAD
ELK CITY, OK 73644

Physical Properties per GPA 2145-09

Calculations per GPA 2186-03

Note: Zero = Less than detection limit

	<u>MOL%</u>	<u>WEIGHT%</u>	<u>LIQUID VOL. %</u>
NITROGEN	0.000	0.000	0.000
CARBON DIOXIDE	0.074	0.035	0.030
METHANE	1.682	0.290	0.674
ETHANE	2.112	0.683	1.336
PROPANE	3.401	1.614	2.218
ISOBUTANE	1.067	0.667	0.826
N-BUTANE	4.678	2.926	3.492
ISOPENTANE	3.391	2.632	2.935
N-PENTANE	7.538	5.852	6.468
HEXANE	15.460	14.335	15.108
HEPTANE	21.858	23.200	23.142
OCTANE	22.665	26.485	25.037
NONANE	11.433	14.330	12.611
DECANE	3.009	4.203	3.672
UN-DECANE+	1.632	2.748	2.451
	100.000	100.000	100.000

<u>Calculated Value</u>	<u>Total Sample</u>	<u>Heptanes Plus</u>
Molecular Weight	92.938	108.840
Relative Density	0.6971	0.7393
Liquid Density (lbs/gal Absolute Density)	5.812	6.164
Liquid Density (lbs/gal Weight in Air)	5.806	6.158
Cu.Ft./Vapor / Gal. @ 14.696	23.732	21.492
Vapor Pressure (PSIA) @ 100° F	115.110	1.252
API Gravity at 60° F	71.5	59.9
BTU / LB	20588	20384
BTU / GAL.	119648	146525
BTU / Cu. FT. (Vol. IDEAL Gas Fuel @ 14.696)	5042.3	5846.7
Specific Gravity as a Vapor @ 14.696	3.2088	3.7577

Remarks: RUSH SAMPLE
Remarks:

ATTACHMENT 11

Engine Compliance Testing Results

ENERGY TRANSFER EMISSION MONITORING REPORT

TEST DATA:

Test Date:	October 9, 2024
Station Name:	Foster
Unit No.:	1498
Serial No.:	N6E00540
Engine Make / Model:	Caterpillar 3516B LE
Permit No.:	2024-0330-NOI
Emissions Control:	Oxidation Catalyst
Type of Test :	Semi-Annual

ENGINE DATA:

Flue Gas Moisture, % =	12
Flue Gas Temperature, °F =	993
Observed Speed, RPM =	1250
Site Rated Speed, RPM =	1400
Observed Horsepower, HP =	995
Site Rated Horsepower, HP =	1380
Load, % =	72

OPERATING DATA:

Engine Fuel Consumption, scfh =		(1)
Engine Fuel Consumption, scfh =	6369	(2)
Gross Fuel Heating Value, Btu/scf (HHV) =	1248	
Engine Heat Rate, Btu/bhp-hr =	7989	
Fired Duty, MMBtu/hr, HHV =		(1)
Fired Duty, MMBtu/hr, HHV =	7.95	(2)
EPA Method 19 "F" Factor, dscf/MMBtu =	8710	
Ambient Temperature, °F =	65	
Compressor Suction Pressure, psig =	47	
Compressor Discharge Pressure, psig =	745	

EMISSION DATA:

	Run 1	Run 2	Run 3	Average:	Permit:	Pass ?
Start Time =	9:20	9:34	9:48			
End Time =	9:29	9:43	9:57			
Oxygen Concentration, %, dry =	10.28	10.31	10.21	10.27		
NO, Concentration, ppmvd =	52.0	50.6	51.8	51.5		
NO ₂ , Concentration, ppmvd =	5.6	6.6	7.0	6.4		
NO _x , Concentration, ppmvd =	57.7	57.2	58.9	57.9		
NO _x , mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	2.13	#####
NO _x , mass emission rate, lb/hr =	0.94 (2)	0.93 (2)	0.95 (2)	0.94 (2)	2.13	Yes
CO, Concentration, ppmvd =	35.4	35.2	34.9	35.2		
CO, mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	3.04	#####
CO, mass emission rate, lb/hr =	0.35 (2)	0.35 (2)	0.34 (2)	0.35 (2)	3.04	Yes
Stack Flow, dscfm =	(1)	(1)	(1)	(1)		
Stack Flow, dscfm =	2271 (2)	2277 (2)	2257 (2)	2268 (2)		

Note: (1) Values obtained or calculated using actual fuel flow measured during test.

(2) Values obtained or calculated using manufacturers or default heat rate (RB = 9500, LB = 8500, 2 Cycle = 11,000).

Test Performed By:

Philip Willis
(signature)

Engine Emission Calcs.xls
GTM CETCON, Inc. August 30, 2002

Calibration Drift Data

Station Name: **Foster**

Unit No. : 1498

Test Date: 10/9/2024

Cell Type:	NO	Cylinder Expiration Date:		4/25/2030	Value, ppm	% of Span	Cylinder #					
		Nominal Span:		1800.0	Zero Gas:	0.0	0.0					Ambient Air
		Units:		ppmvd	Span Gas:	910.3	50.6					CC192288
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	2.0	0.1	908.0	917.0	0.5	53.1	52.0	0.0	0.1	-0.1	0.4
R2	0.0	2.0	0.1	908.0	917.0	0.5	51.7	50.6	0.0	0.1	-0.1	0.4
R3	0.0	2.0	0.1	908.0	917.0	0.5	52.9	51.8	0.0	0.1	-0.1	0.4

Cell Type:	NO ₂	Cylinder Expiration Date:		12/13/2025	Value, ppm	% of Span	Cylinder #					
		Nominal Span:		350.0	Zero Gas:	0.0	Ambient Air					
		Units:		ppmvd	Span Gas:	194.6	55.6					CC513416
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	192.0	191.5	-0.1	5.6	5.6	0.0	0.0	-0.7	-0.9
R2	0.0	0.0	0.0	192.0	191.5	-0.1	6.5	6.6	0.0	0.0	-0.7	-0.9
R3	0.0	0.0	0.0	192.0	191.5	-0.1	6.9	7.0	0.0	0.0	-0.7	-0.9

Cell Type:	CO	Cylinder Expiration Date: 4/25/2030		Value, ppm	% of Span	Cylinder #						
		Nominal Span: 1800.0		Zero Gas: 0.0	0.0	Ambient Air						
		Units: ppmvd		Span Gas: 925.0	51.4	CC192288						
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	921.0	908.0	-0.7	35.0	35.4	0.0	0.0	-0.2	-0.9
R2	0.0	0.0	0.0	921.0	908.0	-0.7	34.8	35.2	0.0	0.0	-0.2	-0.9
R3	0.0	0.0	0.0	921.0	908.0	-0.7	34.5	34.9	0.0	0.0	-0.2	-0.9

Cell Type:	O ₂	Cylinder Expiration Date: 4/25/2030			Value, %	% of Span	Cylinder #					
		Nominal Span:		25.0	Zero Gas:	0.0	CC192288					
		Units:		%	Span Gas:	20.9	Ambient Air					
Sample Run #	C _{0i} %	C _{0f} %	Zero Drift % Span	C _{mi} %	C _{mf} %	Cal Drift % Span	C _{Ave} %	Corrected Conc., %	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	-0.2	21.0	20.9	-0.4	10.32	10.28	0.2	0.0	0.5	0.0
R2	0.0	0.0	-0.2	21.0	20.9	-0.4	10.35	10.31	0.2	0.0	0.5	0.0
R3	0.0	0.0	-0.2	21.0	20.9	-0.4	10.26	10.21	0.2	0.0	0.5	0.0

Drift ≤ 5% of Nominal Span

C_{0i}: Initial Zero Gas Response, ppm
 C_{0f}: Final Zero Gas Response, ppm
 C₀: Average Zero Gas Response, ppm
 C_{mi}: Initial Span Gas Response, ppm
 Drift Corrected Concentration, ppm =

Span Gas Range: 50-100% of Nominal Span

C_{mf}: Final Span Gas Response, ppm
 C_m: Average Span Gas Response, ppm
 C_{ma}: Span Gas Value, ppm
 C_{Ave}: Average Response From Run, ppm
 $(C_{Ave} - C_0) \cdot C_{ma} \div (C_m - C_0)$ Method 6C Equation: 6C-1

RAW CALIBRATION DATA SHEET

Station Name: Foster

Unit # : 1498

Initial Calibration Data

Minute.	Time	Date	CO	O ₂	NO	NO2
	8:17:53 AM	10/9/2024	0	21.02	0	0
	8:44:09 AM	10/9/2024	921	0.04	908	3.3
	9:02:55 AM	10/9/2024	0	21.13	3	192

Post Calibration Data

Minute.	Time	Date	CO	O ₂	NO	NO2
	3:43:32 PM	10/9/2024	0	20.91	2	0
	3:52:39 PM	10/9/2024	908	0	917	3.2
	4:06:18 PM	10/9/2024	0	21.07	5	191.5

Raw Run Data

Station Name: **Foster**

Unit #: **1498**

Minute.	Time	Date	CO	O ₂	NO	NO2
1	9:20:05 AM	10/9/2024	35	10.37	55	5
2	9:21:05 AM	10/9/2024	35	10.36	54	5.1
3	9:22:05 AM	10/9/2024	35	10.33	54	5.3
4	9:23:05 AM	10/9/2024	35	10.32	52	5.3
5	9:24:05 AM	10/9/2024	35	10.32	52	5.5
6	9:25:05 AM	10/9/2024	35	10.31	52	5.6
7	9:26:05 AM	10/9/2024	35	10.29	54	5.8
8	9:27:05 AM	10/9/2024	35	10.29	54	5.9
9	9:28:05 AM	10/9/2024	35	10.31	52	6
10	9:29:05 AM	10/9/2024	35	10.31	52	6.1
Average			35	10.32	53.1	5.56

Minute.	Time	Date	CO	O ₂	NO	NO2
1	9:34:17 AM	10/9/2024	35	10.39	51	6.3
2	9:35:17 AM	10/9/2024	35	10.39	51	6.4
3	9:36:17 AM	10/9/2024	35	10.38	51	6.4
4	9:37:17 AM	10/9/2024	35	10.36	52	6.4
5	9:38:17 AM	10/9/2024	35	10.37	51	6.5
6	9:39:17 AM	10/9/2024	35	10.36	51	6.5
7	9:40:17 AM	10/9/2024	35	10.34	52	6.5
8	9:41:17 AM	10/9/2024	35	10.32	53	6.6
9	9:42:17 AM	10/9/2024	34	10.31	53	6.6
10	9:43:17 AM	10/9/2024	34	10.3	52	6.6
Average			34.8	10.35	51.7	6.48

Minute.	Time	Date	CO	O ₂	NO	NO2
1	9:48:22 AM	10/9/2024	34	10.28	52	6.8
2	9:49:22 AM	10/9/2024	34	10.27	53	6.8
3	9:50:22 AM	10/9/2024	34	10.26	53	6.9
4	9:51:22 AM	10/9/2024	34	10.24	53	6.9
5	9:52:22 AM	10/9/2024	34	10.24	53	6.9
6	9:53:22 AM	10/9/2024	35	10.24	54	7
7	9:54:22 AM	10/9/2024	35	10.25	53	7
8	9:55:22 AM	10/9/2024	35	10.26	52	7
9	9:56:22 AM	10/9/2024	35	10.26	53	7
10	9:57:22 AM	10/9/2024	35	10.25	53	7.1
Average			34.5	10.26	52.9	6.94

ENERGY TRANSFER EMISSION MONITORING REPORT

TEST DATA:

Test Date:	October 9, 2024
Station Name:	Foster
Unit No.:	386
Serial No.:	JEF02003
Engine Make / Model:	Caterpillar 3516B LE
Permit No.:	2024-0330-NOI
Emissions Control:	Oxidation Catalyst
Type of Test :	Semi-Annual

ENGINE DATA:

Flue Gas Moisture, % =	12
Flue Gas Temperature, °F =	993
Observed Speed, RPM =	1280
Site Rated Speed, RPM =	1400
Observed Horsepower, HP =	1044
Site Rated Horsepower, HP =	1380
Load, % =	76

OPERATING DATA:

Engine Fuel Consumption, scfh =	(1)
Engine Fuel Consumption, scfh =	6683 (2)
Gross Fuel Heating Value, Btu/scf (HHV) =	1248
Engine Heat Rate, Btu/bhp-hr =	7989
Fired Duty, MMBtu/hr, HHV =	(1)
Fired Duty, MMBtu/hr, HHV =	8.34 (2)
EPA Method 19 "F" Factor, dscf/MMBtu =	8710
Ambient Temperature, °F =	83
Compressor Suction Pressure, psig =	44
Compressor Discharge Pressure, psig =	745

EMISSION DATA:

	Run 1	Run 2	Run 3	Average:	Permit:	Pass ?
Start Time =	13:13	13:27	13:41			
End Time =	13:22	13:36	13:50			
Oxygen Concentration, %, dry =	10.48	10.57	10.62	10.56		
NO, Concentration, ppmvd =	47.4	56.8	60.5	54.9		
NO ₂ , Concentration, ppmvd =	8.0	9.1	9.5	8.9		
NO _x , Concentration, ppmvd =	55.5	65.9	70.1	63.8		
NO _x , mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	2.13	#####
NO _x , mass emission rate, lb/hr =	0.97 (2)	1.16 (2)	1.24 (2)	1.12 (2)	2.13	Yes
CO, Concentration, ppmvd =	22.8	23.0	23.1	22.9		
CO, mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	3.04	#####
CO, mass emission rate, lb/hr =	0.24 (2)	0.25 (2)	0.25 (2)	0.24 (2)	3.04	Yes
Stack Flow, dscfm =	(1)	(1)	(1)	(1)		
Stack Flow, dscfm =	2429 (2)	2450 (2)	2462 (2)	2447 (2)		

Note: (1) Values obtained or calculated using actual fuel flow measured during test.

(2) Values obtained or calculated using manufacturers or default heat rate (RB = 9500, LB = 8500, 2 Cycle = 11,000).

Calibration Drift Data

 Station Name: Foster

 Unit No. : 386

 Test Date: 10/9/2024

Cell Type:	NO	Cylinder Expiration Date: 4/25/2030		Value, ppm	% of Span	Cylinder #						
		Nominal Span: 1800.0		Zero Gas: 0.0	0.0	Ambient Air						
		Units: ppmvd		Span Gas: 910.3	50.6	CC192288						
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	2.0	0.1	908.0	917.0	0.5	48.5	47.4	0.0	0.1	-0.1	0.4
R2	0.0	2.0	0.1	908.0	917.0	0.5	57.9	56.8	0.0	0.1	-0.1	0.4
R3	0.0	2.0	0.1	908.0	917.0	0.5	61.6	60.5	0.0	0.1	-0.1	0.4

Cell Type:	NO ₂	Cylinder Expiration Date: 12/13/2025		Value, ppm	% of Span	Cylinder #						
		Nominal Span: 350.0		Zero Gas: 0.0	0.0	Ambient Air						
		Units: ppmvd		Span Gas: 194.6	55.6	CC513416						
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	192.0	191.5	-0.1	7.9	8.0	0.0	0.0	-0.7	-0.9
R2	0.0	0.0	0.0	192.0	191.5	-0.1	8.9	9.1	0.0	0.0	-0.7	-0.9
R3	0.0	0.0	0.0	192.0	191.5	-0.1	9.4	9.5	0.0	0.0	-0.7	-0.9

Cell Type:	CO	Cylinder Expiration Date: 4/25/2030		Value, ppm	% of Span	Cylinder #						
		Nominal Span: 1800.0		Zero Gas: 0.0	0.0	Ambient Air						
		Units: ppmvd		Span Gas: 925.0	51.4	CC192288						
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	921.0	908.0	-0.7	22.5	22.8	0.0	0.0	-0.2	-0.9
R2	0.0	0.0	0.0	921.0	908.0	-0.7	22.7	23.0	0.0	0.0	-0.2	-0.9
R3	0.0	0.0	0.0	921.0	908.0	-0.7	22.8	23.1	0.0	0.0	-0.2	-0.9

Cell Type:	O ₂	Cylinder Expiration Date: 4/25/2030		Value, %	% of Span	Cylinder #						
		Nominal Span: 25.0		Zero Gas: 0.0	0.0	CC192288						
		Units: %		Span Gas: 20.9	83.6	Ambient Air						
Sample Run #	C _{0i} %	C _{0f} %	Zero Drift % Span	C _{mi} %	C _{mf} %	Cal Drift % Span	C _{Ave} %	Corrected Conc., %	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	-0.2	21.0	20.9	-0.4	10.53	10.48	0.2	0.0	0.5	0.0
R2	0.0	0.0	-0.2	21.0	20.9	-0.4	10.62	10.57	0.2	0.0	0.5	0.0
R3	0.0	0.0	-0.2	21.0	20.9	-0.4	10.67	10.62	0.2	0.0	0.5	0.0

Drift ≤ 5% of Nominal Span

C_{0i}: Initial Zero Gas Response, ppm
 C_{0f}: Final Zero Gas Response, ppm
 C₀: Average Zero Gas Response, ppm
 C_{mi}: Initial Span Gas Response, ppm
 Drift Corrected Concentration, ppm =

Span Gas Range: 50-100% of Nominal Span

C_{mf}: Final Span Gas Response, ppm
 C_m: Average Span Gas Response, ppm
 C_{ma}: Span Gas Value, ppm
 C_{Ave}: Average Response From Run, ppm
 $(C_{Ave} - C_0) \cdot C_{ma} \div (C_m - C_0)$ Method 6C Equation: 6C-1

RAW CALIBRATION DATA SHEET

Station Name: Foster

Unit # : 386

Initial Calibration Data

Minute.	Time	Date	CO	O ₂	NO	NO2
	8:17:53 AM	10/9/2024	0	21.02	0	0
	8:44:09 AM	10/9/2024	921	0.04	908	3.3
	9:02:55 AM	10/9/2024	0	21.13	3	192

Post Calibration Data

Minute.	Time	Date	CO	O ₂	NO	NO2
	3:43:32 PM	10/9/2024	0	20.91	2	0
	3:52:39 PM	10/9/2024	908	0	917	3.2
	4:06:18 PM	10/9/2024	0	21.07	5	191.5

Raw Run Data

Station Name: **Foster**

Unit #: **386**

Minute.	Time	Date	CO	O ₂	NO	NO2
1	1:13:10 PM	10/9/2024	22	10.56	41	7.3
2	1:14:10 PM	10/9/2024	22	10.53	44	7.3
3	1:15:10 PM	10/9/2024	22	10.52	48	7.8
4	1:16:10 PM	10/9/2024	23	10.51	49	8
5	1:17:10 PM	10/9/2024	23	10.49	50	8.2
6	1:18:10 PM	10/9/2024	23	10.51	51	8.2
7	1:19:10 PM	10/9/2024	23	10.53	50	8.1
8	1:20:10 PM	10/9/2024	23	10.53	50	8.1
9	1:21:10 PM	10/9/2024	22	10.54	50	8
10	1:22:10 PM	10/9/2024	22	10.54	52	8.1
Average			22.5	10.53	48.5	7.91

Minute.	Time	Date	CO	O ₂	NO	NO2
1	1:27:19 PM	10/9/2024	22	10.56	57	8.8
2	1:28:19 PM	10/9/2024	23	10.57	57	8.8
3	1:29:19 PM	10/9/2024	22	10.58	57	8.7
4	1:30:19 PM	10/9/2024	22	10.59	59	8.8
5	1:31:19 PM	10/9/2024	23	10.61	58	9
6	1:32:19 PM	10/9/2024	23	10.63	59	9.2
7	1:33:19 PM	10/9/2024	23	10.65	57	9
8	1:34:19 PM	10/9/2024	23	10.66	57	8.9
9	1:35:19 PM	10/9/2024	23	10.66	58	9
10	1:36:19 PM	10/9/2024	23	10.65	60	9.1
Average			22.7	10.62	57.9	8.93

Minute.	Time	Date	CO	O ₂	NO	NO2
1	1:41:24 PM	10/9/2024	22	10.7	61	9.3
2	1:42:24 PM	10/9/2024	22	10.7	61	9.4
3	1:43:24 PM	10/9/2024	23	10.7	61	9.3
4	1:44:24 PM	10/9/2024	23	10.69	61	9.3
5	1:45:24 PM	10/9/2024	23	10.67	62	9.5
6	1:46:24 PM	10/9/2024	23	10.66	62	9.6
7	1:47:24 PM	10/9/2024	23	10.66	61	9.3
8	1:48:24 PM	10/9/2024	23	10.65	61	9.3
9	1:49:24 PM	10/9/2024	23	10.63	62	9.4
10	1:50:24 PM	10/9/2024	23	10.6	64	9.6
Average			22.8	10.67	61.6	9.4

ENERGY TRANSFER EMISSION MONITORING REPORT

TEST DATA:

Test Date:	October 14, 2024
Station Name:	Foster
Unit No.:	1499
Serial No.:	N6E00541
Engine Make / Model:	Caterpillar 3516B LE
Permit No.:	2024-0330-NOI
Emissions Control:	Oxidation Catalyst
Type of Test :	Semi-Annual

ENGINE DATA:

Flue Gas Moisture, % =	12
Flue Gas Temperature, °F =	993
Observed Speed, RPM =	1100
Site Rated Speed, RPM =	1400
Observed Horsepower, HP =	767
Site Rated Horsepower, HP =	1380
Load, % =	56

OPERATING DATA:

Engine Fuel Consumption, scfh =		(1)
Engine Fuel Consumption, scfh =	4910	(2)
Gross Fuel Heating Value, Btu/scf (HHV) =	1248	
Engine Heat Rate, Btu/bhp-hr =	7989	
Fired Duty, MMBtu/hr, HHV =		(1)
Fired Duty, MMBtu/hr, HHV =	6.13	(2)
EPA Method 19 "F" Factor, dscf/MMBtu =	8710	
Ambient Temperature, °F =	75	
Compressor Suction Pressure, psig =	44	
Compressor Discharge Pressure, psig =	915	

EMISSION DATA:

	Run 1	Run 2	Run 3	Average:	Permit:	Pass ?
Start Time =	14:24	14:38	14:52			
End Time =	14:33	14:47	15:01			
Oxygen Concentration, %, dry =	11.62	11.44	11.15	11.40		
NO, Concentration, ppmvd =	66.2	68.1	70.2	68.2		
NO ₂ , Concentration, ppmvd =	8.9	9.5	9.8	9.4		
NO _x , Concentration, ppmvd =	75.1	77.7	80.0	77.6		
NO _x , mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	2.13	#####
NO _x , mass emission rate, lb/hr =	(2) 1.08	(2) 1.09	(2) 1.09	(2) 1.09	2.13	Yes
CO, Concentration, ppmvd =	23.5	23.5	24.1	23.7		
CO, mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	3.04	#####
CO, mass emission rate, lb/hr =	(2) 0.20	(2) 0.20	(2) 0.20	(2) 0.20	3.04	Yes
Stack Flow, dscfm =	(1)	(1)	(1)	(1)		
Stack Flow, dscfm =	(2) 2002	(2) 1965	(2) 1907	(2) 1958		

Note: (1) Values obtained or calculated using actual fuel flow measured during test.

(2) Values obtained or calculated using manufacturers or default heat rate (RB = 9500, LB = 8500, 2 Cycle = 11,000).

Test Performed By:

Philip Willis
(signature)

Engine Emission Calcs.xls
GTM CETCON, Inc. August 30, 2002

Calibration Drift Data

Station Name: **Foster**

Unit No. : 1499

Test Date: 10/14/2024

Cell Type:	NO	Cylinder Expiration Date:		4/25/2030	Value, ppm	% of Span	Cylinder #					
		Nominal Span:		1800.0	Zero Gas:	0.0	Ambient Air					
		Units:		ppmvd	Span Gas:	910.3	50.6					CC192288
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	1.0	0.1	909.0	906.0	-0.2	66.5	66.2	0.0	0.1	-0.1	-0.2
R2	0.0	1.0	0.1	909.0	906.0	-0.2	68.4	68.1	0.0	0.1	-0.1	-0.2
R3	0.0	1.0	0.1	909.0	906.0	-0.2	70.4	70.2	0.0	0.1	-0.1	-0.2

Cell Type:	NO ₂	Cylinder Expiration Date:		12/13/2025	Value, ppm	% of Span	Cylinder #					
		Nominal Span:		350.0	Zero Gas:	0.0	Ambient Air					
		Units:		ppmvd	Span Gas:	194.6	55.6					CC513416
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	192.7	191.4	-0.4	8.8	8.9	0.0	0.0	-0.5	-0.9
R2	0.0	0.0	0.0	192.7	191.4	-0.4	9.4	9.5	0.0	0.0	-0.5	-0.9
R3	0.0	0.0	0.0	192.7	191.4	-0.4	9.7	9.8	0.0	0.0	-0.5	-0.9

Cell Type:	CO	Cylinder Expiration Date: 4/25/2030		Value, ppm	% of Span	Cylinder #						
		Nominal Span: 1800.0		Zero Gas: 0.0	0.0	Ambient Air						
		Units: ppmvd		Span Gas: 925.0	51.4	CC192288						
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	1.0	0.1	925.0	914.0	-0.6	23.8	23.5	0.0	0.1	0.0	-0.6
R2	0.0	1.0	0.1	925.0	914.0	-0.6	23.8	23.5	0.0	0.1	0.0	-0.6
R3	0.0	1.0	0.1	925.0	914.0	-0.6	24.4	24.1	0.0	0.1	0.0	-0.6

Cell Type:	O ₂	Cylinder Expiration Date: 4/25/2030		Value, %	% of Span	Cylinder #						
		Nominal Span: 25.0		Zero Gas: 0.0	0.0	CC192288						
		Units: %		Span Gas: 20.9	83.6	Ambient Air						
Sample Run #	C _{Oi} %	C _{Of} %	Zero Drift % Span	C _{mi} %	C _{mf} %	Cal Drift % Span	C _{Ave} %	Corrected Conc., %	C _{Oi} % Error	C _{Of} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.1	21.0	20.9	-0.5	11.65	11.62	0.1	0.2	0.4	-0.1
R2	0.0	0.0	0.1	21.0	20.9	-0.5	11.47	11.44	0.1	0.2	0.4	-0.1
R3	0.0	0.0	0.1	21.0	20.9	-0.5	11.19	11.15	0.1	0.2	0.4	-0.1

Drift ≤ 5% of Nominal Span

C_{0i}: Initial Zero Gas Response, ppm
 C_{0f}: Final Zero Gas Response, ppm
 C₀: Average Zero Gas Response, ppm
 C_{mi}: Initial Span Gas Response, ppm
 Drift Corrected Concentration, ppm =

Span Gas Range: 50-100% of Nominal Span

C_{mf}: Final Span Gas Response, ppm
 C_m: Average Span Gas Response, ppm
 C_{ma}: Span Gas Value, ppm
 C_{Ave}: Average Response From Run, ppm
 $(C_{Ave} - C_0) \cdot C_{ma} \div (C_m - C_0)$ Method 6C Equation: 6C-1

RAW CALIBRATION DATA SHEET

Station Name: Foster

Unit # : 1499

Initial Calibration Data

Minute. Time	Date	CO	O ₂	NO	NO2
9:21:34 AM	10/14/2024	0	21	0	0
9:29:25 AM	10/14/2024	925	0.02	909	3.5
9:43:11 AM	10/14/2024	0	21.08	0	192.7

Post Calibration Data

Minute. Time	Date	CO	O ₂	NO	NO2
3:37:46 PM	10/14/2024	1	20.87	1	0
3:50:25 PM	10/14/2024	914	0.04	906	4
4:00:22 PM	10/14/2024	0	21.13	7	191.4

Raw Run Data

Station Name: **Foster**

Unit #: **1499**

Minute.	Time	Date	CO	O ₂	NO	NO2
1	2:24:10 PM	10/14/2024	24	11.65	66	8.3
2	2:25:10 PM	10/14/2024	24	11.66	66	8.4
3	2:26:10 PM	10/14/2024	24	11.66	66	8.6
4	2:27:10 PM	10/14/2024	24	11.65	67	8.7
5	2:28:10 PM	10/14/2024	24	11.65	67	8.9
6	2:29:10 PM	10/14/2024	24	11.65	67	8.9
7	2:30:10 PM	10/14/2024	24	11.65	67	8.9
8	2:31:10 PM	10/14/2024	24	11.64	66	8.9
9	2:32:10 PM	10/14/2024	23	11.64	66	8.9
10	2:33:10 PM	10/14/2024	23	11.63	67	9
Average			23.8	11.65	66.5	8.75

Minute.	Time	Date	CO	O ₂	NO	NO2
1	2:38:37 PM	10/14/2024	23	11.58	67	9.3
2	2:39:37 PM	10/14/2024	23	11.56	67	9.3
3	2:40:37 PM	10/14/2024	24	11.52	69	9.5
4	2:41:37 PM	10/14/2024	24	11.5	69	9.5
5	2:42:37 PM	10/14/2024	24	11.48	68	9.4
6	2:43:37 PM	10/14/2024	24	11.46	69	9.4
7	2:44:37 PM	10/14/2024	24	11.44	69	9.4
8	2:45:37 PM	10/14/2024	24	11.42	69	9.4
9	2:46:37 PM	10/14/2024	24	11.39	69	9.4
10	2:47:37 PM	10/14/2024	24	11.38	68	9.3
Average			23.8	11.47	68.4	9.39

Minute.	Time	Date	CO	O ₂	NO	NO2
1	2:52:43 PM	10/14/2024	24	11.23	71	9.8
2	2:53:43 PM	10/14/2024	24	11.21	71	9.7
3	2:54:43 PM	10/14/2024	24	11.19	70	9.6
4	2:55:43 PM	10/14/2024	24	11.19	69	9.5
5	2:56:43 PM	10/14/2024	25	11.19	69	9.6
6	2:57:43 PM	10/14/2024	25	11.18	70	9.7
7	2:58:43 PM	10/14/2024	25	11.17	71	9.8
8	2:59:43 PM	10/14/2024	25	11.17	70	9.7
9	3:00:43 PM	10/14/2024	24	11.16	72	9.9
10	3:01:43 PM	10/14/2024	24	11.17	71	9.8
Average			24.4	11.19	70.4	9.71

ENERGY TRANSFER EMISSION MONITORING REPORT

TEST DATA:

Test Date:	July 17, 2024
Station Name:	Foster
Unit No.:	373
Serial No.:	JEF01446
Engine Make / Model:	Caterpillar 3516B LE
Permit No.:	2024-0330-NOI
Emissions Control:	Oxidation Catalyst
Type of Test :	Semi-Annual

ENGINE DATA:

Flue Gas Moisture, % =	12
Flue Gas Temperature, °F =	993
Observed Speed, RPM =	1100
Site Rated Speed, RPM =	1400
Observed Horsepower, HP =	653
Site Rated Horsepower, HP =	1380
Load, % =	47

OPERATING DATA:

Engine Fuel Consumption, scfh =		(1)
Engine Fuel Consumption, scfh =	4180	(2)
Gross Fuel Heating Value, Btu/scf (HHV) =	1248	
Engine Heat Rate, Btu/bhp-hr =	7989	
Fired Duty, MMBtu/hr, HHV =		(1)
Fired Duty, MMBtu/hr, HHV =	5.22	(2)
EPA Method 19 "F" Factor, dscf/MMBtu =	8710	
Ambient Temperature, °F =	87	
Compressor Suction Pressure, psig =	44	
Compressor Discharge Pressure, psig =	805	

EMISSION DATA:

	Run 1	Run 2	Run 3	Average:	Permit:	Pass ?
Start Time =	13:31	13:45	13:59			
End Time =	13:40	13:54	14:08			
Oxygen Concentration, %, dry =	9.11	9.31	9.68	9.36		
NO, Concentration, ppmvd =	63.9	64.3	62.0	63.4		
NO ₂ , Concentration, ppmvd =	13.4	13.8	13.5	13.6		
NO _x , Concentration, ppmvd =	77.3	78.1	75.5	77.0		
NO _x , mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	2.13	#####
NO _x , mass emission rate, lb/hr =	(2) 0.74	(2) 0.76	(2) 0.76	(2) 0.76	2.13	Yes
CO, Concentration, ppmvd =	35.1	34.0	33.0	34.0		
CO, mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	3.04	#####
CO, mass emission rate, lb/hr =	(2) 0.21	(2) 0.20	(2) 0.20	(2) 0.20	3.04	Yes
Stack Flow, dscfm =	(1)	(1)	(1)	(1)		
Stack Flow, dscfm =	(2) 1342	(2) 1365	(2) 1410	(2) 1372		

Note: (1) Values obtained or calculated using actual fuel flow measured during test.

(2) Values obtained or calculated using manufacturers or default heat rate (RB = 9500, LB = 8500, 2 Cycle = 11,000).

Test Performed By:

Philip Willis
(signature)

Engine Emission Calcs.xls
GTM CETCON, Inc. August 30, 2002

Calibration Drift Data

 Station Name: Foster

 Unit No. : 373

 Test Date: 7/17/2024

Cell Type:	NO	Cylinder Expiration Date: 4/25/2030		Value, ppm	% of Span	Cylinder #						
		Nominal Span: 1800.0		Zero Gas: 0.0	0.0	Ambient Air						
		Units: ppmvd		Span Gas: 910.3	50.6	CC192288						
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	906.0	903.0	-0.2	63.5	63.9	0.0	0.0	-0.2	-0.4
R2	0.0	0.0	0.0	906.0	903.0	-0.2	63.9	64.3	0.0	0.0	-0.2	-0.4
R3	0.0	0.0	0.0	906.0	903.0	-0.2	61.6	62.0	0.0	0.0	-0.2	-0.4

Cell Type:	NO ₂	Cylinder Expiration Date: 12/13/2025		Value, ppm	% of Span	Cylinder #						
		Nominal Span: 350.0		Zero Gas: 0.0	0.0	Ambient Air						
		Units: ppmvd		Span Gas: 194.6	55.6	CC513416						
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	191.9	192.4	0.1	13.2	13.4	0.0	0.0	-0.8	-0.6
R2	0.0	0.0	0.0	191.9	192.4	0.1	13.7	13.8	0.0	0.0	-0.8	-0.6
R3	0.0	0.0	0.0	191.9	192.4	0.1	13.4	13.5	0.0	0.0	-0.8	-0.6

Cell Type:	CO	Cylinder Expiration Date: 4/25/2030		Value, ppm	% of Span	Cylinder #						
		Nominal Span: 1800.0		Zero Gas: 0.0	0.0	Ambient Air						
		Units: ppmvd		Span Gas: 925.0	51.4	CC192288						
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	918.0	913.0	-0.3	34.7	35.1	0.0	0.0	-0.4	-0.7
R2	0.0	0.0	0.0	918.0	913.0	-0.3	33.7	34.0	0.0	0.0	-0.4	-0.7
R3	0.0	0.0	0.0	918.0	913.0	-0.3	32.7	33.0	0.0	0.0	-0.4	-0.7

Cell Type:	O ₂	Cylinder Expiration Date: 4/25/2030		Value, %	% of Span	Cylinder #						
		Nominal Span: 25.0		Zero Gas: 0.0	0.0	CC192288						
		Units: %		Span Gas: 20.9	83.6	Ambient Air						
Sample Run #	C _{0i} %	C _{0f} %	Zero Drift % Span	C _{mi} %	C _{mf} %	Cal Drift % Span	C _{Ave} %	Corrected Conc., %	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.1	0.0	21.1	21.0	-0.1	9.20	9.11	0.2	0.2	0.7	0.6
R2	0.0	0.1	0.0	21.1	21.0	-0.1	9.40	9.31	0.2	0.2	0.7	0.6
R3	0.0	0.1	0.0	21.1	21.0	-0.1	9.77	9.68	0.2	0.2	0.7	0.6

Drift ≤ 5% of Nominal Span

C_{0i}: Initial Zero Gas Response, ppm
 C_{0f}: Final Zero Gas Response, ppm
 C₀: Average Zero Gas Response, ppm
 C_{mi}: Initial Span Gas Response, ppm
 Drift Corrected Concentration, ppm =

Span Gas Range: 50-100% of Nominal Span

C_{mf}: Final Span Gas Response, ppm
 C_m: Average Span Gas Response, ppm
 C_{ma}: Span Gas Value, ppm
 C_{Ave}: Average Response From Run, ppm
 $(C_{Ave} - C_0) \cdot C_{ma} \div (C_m - C_0)$ Method 6C Equation: 6C-1

RAW CALIBRATION DATA SHEET

Station Name: Foster

Unit # : 373

Initial Calibration Data

Minute. Time	Date	CO	O ₂	NO	NO2
12:55:05 PM	7/17/2024	0	21.07	0	0
1:03:30 PM	7/17/2024	918	0.04	906	3.4
1:14:30 PM	7/17/2024	0	21.16	0	191.9

Post Calibration Data

Minute. Time	Date	CO	O ₂	NO	NO2
3:19:46 PM	7/17/2024	0	21.04	0	0
3:30:11 PM	7/17/2024	913	0.05	903	3.7
4:00:21 PM	7/17/2024	0	21.18	0	192.4

Raw Run Data

Station Name: Foster

Unit #: 373

Minute.	Time	Date	CO	O ₂	NO	NO2
1	1:31:15 PM	7/17/2024	35	9.18	63	13
2	1:32:15 PM	7/17/2024	35	9.18	63	13
3	1:33:15 PM	7/17/2024	35	9.18	64	13.1
4	1:34:15 PM	7/17/2024	35	9.18	64	13.2
5	1:35:15 PM	7/17/2024	35	9.18	64	13.1
6	1:36:15 PM	7/17/2024	35	9.2	64	13.2
7	1:37:15 PM	7/17/2024	35	9.2	64	13.3
8	1:38:15 PM	7/17/2024	34	9.23	61	13.4
9	1:39:15 PM	7/17/2024	34	9.22	65	13.4
10	1:40:15 PM	7/17/2024	34	9.24	63	13.4
Average			34.7	9.199	63.5	13.21

Minute.	Time	Date	CO	O ₂	NO	NO2
1	1:45:36 PM	7/17/2024	34	9.33	61	13.7
2	1:46:36 PM	7/17/2024	34	9.32	63	13.7
3	1:47:36 PM	7/17/2024	34	9.34	64	13.7
4	1:48:36 PM	7/17/2024	34	9.36	64	13.7
5	1:49:36 PM	7/17/2024	34	9.38	65	13.7
6	1:50:36 PM	7/17/2024	34	9.41	64	13.6
7	1:51:36 PM	7/17/2024	34	9.43	65	13.7
8	1:52:36 PM	7/17/2024	33	9.45	64	13.6
9	1:53:36 PM	7/17/2024	33	9.48	64	13.6
10	1:54:36 PM	7/17/2024	33	9.51	65	13.6
Average			33.7	9.401	63.9	13.66

Minute.	Time	Date	CO	O ₂	NO	NO2
1	1:59:40 PM	7/17/2024	33	9.67	61	13.5
2	2:00:40 PM	7/17/2024	33	9.68	63	13.5
3	2:01:40 PM	7/17/2024	33	9.71	62	13.4
4	2:02:40 PM	7/17/2024	33	9.76	60	13.4
5	2:03:40 PM	7/17/2024	32	9.77	60	13.4
6	2:04:40 PM	7/17/2024	33	9.77	63	13.4
7	2:05:40 PM	7/17/2024	32	9.81	62	13.3
8	2:06:40 PM	7/17/2024	32	9.83	61	13.3
9	2:07:40 PM	7/17/2024	33	9.85	63	13.2
10	2:08:40 PM	7/17/2024	33	9.87	61	13.2
Average			32.7	9.772	61.6	13.36

ENERGY TRANSFER EMISSION MONITORING REPORT

TEST DATA:

Test Date:	July 17, 2024
Station Name:	Foster
Unit No.:	275
Serial No.:	WPW00475
Engine Make / Model:	Caterpillar G3516TALE
Permit No.:	2024-0330-NOI
Emissions Control:	Oxidation Catalyst
Type of Test :	Semi-Annual

ENGINE DATA:

Flue Gas Moisture, % =	12
Flue Gas Temperature, °F =	877
Observed Speed, RPM =	1100
Site Rated Speed, RPM =	1400
Observed Horsepower, HP =	714
Site Rated Horsepower, HP =	1340
Load, % =	53

OPERATING DATA:

Engine Fuel Consumption, scfh =		(1)
Engine Fuel Consumption, scfh =	4861	(2)
Gross Fuel Heating Value, Btu/scf (HHV) =	1248	
Engine Heat Rate, Btu/bhp-hr =	8496	
Fired Duty, MMBtu/hr, HHV =		(1)
Fired Duty, MMBtu/hr, HHV =	6.07	(2)
EPA Method 19 "F" Factor, dscf/MMBtu =	8710	
Ambient Temperature, °F =	87	
Compressor Suction Pressure, psig =	46	
Compressor Discharge Pressure, psig =	810	

EMISSION DATA:

	Run 1	Run 2	Run 3	Average:	Permit:	Pass ?
Start Time =	14:20	14:35	14:49			
End Time =	14:29	14:44	14:58			
Oxygen Concentration, %, dry =	8.95	8.98	8.76	8.90		
NO, Concentration, ppmvd =	203.0	204.1	209.7	205.6		
NO ₂ , Concentration, ppmvd =	13.6	13.5	14.1	13.7		
NO _x , Concentration, ppmvd =	216.6	217.6	223.8	219.3		
NO _x , mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	5.91	#####
NO _x , mass emission rate, lb/hr =	2.39 (2)	2.41 (2)	2.43 (2)	2.41 (2)	5.91	Yes
CO, Concentration, ppmvd =	28.3	28.3	29.2	28.6		
CO, mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	2.66	#####
CO, mass emission rate, lb/hr =	0.19 (2)	0.19 (2)	0.19 (2)	0.19 (2)	2.66	Yes
Stack Flow, dscfm =	(1)	(1)	(1)	(1)		
Stack Flow, dscfm =	1540 (2)	1544 (2)	1516 (2)	1533 (2)		

Note: (1) Values obtained or calculated using actual fuel flow measured during test.

(2) Values obtained or calculated using manufacturers or default heat rate (RB = 9500, LB = 8500, 2 Cycle = 11,000).

Calibration Drift Data

 Station Name: Foster

 Unit No. : 275

 Test Date: 7/17/2024

Cell Type:	NO	Cylinder Expiration Date:		4/25/2030	Value, ppm	% of Span	Cylinder #					
		Nominal Span:		1800.0	Zero Gas:	0.0	Ambient Air					
		Units:		ppmvd	Span Gas:	910.3	50.6					CC192288
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	906.0	903.0	-0.2	201.7	203.0	0.0	0.0	-0.2	-0.4
R2	0.0	0.0	0.0	906.0	903.0	-0.2	202.8	204.1	0.0	0.0	-0.2	-0.4
R3	0.0	0.0	0.0	906.0	903.0	-0.2	208.4	209.7	0.0	0.0	-0.2	-0.4

Cell Type:	NO ₂	Cylinder Expiration Date:		12/13/2025	Value, ppm	% of Span	Cylinder #					
		Nominal Span:		350.0	Zero Gas:	0.0	Ambient Air					
		Units:		ppmvd	Span Gas:	194.6	55.6					CC513416
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	191.9	192.4	0.1	13.4	13.6	0.0	0.0	-0.8	-0.6
R2	0.0	0.0	0.0	191.9	192.4	0.1	13.3	13.5	0.0	0.0	-0.8	-0.6
R3	0.0	0.0	0.0	191.9	192.4	0.1	13.9	14.1	0.0	0.0	-0.8	-0.6

Cell Type:	CO	Cylinder Expiration Date: 4/25/2030		Value, ppm	% of Span	Cylinder #						
		Nominal Span: 1800.0		Zero Gas: 0.0	0.0	Ambient Air						
		Units: ppmvd		Span Gas: 925.0	51.4	CC192288						
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	918.0	913.0	-0.3	28.0	28.3	0.0	0.0	-0.4	-0.7
R2	0.0	0.0	0.0	918.0	913.0	-0.3	28.0	28.3	0.0	0.0	-0.4	-0.7
R3	0.0	0.0	0.0	918.0	913.0	-0.3	28.9	29.2	0.0	0.0	-0.4	-0.7

Cell Type:	O ₂	Cylinder Expiration Date: 4/25/2030		Value, %	% of Span	Cylinder #						
		Nominal Span: 25.0		Zero Gas: 0.0	0.0	CC192288						
		Units: %		Span Gas: 20.9	83.6	Ambient Air						
Sample Run #	C _{0i} %	C _{0f} %	Zero Drift % Span	C _{mi} %	C _{mf} %	Cal Drift % Span	C _{Ave} %	Corrected Conc., %	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.1	0.0	21.1	21.0	-0.1	9.04	8.95	0.2	0.2	0.7	0.6
R2	0.0	0.1	0.0	21.1	21.0	-0.1	9.07	8.98	0.2	0.2	0.7	0.6
R3	0.0	0.1	0.0	21.1	21.0	-0.1	8.85	8.76	0.2	0.2	0.7	0.6

Drift ≤ 5% of Nominal Span

C_{0i}: Initial Zero Gas Response, ppm
 C_{0f}: Final Zero Gas Response, ppm
 C₀: Average Zero Gas Response, ppm
 C_{mi}: Initial Span Gas Response, ppm
 Drift Corrected Concentration, ppm =

Span Gas Range: 50-100% of Nominal Span

C_{mf}: Final Span Gas Response, ppm
 C_m: Average Span Gas Response, ppm
 C_{ma}: Span Gas Value, ppm
 C_{Ave}: Average Response From Run, ppm
 $(C_{Ave} - C_0) \cdot C_{ma} \div (C_m - C_0)$ Method 6C Equation: 6C-1

RAW CALIBRATION DATA SHEET

Station Name: Foster

Unit # : 275

Initial Calibration Data

Minute. Time	Date	CO	O ₂	NO	NO2
12:55:05 PM	7/17/2024	0	21.07	0	0
1:03:30 PM	7/17/2024	918	0.04	906	3.4
1:14:30 PM	7/17/2024	0	21.16	0	191.9

Post Calibration Data

Minute. Time	Date	CO	O ₂	NO	NO2
3:19:46 PM	7/17/2024	0	21.04	0	0
3:30:11 PM	7/17/2024	913	0.05	903	3.7
4:00:21 PM	7/17/2024	0	21.18	0	192.4

Raw Run Data

Station Name: **Foster**

Unit #: **275**

Minute.	Time	Date	CO	O ₂	NO	NO2
1	2:20:34 PM	7/17/2024	28	9	202	13.6
2	2:21:34 PM	7/17/2024	28	9.01	202	13.5
3	2:22:34 PM	7/17/2024	28	9.03	202	13.5
4	2:23:34 PM	7/17/2024	28	9.03	199	13.3
5	2:24:34 PM	7/17/2024	28	9.03	201	13.3
6	2:25:34 PM	7/17/2024	28	9.03	202	13.4
7	2:26:34 PM	7/17/2024	28	9.04	200	13.3
8	2:27:34 PM	7/17/2024	28	9.05	203	13.4
9	2:28:34 PM	7/17/2024	28	9.07	203	13.3
10	2:29:34 PM	7/17/2024	28	9.09	203	13.3
Average			28	9.038	201.7	13.39

Minute.	Time	Date	CO	O ₂	NO	NO2
1	2:35:03 PM	7/17/2024	28	9.14	200	13.1
2	2:36:03 PM	7/17/2024	28	9.13	200	13.1
3	2:37:03 PM	7/17/2024	28	9.11	200	13.2
4	2:38:03 PM	7/17/2024	28	9.09	204	13.4
5	2:39:03 PM	7/17/2024	28	9.08	206	13.5
6	2:40:03 PM	7/17/2024	28	9.08	204	13.4
7	2:41:03 PM	7/17/2024	28	9.06	203	13.3
8	2:42:03 PM	7/17/2024	28	9.04	204	13.3
9	2:43:03 PM	7/17/2024	28	9.02	203	13.3
10	2:44:03 PM	7/17/2024	28	8.99	204	13.4
Average			28	9.074	202.8	13.3

Minute.	Time	Date	CO	O ₂	NO	NO2
1	2:49:08 PM	7/17/2024	28	8.92	203	13.5
2	2:50:08 PM	7/17/2024	29	8.9	205	13.7
3	2:51:08 PM	7/17/2024	29	8.87	209	13.9
4	2:52:08 PM	7/17/2024	29	8.86	209	14
5	2:53:08 PM	7/17/2024	29	8.84	210	14
6	2:54:08 PM	7/17/2024	29	8.83	210	14
7	2:55:08 PM	7/17/2024	29	8.83	210	14
8	2:56:08 PM	7/17/2024	29	8.83	207	13.8
9	2:57:08 PM	7/17/2024	29	8.82	209	13.9
10	2:58:08 PM	7/17/2024	29	8.8	212	14
Average			28.9	8.85	208.4	13.88

ENERGY TRANSFER EMISSION MONITORING REPORT

TEST DATA:

Test Date:	August 26, 2024
Station Name:	Foster
Unit No.:	276
Serial No.:	WPW01546
Engine Make / Model:	Caterpillar G3516TALE
Permit No.:	2024-0330-NOI
Emissions Control:	Oxidation Catalyst
Type of Test :	Semi-Annual

ENGINE DATA:

Flue Gas Moisture, % =	12
Flue Gas Temperature, °F =	877
Observed Speed, RPM =	1260
Site Rated Speed, RPM =	1400
Observed Horsepower, HP =	936
Site Rated Horsepower, HP =	1340
Load, % =	70

OPERATING DATA:

Engine Fuel Consumption, scfh =		(1)
Engine Fuel Consumption, scfh =	6372	(2)
Gross Fuel Heating Value, Btu/scf (HHV) =	1248	
Engine Heat Rate, Btu/bhp-hr =	8496	
Fired Duty, MMBtu/hr, HHV =		(1)
Fired Duty, MMBtu/hr, HHV =	7.95	(2)
EPA Method 19 "F" Factor, dscf/MMBtu =	8710	
Ambient Temperature, °F =	85	
Compressor Suction Pressure, psig =	34	
Compressor Discharge Pressure, psig =	970	

EMISSION DATA:

	Run 1	Run 2	Run 3	Average:	Permit:	Pass ?
Start Time =	10:33	10:47	11:01			
End Time =	10:42	10:56	11:10			
Oxygen Concentration, %, dry =	8.69	8.68	8.65	8.67		
NO, Concentration, ppmvd =	258.2	262.8	263.5	261.5		
NO ₂ , Concentration, ppmvd =	22.9	23.1	23.1	23.0		
NO _x , Concentration, ppmvd =	281.1	285.9	286.6	284.5		
NO _x , mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	5.91	#####
NO _x , mass emission rate, lb/hr =	3.98 (2)	4.04 (2)	4.04 (2)	4.02 (2)	5.91	Yes
CO, Concentration, ppmvd =	6.2	6.8	7.0	6.7		
CO, mass emission rate, lb/hr =	(1)	(1)	(1)	(1)	2.66	#####
CO, mass emission rate, lb/hr =	0.05 (2)	0.06 (2)	0.06 (2)	0.06 (2)	2.66	Yes
Stack Flow, dscfm =	(1)	(1)	(1)	(1)		
Stack Flow, dscfm =	1976 (2)	1974 (2)	1969 (2)	1973 (2)		

Note: (1) Values obtained or calculated using actual fuel flow measured during test.

(2) Values obtained or calculated using manufacturers or default heat rate (RB = 9500, LB = 8500, 2 Cycle = 11,000).

Test Performed By:

Philip Willis
(signature)

Engine Emission Calcs.xls
GTM CETCON, Inc. August 30, 2002

Calibration Drift Data

 Station Name: Foster

 Unit No. : 276

 Test Date: 8/26/2024

Cell Type:	NO	Cylinder Expiration Date:		4/25/2030	Value, ppm	% of Span	Cylinder #					
		Nominal Span:		1800.0	Zero Gas:	0.0	Ambient Air					
		Units:		ppmvd	Span Gas:	910.3	50.6					CC192288
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	910.0	904.0	-0.3	257.3	258.2	0.0	0.0	0.0	-0.3
R2	0.0	0.0	0.0	910.0	904.0	-0.3	261.8	262.8	0.0	0.0	0.0	-0.3
R3	0.0	0.0	0.0	910.0	904.0	-0.3	262.5	263.5	0.0	0.0	0.0	-0.3

Cell Type:	NO ₂	Cylinder Expiration Date:		12/13/2025	Value, ppm	% of Span	Cylinder #					
		Nominal Span:		350.0	Zero Gas:	0.0	Ambient Air					
		Units:		ppmvd	Span Gas:	194.6	55.6					CC513416
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	194.2	193.1	-0.3	22.8	22.9	0.0	0.0	-0.1	-0.4
R2	0.0	0.0	0.0	194.2	193.1	-0.3	23.0	23.1	0.0	0.0	-0.1	-0.4
R3	0.0	0.0	0.0	194.2	193.1	-0.3	23.0	23.1	0.0	0.0	-0.1	-0.4

Cell Type:	CO	Cylinder Expiration Date: 4/25/2030		Value, ppm	% of Span	Cylinder #						
		Nominal Span: 1800.0		Zero Gas: 0.0	0.0	Ambient Air						
		Units: ppmvd		Span Gas: 925.0	51.4	CC192288						
Sample Run #	C _{0i} ppm	C _{0f} ppm	Zero Drift % Span	C _{mi} ppm	C _{mf} ppm	Cal Drift % Span	C _{Ave} ppm	Corrected Conc., ppm	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.0	926.0	920.0	-0.3	6.2	6.2	0.0	0.0	0.1	-0.3
R2	0.0	0.0	0.0	926.0	920.0	-0.3	6.8	6.8	0.0	0.0	0.1	-0.3
R3	0.0	0.0	0.0	926.0	920.0	-0.3	7.0	7.0	0.0	0.0	0.1	-0.3

Cell Type:	O ₂	Cylinder Expiration Date: 4/25/2030		Value, %	% of Span	Cylinder #						
		Nominal Span: 25.0		Zero Gas: 0.0	0.0	CC192288						
		Units: %		Span Gas: 20.9	83.6	Ambient Air						
Sample Run #	C _{0i} %	C _{0f} %	Zero Drift % Span	C _{mi} %	C _{mf} %	Cal Drift % Span	C _{Ave} %	Corrected Conc., %	C _{0i} % Error	C _{0f} % Error	C _{mi} % Error	C _{mf} % Error
R1	0.0	0.0	0.1	21.0	20.9	-0.7	8.71	8.69	0.0	0.1	0.5	-0.2
R2	0.0	0.0	0.1	21.0	20.9	-0.7	8.70	8.68	0.0	0.1	0.5	-0.2
R3	0.0	0.0	0.1	21.0	20.9	-0.7	8.67	8.65	0.0	0.1	0.5	-0.2

Drift ≤ 5% of Nominal Span

C_{0i}: Initial Zero Gas Response, ppm
 C_{0f}: Final Zero Gas Response, ppm
 C₀: Average Zero Gas Response, ppm
 C_{mi}: Initial Span Gas Response, ppm
 Drift Corrected Concentration, ppm =

Span Gas Range: 50-100% of Nominal Span

C_{mf}: Final Span Gas Response, ppm
 C_m: Average Span Gas Response, ppm
 C_{ma}: Span Gas Value, ppm
 C_{Ave}: Average Response From Run, ppm
 $(C_{Ave} - C_0) \cdot C_{ma} \div (C_m - C_0)$ Method 6C Equation: 6C-1

RAW CALIBRATION DATA SHEET

Station Name: Foster

Unit # : 276

Initial Calibration Data

Minute. Time	Date	CO	O ₂	NO	NO2
9:51:28 AM	8/26/2024	0	21.03	0	0
10:07:54 AM	8/26/2024	926	0	910	3.3
10:19:55 AM	8/26/2024	0	21.13	0	194.2

Post Calibration Data

Minute. Time	Date	CO	O ₂	NO	NO2
3:00:32 PM	8/26/2024	0	20.85	0	0
3:19:42 PM	8/26/2024	920	0.02	904	3.6
4:08:19 PM	8/26/2024	0	21.1	0	193.1

Raw Run Data

Station Name: **Foster**

Unit #: **276**

Minute.	Time	Date	CO	O ₂	NO	NO2
1	10:33:09 AM	8/26/2024	6	8.71	258	23.2
2	10:34:09 AM	8/26/2024	6	8.72	256	22.8
3	10:35:09 AM	8/26/2024	6	8.72	257	22.8
4	10:36:09 AM	8/26/2024	6	8.71	256	22.6
5	10:37:09 AM	8/26/2024	6	8.71	257	22.7
6	10:38:09 AM	8/26/2024	7	8.71	256	22.6
7	10:39:09 AM	8/26/2024	6	8.71	255	22.5
8	10:40:09 AM	8/26/2024	6	8.71	259	22.9
9	10:41:09 AM	8/26/2024	7	8.69	261	23
10	10:42:09 AM	8/26/2024	6	8.71	258	22.6
Average			6.2	8.71	257.3	22.77

Minute.	Time	Date	CO	O ₂	NO	NO2
1	10:47:27 AM	8/26/2024	6	8.72	261	23.1
2	10:48:27 AM	8/26/2024	6	8.72	262	23
3	10:49:27 AM	8/26/2024	7	8.71	260	22.8
4	10:50:27 AM	8/26/2024	7	8.71	262	23.2
5	10:51:27 AM	8/26/2024	7	8.7	262	23.1
6	10:52:27 AM	8/26/2024	7	8.69	263	23.1
7	10:53:27 AM	8/26/2024	7	8.69	265	23.2
8	10:54:27 AM	8/26/2024	7	8.68	258	22.6
9	10:55:27 AM	8/26/2024	7	8.67	260	22.8
10	10:56:27 AM	8/26/2024	7	8.69	265	23
Average			6.8	8.698	261.8	22.99

Minute.	Time	Date	CO	O ₂	NO	NO2
1	11:01:32 AM	8/26/2024	7	8.67	262	23.2
2	11:02:32 AM	8/26/2024	7	8.69	262	22.9
3	11:03:32 AM	8/26/2024	7	8.68	262	23
4	11:04:32 AM	8/26/2024	7	8.68	262	23
5	11:05:32 AM	8/26/2024	7	8.68	261	22.9
6	11:06:32 AM	8/26/2024	7	8.69	260	22.7
7	11:07:32 AM	8/26/2024	7	8.64	265	23.3
8	11:08:32 AM	8/26/2024	7	8.66	262	22.9
9	11:09:32 AM	8/26/2024	7	8.67	263	22.9
10	11:10:32 AM	8/26/2024	7	8.64	266	23.4
Average			7	8.67	262.5	23.02

ATTACHMENT 12
ODEQ Permit Application Forms

DEQ LANDOWNER NOTIFICATION AFFIDAVIT

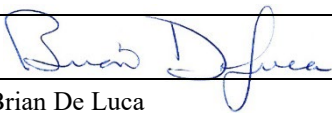
Tier I, II, or III permit applicants must provide notice to the landowner(s). The basis for this requirement is Title 27A of the Oklahoma Statutes, Supplement 1996, § 2-14-103(9), as described in OAC 252:4-7-13 (b).

Please note that you MUST fill out and return this affidavit even if you don't have to give any landowner notice.

A	NOTICE TO THE LANDOWNER(S) IS NOT REQUIRED because: (check one)
	My application does not involve any land.
X	My application involves only land owned by me (or applicant business).
	I have a current lease given to accomplish the permitted purpose.
	I have a current easement given to accomplish the permitted purpose.

OR

B	NOTICE TO THE LANDOWNER(S) IS REQUIRED because the land is owned by someone other than myself or the applicant business AND I HAVE NOTIFIED the following (check one):	
	Landowner(s)	Lessor or Administrator or Executor of the land
METHOD OF DELIVERY (check one):		
	Actual notice, for which I have a signed and dated receipt	
	Service by Sheriff or private process server, for which I have an affidavit	
	Service by certified mail, restricted delivery, for which I have a signed return receipt	
	Legal publication, for which I have an affidavit of publication from the newspaper, because the landowners could not be located through due diligence	

LANDOWNER AFFIDAVIT CERTIFICATION			
I, as the applicant or an authorized representative of the applicant, hereby certify that I own the real property, have a current lease or easement which is given to accomplish the permitted purpose (per Option A above), or have provided legal notice to the landowner(s) (per Option B above) about the permit application for the facility described below.			
Company Name	ET Gathering & Processing LLC	Facility Name	Foster Compressor Station
Facility Address or Legal Description.	NW ¼ of Section 20, Township 2N, Range 3W, Garvin County, Oklahoma		
Responsible Official (signature)		Date Signed	March 26, 2025
Responsible Official (typed)	Brian De Luca	Title	Senior Director – Field Operations West

If the landowner notice applies to your application (Option B above) you can send the following form to them as your notice:

NOTICE TO LANDOWNER OF FILING	
Dear Landowner: (Name) _____	
(Applicant Name) _____ has filed a permit application with the Oklahoma Department of Environmental Quality for (Facility Name) _____ facility.	
This application involves the land owned by you located at:	
Address or Legal Description: _____	

Signed: _____	Date: _____

**AIR QUALITY PERMIT APPLICATION
GENERAL FACILITY INFORMATION**

 APPLICATION NUMBER
(AQD Use Only)

1	COMPANY INFORMATION	Name	ET Gathering & Processing LLC							
Mailing Address		499 W. Sheridan, Suite 1500, M/C 700			City	Oklahoma City	State	OK	Zip	73102

2	APPLICATION TYPE	Applicability Determination		Construction Permit		X	Operating Permit			
GP Authorization To Construct		GP Authorization To Operate		GP Name:						
Renewal		Modification		Relocation		PBR		PBR Type:		
Permit Number(s) (If Applicable)		2024-0330-NOI			2012-1198-O (M-1)					
Est. Date of Construction/Modification Start:				Operational Start-up:		10/1/2024				
Construction Permit Public Review Process:				N/A		Traditional		N/A		Enhanced

3	IS CONFIDENTIAL INFORMATION INCLUDED?	YES	X	NO
By including confidential information, Applicant acknowledges that such information may be shared with the U.S. Environmental Protection Agency for purposes consistent with the Federal Clean Air Act, 42 U.S.C. §§ 4201 et. seq.				

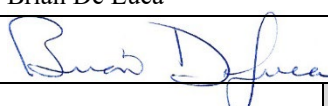
4	TIER CLASSIFICATION	X	Tier I		Tier II		Tier III		N/A – AD only
FACILITY TYPE			Major		Minor	X	Synthetic Minor		

5	FEES SUBMITTED	\$2,250	Check #	***PAID VIA CREDIT CARD.***	Date	March 26, 2025
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6	TECHNICAL CONTACT	Name	Sean Walker							
Phone		(405) 557-5235			Email Address		Sean.Walker@energytransfer.com			
Company Name		Energy Transfer Partners, LP								
Street Address		499 W. Sheridan, Suite 1500, M/C 700			City	Oklahoma City	State	OK	Zip	73102

7	FACILITY INFORMATION	Name	Foster Compressor Station								
SIC Code(s)		4922		NAICS Code(s)		486210					
Contact Person		Sean Walker			Title	Sr. Specialist – Env		Phone	(405) 557-5235		
LEGAL DESCRIPTION		Sub Section	NW ¼			Section	20	Township	2N	Range	3W
Physical Address or Driving Directions		From the Junction of SH-74 and SH-29 in Elmore City, travel approximately eight (8) miles west. The Facility is located on the north side of the road.									
City or Nearest Town		Elmore City			Zip	73433		County	Garvin		

8	GEOGRAPHIC COORDINATES	Latitude (to 5 Decimals)		34.63062		Longitude (to 5 Decimals)		-97.54297		
REFERENCE POINT		Facility Entrance Point or First Gate of Lease Property (preferred above all other options)								
Center of Facility		X	Other (Specify):		GIS Data					

9	APPLICATION CERTIFICATION	This application, including all attachments, has been submitted as required by OAC 252:100. I certify that (a) I am the Responsible Official for this company as defined in OAC 252:100-1-3; and (b) based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.								
Responsible Official (name)		Brian De Luca					Title	Sr. Dir – Field Operations West		
Responsible Official (signature)							Date	March 26, 2025		
Phone		(405) 556-2406			Email Address		Brian.DeLuca@energytransfer.com			
Street Address		499 W. Sheridan, Suite 1500, M/C 700			City	Oklahoma City	State	OK	Zip	73102

EMISSION UNITS – SUMMARY

- For each affected facility under an NSPS or affected source under a MACT standard, provide the information requested in the table below
- For any control equipment listed here, provide supporting documentation of the control efficiency relied upon.
- For each engine, storage tank, and dehydration unit subject of this application, complete an equipment description table.
- Refer to Appendix F for De Minimis Activities that should be addressed in the application.

Emission Unit ID	Description (Make/Model, Capacity, Contents, Size, etc.)	Manufacture or Modification Date	Installed Date	Control Equipment (if any)		Subject to NSPS or NESHAP? If Yes, Specify Subpart	Appendix H Activity?		Subject to this Permit Action?
				Type	Capture / Control Efficiency (%)		Yes	No	
COMP1	Caterpillar 3516B LE (w/ oxidation catalyst)	Mfg. date: 11/6/2017	N/A	Oxidation Catalyst	CO – 70% HCHO – 70%	NSPS JJJJ & OOOOa NESHAP ZZZZ – Area Source		X	X
COMP2	Caterpillar 3516B LE (w/ oxidation catalyst)	Mfg. date: 11/17/2012	N/A	Oxidation Catalyst	CO – 70% HCHO – 70%	NSPS JJJJ & OOOO NESHAP ZZZZ – Area Source		X	X
COMP3	Caterpillar 3516B LE (w/ oxidation catalyst)	Mfg. date: 11/9/2017	N/A	Oxidation Catalyst	CO – 70% HCHO – 70%	NSPS JJJJ & OOOOa NESHAP ZZZZ – Area Source		X	X
COMP4	Caterpillar 3516B LE (w/ oxidation catalyst)	Mfg. date: 12/12/2011	N/A	Oxidation Catalyst	CO – 70% HCHO – 70%	NSPS JJJJ & OOOO NESHAP ZZZZ – Area Source		X	X
COMP5	Caterpillar 3516TALE (w/ oxidation catalyst)	Mfg. date: 10/31/2006	N/A	Oxidation Catalyst	CO – 70% HCHO – 70%	NSPS JJJJ & NESHAP ZZZZ – Area Source		X	X
COMP6	Caterpillar 3516TALE (w/ oxidation catalyst)	Mfg. date: 8/2/2007	N/A	Oxidation Catalyst	CO – 70% HCHO – 70%	NSPS JJJJ & NESHAP ZZZZ – Area Source		X	X
DEHY1	Glycol Dehydrator (w/ condenser & combustion device)	N/A	N/A	Condenser/ Combustion	95%	NESHAP Subpart HH – Area Source		X	X
	Glycol Dehydrator (uncontrolled 125 hours)							X	X
HEAT1	Glycol Dehydrator Reboiler (1.0 MMBtu/hr)	N/A	N/A					X	X
TANK1	Condensate Storage Tank (400-bbl)	12/2012	N/A	Flare	98%			X	X
TANK2	Condensate Storage Tank (400-bbl)	12/2012	N/A	Flare	98%			X	X
TANK3	Condensate Storage Tank (400-bbl)	12/2012	N/A	Flare	98%			X	X
TANK4	Condensate Storage Tank (400-bbl)	12/2012	N/A	Flare	98%			X	X
FLARE1	Condensate Flare	N/A	N/A					X	X
LOAD1	Condensate Truck Loading	N/A	N/A					X	X
FUG1	Process Piping Fugitives	N/A	N/A					X	X
MSS-BD	Compressor Blowdowns	N/A	N/A					X	X
MSS	MSS Emissions	N/A	N/A					X	X

EMISSION UNITS – ENGINES & TURBINES

MINOR FACILITY

- Provide applicable information for each engine or turbine.
- For each engine or turbine, establish a NO_x, CO, VOC, and formaldehyde short-term (lb/hr) emission rate. Applicant may rely upon the CO surrogate policy to demonstrate compliance with formaldehyde limits. The lb/hr emission rates established will be incorporated into the permit, as necessary.
- Provide documentation of the emission factors used to determine lb/hr emissions, unless relying upon AP-42.
- Note any inherent limitations on HP, such as limits associated with the equipment coupled to an engine.

ENGINE DESIGN	Engine	X	Turbine		Manufacture Date	Mfg. date: 11/6/2017			
Emission Unit ID#	COMP1			Serial Number	N6E00540				
Engine / Turbine Make	Caterpillar				Model Number	3516B LE			
Fuel Type	Natural Gas	Equipped with Air Fuel Ratio Controller (AFRC)?				Yes	X	No	
Type (check all that apply)	Lean-burn	X	Rich-burn		4-stroke	X	2-stroke		
Control Equipment	None		NSCR		Oxidation Catalyst	X	Other: (specify)		
LB/HR CALCULATIONS	Maximum Rated HP		1,380		Btu/bhp-hr		7,989		
Pollutant	Factor (Units)		lb/hr		Source				
NO _x	0.70 g/hp-hr		2.13		Manufacturer's Data				
CO	1.00 g/hp-hr		3.04		Manufacturer's Data				
VOC	0.70 g/hp-hr		2.13		Manufacturer's Data				
Formaldehyde	0.105 g/hp-hr		0.32		Manufacturer's Data				
Comments:	Please note that the VOC emission factors include the formaldehyde emissions.								

ENGINE DESIGN	Engine	X	Turbine		Manufacture Date	Mfg. date: 11/17/2012			
Emission Unit ID#	COMP2			Serial Number	JEF02003				
Engine / Turbine Make	Caterpillar				Model Number	3516B LE			
Fuel Type	Natural Gas	Equipped with Air Fuel Ratio Controller (AFRC)?				Yes	X	No	
Type (check all that apply)	Lean-burn	X	Rich-burn		4-stroke	X	2-stroke		
Control Equipment	None		NSCR		Oxidation Catalyst	X	Other: (specify)		
LB/HR CALCULATIONS	Maximum Rated HP		1,380		Btu/bhp-hr		7,989		
Pollutant	Factor (Units)		lb/hr		Source				
NO _x	0.70 g/hp-hr		2.13		Manufacturer's Data				
CO	1.00 g/hp-hr		3.04		Manufacturer's Data				
VOC	0.70 g/hp-hr		2.13		Manufacturer's Data				
Formaldehyde	0.105 g/hp-hr		0.32		Manufacturer's Data				
Comments:	Please note that the VOC emission factors include the formaldehyde emissions.								

Engines & Turbines (Cont.)

ENGINE DESIGN	Engine	X	Turbine		Manufacture Date	Mfg. date: 11/9/2017			
Emission Unit ID#	COMP3			Serial Number	N6E00541				
Engine / Turbine Make	Caterpillar			Model Number	3516B LE				
Fuel Type	Natural Gas	Equipped with Air Fuel Ratio Controller (AFRC)?				Yes	X	No	
Type (check all that apply)	Lean-burn	X	Rich-burn		4-stroke	X	2-stroke		
Control Equipment	None		NSCR		Oxidation Catalyst	X	Other: (specify)		
LB/HR CALCULATIONS	Maximum Rated HP		1,380	Btu/bhp-hr		7,989			
Pollutant	Factor (Units)		lb/hr	Source					
NO _x	0.70 g/hp-hr		2.13	Manufacturer's Data					
CO	1.00 g/hp-hr		3.04	Manufacturer's Data					
VOC	0.70 g/hp-hr		2.13	Manufacturer's Data					
Formaldehyde	0.105 g/hp-hr		0.32	Manufacturer's Data					
Comments:	Please note that the VOC emission factors include the formaldehyde emissions.								

ENGINE DESIGN	Engine	X	Turbine		Manufacture Date	Mfg. date: 12/12/2011			
Emission Unit ID#	COMP4			Serial Number	JEF01446				
Engine / Turbine Make	Caterpillar			Model Number	3516B LE				
Fuel Type	Natural Gas	Equipped with Air Fuel Ratio Controller (AFRC)?				Yes	X	No	
Type (check all that apply)	Lean-burn	X	Rich-burn		4-stroke	X	2-stroke		
Control Equipment	None		NSCR		Oxidation Catalyst	X	Other: (specify)		
LB/HR CALCULATIONS	Maximum Rated HP		1,380	Btu/bhp-hr		7,989			
Pollutant	Factor (Units)		lb/hr	Source					
NO _x	0.70 g/hp-hr		2.13	Manufacturer's Data					
CO	1.00 g/hp-hr		3.04	Manufacturer's Data					
VOC	0.70 g/hp-hr		2.13	Manufacturer's Data					
Formaldehyde	0.105 g/hp-hr		0.32	Manufacturer's Data					

Engines & Turbines (Cont.)

ENGINE DESIGN	Engine	X	Turbine		Manufacture Date	Mfg. date: 10/31/2006			
Emission Unit ID#	COMP5			Serial Number	WPW00475				
Engine / Turbine Make	Caterpillar			Model Number	3516TALE				
Fuel Type	Natural Gas	Equipped with Air Fuel Ratio Controller (AFRC)?				Yes	X	No	
Type (check all that apply)	Lean-burn	X	Rich-burn		4-stroke	X	2-stroke		
Control Equipment	None		NSCR		Oxidation Catalyst	X	Other: (specify)		
LB/HR CALCULATIONS	Maximum Rated HP		1,340	Btu/bhp-hr		8,496			
Pollutant	Factor (Units)		lb/hr	Source					
NO _x	2.00 g/hp-hr		5.91	Manufacturer's Data					
CO	0.90 g/hp-hr		2.66	Manufacturer's Data					
VOC	0.50 g/hp-hr		1.48	Manufacturer's Data					
Formaldehyde	0.087 g/hp-hr		0.26	Manufacturer's Data					

ENGINE DESIGN	Engine	X	Turbine		Manufacture Date	Mfg. date: 8/2/2007			
Emission Unit ID#	COMP6			Serial Number	WPW01546				
Engine / Turbine Make	Caterpillar			Model Number	3516TALE				
Fuel Type	Natural Gas	Equipped with Air Fuel Ratio Controller (AFRC)?				Yes	X	No	
Type (check all that apply)	Lean-burn	X	Rich-burn		4-stroke	X	2-stroke		
Control Equipment	None		NSCR		Oxidation Catalyst	X	Other: (specify)		
LB/HR CALCULATIONS	Maximum Rated HP		1,340	Btu/bhp-hr		8,496			
Pollutant	Factor (Units)		lb/hr	Source					
NO _x	2.00 g/hp-hr		5.91	Manufacturer's Data					
CO	0.90 g/hp-hr		2.66	Manufacturer's Data					
VOC	0.50 g/hp-hr		1.48	Manufacturer's Data					
Formaldehyde	0.087 g/hp-hr		0.26	Manufacturer's Data					

EMISSION UNITS - STORAGE TANKS MINOR FACILITY

- Tanks subject to this permit action identified in Form 100-100-A must submit supporting emission calculations or input and output files from emissions calculation software.
 - Working loss turnover (saturation) factor (K_N) should be set equal to 1 if the tanks are vapor balanced or have flashing emissions.
 - Flashing emissions from the produced water tanks may be calculated assuming 1% of the throughput is condensate or crude oil.
 - Capture efficiency is limited to 98%. Applicant may request a higher efficiency with additional monitoring and record keeping requirements to be established in the permit.
 - For floating roof storage tanks, please provide landing loss calculations.
 - Cleaning emissions are considered to be part of permitted tank emissions.
- Any new tank limits requested as part of this application are not in effect and may not be relied upon (e.g., for limiting applicability of 40 CFR Part 60, Subpart OOOOa requirements) until issuance of the corresponding permit. Please consult with a permit writer if you have questions or concerns after completing the enforceable limit eligibility review below.

Federally Enforceable Limits					
Eligibility Review					
Well Affected Facilities		Yes	☐	No	X
Are you requesting enforceable limits within 30 days after startup of production of the well(s)? If yes, please provide the startup date of well production 		Yes	☐	No	☐
Are you requesting enforceable limits for existing tanks with an initial PTE of less than 6 TPY as calculated based on the maximum average daily throughput as defined in §60.5430a.		Yes	☐	No	☐
Are you requesting enforceable limits for a new tank at an existing facility where the installation of the tank is unrelated to the modification of a well site? If yes, the enforceable limit must be requested prior to startup of the new tank.		Yes	☐	No	☐
Compressor Station or Gas Processing Plant		Yes	X	No	☐
Are you requesting enforceable limits prior to startup of the compressor station or onshore natural gas processing plant? If yes, please provide the startup date of the compressor station or onshore natural gas processing plant.		Yes	☐	No	X
Are you requesting enforceable limits for a tank after the startup of the compressor station or onshore natural gas processing plant? If yes, the enforceable limit must be requested prior to startup of the new tank.		Yes	X	No	☐
VRU Removal		Yes	☐	No	X
Are you requesting enforceable limits for tanks within 30 days of removal of the VRU from operation? If yes, please provide the date of removal from operation. 		Yes	☐	No	☐
<i>If you answer no to the question applicable to your facility/situation, you may not be eligible for enforceable limits.</i>					
Enforceable Limits Request	Tank Number(s)	Requested Limit (TPY)			
The listed tanks and requested limits will be included in the permit.	TANK1	0.22 VOC			
	TANK2	0.22 VOC			
	TANK3	0.22 VOC			
	TANK4	0.22 VOC			

Tanks Not Requesting Federally Enforceable Limits	
	Emission Unit ID #
List tanks not requesting enforceable limits	N/A

Fixed Roof

Parameter (Tank IDs) ¹	TANK1 – TANK4	
Contents	Condensate	
Throughput, gal/yr	315,000	
Working/Breathing Calculation Method/Tool	AP-42	
Working/Breathing Emissions, TPY	2.04	
Flash Calculation Method/Tool	HYSYS	
Flashing Emissions, TPY	9.08	
Cleaning Calculation Method/Tool	N/A	
Cleaning Emissions, TPY	N/A	
Control Type, see Appendix D	Flare	
Capture Efficiency, %	98%	
Control Efficiency, %	98%	
Tank VOC Emitted at Tank, TPY	0.22	
Tank VOC Emitted at Flare, TPY	0.23	
Total VOC Emissions, TPY	0.45	
Benzene, TPY	---	
Toluene, TPY	---	
Ethylbenzene, TPY	---	
Xylene, TPY	---	
n-Hexane, TPY	---	
Total HAP, TPY	---	

¹ Multiple tanks may be grouped by liquid.

HEATERS/BOILERS/FLARES

MINOR FACILITY

- Provide applicable information for each heater, boiler, and/or flare.
- For each unit, an emission factor shall be established for the listed pollutants.
- Provide documentation of the emission factors used, unless AP-42 is used.

Emission Unit ID #	Heat Input (Units)	Fuel Burned
HEAT1	1.0 (MMbtu/hr)	Nat Gas
FLARE1	0.36 (MMbtu/hr) ¹	Nat Gas

¹ Calculated Heat Capacity

Emission Unit ID(s) #	HEAT1		
POLLUTANT	Emission Factor (Unit)	Emission Factor Source	Comments
NO _x	100.0 (lb/MMSCF)	AP-42	
CO	84.0 (lb/MMSCF)	AP-42	
VOC	5.5 (lb/MMSCF)	AP-42	
SO ₂	N/A	N/A	Negligible
PM	N/A	N/A	Negligible

Emission Unit ID(s) #	FLARE1		
POLLUTANT	Emission Factor (Unit)	Emission Factor Source	Comments
NO _x	0.068 (lb/MMBtu)	AP-42	
CO	0.31 (lb/MMBtu)	AP-42	
VOC	N/A	N/A	Emissions based on waste gas streams sent to flare.
SO ₂	N/A	N/A	Negligible
PM	N/A	N/A	Negligible

DEHYDRATION UNIT

MINOR FACILITY

- Please include data for the reboiler in the Fuel Burning Section 100-D of the application forms.
- If the applicant relies on an outlet condenser temperature equal to or greater than 100 °F, then monitoring of the condenser outlet temperature is not required (See Appendix A).

Emission Unit ID(s) #	DEHY1	DEHY1 (Uncontrolled 125 hrs)
Calculation Method (GRI GLYCalc or Process Simulator)	GRI-GLYCalc	GRI-GLYCalc
Type of Glycol	TEG	TEG
Dry Gas Flow Rate, MMSCFD	50.0	50.0
Inlet Gas H ₂ S Concentration, ppmv	---	---
Glycol Pump Type	Kimray 450-20PV x 2	Kimray 450-20PV x 2
Lean Glycol Pump Design Capacity, gpm	15.0	15.0
Lean Glycol Recirculation Rate Input, gpm	15.0	15.0
Regenerator Vent		
Condenser Outlet Temperature, °F	100	N/A
Control Method, refer to Appendix A	Condenser / Combustion	None
Overall Control Efficiency, %	95%	0%
VOC Emissions, TPY	7.99	2.73
Flash Tank		
Flash Tank Temperature, °F	100	100
Flash Tank Pressure, psig	75	75
Control Method, refer to Appendix A	Recycle / Recompression	None
Overall Control Efficiency, %	100%	0%
VOC Emissions, TPY	---	6.96
Safety Factor, % (if used)	100%	N/A
Total Emissions		
VOC, TPY	7.99	9.69
Benzene, TPY	0.44	0.19
Toluene, TPY	0.34	0.34
Ethylbenzene, TPY	0.004	0.01
Xylene, TPY	0.19	0.62
n-Hexane, TPY	0.24	0.18
Total HAP, TPY	1.22	1.35

LOADING EMISSIONS

MINOR FACILITY

- Emissions from loading condensate and produced water into tank trucks should be estimated using AP-42 (6/08), Section 5.2, Equation 1. Applicant should consult with AQD if proposing a different calculation method.
- Emissions routed to the tanks are distributed and represented at the tanks.
- Emissions from produced water loading may be calculated assuming 1% of the throughput is condensate or crude oil.

Emission Unit ID#	LOAD1	
Liquids Loaded	Condensate	
Throughput, gal/yr	1,260,000	
Saturation Factor	0.6	
Temp., °F	62.56	
TVP, psia	6.39	
MW, lb/lb-mol	66	
VOC, wt. %	100	
Emission Factor, lb/10³ gal ⁽¹⁾	6.032	
Control Method Efficiency, see Appendix C	0%	
Capture Efficiency, %	0%	
VOC Emitted at Truck, TPY	3.80	
VOC Routed to Control, TPY	N/A	
VOC Routed to Tanks, TPY ⁽²⁾	N/A	
Total VOC Emissions, TPY	3.80	
Benzene, TPY	---	
Toluene, TPY	---	
Ethylbenzene, TPY	---	
Xylene, TPY	---	
n-Hexane, TPY	---	
Total HAP, TPY	---	

⁽¹⁾ Final factor considering any VOC reduction stated for methane/ethane.

⁽²⁾ For when emissions from loading are routed to a tank the emissions shall be included in determining compliance with the tank emission limits.

FUGITIVE EMISSIONS

MINOR FACILITY

- Fugitive VOC emissions need to be included in the emissions calculations to determine major source status for any facility with a storage tank subject to, or grandfathered from, NSPS Subpart K or Ka.
- Separate tables may be necessary for controlled and uncontrolled sources or affected and unaffected sources under NSPS Subparts KKK, OOOO, OOOOa.
- The emission factors shown are the Oil and Gas Production Operations factors from the "Protocol for Equipment Leak Emission Estimates" EPA-453/R-95-017. Other factors may be used, if applicable.
- Any form or spreadsheet containing the same relevant information may be substituted for this form.

FUGITIVE EMISSION SOURCES			Emission Unit ID#		FUG1		
Source Type	Service ¹	Number of Sources	Emissions Factor, lb/hr/source	Weight % VOC	VOC Emissions		Type of Control
					lb/hr	TPY	
Valves	Gas	200	0.00992	24.77	0.49	2.15	
	Light Oil	20	0.00551	100.00	0.11	0.48	
	Heavy Oil		0.00002				
	Water/Oil		0.00022				
Pump Seals	Gas		0.00529				
	Light Oil	12	0.02866	100.00	0.34	1.51	
	Heavy Oil ³		0.01610				
	Water/Oil		0.00005				
Connectors	Gas		0.00044				
	Light Oil		0.00046				
	Heavy Oil		0.00002				
	Water/Oil		0.00024				
Flanges	Gas	220	0.00086	24.77	0.05	0.21	
	Light Oil	22	0.00024	100.00	0.01	0.02	
	Heavy Oil		0.00000				
	Water/Oil		0.00001				
Open-ended lines	Gas		0.00441				
	Light Oil		0.00309				
	Heavy Oil		0.00031				
	Water/Oil		0.00055				
Other ²	Gas	130	0.01940	24.77	0.62	2.73	
	Light Oil	10	0.01653	100.00	0.17	0.72	
	Heavy Oil		0.00007				
	Water/Oil		0.03086				
					TOTAL	7.83	

Notes: 1. Heavy oil has an API gravity of less than 20°. Water/oil is any water stream in oil service with water content greater than 50% up to water content of 99%.

2. The "Other" equipment type includes compressors, pressure relief valves, relief valves, diaphragms, drains, dump arms, hatches, instruments, meters, polished rods, and vents. This "Other" equipment type should be applied for any equipment type other than connectors, flanges, open-ended lines, pumps, or valves.

3. No EF for pumps in heavy oil service was provided in the EPA document as no data was collected in the API study. This is a suggested factor from a June 2018, TCEQ memorandum without the estimated control efficiency for the TX LDAR program.

OTHER NSPS AFFECTED EQUIPMENT MINOR FACILITY

Reciprocating Compressors

Emission Unit ID#	Manufacturer / Model	Serial Number or Unique Identifier	Construction Date	Subject to NSPS (if not provide reason)
COMP1	Ariel JGT4	---	2/2018	NSPS Subpart OOOOa
COMP2	Ariel JGT4	---	4/2013	NSPS Subpart OOOO
COMP3	Ariel JGT4	---	2/2018	NSPS Subpart OOOOa
COMP4	Ariel JGT4	---	12/2012	NSPS Subpart OOOO
COMP5	Ariel JGT4	---	Pre-8/2011	N/A
COMP6	Ariel JGT4	---	Pre-8/2011	N/A

MAINTENANCE, STARTUP, AND SHUTDOWN (MSS)
MINOR FACILITY

- MSS emissions are part of normal operation of a source and should be accounted for in planning, design, and implementation of operating procedures for process and control equipment. As such, MSS emissions should be included in Potential to Emit (PTE) calculations and are subject to applicable permitting requirements.
- Facility shall estimate MSS emissions to the extent that they are predictable and quantifiable. Please identify and explain "other" MSS emissions listed.

Parameter	Emissions (TPY)
Blowdown \ Venting Emissions or Activities	MSS-BD
VOC	4.52
Other MSS Activities, Identify Each Activity	MSS
NO _x	--
CO	--
VOC	0.27
PM _{2.5}	--
PM ₁₀	--
SO ₂	--
Other Pollutant	--
Total Emissions	
VOC	4.79
NO _x	--
CO	--
PM _{2.5}	--
PM ₁₀	--
SO ₂	--
Other Pollutant	--
Benzene	--
Toluene	--
Ethylbenzene	--
Xylene	--
n-Hexane	--
Total HAP	--

AIR QUALITY DIVISION CLASSIFICATION OF AQ PERMIT APPLICATIONS & APPLICATION FEES		Application Number (AQD Use Only)	

Company Name	ET Gathering & Processing LLC						
Facility Name	Foster Compressor Station						
Mailing Address	499 W. Sheridan, Suite 1500, M/C 700	City	Oklahoma City	State	OK	Zip	73102

This form is used to document both a preliminary determination of the Tier classification and any associated Application Fee.

Step 1: APPLICATION CLASSIFICATION AND TIER DETERMINATION

DEQ's "Uniform Permitting" system, under OAC 252:004, categorizes different types of applications as Tier I, II, or III, depending on their complexity and the amount of public interest. The main effect of a Tier classification is the amount of public review given the application. For Air Quality permits, Tier I basically includes minor facilities and most synthetic minor facilities. Tier II covers major sources, and Tier III covers only very large sources such as those requiring PSD review. Additional information to make a preliminary determination of the Tier classification is provided on the next page. This determination will be verified before permit issuance.

Note that all Tier II and III applications require public notice of the application in one newspaper local to the site or facility as soon after the filing date as possible. Other public participation requirements, such as notice of draft and proposed permit, and notice of public meeting may also be required. Contact our office for more information on these requirements.

TIER CLASSIFICATION	X	Tier I		Tier II		Tier III		N/A – AD only
FACILITY TYPE		Major		Minor	X	Synthetic Minor	Confirmed/Corrected by: (AQD Use Only)	

Step 2: APPLICATION TYPE & FEE

Application fee may be determined according to the following schedule. The emissions level is based on the single criteria pollutant with the highest emissions rate. Fees are subject to change – please refer to OAC 252:100-7-3 or 252:100-8-1.7 for the latest fee schedule.

MAJOR SOURCE		Fee	MINOR OR SYNTHETIC MINOR FACILITY		Fee
	Applicability Determination (100734)	\$500		Applicability Determination (100922)	\$500
	GP- Authorization to Construct (100778)	\$900		PBR – Construct (100985)	\$250
	GP- Authorization to Operate (100788)	\$900		PBR – Operate (100989)	\$100
	Part 70 Construction (100150)	\$7,500		GP – Authorization to Construct (100826)	\$500
	Part 70 Construction Modification (100779)	\$5,000		GP – Authorization to Operate (100827)	\$500
	Part 70 Operation (100733)	\$7,500		Construction (100829)	\$2,000
	Part 70 Minor Modification (100781)	\$3,000		Permit Amendment – no emission increase (100830)	\$500
	Part 70 Significant Modification (100786)	\$6,000	X	Operating Permit (100831)	\$750
	Part 70 Renewal (100787)	\$7,500		Operating Permit Modification (100833)	\$750
	Part 70 Relocation (100782)	\$500		Relocation (100834)	\$250

Application Type Confirmed – (AQD Use Only)			
GP or PBR Name (If Applicable):		Existing Permit Number (If Applicable)	2024-0330-NOI, 2012-1198-O (M-1)

PAYMENT INFORMATION

Please choose one payment type and attach payment – payable to the Department of Environmental Quality (no cash can be accepted). Please reference the facility name (or existing permit or Authorization number) on the check or money order.

Payment Type		Check		Money order	Amount/ Receipt Confirmed by: (DEQ Use Only)	
Amount:	\$2,250	Check or Money Order Number:		***PAID VIA CREDIT CARD***	Date:	March 26, 2025

From: [Walker, Sean P](#)
To: [DEQ AQD APU](#)
Cc: [Tucker, Bryan C](#)
Subject: [EXTERNAL] ET Gathering & Processing LLC Foster Compressor Station Op App
Date: Wednesday, March 26, 2025 12:44:53 PM
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[Foster Op App_submitted 2025-03-26.pdf](#)
[Foster 2025 Op App Fee Payment Receipt.pdf](#)

Good afternoon,

Please find attached an ET Gathering & Processing LLC Minor Source Op Application for the Foster Compressor Station. We have paid the \$2,250 application fee via credit card over the phone with ODEQ-Accounts Receivable (see attached receipt). If you have any questions, please let me know.

Please reply to confirm receipt.

Thanks,

Sean Walker
Senior Specialist, Environmental
Energy Transfer
O: 405.557.5235
M: 405.226.8190



Private and confidential as detailed [here](#). If you cannot access hyperlink, please e-mail sender.