



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

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

Sample: Firethorn No. 113H
30-025-44961
First Stage Meter Run
Spot Gas Sample @ 102 psig & 62°F

Date Sampled: 02/04/2023

Job Number: 231336.005

CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286

COMPONENT	Un-Normalized		
	Mol%	MOL%	GPM
Hydrogen Sulfide*		0.600	
Nitrogen	0.993	0.996	
Carbon Dioxide	1.376	1.380	
Methane	79.680	79.883	
Ethane	8.520	8.541	2.338
Propane	4.483	4.494	1.267
Isobutane	0.941	0.943	0.316
n-Butane	1.658	1.662	0.536
2-2 Dimethylpropane	0.017	0.017	0.007
Isopentane	0.515	0.516	0.193
n-Pentane	0.358	0.359	0.133
Hexanes	0.343	0.302	0.127
Heptanes Plus	<u>0.265</u>	<u>0.307</u>	<u>0.128</u>
	99.149	100.000	5.045

Computed Real Characteristics Of Heptanes Plus:

Specific Gravity ----- 3.358 (Air=1)
Molecular Weight ----- 96.90
Gross Heating Value ----- 5220 BTU/CF

Computed Real Characteristics Of Total Sample:

Specific Gravity ----- 0.734 (Air=1)
Compressibility (Z) ----- 0.9964
Molecular Weight ----- 21.17
Gross Heating Value
Dry Basis ----- 1257 BTU/CF
Saturated Basis ----- 1236 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) R. Elizondo
Analyst: JS
Processor: HB
Cylinder ID: T-5926

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		0.966
Nitrogen	0.996		1.318
Carbon Dioxide	1.380		2.869
Methane	79.883		60.531
Ethane	8.541	2.338	12.131
Propane	4.494	1.267	9.360
Isobutane	0.943	0.316	2.589
n-Butane	1.662	0.536	4.563
2,2 Dimethylpropane	0.017	0.007	0.058
Isopentane	0.516	0.193	1.758
n-Pentane	0.359	0.133	1.223
2,2 Dimethylbutane	0.010	0.004	0.041
Cyclopentane	0.000	0.000	0.000
2,3 Dimethylbutane	0.032	0.013	0.130
2 Methylpentane	0.094	0.040	0.383
3 Methylpentane	0.063	0.026	0.256
n-Hexane	0.103	0.043	0.419
Methylcyclopentane	0.041	0.015	0.163
Benzene	0.008	0.002	0.030
Cyclohexane	0.047	0.016	0.187
2-Methylhexane	0.015	0.007	0.071
3-Methylhexane	0.016	0.008	0.076
2,2,4 Trimethylpentane	0.005	0.003	0.027
Other C7's	0.023	0.010	0.108
n-Heptane	0.025	0.012	0.118
Methylcyclohexane	0.046	0.019	0.213
Toluene	0.024	0.008	0.104
Other C8's	0.029	0.014	0.151
n-Octane	0.006	0.003	0.032
Ethylbenzene	0.002	0.001	0.010
M & P Xylenes	0.006	0.002	0.030
O-Xylene	0.001	0.000	0.005
Other C9's	0.009	0.005	0.054
n-Nonane	0.001	0.001	0.006
Other C10's	0.003	0.002	0.020
n-Decane	0.000	0.000	0.000
Undecanes (11)	<u>0.000</u>	<u>0.000</u>	<u>0.000</u>
Totals	100.000	5.045	100.000

Computed Real Characteristics Of Total Sample:

Specific Gravity ----- 0.734 (Air=1)

Compressibility (Z) ----- 0.9964

Molecular Weight ----- 21.17

Gross Heating Value

Dry Basis ----- 1257 BTU/CF

Saturated Basis ----- 1236 BTU/CF

Sample Date: 02/04/2023

Sample Time: 10:15

Analysis Date: 02/15/2023

Analysis Time: 09:13

Sample Pressure: 102 psig

Sample Temp: 62 °F

Sampling Flow Rate: N/A MCF/D

Ambient Air Temp: 48 °F

Heating Method Utilized: Yes

Sampling Method: Fill & Empty

Device: (GC) S10

Make & Model: Shimadzu GC 2014

Last Verification Date: 02/09/2023

Received by OGD: 1/30/2024 3:14:13 PM Facility #	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	Page 3 of 8
NA	NA	1/18/2024	1/1/2024	Red Bud	VRU Discharge	74.05	Flared	12:00 AM	11:21 AM	7.17	Oxygen	Facility was getting O2 spikes from the tank
FAPP2203927141	1/19/2024	1/18/2024	1/5/2024	Red Bud	LP - Vent flare/Blower Flare	104.68	Flared	12:01 AM	11:56 PM	14.70	Flared more than 8 Hrs	Sales blowers were switched off due to high
FAPP2203855966		1/22/2024	1/10/2024	Firethorn	LP Flare Estimation Sheet - Contact Tower	88.04	Flared	12:01 AM	6:52 PM	15.88	Flared more than 8 Hrs	Contact Tower ACI VRUs were having volta
FAPP2203855966		1/22/2024	1/11/2024	Firethorn	LP Flare Estimation Sheet - Contact Tower	128.26	Flared	1:56 PM	5:47 PM	2.37	Malfunction	Contact Tower ACI VRUs were having volta
FAPP2203855966		1/22/2024	1/12/2024	Firethorn	LP Flare Estimation Sheet - Contact Tower	324.20	Flared	10:08 AM	5:15 PM	6.28	Malfunction	Contact Tower ACI VRUs were having volta
FAPP2203855966		1/22/2024	1/14/2024	Firethorn	LP Flare Estimation Sheet - Contact Tower	365.25	Flared	8:17 AM	10:03 PM	5.68	Malfunction	Contact Tower ACI VRUs were having volta
FAPP2203855966		1/22/2024	1/15/2024	Firethorn	LP Flare Estimation Sheet - Contact Tower	282.11	Flared	10:19 AM	5:59 PM	4.60	Malfunction	Contact Tower ACI VRUs were having volta
FAPP2203855966	1/17/2024	1/17/2024	1/16/2024	Firethorn	LP Flare Estimation Sheet - Contact Tower	520.34	Flared	8:38 AM	7:00 PM	7.43	Malfunction	Contact Tower ACI VRUs were having volta
FAPP2203855966	1/18/2024	1/18/2024	1/17/2024	Firethorn	LP Flare Estimation Sheet - Contact Tower	635.06	Flared	5:47 AM	8:27 PM	10.42	Flared more than 8 Hrs	Contact Tower ACI VRUs were having volta
FAPP2203856979		1/22/2024	1/17/2024	Nandina	LP Flare Estimation Sheet - Tank Pressure, Valve Status	77.81	Flared	9:04 AM	10:06 PM	3.23	Malfunction	Control Room opened up production and V
FAPP2203855966		1/22/2024	1/18/2024	Firethorn	LP Flare Estimation Sheet - Contact Tower	428.17	Flared	7:24 AM	4:39 PM	8.72	Flared more than 8 Hrs	Contact Tower ACI VRUs were having volta
NA	NA	1/19/2024	1/18/2024	Nandina	HP Flare	119.69	Flared	12:36 AM	11:12 PM	5.62	Oxygen	Control Room has been purging the vessels
FAPP2203856979	1/19/2024	1/19/2024	1/18/2024	Nandina	VRU Discharge	621.06	Flared	12:01 AM	11:53 PM	23.99	Flared more than 8 Hrs	Control Room has been purging the vessels
FAPP2203855966		1/22/2024	1/19/2024	Firethorn	LP Flare Estimation Sheet - Contact Tower	68.43	Flared	8:06 AM	9:12 AM	1.02	Malfunction	Contact Tower ACI VRUs were having volta
FAPP2203856979		1/22/2024	1/19/2024	Nandina	HP Flare	271.06	Flared	12:12 AM	11:23 PM	12.31	Flared more than 8 Hrs	Control Room has been purging the vessels
FAPP2203856979		1/22/2024	1/19/2024	Nandina	VRU Discharge	315.22	Flared	12:00 PM	11:59 PM	24.00	Flared more than 8 Hrs	Control Room has been purging the vessels
FAPP2304126884		1/22/2024	1/19/2024	Nan 1.5N	HP Flare	92.73	Flared	1:32 AM	6:39 PM	0.19	Malfunction	ETC was having issues, causing line pressur
FAPP2203855966		1/22/2024	1/20/2024	Firethorn	LP Flare Estimation Sheet - Contact Tower	114.57	Flared	8:14 AM	10:10 AM	1.95	Malfunction	ACI VRUs faulted on low discharge over nig
FAPP2203856979		1/22/2024	1/20/2024	Nandina	HP Flare	209.25	Flared	12:23 AM	1:17 PM	11.24	Flared more than 8 Hrs	Control Room has been purging the vessels
FAPP2203856980		1/22/2024	1/20/2024	Nandina	VRU Discharge	449.65	Flared	12:00 AM	11:05 PM	22.40	Flared more than 8 Hrs	Control Room has been purging the vessels
FAPP2203856981		1/22/2024	1/21/2024	Nandina	HP Flare	139.69	Flared	9:12 AM	11:51 PM	11.90	Flared more than 8 Hrs	Separators are being purged for high O2.
FAPP2203856982	1/22/2024	1/22/2024	1/21/2024	Nandina	VRU Discharge	607.41	Flared	12:00 AM	11:48 PM	23.99	Flared more than 8 Hrs	Facility is purging O2 since vessels are bein
FAPP2203856983		1/23/2024	1/22/2024	Nandina	HP Flare	192.38	Flared	12:51 AM	7:58 PM	10.85	Flared more than 8 Hrs	Separators are being purged for high O2.
FAPP2203856984		1/23/2024	1/22/2024	Nandina	VRU Discharge	451.98	Flared	12:00 AM	6:27 PM	17.47	Flared more than 8 Hrs	Facility is purging O2 since vessels are bein
NA	NA	1/23/2024	1/22/2024	Red Bud	VRU Discharge	87.38	Flared	10:07 AM	11:39 AM	3.32	Oxygen	Sales blowers were turned on which cause

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District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
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Santa Fe, NM 87505

DEFINITIONS

Action 309639

DEFINITIONS

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 309639
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

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: • this application's operator, hereinafter "this operator"; • venting and/or flaring, hereinafter "vent or flare"; • any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms"; • the statements in (and/or attached to) this, hereinafter "the statements in this"; • and the past tense will be used in lieu of mixed past/present tense questions and statements.
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QUESTIONS

Action 309639

QUESTIONS

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	Action Number: 309639
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

QUESTIONS

Prerequisites
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 ID (n#)	Unavailable.
Incident Name	Unavailable.
Incident Type	Flare
Incident Status	Unavailable.
Incident Facility	[fAPP2203855966] FIRETHORN

Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section) that are assigned to your current operator can be amended with this C-129A application.

Determination of Reporting Requirements
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	No
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, major 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

Equipment Involved

Primary Equipment Involved	Not answered.
Additional details for Equipment Involved. Please specify	Not answered.

Representative Compositional Analysis of Vented or Flared Natural Gas
Please provide the mole percent for the percentage questions in this group.

Methane (CH4) percentage	80
Nitrogen (N2) percentage, if greater than one percent	1
Hydrogen Sulfide (H2S) PPM, rounded up	1
Carbon Dioxide (CO2) percentage, if greater than one percent	1
Oxygen (O2) 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 Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 309639

QUESTIONS (continued)

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 309639
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	01/17/2024
Time vent or flare was discovered or commenced	05:47 AM
Time vent or flare was terminated	08:27 PM
Cumulative hours during this event	10

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Equipment Failure Flow Line - Production Natural Gas Flared Released: 635 Mcf Recovered: 0 Mcf Lost: 635 Mcf.
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	
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	Contact Tower ACI VRUs were having voltage problems.
Steps taken to limit the duration and magnitude of vent or flare	We choked back the wells to limit production.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Control room will aim to reduce flaring event during startup of the facility. (Firethorn was rebuilt and turned on.)

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ACKNOWLEDGMENTS

Action 309639

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Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 309639
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

ACKNOWLEDGMENTS

☒	I acknowledge that with this application I will be amending an existing incident file (assigned to this operator) for a vent or flare event, pursuant to 19.15.27 and 19.15.28 NMAC.
☒	I acknowledge that amending an incident file does not replace original submitted application(s) or information and understand that any C-129 forms submitted to the OCD will be logged and stored as public record.
☒	I hereby certify the statements in this amending 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.
☒	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.
☒	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

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Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 309639
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

CONDITIONS

Created By	Condition	Condition Date
cescayu	If the information provided in this report requires further amendment(s), submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	1/30/2024