

Rahul Kaushik
Senior Environmental Engineer

ConocoPhillips Company
600 West Illinois Ave.
Midland, TX 79701
Phone 432-212-3279



June 19, 2025

Texas Commission on Environmental Quality
Air Permits Initial Review Team (APIRT), MC 161
P.O. Box 13087
Austin, Texas 78711-3087

Re: TXL POWELL A12 A13 4805BH OFFSITE
COG Operating Company - CN602997165

Permit Engineering Staff:

ConocoPhillips Company (COP) is submitting the attached Permit by Rule registration for TXL POWELL A12 A13 4805BH OFFSITE. The facility is registering under the applicable Permit by Rule requirements of 30 TAC 106.352, 30 TAC 106.512, and 30 TAC 106.359.

This application and associated filing fee are being filed through the Texas Commission on Environmental Quality's STEERS e-Permit system.

If there are any questions, please feel free to contact me at 432-238-3781 or via email at rahul.kaushik@conocophillips.com.

Sincerely,

A handwritten signature in black ink that reads "Rahul Kaushik". The signature is written in a cursive, flowing style.

Rahul Kaushik
Senior Environmental Engineer

COG Operating LLC

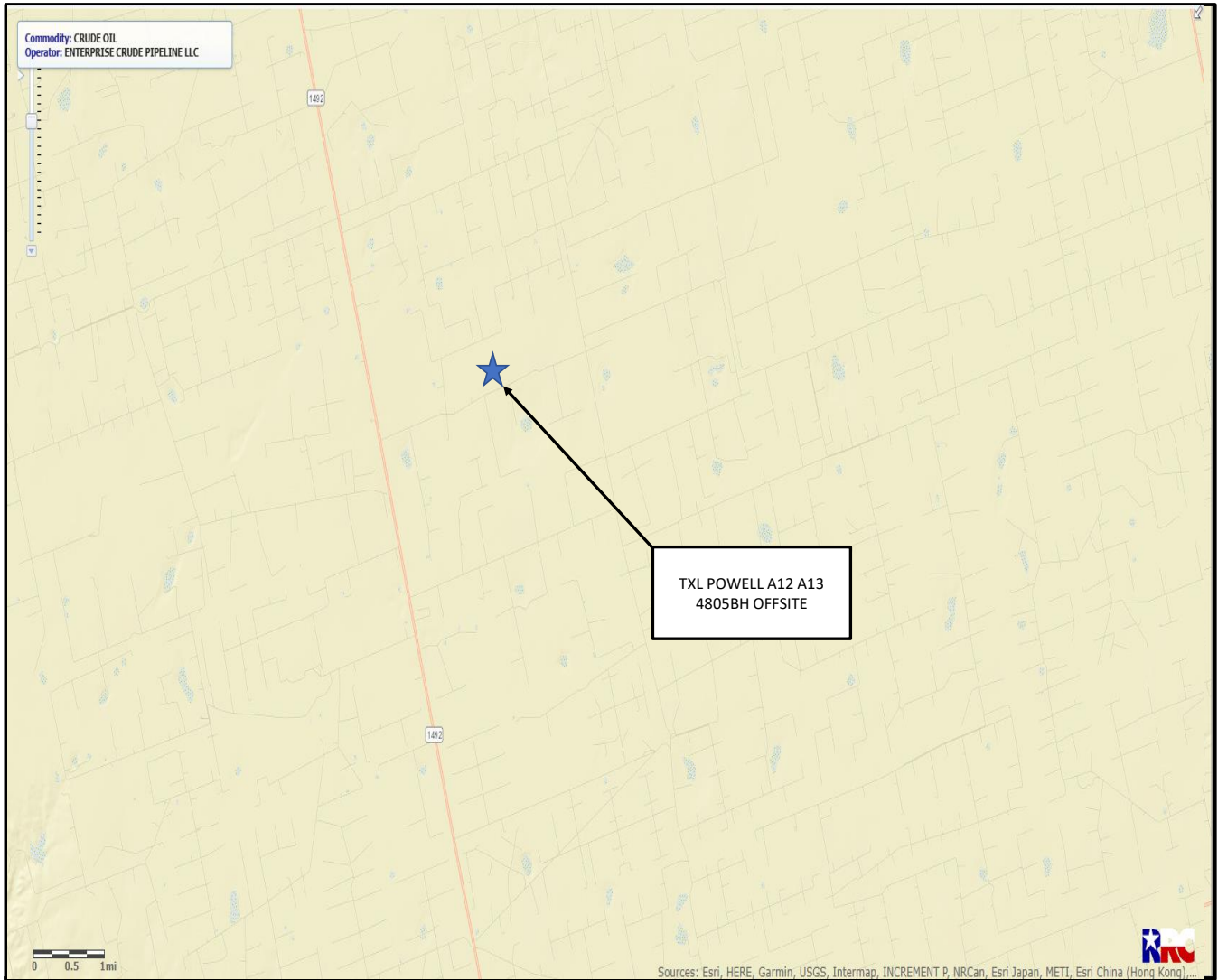
TXL POWELL A12 A13 4805BH OFFSITE

Process Description:

The TXL POWELL A12 A13 4805BH OFFSITE is an oil and gas compression site that is eligible for Permit By Rule (PBR) under 30 TAC 106.352, 30 TAC 106.512, and 30 TAC 106.359. The compressor site supports artificial lift operations.

The produced gas is compressed for introduction into a production well. The pressurized gas assists bringing produced fluids to surface. The compressor, producing well, and/or gas supply can be curtailed as necessary.

Planned maintenance, startups and shutdowns (MSS) will occur and are included in this application. MSS activities may include, but are not limited to, pigging pipelines, purging equipment, repair or replacement of equipment, and blowdowns.



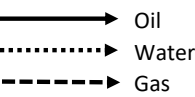
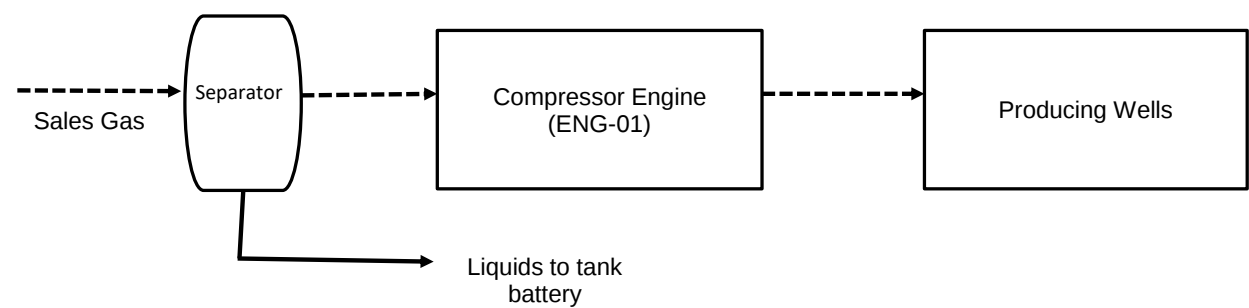
COG Operating LLC
TXL POWELL A12 A13 4805BH OFFSITE
Upton County
31.589498, -102.155857

Map Source: Texas Railroad Commission GIS Viewer
[RRC Public GIS Viewer \(texas.gov\)](https://www.texas.gov)



COG Operating LLC

TXL POWELL A12 A13 4805BH OFFSITE



COG Operating LLC

TXL POWELL A12 A13 4805BH OFFSITE

Regulatory Requirements:

1. 30 TAC §106.352: Oil and Gas Handling and Production Facilities

The Oil and Gas PBR applies to stationary facilities, or group of facilities, at a site engaged in the production or processing of oil and gas. The TXL POWELL A12 A13 4805 BH OFFSITE Compressor provides gas-lift for oil and gas production and falls within the scope of the Oil and Gas PBR. The facility is not a major source as demonstrated in the emissions summary table.

As the facility is not located within the Barnett Shale, it is subject to 30 TAC §106.352 (I). The facility utilizes sweet gas and the engine complies with 30 TAC §106.512 as further described below. The emissions from the facility are below 25 tpy of SO₂ and VOCs and 250 tpy of NOx and CO (see Emissions Summary table).

2. 30 TAC §106.512: Stationary Engines and Turbines

The Engines and Turbines PBR applies to gas or liquid fuel-fired engines or turbines. The gas-fired engine at the compressor site is operated consistent with the provisions of 30 TAC §106.512 as detailed below.

The 4-cycle natural gas engine is rated below 500 hp and use produced gas containing less than 20 ppm hydrogen sulfide. The engine is designed and operated to achieve NOx concentrations below 1.0 g/hp-hr for below 500 hp; thereby not jeopardizing the applicable National Ambient Air Quality Standard (NAAQS). The source test was performed for the engines as per the requirements.

3. 40 CFR Part 60, Subpart JJJJ: NSPS Stationary Spark Ignition Engines

The requirements under the NSPS for stationary engines are dependent on the rating and age of the engine and the fuel type. Information on the engine is included in this application. Under Subpart JJJJ, if the engines has date of manufacturing after July 1, 2008 the engine must comply with 2.0 g/hp-hr NOx; 4 g/hp-hr CO; and 1 g/hp-hr VOC and for after July 1, 2010 the engine must maintain emissions below 1.0 g/hp-hr NOx; 2.0 g/hp-hr CO; and 0.7 g/hp-hr VOC.

To ensure ongoing compliance, the engine and associated control equipment are subject to regular maintenance. Compliance is verified through initial source testing submitted to the TCEQ.

4. 40 CFR Part 63, Subpart HH: NESHAPS Oil and Gas Production Facilities

Subpart HH applies to oil and gas production facilities located at area sources and major sources of hazardous air pollutants (HAPs). For area sources of HAPs, the regulation applies to glycol dehydration units, which are not present at this location.

5. 40 CFR Part 63, Subpart ZZZZ: NESHAPS Stationary Reciprocating Engines

Subpart ZZZZ establishes requirements to minimize hazardous air pollutants from stationary reciprocating engines. The engine is manufactured in 2020 and is located at an area source of HAPs. Pursuant to 40 CFR 63.6590(c)(1), new engines at area sources can comply with the requirements of 40 CFR Part 60 Subpart JJJJ. As demonstrated above, this engine will comply with 40 CFR Part 60 Subpart JJJJ, which satisfies 40 CFR Part 63 Subpart ZZZZ.

COG Operating LLC

TXL POWELL A12 A13 4805BH OFFSITE

Emissions Summary

EPN	Certified	Description	VOC		NOx		CO		SO ₂		PM ₁₀		PM2.5		H2S	
			lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
ENG-01	No	Engine Gas-Fired	0.617	2.704	0.882	3.863	1.764	7.725	0.009	0.041	0.066	0.289	0.066	0.289		
Fug-01	No	Fugitive Emissions	0.393	1.722												
MSS-01	No	MSS Emissions	32.589	2.346											0.000	0.000

TOTALS: **6.77** **3.86** **7.73** **0.04** **0.29** **0.29**

PBR THRESHOLDS: **25** **250** **250** **25** **15** **10**

Hazardous Air Pollutants

EPN	Certified	Description	Formaldehyde	
			lb/hr	tons/yr
ENG-01	No	Engine Gas-Fired	0.070	0.306
Fug-01	No	Fugitive Emissions		
MSS-01	No	MSS Emissions		

0.306

COG Operating LLC

TXL POWELL A12 A13 4805BH OFFSITE

Emission Point Numbers: ENG-01

Description: Natural Gas-Fired, 4-Stroke, Rich-Burn Engine

Model: CG137-8

Rated Output (hp):	400	
Fuel Consumption (Btu/hp-hr):	8509	
Higher Heating Value (Btu/cf):	1223	
H2S Content (ppm):	20	Maximum concentration
Run Time (hrs/yr):	8760	Unit can operate all year
Molar Volume (cf/lb-mol):	379.4	
Molecular Weight SO ₂ (lb/lb-mol):	64	

Pollutant	Emission Factor		Emission Rate ⁴	
	g/hp-hr ¹	lb/MMBtu ^{2,3}	lb/hr	ton/yr
VOC	0.7		0.617	2.704
NOx	1.0		0.882	3.863
CO	2.0		1.764	7.725
SO ₂		0.0028	0.009	0.041
PM ₁₀		0.01941	0.066	0.289
PM _{2.5}		0.01941	0.066	0.289
Formaldehyde		0.0205	0.070	0.306

¹ Emission factors from 40 CFR Part 60, Subpart JJJJ.

² Emission factors (except SO₂) from U.S. EPA's AP-42: *Compilation of Air Emissions Factors*, Table 3.2-3.

³ SO₂ emission factor calculated from H₂S content in the fuel gas as follows:

$$EF_{SO_2} = \left(\frac{H_2S \text{ Content}}{\text{Molar Vol}} \right) \left(\frac{MW_{SO_2}}{HHV} \right)$$

⁴ Emission rate (in lbs/hr) determined by multiplying emission factor by the fuel consumption.

$$Emissions = (EF) \left(\frac{Rated \text{ Output}}{453.59} \right) \quad \text{For EF in units of g/hp-hr}$$

$$Emissions = (EF) \left(\frac{Fuel \text{ Consumption}}{10^6} \right) (Rated \text{ Output}) \quad \text{For EF in units of lb/MMBtu}$$

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TXL POWELL A12 A13 4805BH OFFSITE

Fugitive Components:

Component Type	Service	Component Count	Hours Operation	Emission Factors ¹	Total VOC Weight % ²	H ₂ S Weight % ³	Control Efficiency	VOC Emissions		H ₂ S Emissions
								lb/hr	tpy	tpy
Valves	Gas/Vapor	20	8760	0.00992	39.0%	0.000%		0.077	0.339	0.000
	Light Oil	10	8760	0.0055	100.0%	0.000%		0.055	0.241	0.000
	Heavy Oil		8760	0.000019	100.0%	0.000%		0.000	0.000	0.000
	Water/Light Oil		8760	0.000216	100.0%	0.000%		0.000	0.000	0.000
Pump Seals	Gas/Vapor		8760	0.00529	39.0%	0.000%		0.000	0.000	0.000
	Light Oil		8760	0.02866	100.0%	0.000%		0.000	0.000	0.000
	Heavy Oil		8760	0.02866	100.0%	0.000%		0.000	0.000	0.000
	Water/Light Oil		8760	0.000053	100.0%	0.000%		0.000	0.000	0.000
Connectors	Gas/Vapor	30	8760	0.00044	39.0%	0.000%		0.005	0.023	0.000
	Light Oil	10	8760	0.000463	100.0%	0.000%		0.005	0.020	0.000
	Heavy Oil		8760	0.000017	100.0%	0.000%		0.000	0.000	0.000
	Water/Light Oil		8760	0.000243	100.0%	0.000%		0.000	0.000	0.000
Open-ended Lines	Gas/Vapor		8760	0.00441	39.0%	0.000%		0.000	0.000	0.000
	Light Oil		8760	0.003086	100.0%	0.000%		0.000	0.000	0.000
	Heavy Oil		8760	0.00030864	100.0%	0.000%		0.000	0.000	0.000
	Water/Light Oil		8760	0.0005512	100.0%	0.000%		0.000	0.000	0.000
Flanges	Gas/Vapor	30	8760	0.00086	39.0%	0.000%		0.010	0.044	0.000
	Heavy Oil		8760	0.000001	100.0%	0.000%		0.000	0.000	0.000
	Water/Light Oil		8760	0.00001	100.0%	0.000%		0.000	0.000	0.000
Others	Gas/Vapor	10	8760	0.0194	39.0%	0.000%		0.076	0.331	0.000
	Light Oil	10	8760	0.0165	100.0%	0.000%		0.165	0.724	0.000
	Heavy Oil		8760	0.000007	100.0%	0.000%		0.000	0.000	0.000
	Water/Light Oil		8760	0.0309	100.0%	0.000%		0.000	0.000	0.000

Totals: 0.393 1.722 0.000

¹ Emission factors from Table II of TCEQ's *Air Permit Technical Guidance for Chemical Sources, Fugitive Guidance (APDG-6422)* .

² VOC mass fraction from the representative gas sample analysis.

³ H₂S fraction from the representative gas sample analysis.

COG Operating LLC
TXL POWELL A12 A13 4805BH OFFSITE
Routine Maintenance:

Molar Volume (cf/lb-mol): 379.4

Emission Source Description	Blowdown Volume ¹ (scf/yr)	Molecular Weight ² (lbs/lbmol)	Total VOC Weight % ²	H ₂ S Weight % ³	VOC ⁵		H ₂ S ⁵
					lb/hr ⁴	ton/yr	lb/hr ⁴
Maintenance	180,000	25.39	38.96%	0.000%	32.59	2.346	0.000

¹ Estimate 15,000 scf of gas would be released every month while performing routine maintenance, startups and shutdowns for both engines.
Routine maintenance includes pipeline repairs, instrumentation calibration, etc.

² Molecular weight and VOC concentration estimated from gas analysis.

³ Assumed 10 ppmv H₂S in produced gas from the wells.

⁴ Conservatively assumed the estimated monthly volume was released in a single 12-hour day period.

⁵ Emissions were calculated with the following formula:

$$Emissions = (Blowdown\ Volume) \left(\frac{Molecular\ Wt}{Molar\ Vol} \right) (Wt\ \%)$$



Certificate of Analysis
Number: 5030-23060672-001A

Midland Laboratory
2200 East I-20
Midland, TX 79706
Phone 432-689-7252

John Haley
Conoco Phillips
800, W Illinois Ave
Midland, TX 79701

July 13, 2023

Station Name: NEAL POWELL 4204 LH
Sample Point: SEP
Cylinder No: 1111-008457
Analyzed: 06/29/2023 09:07:03 by CDW

Sampled By: SAM LUCAS
Sample Of: Gas Spot
Sample Date: 06/27/2023 08:42
Sample Conditions: 71 psig, @ 107 °F
Method: GPA 2286

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.696 psia	
Hydrogen Sulfide	0.000	0.000		GPM TOTAL C2+ 9.004
Nitrogen	3.234	3.568		
Methane	65.444	41.352		
Carbon Dioxide	0.443	0.768		
Ethane	12.981	15.351	3.475	
Propane	9.707	16.860	2.681	
Iso-Butane	1.004	2.299	0.329	
n-Butane	3.671	8.404	1.160	
Iso-Pentane	0.856	2.433	0.314	
n-Pentane	0.970	2.757	0.353	
i-Hexanes	0.411	1.359	0.164	
n-Hexane	0.211	0.739	0.090	
Benzene	0.057	0.176	0.016	
Cyclohexane	0.128	0.428	0.044	
i-Heptanes	0.425	1.548	0.168	
n-Heptane	0.067	0.265	0.031	
Toluene	0.043	0.153	0.014	
i-Octanes	0.236	0.989	0.105	
n-Octane	0.025	0.115	0.013	
Ethylbenzene	0.008	0.035	0.003	
Xylenes	0.013	0.050	0.005	
i-Nonanes	0.058	0.219	0.026	
n-Nonane	0.006	0.029	0.004	
Decane Plus	0.022	0.103	0.009	
	100.000	100.000	9.004	

Calculated Physical Properties

Relative Density Real Gas	Total 0.8809	C10+ 4.3521
Calculated Molecular Weight	25.39	126.05
Compressibility Factor	0.9948	

GPA 2172 Calculation:

Calculated Gross BTU per ft ³ @ 14.696 psia & 60°F		
Real Gas Dry BTU	1452.4	6608.5
Water Sat. Gas Base BTU	1427.1	6459.5

Comments: H2S Field Content 0 ppm

Data reviewed by: Raymond Bradford, Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

COG Operating LLC

TXL POWELL A12 A13 4805BH OFFSITE

(Representative sample from Neal Powell 4204LH Battery)

Promax Inputs:

Measured Gas			
Molecular Wt:		25.39	
Compound	MW	Mole %	Wt %
Methane	16.042	65.444	41.352
Ethane	30.07	12.961	15.351
Propane	44.1	9.707	16.86
i-Butane	58.12	1.004	2.299
n-Butane	58.12	3.671	8.404
i-Pentane	72.15	0.856	2.433
n-Pentane	72.15	0.97	2.757
i-Hexane	86.18	0.411	1.356
n-Hexane	86.18	0.211	0.739
Benzene	78.11	0.057	0.176
Cyclohexane	84.16	0.128	0.428
i-Heptane	100.21	0.425	1.548
n-Heptane	100.21	0.067	0.265
Toluene	92.14	0.043	0.153
i-Octane	114.23	0.236	0.989
n-Octane	114.23	0.025	0.115
Ethylbenzene	106.17	0.008	0.035
Xylenes	106.16	0.013	0.05
i-Nonanes	128.2	0.058	0.219
n-Nonanes	128.2	0.006	0.029
Decane Plus	124.48	0.022	0.103
Nitrogen	28.02	3.234	3.568
CO2	44.01	0.443	0.768
TOTALS:		100	100.00
VOCs in total gas			38.96%
VOCs in Total Organic Compounds			40.73%

**Texas Commission on Environmental Quality
Table 29 Reciprocating Engines**

ENERFLEX EF6576

I. Engine Data											
Manufacturer:		Model No.		Serial No.		Manufacture Date:					
Caterpillar		CG137-8		ST800361		05/13/2020					
Rebuilds Date:		No. of Cylinders:		Compression Ratio:		EPN:					
		8		8:3		ENG-01					
Application: ☒ Gas Compression ☐ Electric Generation ☐ Refrigeration ☐ Emergency/Stand by											
☒ 4 Stroke Cycle ☐ 2 Stroke Cycle ☐ Carbureted ☒ Spark Ignited ☐ Dual Fuel ☐ Fuel Injected											
☐ Diesel ☐ Naturally Aspirated ☐ Blower /Pump Scavenged ☐ Turbo Charged and I.C. ☒ Turbo Charged											
☐ Intercooled ☐ I.C. Water Temperature ☐ Lean Burn ☒ Rich Burn											
Ignition/Injection Timing: Fixed: _____ Variable: _____											
Manufacture Horsepower Rating: 400 hp Proposed Horsepower Rating: 400 hp											
Discharge Parameters											
Stack Height (Feet)		Stack Diameter (Feet)		Stack Temperature (°F)		Exit Velocity (FPS)					
12		0.33		988		315					
II. Fuel Data											
Type of Fuel: ☒ Field Gas ☐ Landfill Gas ☐ LP Gas ☐ Natural Gas ☐ Digester Gas ☐ Diesel											
Fuel Consumption (BTU/bhp-hr): 8509				Heating Value: 1,223Btu/scf				Lower Heating Value:			
Sulfur Content (grains/100 scf - weight %): _____											
III. Emission Factors (Before Control)											
NO _x		CO		SO ₂		VOC		Formaldehyde		PM ₁₀	
g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv
1		2				0.7					
Source of Emission Factors: ☒ Manufacturer Data ☐ AP-42 ☐ Other (specify): _____											
IV. Emission Factors (Post Control)											
NO _x		CO		SO ₂		VOC		Formaldehyde		PM ₁₀	
g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv
1		2.0				0.7					
Method of Emission Control: ☒ NSCR Catalyst ☐ Lean Operation ☐ Parameter Adjustment ☐ Stratified Charge ☐ JLCC Catalyst ☐ Other (Specify): _____											
<i>Note: Must submit a copy of any manufacturer control information that demonstrates control efficiency.</i>											
Is Formaldehyde included in the VOCs? ☒ Yes ☐ No											
V. Federal and State Standards (Check all that apply)											
☒ NSPS JJJJ ☐ MACT ZZZZ ☐ NSPS IIII ☐ Title 30 Chapter 117 - List County: _____											
VI. Additional Information											
1. Submit a copy of the engine manufacturer's site rating or general rating specification data. 2. Submit a typical fuel gas analysis, including sulfur content and heating value. For gaseous fuels, provide mole percent of constituents. 3. Submit description of air/fuel ratio control system (manufacturer information is acceptable).											

Reset Form

Print Form

Enerflex		Enerflex Contract Compression		Date:	
		Unit Information Form		6/5/2025	
ECC Unit #	EF6576	Unit Description	CG137-8 - JGA/4		
Engine Make	Caterpillar	Compressor Make	ARIEL		
Engine Model	CG137-8	Compressor Model	JGA/4		
Engine Serial Number	ST800361	Compressor Serial Number	F65393		
Engine Manufactured Date	5/13/2020	Compressor Manufacture Date	44715		
Engine Rated Horsepower	400				
Engine Max RPM	1800	Compressor Max RPM	1800		
Engine Combustion Type	4 Cycle Rich Burn				
Engine Displacement (in3)	1099	Engine Modified or			
Fuel Delivery Method	Carburetor	Reconstructed	No		
Turbo or Naturally Aspirated	Turbo				
Air Environmental Regulations					
	Uncontrolled Emission:	Catalyst Performance:	Controlled Emissions:		
	g/bhp-hr	% Conversion	g/bhp-hr		
NOx	14	92.86	1		
CO	14	85.72	2		
VOC	0.57	0	0.7		
HCHO					
AFR Make	CAT	Catalyst Housing Make	Catalytic Combustion		
AFR Model	ADEM 4 / NOX	Catalyst Housing Model	2421C-1950C2-081081-01		
		Catalyst Element Type	3-Way		
		# of Catalyst Elements in Housing	2		
Customer Gas		Other Engine Emissions Controls	None		
Analysis Provided	Yes				
Notes					
EF6576 TXL Powell A9 A11 A12 A13 A14 GERP 6-27-23					
All emissions values are based on Engine, AFR controller & Catalyst Manufacturer specification assuming a "Pipline Quality" (~905 BTU) fuel gas composition, 1200ft elevation and 100F max air inlet temp unless otherwise specified. Note that Emissions values are based on 100% engine load operation with fresh or cleaned catalyst. Some emissions values are nominal and are not representative of Not-to-Exceed values unless otherwise specified. It is recommended to apply a safety factor to all emissions values for air permitting to allow for operational flexibility and variations in fuel gas composition.					

COG Operating LLC

TXL POWELL A12 A13 4805BH OFFSITE

NO₂ SCREEN3 Modeling Results

EPN	Description	NOx Emissions		NOx Unit Concentration ¹	NOx Calculated Concentration	Ratio NO ₂ /NOx ²	NO ₂ Hourly Concentration	Annual Factor ³	NO ₂ Annual Concentration
		lb/hr	tons/yr	µg/m3	µg/m3		µg/m3		µg/m3
ENG -01	Engine Gas-Fired	0.882	3.863	14.31	12.6	0.4	5.0	0.08	0.40
Fug-01	Fugitive Emissions	0	0						
MSS-01	MSS Emissions	0	0						

NO₂ Hourly: 5.0 NO₂ Annual: 0.40

BACKGROUND REGION 7:⁴ 70 20

ESTIMATED GROUND LEVEL NO₂ CONCENTRATION: 75.0 20.4

NAAQS:⁵ 188 100

¹ SCREEN3 estimated maximum ground level concentration using unit emission rate of 1 lb/hr (0.126 g/s). Nearest receptor >0.25 miles (400 m) from engines.

² Ratio of NO₂ to NOx of 0.40 for rich and lean burn engines from TCEQ *Modeling Guidance for Exemption 106.512* .

³ Factor to convert 1-hour to annual concentration from TCEQ's *Oil and Gas Standard Permit By Rule Refined-Screening Modeling Guidelines* .

⁴ Background concentrations from TCEQ's *Modeling Guidance for Exemption 106.512*.

⁵ NAAQS from Table B-1 for TCEQ's *Air Quality Modeling Guidelines APDG-6232* .

06/18/25
09:12:0

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 13043 ***

Eng 1 420 HP

SIMPLE TERRAIN INPUTS:
SOURCE TYPE = POINT
EMISSION RATE (G/S) = 0.126000
STACK HEIGHT (M) = 3.6600
STK INSIDE DIAM (M) = 0.1000
STK EXIT VELOCITY (M/S)= 266.0000
STK GAS EXIT TEMP (K) = 804.0000
AMBIENT AIR TEMP (K) = 293.0000
RECEPTOR HEIGHT (M) = 0.0000
URBAN/RURAL OPTION = RURAL
BUILDING HEIGHT (M) = 0.0000
MIN HORIZ BLDG DIM (M) = 0.0000
MAX HORIZ BLDG DIM (M) = 0.0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = 4.145 M**4/S**3; MOM. FLUX = 64.464 M**4/S**2.

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST	CONC		U10M	USTK	MIX	HT	PLUME	SIGMA	SIGMA	
(M)	(UG/M**3)	STAB	(M/S)	(M/S)	(M)	HT (M)	Y (M)	Z (M)	DWASH	
10.	0.1835E-04	6	1.0	1.0	10000.0	43.28	7.32	7.31	NO	
100.	13.87	4	20.0	20.0	6400.0	7.65	8.24	4.72	NO	
200.	12.08	4	10.0	10.0	3200.0	11.64	15.73	8.80	NO	
300.	9.696	4	8.0	8.0	2560.0	13.64	22.79	12.42	NO	
400.	7.914	4	5.0	5.0	1600.0	19.62	29.81	15.94	NO	
500.	6.817	4	4.5	4.5	1440.0	21.39	36.50	18.99	NO	
600.	5.944	4	4.0	4.0	1280.0	23.61	43.10	21.96	NO	
700.	5.274	4	3.5	3.5	1120.0	26.46	49.62	24.90	NO	
800.	4.742	4	3.0	3.0	960.0	30.26	56.09	27.84	NO	
900.	4.298	4	3.0	3.0	960.0	30.26	62.35	30.43	NO	
1000.	3.962	4	2.5	2.5	800.0	35.58	68.73	33.36	NO	

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 10. M:
115. 14.31 4 20.0 20.0 6400.0 7.65 9.45 5.36 NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB