

**Gas Composition and Properties**

Effective July 1, 2020 00:00 - January 18, 2038 21:14

Source #: ART82067

Name: Crossroads AFX Fed #1 Flare

Component	Mole %	Liquid Content	Mass %
Carbon Dioxide, CO2	0.1644		0.2715
Nitrogen, N2	8.4722		8.9066
Methane, C1	60.6606		36.5195
Ethane, C2	9.9097	2.6578	11.1822
Propane, C3	10.2156	2.8224	16.9047
iso-Butane, iC4	1.9788	0.6494	4.3161
n-Butane, nC4	4.4269	1.3996	9.6558
iso-Pentane, iC5	1.1631	0.4266	3.1492
n-Pentane, nC5	1.2074	0.4389	3.2691
Neo-Pentane, NeoC5			
Hexanes Plus, C6+	1.8013	0.7428	5.8253
Water, H2O			
Hydrogen Sulfide, H2S			
Oxygen, O2			
Carbon Monoxide, CO			
Hydrogen, H2			
Helium, He			
Argon, Ar			
Totals	100.0000	9.1380	100.0000

Property	Total Sample	C6 Plus Fraction
Pressure Base	14.730	
Temperature Base	60.00	
HCDP @ Sample Pressure		
Cricondentherm		
HV, Dry @ Base P, T	1452.00	
HV, Sat @ Base P, T	1426.73	
HV, Sat @ Sample P, T		
Relative Density	0.9292	
C6+: 100		

**Sample**

Date: Pressure:  
 Type: Temperature:  
 Tech: H2O: lbs/mm  
 H2S: ppm

Remarks:

**Analysis**

Date: Instrument:  
 Cylinder:

Tech:

Remarks:

\*\*\* End of Report \*\*\*

Gauge Sheet				LEASE: Crossroads AFX Federal #1				PROP NO:		COUNTY: 005		PROP METH:				MONTH: OCT-21									
11/2/2021 3:10:37 PM CST				PUMPER:				FIELD:		STATE: NM		STATUS: Shut-In													
DAY	WELL HEAD				PRODUCTION			Comments	OIL SALES BO	WATER DISP BW	GAS METER			OIL RUNS AND WATER HAULS				BBLs	Crossroads #1 16978 TK1 Top/Bottom	Crossroads #1 NEWOIL TK2 Top/Bottom	Crossroads #1 WTR TK1 Top/Bottom				
	HR PRD	CHK	TBG PRES	CSG PRES	MCF (Flare)	BO	BW				LP	DIFF	COEF	TK NO	TICKET NUMBER	OPEN FT-IN O	CLOSE FT-IN O								
1	24	64	190	35	49	120	0		0	0	28	57						0' 0.00"/0' 0.00"	10' 5.00"/0' 0.00"	1' 4.00"/0' 0.00"					
2	24	64	185	35	48	107	0		185.54	0	26	55						0' 0.00"/0' 0.00"	3' 10.00"/0' 0.00"	1' 4.00"/0' 0.00"					
3	24	64	180	30	49	114	0		0	0	27	49						0' 0.00"/0' 0.00"	6' 8.00"/0' 0.00"	1' 4.00"/0' 0.00"					
4	24	64	180	30	50	90	0		0	0	27	37						0' 0.00"/0' 0.00"	8' 11.00"/0' 0.00"	1' 4.00"/0' 0.00"					
5	24	64	180	30	50	117	0		0	0	28	44						0' 0.00"/0' 0.00"	11' 10.00"/0' 0.00"	1' 4.00"/0' 0.00"					
6	24	64	180	30	50	120	0	Replaced packing on well	0	0	26	48						0' 0.00"/0' 0.00"	14' 10.00"/0' 0.00"	1' 4.00"/0' 0.00"					
7	24	64	180	30	50	100	0		183.93	0	26	38						0' 0.00"/0' 0.00"	8' 2.00"/0' 0.00"	1' 4.00"/0' 0.00"					
8	24	64	180	30	52	120	0		0	0	26	39						0' 0.00"/0' 0.00"	11' 2.00"/0' 0.00"	1' 4.00"/0' 0.00"					
9	24	64	180	30	51	95	0		185.96	0	26	39						0' 0.00"/0' 0.00"	4' 4.00"/0' 0.00"	1' 4.00"/0' 0.00"					
10	24	64	180	25	45	110	0		0	0	37	35						0' 0.00"/0' 0.00"	7' 1.00"/0' 0.00"	1' 4.00"/0' 0.00"					
11	24	64	190	25	45	110	0		0	0	28	36						0' 0.00"/0' 0.00"	9' 10.00"/0' 0.00"	1' 4.00"/0' 0.00"					
12	24	64	150	25	46	120	0		0	0	29	35						0' 0.00"/0' 0.00"	12' 10.00"/0' 0.00"	1' 4.00"/0' 0.00"					
13	24	64	180	30	46	124	6		182.2	0	28	50						0' 0.00"/0' 0.00"	6' 11.00"/0' 0.00"	1' 5.00"/0' 0.00"					
14	24	64	350	30	47	117	0		0	0	27	58						0' 0.00"/0' 0.00"	9' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
15	24	64	350	30	48	122	0		185.57	0	28	60						0' 0.00"/0' 0.00"	3' 7.00"/0' 0.00"	1' 5.00"/0' 0.00"					
16	24	64	350	30	46	110	0		0	0	27	55						0' 0.00"/0' 0.00"	6' 4.00"/0' 0.00"	1' 5.00"/0' 0.00"					
17	24	64	350	30	46	100	0		0	0	28	66						0' 0.00"/0' 0.00"	8' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
18	24	64	350	30	46	114	0		0	0	27	60						0' 0.00"/0' 0.00"	11' 8.00"/0' 0.00"	1' 5.00"/0' 0.00"					
19	24	64	350	30	45	105	0		185.54	0	27	66						0' 0.00"/0' 0.00"	5' 1.00"/0' 0.00"	1' 5.00"/0' 0.00"					
20	24	64	350	30	47	60	0		0	0	28	60						0' 0.00"/0' 0.00"	6' 7.00"/0' 0.00"	1' 5.00"/0' 0.00"					
21	10	64	0	20	35	10	0	Well Down - Suspect Rod Part	0	0	27	0						0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
22	0				0	0	0		0	0								0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
23	0				0	0	0		0	0								0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
24	0				0	0	0		0	0								0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
25	0				0	0	0		0	0								0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
26	0				0	0	0		0	0								0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
27	0				0	0	0		0	0								0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
28	0				0	0	0		0	0								0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
29	0				0	0	0		0	0								0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
30	0				0	0	0		0	0								0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
31	0				0	0	0		0	0								0' 0.00"/0' 0.00"	6' 10.00"/0' 0.00"	1' 5.00"/0' 0.00"					
DAYS	20.42			TOTAL	991.0	2186.9	5.6	TOTAL	1108.7	0.0								STOCK END OF MONTH	136.94						
				AVERAGE	32.0													35.3	0.1				ADD OIL RUNS	1108.74	
	490			Gr HV (dry)				1452	BTU/MCF								LESS STOCK BEG OF MONTH	148.63							
				Total Energy													1439	MMbtu				PRODUCTION FOR MONTH	1097.05		

**District I**

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

**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**

QUESTIONS

Action 59623

**QUESTIONS**

Operator: Opal Operating Company LLC 4811 Gaillardia Parkway Oklahoma City, OK 73142	OGRID: 330887
	Action Number: 59623
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

<b>Prerequisites</b>	
<i>Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.</i>	
Incident Well	[30-041-20841] CROSSROADS AFX FEDERAL #001
Incident Facility	Not answered.

<b>Determination of Reporting Requirements</b>	
<i>Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.</i>	
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, major venting and/or flaring of natural gas.
<i>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.</i>	
Was there or will there be at least 50 MCF of natural gas vented and/or flared during this event	Yes
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

<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>	
<i>Please provide the mole percent for the percentage questions in this group.</i>	
Methane (CH4) percentage	61
Nitrogen (N2) percentage, if greater than one percent	8
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
<i>If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.</i>	
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.

<b>Date(s) and Time(s)</b>	
Date venting and/or flaring was discovered or commenced	10/01/2021
Time venting and/or flaring was discovered or commenced	12:01 PM
Time venting and/or flaring was terminated	10:01 PM
Cumulative hours during this event	490

<b>Measured or Estimated Volume of Vented or Flared Natural Gas</b>	
Natural Gas Vented (Mcf) Details	Not answered.

Natural Gas Flared (Mcf) Details	Cause: Normal Operations   Well   Natural Gas Flared   Released: 991 Mcf   Recovered: 0 Mcf   Lost: 991 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 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	The gas gatherer has recently taken the line out of service for integrity issues. We are working with the gatherer on an alternative gathering option.
Steps taken to limit the duration and magnitude of venting and/or flaring	Steps are being taken to evaluate and secure pipeline takeaway options and evaluate power generation
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	Ongoing communication and meetings with the gas gatherer and power generation providers to secure best available option.

**District I**  
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  
**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**

CONDITIONS  
  
Action 59623

CONDITIONS

Operator: Opal Operating Company LLC 4811 Gaillardia Parkway Oklahoma City, OK 73142	OGRID: 330887
	Action Number: 59623
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
johnsonc	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.	11/3/2021