

Natural Gas Analysis Report

GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

Sample Information

	Sample Information
Sample Name	CULEBRA BLUFF CTB 2 CHECK (NOG1007C) 12-20-2021
Effective/Start Date	12-1-2021
WELL NAME	
Laboratory	D JURNEY
Analyzer Type	NAT. GAS ANALYZER
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	12-13-2021
Sampling Flow Rate	
Air Temperature	37
Heat Tracing	Heated Hose & Gasifier
Type of Sample	SPOT PORTABLE GC
Sampling Method	FILL AND EMPTY
Company Collecting Sample	AKM Measurement
Method Name	C9
Injection Date	2021-12-20 10:10:48
Report Date	2021-12-20 10:21:42
EZReporter Configuration File	BLM Onshore.Extended.GPA 2145-16.FlowCal.H2S.cfgx
Source Data File	aaaaea798-ff37-478a-9d76-221e5af3cf55
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	14308.2	1.0013	0.00006998	0.9936	0.0	0.00961	0.000	
Methane	867765.8	78.8754	0.00009089	78.2742	792.4	0.43356	0.000	
CO2	2100.7	0.0643	0.00003062	0.0638	0.0	0.00097	0.000	
Ethane	208618.0	11.7988	0.00005656	11.7089	207.7	0.12156	3.142	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	130401.7	5.2769	0.00004047	5.2367	132.1	0.07973	1.448	
iso-butane	43945.3	0.7540	0.00001716	0.7483	24.4	0.01502	0.246	
n-Butane	92579.0	1.5868	0.00001714	1.5747	51.5	0.03160	0.498	
iso-pentane	25768.4	0.3869	0.00001502	0.3840	15.4	0.00957	0.141	
n-Pentane	27824.9	0.4122	0.00001482	0.4091	16.4	0.01019	0.149	
hexanes	23255.0	0.2834	0.00001219	0.2812	13.4	0.00837	0.116	
heptanes	18586.0	0.2012	0.00001083	0.1997	11.0	0.00691	0.092	
octanes	10667.0	0.1093	0.00001024	0.1084	6.8	0.00428	0.056	
nonanes+	1971.0	0.0175	0.00000889	0.0174	1.2	0.00077	0.010	
Total:		100.7680		100.0000	1272.3	0.73213	5.898	

Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	100.7680		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	105.0		
Flowing Pressure (psia)	297.0		
Gross Heating Value (BTU / Ideal cu.ft.)	1272.3	1250.2	
Gross Heating Value (BTU / Real cu.ft.)	1277.0	1255.3	
Relative Density (G), Real	0.7345	0.7329	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	100.7680	97.0000	103.0000	Pass	

Production	Site Name	Meter Description	Sum of Volume	Notes
3/22/2022	Culebra Bluff CTB 2	LP Flare Meter	387	
3/22/2022	Culebra Bluff CTB 3	HP Flare Meter	1,589	
3/22/2022	Culebra Bluff CTB 3	LP Flare Meter	312	
3/22/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	172	
3/22/2022	Rana Salada FC Pad L CTB	LP Flare Meter	884	
3/23/2022	Culebra Bluff CTB 2	LP Flare Meter	296	
3/23/2022	Culebra Bluff CTB 3	HP Flare Meter	589	
3/23/2022	Culebra Bluff CTB 3	LP Flare Meter	337	
3/23/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	211	
3/23/2022	Rana Salada FC Pad L CTB	LP Flare Meter	1,015	
3/24/2022	Culebra Bluff CTB 2	LP Flare Meter	223	
3/24/2022	Culebra Bluff CTB 3	HP Flare Meter	96	
3/24/2022	Culebra Bluff CTB 3	LP Flare Meter	264	
3/24/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	211	
3/24/2022	Rana Salada FC Pad L CTB	LP Flare Meter	1,053	
3/25/2022	Culebra Bluff CTB 2	LP Flare Meter	193	
3/25/2022	Culebra Bluff CTB 3	LP Flare Meter	307	
3/25/2022	Rana Salada FC Pad L CTB	LP Flare Meter	970	
3/26/2022	Culebra Bluff CTB 2	LP Flare Meter	133	
3/26/2022	Culebra Bluff CTB 3	LP Flare Meter	322	
3/26/2022	Rana Salada FC Pad L CTB	LP Flare Meter	960	
3/27/2022	Culebra Bluff CTB 2	LP Flare Meter	104	
3/27/2022	Culebra Bluff CTB 3	LP Flare Meter	231	
3/27/2022	Rana Salada FC Pad L CTB	LP Flare Meter	918	
3/28/2022	Culebra Bluff CTB 2	LP Flare Meter	265	
3/28/2022	Culebra Bluff CTB 3	LP Flare Meter	246	
3/28/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	56	
3/28/2022	Rana Salada FC Pad L CTB	LP Flare Meter	873	
3/29/2022	Culebra Bluff CTB 2	LP Flare Meter	219	
3/29/2022	Culebra Bluff CTB 3	LP Flare Meter	238	
3/29/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	54	

3/29/2022	Rana Salada FC Pad L CTB	LP Flare Meter	919
3/30/2022	Culebra Bluff CTB 2	LP Flare Meter	150
3/30/2022	Culebra Bluff CTB 3	LP Flare Meter	195
3/30/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	62
3/30/2022	Rana Salada FC Pad L CTB	LP Flare Meter	507
3/31/2022	Culebra Bluff CTB 2	LP Flare Meter	194
3/31/2022	Culebra Bluff CTB 3	LP Flare Meter	123
3/31/2022	Rana Salada FC Pad L CTB	LP Flare Meter	162
4/1/2022	Culebra Bluff CTB 2	LP Flare Meter	177
4/1/2022	Culebra Bluff CTB 3	LP Flare Meter	150
4/1/2022	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	131
4/1/2022	Rana Salada FC Pad L CTB	LP Flare Meter	155
4/2/2022	Culebra Bluff CTB 2	LP Flare Meter	125
4/2/2022	Culebra Bluff CTB 3	LP Flare Meter	69
4/2/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	173
4/2/2022	Rana Salada FC Pad L CTB	LP Flare Meter	59
4/3/2022	Culebra Bluff CTB 2	LP Flare Meter	177
4/3/2022	Culebra Bluff CTB 3	LP Flare Meter	239
4/3/2022	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	268
4/3/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	172
4/3/2022	Rana Salada FC Pad L CTB	LP Flare Meter	93

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Oil Conservation Division
1220 S. St Francis Dr.
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DEFINITIONS

Action 97487

DEFINITIONS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 1001 West Wilshire Blvd Oklahoma City, OK 73116	OGRID: 372920
	Action Number: 97487
	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: • 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 97487

QUESTIONS

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	Action Number: 97487
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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 Well	Not answered.
Incident Facility	[fAPP2200639309] Culebra Bluff CTB #2

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, 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

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	78
Nitrogen (N2) percentage, if greater than one percent	0
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	0
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 97487

QUESTIONS (continued)

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	Action Number: 97487
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	03/27/2022
Time vent or flare was discovered or commenced	08:00 AM
Time vent or flare was terminated	08:00 AM
Cumulative hours during this event	24

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Other Other (Specify) Natural Gas Flared Released: 104 Mcf Recovered: 0 Mcf Lost: 104 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	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.	False
Please explain reason for why this event was beyond this operator's control	Not answered.
Steps taken to limit the duration and magnitude of vent or flare	monitored
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	repair

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ACKNOWLEDGMENTS

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	Action Number: 97487
	Action Type: [C-129] Venting and/or Flaring (C-129)

ACKNOWLEDGMENTS

☒	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 complete C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
☒	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.
☒	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.
☒	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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	Action Number: 97487
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
bwheaton	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.	4/11/2022