

**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 \*\*\*

Production Daily - Details

Range: 3/1/2022 - 3/31/2022

Location: Crossroads AFX Federal #1

																			Crossroads #1		Crossroads #1 16978 TK1				Crossroads #1 NEWOIL TK2									
Well	API Number	Date	TP	CP	Diff	MCF	Oil MTR	H2O MTR	Choke	#	Oil Haul	H2O Haul	Oil OH	H2O OH	BOPD	BWPD	Inj H2O	Notes	Top	bbl	Top	bbl	H2O	bbl	Top	bbl	H2O	bbl						
Crossroads AFX Federal #1	3004120841	03/01/2022	360	20	----	47.00	----	----	64	1	180.52	0.00	105.21	0.00	55.40	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	5' 3"	105	0' 0"	0						
		03/02/2022	360	19	19	43.00	----	----	64	0	0.00	0.00	160.32	0.00	55.11	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	8' 0"	160	0' 0"	0						
		03/03/2022	360	19	30	41.00	----	----	64	0	0.00	0.00	213.76	0.00	53.44	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	10' 8"	214	0' 0"	0						
		03/04/2022	360	19	30	42.00	----	----	64	1	184.78	0.00	83.50	0.00	54.41	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	4' 2"	84	0' 0"	0						
		03/05/2022	360	19	28	44.00	----	----	64	0	0.00	0.00	136.94	0.00	53.44	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	6' 10"	137	0' 0"	0						
		03/06/2022	360	19	29	42.00	----	----	64	0	0.00	0.00	190.38	0.00	53.44	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	9' 6"	190	0' 0"	0						
		03/07/2022	360	19	30	42.00	----	----	64	1	159.31	0.00	83.50	0.00	52.79	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	4' 2"	84	0' 0"	0						
		03/08/2022	360	19	26	40.00	----	----	64	0	0.00	0.00	133.60	0.00	50.10	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	6' 8"	134	0' 0"	0						
		03/09/2022	360	19	28	42.00	----	----	64	0	0.00	0.00	183.70	0.00	50.10	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	9' 2"	184	0' 0"	0						
		03/10/2022	360	17	29	40.00	----	----	64	0	0.00	0.00	223.78	0.00	40.08	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	11' 2"	224	0' 0"	0						
		03/11/2022	360	17	30	42.00	----	----	64	0	0.00	0.00	263.86	0.00	40.08	0.00		0 Hot oil well today	0' 0"	0	0' 0"	0	0' 0"	0	13' 2"	264	0' 0"	0						
		03/12/2022	350	15	0	0.00	----	----	64	0	0.00	0.00	263.86	0.00	0.00	0.00		0 Recovering oil from hot	0' 0"	0	0' 0"	0	0' 0"	0	13' 2"	264	0' 0"	0						
		03/13/2022	360	15	49	30.00	----	----	64	1	185.55	0.00	133.60	0.00	57.00	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	6' 8"	134	0' 0"	0						
		03/14/2022	340	14	48	44.00	----	----	64	0	0.00	0.00	188.71	0.00	55.11	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	9' 5"	189	0' 0"	0						
		03/15/2022	350	15	47	42.00	----	----	64	0	0.00	0.00	247.16	0.00	58.45	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	12' 4"	247	0' 0"	0						
		03/16/2022	350	15	50	43.00	----	----	64	1	180.52	0.00	120.24	0.00	54.63	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	6' 0"	120	0' 0"	0						
		03/17/2022	350	15	48	42.00	----	----	64	0	0.00	0.00	170.34	0.00	50.10	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	8' 6"	170	0' 0"	0						
		03/18/2022	380	15	40	44.00	----	----	64	1	185.67	0.00	35.07	0.00	51.26	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	1' 9"	35	0' 0"	0						
		03/19/2022	380	15	38	41.00	----	----	64	0	0.00	0.00	88.51	0.00	53.44	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	4' 5"	89	0' 0"	0						
		03/20/2022	375	15	30	40.00	----	----	64	0	0.00	0.00	141.95	0.00	53.44	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	7' 1"	142	0' 0"	0						
		03/21/2022	375	15	30	42.00	----	----	64	0	0.00	0.00	192.05	0.00	50.10	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	9' 7"	192	0' 0"	0						
		03/22/2022	375	15	20	41.00	----	----	64	1	180.60	0.00	51.77	0.00	41.47	0.00		0 Well, is started to pump	0' 0"	0	0' 0"	0	0' 0"	0	2' 7"	52	0' 0"	0						
		03/23/2022	355	14	19	41.00	----	----	64	0	0.00	0.00	91.85	0.00	40.08	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	4' 7"	92	0' 0"	0						
		03/24/2022	355	14	20	41.00	----	----	64	0	0.00	0.00	131.93	0.00	40.08	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	6' 7"	132	0' 0"	0						
		03/25/2022	355	14	39	41.00	----	----	64	0	0.00	0.00	178.69	0.00	46.76	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	8' 11"	179	0' 0"	0						
		03/26/2022	350	15	38	40.00	----	----	64	0	0.00	0.00	223.78	0.00	45.09	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	11' 2"	224	0' 0"	0						
		03/27/2022	345	14	37	41.00	----	----	64	1	180.55	0.00	91.85	0.00	48.73	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	4' 7"	92	0' 0"	0						
		03/28/2022	355	13	35	42.00	----	----	64	0	0.00	0.00	141.95	0.00	50.10	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	7' 1"	142	0' 0"	0						
		03/29/2022	360	13	30	40.00	----	----	64	0	0.00	0.00	195.39	0.00	53.44	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	9' 9"	195	0' 0"	0						
		03/30/2022	360	13	28	41.00	----	----	64	0	0.00	0.00	242.15	0.00	46.76	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	12' 1"	242	0' 0"	0						
		03/31/2022	355	13	29	41.00	----	----	64	1	184.70	0.00	108.55	0.00	50.10	0.00	0		0' 0"	0	0' 0"	0	0' 0"	0	5' 5"	109	0' 0"	0						
Total			359	16	32	1242	----	----	--	1622	0	155.42	0.00	1505	0	0																		

Total Flare	1242 mcf
Gross HV (dry)	1452 mbtu/mcf
Total Energy	1803 mmbtu

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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

DEFINITIONS

Action 105711

**DEFINITIONS**

Operator: Opal Operating Company LLC 4811 Gaillardia Parkway Oklahoma City, OK 73142	OGRID: 330887
	Action Number: 105711
	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: <ul style="list-style-type: none"><li>• this application's operator, hereinafter "this operator";</li><li>• venting and/or flaring, hereinafter "vent or flare";</li><li>• any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";</li><li>• the statements in (and/or attached to) this, hereinafter "the statements in this";</li><li>• and the past tense will be used in lieu of mixed past/present tense questions and statements.</li></ul>
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QUESTIONS

Action 105711

**QUESTIONS**

Operator: Opal Operating Company LLC 4811 Gaillardia Parkway Oklahoma City, OK 73142	OGRID: 330887
	Action Number: 105711
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

<b>Prerequisites</b> 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	[30-041-20841] CROSSROADS AFX FEDERAL #001
Incident Facility	Not answered.

<b>Determination of Reporting Requirements</b> 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 <b>ANY</b> 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 within 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> Please provide the mole percent for the percentage questions in this group.	
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
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 105711

QUESTIONS (continued)

Operator: Opal Operating Company LLC 4811 Gaillardia Parkway Oklahoma City, OK 73142	OGRID: 330887
	Action Number: 105711
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	03/01/2022
Time vent or flare was discovered or commenced	12:01 PM
Time vent or flare was terminated	12:01 PM
Cumulative hours during this event	744

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Cause: Normal Operations   Well   Natural Gas Flared   Released: 1,242 Mcf   Recovered: 0 Mcf   Lost: 1,242 Mcf ]
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	The gas gatherer has taken the line out of service. Producing the well is critical to maintain leases and our fiduciary responsibility to stakeholders. We are in progress of a permanent solution in a team project with RCEC and WFPC.
Steps taken to limit the duration and magnitude of vent or flare	Project is in progress to construct on-site natural gas generation and consume 100% of the flared gas volume.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Completed engineering design and approval of all parties. Procurement of materials is in progress. ACO extension has been approved.

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ACKNOWLEDGMENTS

Action 105711

**ACKNOWLEDGMENTS**

Operator: Opal Operating Company LLC 4811 Gaillardia Parkway Oklahoma City, OK 73142	OGRID: 330887
	Action Number: 105711
	Action Type: [C-129] Venting and/or Flaring (C-129)

**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	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 <b>complete</b> C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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

Action 105711

**CONDITIONS**

Operator: Opal Operating Company LLC 4811 Gaillardia Parkway Oklahoma City, OK 73142	OGRID: 330887
	Action Number: 105711
	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.	5/10/2022