



**FESCO, Ltd.**  
**1100 Fesco Ave. - Alice, Texas 78332**

**For:** Ameredev Operating, LLC  
 2901 Via Fortuna  
 Austin, Texas 78746

**Sample:** Firethorn CTB

Outlet of Contact Tower  
 Spot Gas Sample @ 25 psig & 81°F

Date Sampled: 02/02/2024

Job Number: 241269.002

### CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286

COMPONENT	Un-Normalized		
	Mol%	MOL%	GPM
Hydrogen Sulfide*		0.600	
Nitrogen	2.252	2.309	
Carbon Dioxide	0.183	0.188	
Methane	72.008	73.740	
Ethane	5.482	5.614	1.539
Propane	8.023	8.215	2.320
Isobutane	1.512	1.548	0.519
n-Butane	3.648	3.735	1.207
2-2 Dimethylpropane	0.012	0.013	0.005
Isopentane	1.104	1.130	0.424
n-Pentane	0.992	1.016	0.377
Hexanes	0.806	0.838	0.354
Heptanes Plus	<u>1.038</u>	<u>1.054</u>	<u>0.426</u>
	97.060	100.000	7.170

#### Computed Real Characteristics Of Heptanes Plus:

Specific Gravity ----- 3.304 (Air=1)  
 Molecular Weight ----- 95.22  
 Gross Heating Value ----- 5100 BTU/CF

#### Computed Real Characteristics Of Total Sample:

Specific Gravity ----- 0.848 (Air=1)  
 Compressibility (Z) ----- 0.9950  
 Molecular Weight ----- 24.43  
 Gross Heating Value  
   Dry Basis ----- 1444 BTU/CF  
   Saturated Basis ----- 1420 BTU/CF

\*Hydrogen Sulfide tested on location by: Stain Tube Method (GPA 2377)  
 377.4 Gr/100 CF, 6000 PPMV or 0.600 Mol %

Base Conditions: 15.025 PSI & 60 Deg F

Sampled By: (16) M. Martinez  
 Analyst: JS  
 Processor: HB  
 Cylinder ID: T-6368

Certified: FESCO, Ltd. - Alice, Texas

Conan Pierce 361-661-7015

# CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286

## TOTAL REPORT

COMPONENT	MOL %	GPM	WT %
Hydrogen Sulfide*	0.600		0.837
Nitrogen	2.309		2.648
Carbon Dioxide	0.188		0.339
Methane	73.740		48.427
Ethane	5.614	1.539	6.910
Propane	8.215	2.320	14.829
Isobutane	1.548	0.519	3.683
n-Butane	3.735	1.207	8.887
2,2 Dimethylpropane	0.013	0.005	0.038
Isopentane	1.130	0.424	3.337
n-Pentane	1.016	0.377	3.001
2,2 Dimethylbutane	0.013	0.006	0.046
Cyclopentane	0.000	0.000	0.000
2,3 Dimethylbutane	0.091	0.038	0.321
2 Methylpentane	0.265	0.113	0.935
3 Methylpentane	0.167	0.070	0.589
n-Hexane	0.302	0.127	1.065
Methylcyclopentane	0.133	0.048	0.458
Benzene	0.113	0.032	0.361
Cyclohexane	0.162	0.057	0.558
2-Methylhexane	0.041	0.020	0.168
3-Methylhexane	0.047	0.022	0.193
2,2,4 Trimethylpentane	0.020	0.011	0.094
Other C7's	0.079	0.035	0.321
n-Heptane	0.077	0.036	0.316
Methylcyclohexane	0.119	0.049	0.478
Toluene	0.088	0.030	0.332
Other C8's	0.080	0.038	0.361
n-Octane	0.022	0.012	0.103
Ethylbenzene	0.007	0.003	0.030
M & P Xylenes	0.015	0.006	0.065
O-Xylene	0.004	0.002	0.017
Other C9's	0.029	0.015	0.150
n-Nonane	0.005	0.003	0.026
Other C10's	0.009	0.005	0.052
n-Decane	0.002	0.001	0.012
Undecanes (11)	<u>0.002</u>	<u>0.001</u>	<u>0.013</u>
Totals	100.000	7.170	100.000

### Computed Real Characteristics Of Total Sample:

Specific Gravity -----	0.848	(Air=1)
Compressibility (Z) -----	0.9950	
Molecular Weight -----	24.43	
Gross Heating Value		
Dry Basis -----	1444	BTU/CF
Saturated Basis -----	1420	BTU/CF

<b>Sample Date:</b> 02/02/2024	<b>Ambient Air Temp:</b> 64 °F
<b>Sample Time:</b> 11:35	<b>Heating Method Utilized:</b> Yes
<b>Analysis Date:</b> 02/06/2024	<b>Sampling Method:</b> Fill & Empty
<b>Analysis Time:</b> 11:57	<b>Device:</b> (GC) S15
<b>Sample Pressure:</b> 25 psig	<b>Make &amp; Model:</b> Shimadzu GC 2014
<b>Sample Temp:</b> 81 °F	<b>Last Verification Date:</b> 02/01/2024
<b>Sampling Flow Rate:</b> N/A MCF/D	

Received by OCD: 2/19/2024 12:00:49 PM

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Date (C-129 Was Filed)	Date (Flaring Discovered)	Date Flaring Occurred	Location	Flare Source Equipment	Gas Volume (MCF)	Flared or Vented	Start Time of the flare event	End Time of the flare event	Flare Duration (hr)	C129 Filing Reason
2/19/2024	2/19/2024	2/16/2024	Firethorn	Tripod HP Tip	84.18	Flared	2:10 AM	3:44 PM	13.57	Malfunction/Flared more than 8 Hrs

Released to Imaging: 2/19/2024 12:08:28 PM

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**District IV**  
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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

DEFINITIONS

Action 315621

DEFINITIONS

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 315621
	Action Type: [C-129] Venting and/or Flaring (C-129)

DEFINITIONS

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application: <ul style="list-style-type: none"><li>• this application's operator, hereinafter "this operator";</li><li>• venting and/or flaring, hereinafter "vent or flare";</li><li>• any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";</li><li>• the statements in (and/or attached to) this, hereinafter "the statements in this";</li><li>• and the past tense will be used in lieu of mixed past/present tense questions and statements.</li></ul>
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QUESTIONS

Action 315621

**QUESTIONS**

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 315621
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

<b>Prerequisites</b> Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.	
Incident Well	Unavailable.
Incident Facility	[fAPP2203855966] FIRETHORN

<b>Determination of Reporting Requirements</b> Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.	
Was this vent or flare caused by an emergency or malfunction	Yes
Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event	Yes
Is this considered a submission for a vent or flare event	Yes, minor venting and/or flaring of natural gas.
An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.	
Was there at least 50 MCF of natural gas vented and/or flared during this event	Yes
Did this vent or flare result in the release of ANY liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water	No
Was the vent or flare within an incorporated municipal boundary or withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No

<b>Equipment Involved</b>	
Primary Equipment Involved	Not answered.
Additional details for Equipment Involved. Please specify	Not answered.

<b>Representative Compositional Analysis of Vented or Flared Natural Gas</b> Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	74
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	6,000
Carbon Dioxide (C02) percentage, if greater than one percent	0
Oxygen (02) percentage, if greater than one percent	0
If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.	
Methane (CH4) percentage quality requirement	Not answered.
Nitrogen (N2) percentage quality requirement	Not answered.
Hydrogen Sufide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (C02) percentage quality requirement	Not answered.
Oxygen (02) percentage quality requirement	Not answered.

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QUESTIONS, Page 2  
  
Action 315621

QUESTIONS (continued)

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 315621
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	02/16/2024
Time vent or flare was discovered or commenced	02:10 AM
Time vent or flare was terminated	03:44 PM
Cumulative hours during this event	14

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Cause: Repair and Maintenance   Flow Line - Production   Natural Gas Vented   Released: 84 Mcf   Recovered: 0 Mcf   Lost: 84 Mcf.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Not answered.
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.

Venting or Flaring Resulting from Downstream Activity	
Was this vent or flare a result of downstream activity	No
Was notification of downstream activity received by this operator	Not answered.
Downstream OGRID that should have notified this operator	Not answered.
Date notified of downstream activity requiring this vent or flare	Not answered.
Time notified of downstream activity requiring this vent or flare	Not answered.

Steps and Actions to Prevent Waste	
For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control.	True
Please explain reason for why this event was beyond this operator's control	Malfunction of Process Equipment.
Steps taken to limit the duration and magnitude of vent or flare	Optimize the VRUs to run more efficiently.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Optimize the gas to the VRUs to reduce faults and use less units on location.



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ACKNOWLEDGMENTS  
  
Action 315621

ACKNOWLEDGMENTS

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 315621
	Action Type: [C-129] Venting and/or Flaring (C-129)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be a <b>complete</b> C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
<input checked="" type="checkbox"/>	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively.
<input checked="" type="checkbox"/>	I hereby certify the statements in this report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
<input checked="" type="checkbox"/>	I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.
<input checked="" type="checkbox"/>	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.



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CONDITIONS

Action 315621

CONDITIONS

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 315621
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
tboeckholt	If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	2/19/2024