



Athens, TX (903) 677-0700 . Beeville, TX (361) 354-5200 . Midland, TX (432) 704-5351

GAS EXTENDED ANALYSIS REPORT

LAB REPORT NUMBER: 210505-9999-05-050521-21

PHYSICAL CONSTANTS PER GPA 2145-09 & TP-17 (1998)

CUSTOMER :	NOVO OIL AND GAS	DATE ON:	05/03/2021
STATION:	RANA SALADA PAD A VRU	DATE ANALYZED:	05/05/2021
PRODUCER:	NOVO OIL AND GAS	EFFECTIVE DATE:	05/01/2021
LEASE:	RANA SALADA PAD A VRU	DATE OFF:	

<u>COMPONENT</u>	<u>MOLE %</u>	<u>GPM</u>	<u>WT. %</u>
H2S	0.000		0.000
OXYGEN	0.000		0.000
NITROGEN	0.103		0.077
CARBON DIOXIDE	0.434		0.507
METHANE	31.774		13.532
ETHANE	21.646	5.863	17.278
PROPANE	20.748	5.789	24.285
I-BUTANE	4.832	1.601	7.455
N-BUTANE	10.780	3.442	16.633
I-PENTANE	3.115	1.154	5.966
N-PENTANE	3.324	1.220	6.366
HEXANES (C6's)	2.117	0.881	4.842
HEPTANES (C7+)	0.938	0.417	2.475
OCTANES (C8+)	0.158	0.078	0.477
NONANES (C9+)	0.018	0.008	0.059
DECANES (C10+)	0.013	0.006	0.048
TOTAL	100.000	20.459	100.000

REAL SP. GRAVITY	1.3171	REAL BTU DRY	2187.148
MOL. WT.	37.670	REAL BTU SAT	2149.069
Z FACTOR	0.9871	PRESS BASE	14.730
C2+ GPM	20.459	C4+ GPM	8.807
C3+ GPM	14.596	C5+ GPM	3.764
C6-C10+ MOL WT	100.425	C6-C10+ GRAVITY	3.458

SAMPLED BY	MH	SAMPLE PRESS:	149
SAMPLE TYPE:	SPOT	SAMPLE TEMP:	168
CYLINDER NO.:	2009	COUNTY / STATE:	14.73
COMMENT:	SPOT	ANALYST	MIKE HOBGOOD

* SEE NEXT PAGE FOR C6+ COMPOSITIONAL BREAKDOWN
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 05-17-2021



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STATION: RANA SALADA PAD A VR LEASE: RANA SALADA PAD A VRU

C6+ FRACTION COMPOSITION

<u>HEXANE ISOMERS (C6'S)</u>		<u>MOLE %</u>	<u>GPM</u>	<u>WT. %</u>
2,2-Dimethylbutane	P	0.100	0.042	0.228
2,3-Dimethylbutane	PN	0.000	0.000	0.000
2-Methylpentane	P	0.266	0.112	0.608
3-Methylpentane	P	0.552	0.228	1.262
Methylcyclopentane	N	0.000	0.000	0.000
Benzene	A	0.000	0.000	0.000
Cyclohexane	N	0.011	0.004	0.025
n-Hexane	P	1.188	0.495	2.719
<u>HEPTANE ISOMERS (C7'S)</u>				
3,3-Dimethylpentane	P	0.001	0.000	0.002
2,2-Dimethylpentane	P	0.000	0.000	0.000
2,4-Dimethylpentane	P	0.118	0.056	0.313
2 & 3-Methylhexane	P	0.249	0.116	0.662
2,3-Dimethylpentane	P	0.030	0.014	0.080
1,t-3-Dimethylcyclopentane	N	0.000	0.000	0.000
1,c-3-Dimethylcyclopentane	N	0.000	0.000	0.000
3-Ethylpentane	N	0.000	0.000	0.000
1,t-2-Dimethylcyclopentane	N	0.000	0.000	0.000
Toluene	A	0.013	0.004	0.032
Methylcyclohexane	N	0.315	0.128	0.820
Ethylcyclopentane	N	0.000	0.000	0.000
n-Heptane	P	0.213	0.099	0.566
<u>OCTANE ISOMERS (C8'S)</u>				
2,4 & 2,5-Dimethylhexane	P	0.006	0.003	0.019
2,2,4-Trimethylpentane	N	0.000	0.000	0.000
1,t-2,c-4-Trimethylcyclopentane	N	0.000	0.000	0.000
1,t-2,c-3-Trimethylcyclopentane	N	0.000	0.000	0.000
2-Methylheptane	P	0.030	0.016	0.092
1,c-2,t-4-Trimethylcyclopentane	N	0.000	0.000	0.000
3-Methylheptane	P	0.019	0.010	0.058
1,c-3-Dimethylcyclohexane	N	0.007	0.003	0.020
1,t-4-Dimethylcyclohexane	N	0.000	0.000	0.000
methyl-ethylcyclopentanes	N	0.000	0.000	0.000
1,t-3 & 1,c-4 Dimethylcyclohexane	N	0.000	0.000	0.001
1,c-2-Dimethylcyclohexane	N	0.004	0.002	0.000
Ethylcyclohexane	N	0.019	0.009	0.058
Ethylbenzene	A	0.001	0.000	0.002
m & p-Xylene	A	0.004	0.002	0.013
o-Xylene	A	0.004	0.001	0.011
Cyclooctane	P	0.003	0.001	0.010
n-Octane	P	0.060	0.031	0.181



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C6+ FRACTION COMPOSITION

<u>NONANE ISOMERS (C9'S)</u>		<u>MOLE %</u>	<u>GPM</u>	<u>WT. %</u>
Trimethylhexanes	P	0.000	0.000	0.000
Dimethylpentanes	P	0.000	0.000	0.000
Isopropylcyclopentane	N	0.000	0.000	0.000
n-Propylcyclopentane	N	0.000	0.000	0.000
3-Methyloctane	P	0.000	0.000	0.000
Trimethylcyclohexanes	N	0.000	0.000	0.000
Isopropylbenzene	A	0.004	0.002	0.013
Isopropylcyclohexane	N	0.000	0.000	0.000
n-Propylcyclohexane	N	0.002	0.001	0.007
n-Propylbenzene	A	0.003	0.001	0.009
m-Ethyltoluene	A	0.000	0.000	0.000
p-Ethyltoluene	A	0.000	0.000	0.000
1,3,5-Trimethylbenzene	A	0.002	0.001	0.006
4 & 5-Methylnonane	P	0.000	0.000	0.000
o-Ethyltoluene & 3-Methylnonane	AP	0.000	0.000	0.000
1,2,3-Trimethylbenzene	A	0.000	0.000	0.000
1,2,4-Trimethylbenzene	A	0.005	0.002	0.016
n-Nonane	P	0.002	0.001	0.008
<u>DECANE ISOMERS (C10'S)</u>				
2-Methylnonane	P	0.000	0.000	0.000
tert-Butylbenzene	A	0.012	0.006	0.042
Isobutylcyclohexane & tert-Butylcyclohexane		0.000	0.000	0.000
Isobutylbenzene	A	0.000	0.000	0.000
sec-Butylbenzene	A	0.000	0.000	0.001
n-Butylcyclohexane	N	0.001	0.000	0.003
1,3-Diethylbenzene	A	0.000	0.000	0.000
1,2-Diethylbenzene & n-Butylbenzene	A	0.001	0.000	0.002
1,4-Diethylbenzene	A	0.000	0.000	0.000
n-Decane	P	0.000	0.000	0.000
<u>UNDECANE ISOMERS (C11'S)</u>				
n-Undecane	P	0.000	0.000	0.000
<u>DODECANE ISOMERS (C12'S)</u>				
n-Dodecane +	P	0.000	0.000	0.000

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X *Michael Holson*

ANALYST

Date	Site Name	Meter Description	Volume
2/4/2023	Ovation Pad O CTB	LP Flare Meter	515
2/4/2023	Ovation Pad Q CTB	Ovation Pad Q LP Flare	111
2/3/2023	Ovation Pad O CTB	LP Flare Meter	505
2/3/2023	Ovation Pad Q CTB	Ovation Pad Q LP Flare	150
2/2/2023	Ovation Pad O CTB	LP Flare Meter	500
2/2/2023	Ovation Pad Q CTB	Ovation Pad Q LP Flare	101
2/1/2023	Astrodog Pad S CTB	LP Flare Meter	63
2/1/2023	Ovation Pad O CTB	LP Flare Meter	821
2/1/2023	Ovation Pad Q CTB	Ovation Pad Q HP Flare	666
2/1/2023	Ovation Pad Q CTB	Ovation Pad Q LP Flare	54
2/1/2023	Rana Salada FC Pad A CTB	RS Pad A HP Flare	160
2/1/2023	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	162
2/1/2023	Rana Salada FC Pad L CTB	LP Flare Meter	65
#####	Astrodog Pad S CTB	HP Flare Meter	223
#####	Astrodog Pad S CTB	LP Flare Meter	91
#####	Ovation Pad O CTB	LP Flare Meter	774
#####	Ovation Pad Q CTB	Ovation Pad Q HP Flare	1,041
#####	Ovation Pad Q CTB	Ovation Pad Q LP Flare	59
#####	Rana Salada FC Pad A CTB	RS Pad A HP Flare	891
#####	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	753
#####	Ovation Pad O CTB	LP Flare Meter	374
#####	Ovation Pad O CTB	LP Flare Meter	490

Notes
Crestwood had 1 unit down line PSI high
Enterprise ESD value SI due to frozen fuel gas supply .Gas flared 3Hrs DT
Enterprise ESD value SI due to frozen fuel gas supply .Gas flared 3Hrs DT

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

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Phone:(575) 748-1283 Fax:(575) 748-9720

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
1220 S. St Francis Dr.
Santa Fe, NM 87505

DEFINITIONS

Action 183715

DEFINITIONS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 1001 West Wilshire Blvd Oklahoma City, OK 73116	OGRID: 372920
	Action Number: 183715
	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 183715

QUESTIONS

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	Action Number: 183715
	Action Type: [C-129] Venting and/or Flaring (C-129)

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	Unavailable.
Incident Facility	[fAPP2201150858] Rana Salada Pad E CTB

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	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, 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	78
Nitrogen (N2) percentage, if greater than one percent	0
Hydrogen Sulfide (H2S) PPM, rounded up	0
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 183715

QUESTIONS (continued)

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	Action Number: 183715
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	01/31/2023
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: 753 Mcf Recovered: 0 Mcf Lost: 753 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.	True
Please explain reason for why this event was beyond this operator's control	Enterprise ESD value SI due to frozen fuel gas supply. Gas flared 3 hrs downtime
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	None

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ACKNOWLEDGMENTS

Action 183715

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	Action Number: 183715
	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: 183715
	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.	2/7/2023