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EXTENDED GAS REPORT SUMMARY OF CHROMATOGRAPHIC ANALYSIS

Sample Name: Bell Lake South Inlet 12281G For: Sample Date: 08/05/2021 Cyl. Ident.: 2021044517 Sampled By: DJ Company: Mark West Time Sampled: 12:40 Analysis Date: 08/10/2021

Sample Temp: 0.0 F Analysis By: BH

Sample Press: 45.0 **H2S (PPM)** = 0.2 **Data File:** LS_6231.D

Component	Mole%	GPM REAL	GPM IDEAL
H2S	0.000		
Nitrogen	1.571		
Methane	72.179		
CO2	0.552		
Ethane	12.775	3.416	3.408
Propane	7.090	1.953	1.948
Isobutane	0.985	0.322	0.322
N-Butane	2.449	0.772	0.770
Isopentane	0.593	0.217	0.216
N-Pentane	0.650	0.236	0.235
Hexanes+	1.156	0.469	0.469
Total	100.000	7.385	7.368

CALCULATED PARAMETERS

TOTAL ANALYSIS SU	MMARY	HEATING VAL	.UE	BTEX SUMMA	RY
MOLE WT: VAPOR PRESS PSIA:	23.189 3726.8	BTU/CUFT (DRY) BTU/CUFT (WET)	1361.8 1338.7	WT% BENZENE WT% TOLUENE	6.557 4.868
SPECIFIC GRA	VITY	BIO/COFI (WEI)	1330.7	WT% E BENZENE	0.498
AIR = 1 (REAL): AIR = 1 (IDEAL):	0.8036 0.8005			WT% XYLENES	1.593
H2O = 1 (IDEAL):	0.370				
REPORTED BASIS:	14.73				
Unnormalized Total:	99.455			LAB MANAGER	

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Constants: GPA 2145 Method: GPA 2186.m Released to Imaging: 11/2/2021 3:33:58 PM Report Rev 18-05.22
of 2 Template: eC6+ Liq



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Company: Mark West

*ANALYSIS OF HEXANES PLUS

Component	MOLE%	WT%	*HEXANES PLUS SUMMARY
2,2 DIMETHYL BUTANE	0.008	0.028	AVG MOLE WT 92.249
CYCLOPENTANE	0.055	0.187	VAPOR PRESS PSIA 9.860
2-METHYLPENTANE	0.133	0.496	API GRAVITY @ 60F 63.4
3-METHYLPENTANE	0.074	0.277	SPECIFIC GRAVITY
HEXANE (C6)	0.168	0.622	AIR = 1 (IDEAL): 2.975
DIMETHYLPENTANES	0.013	0.055	H2O = 1 (IDEAL): 0.726
METHYLCYCLOPENTANE	0.087	0.316	
2,2,3 TRIMETHYLBUTANE	0.001	0.005	
BENZENE	0.073	0.246	
CYCLOHEXANE	0.119	0.431	COMPONENT RATIOS
2-METHYLHEXANE	0.021	0.090	
3-METHYLHEXANE	0.032	0.139	HEXANES (C6) MOLE% 37.918
DIMETHYCYCLOPENTANES	0.012	0.050	HEPTANES (C7) MOLE% 37.541
HEPTANE (C7)	0.048	0.207	OCTANES (C8) MOLE% 17.882
METHYLCYCLOHEXANE	0.086	0.367	NONANES (C9) MOLE% 4.312
2,5 DIMETHYLHEXANE	0.001	0.007	DECANES+ (C10+) MOLE% 2.347
TOLUENE	0.055	0.217	
2-METHYLHEPTANE	0.014	0.068	
OTHER OCTANES	0.037	0.183	HEXANES (C6) WT% 35.000
OCTANE (C8)	0.013	0.065	HEPTANES (C7) WT% 36.349
ETHYLCYCLOHEXANE	0.006	0.029	OCTANES (C8) WT% 19.701
ETHYL BENZENE	0.005	0.022	NONANES (C9) WT% 5.453
M,P-XYLENE	0.012	0.055	DECANES+ (C10+) WT% 3.497
O-XYLENE	0.004	0.018	
OTHER NONANES	0.018	0.090	
NONANE (C-9)	0.007	0.036	
IC3 BENZENE	0.002	0.009	
CYCLOOCTANE	0.001	0.006	
NC3 BENZENE	0.001	0.003	
TM BENZENE(S)	0.002	0.012	
IC4 BENZENE	0.001	0.005	
NC4 BENZENE	0.001	0.006	
DECANES + (C10+)	0.017	0.118	

Remarks: spot

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^{*} Hexane+ portion calculated by Allocation Process

Summary of Excess Emission at South Bell Lake Flare

		Total Excess		Total Excess		
	Total Excess	VOC	Total Excess	VOC	Total Excess	
	Emissions	Emissions	Emissions	Emissions	Emissions	
Month	(lbs)	(lbs)	(tons)	(tons)	(scf)	
May	5503.42	3296.70	2.75	1.65	60555	
Jun	10822.52	6387.59	5.41	3.19	121000	
Jul	15966.52	9712.63	7.98	4.86	174319	
Aug	2419.53	1490.40	1.21	0.75	23231.25	
Totals	34711.99	20887.32	17.36	10.44	379105.25	379.11 Mscf

Wt % of Total

Constituent	Emissions
Methane	18.59%
N2	0.60%
H2S	0.00%
CO2	2.30%
02	0.00%
VOC	59.29%

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

811 S. First St., Artesia, NM 88210 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 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**

QUESTIONS

Action 59493

QUESTIONS

Operator:	OGRID:
MarkWest Energy West Texas Gas Company, L.L.C	329252
1515 Arapahoe Street	Action Number:
Denver, CO 80202	59493
	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 t	hese issues before continuing with the rest of the questions.
Incident Well	Not answered.
Incident Facility	[fAPP2125136221] Permian Natural Gas Gathering System

Determination of Reporting Requirements	
Answer all questions that apply. The Reason(s) statements are calculated based on your answers a	nd may provide addional guidance.
Was or is this venting and/or flaring caused by an emergency or malfunction	No
Did or will this venting and/or flaring last eight hours or more cumulatively within any 24-hour period from a single event	Yes
Is this considered a submission for a venting and/or flaring 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 was there or will there be at least 50 MCF of natural gas vented and/or flared	venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC. Yes
during this event	165
Did this venting and/or flaring 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 venting and/or flaring 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	Tank (Any)
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	19	
Nitrogen (N2) percentage, if greater than one percent	1	
Hydrogen Sulfide (H2S) PPM, rounded up	0	
Carbon Dioxide (C02) percentage, if greater than one percent	2	
Oxygen (02) percentage, if greater than one percent	0	
If you are venting and/or flaring because of Pipeline Specification, please provide the required speci-	ifications 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.	

Date(s) and Time(s)	
Date venting and/or flaring was discovered or commenced	10/29/2021
Time venting and/or flaring was discovered or commenced	02:00 PM
Time venting and/or flaring was terminated	05:00 PM
Cumulative hours during this event	1,560

Measured or Estimated Volume of Vented or Flared Natural Gas	
	Cause: Normal Operations Tank (Any) Natural Gas Vented Released: 379 Mcf Recovered: 0 Mcf Lost: 379 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 or is this venting and/or flaring a result of downstream activity	Not answered.	
Was notification of downstream activity received by you or your operator	Not answered.	
Downstream OGRID that should have notified you or your operator	Not answered.	
Date notified of downstream activity requiring this venting and/or flaring	Not answered.	
Time notified of downstream activity requiring this venting and/or flaring	Not answered.	

Steps and Actions to Prevent Waste		
For this event, the operator could not have reasonably anticipated the current event and it was beyond the operator's control.	True	
Please explain reason for why this event was beyond your operator's control	Assumptions used as a basis for design were not observed in the actual operating conditions of the site. Tank exceeded control set point of the thief hatch.	
Steps taken to limit the duration and magnitude of venting and/or flaring	Troubleshooting, flow reduced, curtailed production and installed vapor recovery unit.	
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	Installation of VRU (9/8/21); plan to install increased capacity flare as a back-up upon NMED air permit authorization.	

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1515 Arapahoe Street	Action Number:
Denver, CO 80202	59493
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
jobrien	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.	11/2/2021