



2030 Afton Place  
Farmington, NM 87401  
(505) 325-6622

Analysis No: HM200072  
Cust No: 33700-10025

### Well/Lease Information

Customer Name: HARVEST MIDSTREAM  
Well Name: CHACO COMP INLET  
County/State:  
Location:  
Lease/PA/CA:  
Formation:  
Cust. Stn. No.: 0247730

Source:  
Well Flowing: Y  
Pressure: 275.31 PSIG  
Flow Temp: 73 DEG. F  
Ambient Temp: 79 DEG. F  
Flow Rate: 61,614 MCF/D  
Sample Method: Purge & Fill  
Sample Date: 08/11/2020  
Sample Time: 11.30 AM  
Sampled By: ANTHONY L.  
Sampled by (CO): HARVEST

Heat Trace: N  
Remarks: INLET MANIFOLD  
Calculated Molecular Weight = 19.3272

### Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3239	0.3218	0.0360	0.00	0.0031
CO2	1.6810	1.6701	0.2880	0.00	0.0255
Methane	86.1555	85.5972	14.6450	870.17	0.4772
Ethane	6.9526	6.9075	1.8640	123.04	0.0722
Propane	2.9218	2.9029	0.8070	73.52	0.0445
Iso-Butane	0.5115	0.5082	0.1680	16.63	0.0103
N-Butane	0.7629	0.7580	0.2410	24.89	0.0153
Neopentane 2,2 dmc3	0.0012	0.0012	0.0000	0.05	0.0000
I-Pentane	0.2639	0.2622	0.0970	10.56	0.0066
N-Pentane	0.1903	0.1891	0.0690	7.63	0.0047
Neohexane	0.0051	N/R	0.0020	0.24	0.0002
2-3-Dimethylbutane	0.0095	N/R	0.0040	0.45	0.0003
Cyclopentane	0.0099	N/R	0.0030	0.37	0.0002
2-Methylpentane	0.0640	N/R	0.0270	3.04	0.0019
3-Methylpentane	0.0180	N/R	0.0070	0.86	0.0005
C6	0.0496	0.2338	0.0200	2.36	0.0015
Methylcyclopentane	0.0252	N/R	0.0090	1.13	0.0007
Benzene	0.0039	N/R	0.0010	0.15	0.0001
Cyclohexane	0.0090	N/R	0.0030	0.40	0.0003
2-Methylhexane	0.0032	N/R	0.0010	0.17	0.0001
3-Methylhexane	0.0028	N/R	0.0010	0.15	0.0001
2-2-4-Trimethylpentane	0.0006	N/R	0.0000	0.04	0.0000
i-heptanes	0.0018	N/R	0.0010	0.10	0.0001
Heptane	0.0062	N/R	0.0030	0.34	0.0002

Methylcyclohexane	0.0103	N/R	0.0040	0.54	0.0003
Toluene	0.0045	N/R	0.0020	0.20	0.0001
2-Methylheptane	0.0020	N/R	0.0010	0.12	0.0001
4-Methylheptane	0.0010	N/R	0.0010	0.06	0.0000
i-Octanes	0.0013	N/R	0.0010	0.08	0.0001
Octane	0.0026	N/R	0.0010	0.16	0.0001
Ethylbenzene	0.0002	N/R	0.0000	0.01	0.0000
m, p Xylene	0.0027	N/R	0.0010	0.14	0.0001
o Xylene (& 2,2,4 tmc7)	0.0004	N/R	0.0000	0.02	0.0000
i-C9	0.0003	N/R	0.0000	0.02	0.0000
C9	0.0007	N/R	0.0000	0.05	0.0000
i-C10	0.0003	N/R	0.0000	0.02	0.0000
C10	0.0002	N/R	0.0000	0.02	0.0000
i-C11	0.0000	N/R	0.0000	0.00	0.0000
C11	0.0000	N/R	0.0000	0.00	0.0000
C12P	0.0001	N/R	0.0000	0.01	0.0000
<b>Total</b>	<b>100.00</b>	<b>99.352</b>	<b>18.308</b>	<b>1137.74</b>	<b>0.6666</b>

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029  
 BTU/CU.FT IDEAL: 1140.4  
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1143.7  
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1123.8  
 DRY BTU @ 15.025: 1166.6  
 REAL SPECIFIC GRAVITY: 0.6683

CYLINDER #: 11  
 CYLINDER PRESSURE: 276 PSIG  
 ANALYSIS DATE: 08/12/2020  
 ANALYSIS TIME: 01:12:26 AM  
 ANALYSIS RUN BY: PATRICIA KING

**GPM, BTU, and SPG calculations as shown above are based on current GPA constants.**

**GPA Standard: GPA 2286-14**

**GC: SRI Instruments 8610 Last Cal/Verify: 08/13/2020**

**GC Method: C12+BTEX Gas**



HARVEST MIDSTREAM  
WELL ANALYSIS COMPARISON

**Lease:** CHACO COMP INLET  
**Stn. No.:** 0247730  
**Mtr. No.:**

08/13/2020  
 33700-10025

Smpl Date:	08/11/2020	11/27/2018
Test Date:	08/12/2020	11/29/2018
Run No:	HM200072	HM180006
Nitrogen:	0.3239	0.3306
CO2:	1.6810	1.9364
Methane:	86.1555	85.6254
Ethane:	6.9526	7.0286
Propane:	2.9218	2.9810
I-Butane:	0.5115	0.5417
N-Butane:	0.7629	0.7937
2,2 dmc3:	0.0012	0.0021
I-Pentane:	0.2639	0.2733
N-Pentane:	0.1903	0.1943
Neohexane:	0.0051	0.0111
2-3-	0.0095	0.0077
Cyclopentane:	0.0099	0.0080
2-Methylpentane:	0.0640	0.0518
3-Methylpentane:	0.0180	0.0246
C6:	0.0496	0.0563
Methylcyclopentane:	0.0252	0.0389
Benzene:	0.0039	0.0090
Cyclohexane:	0.0090	0.0193
2-Methylhexane:	0.0032	0.0057
3-Methylhexane:	0.0000	0.0000
2-2-4-	0.0006	0.0010
i-heptanes:	0.0018	0.0035
Heptane:	0.0062	0.0120
Methylcyclohexane:	0.0103	0.0228
Toluene:	0.0045	0.0076
2-Methylheptane:	0.0020	0.0019
4-Methylheptane:	0.0010	0.0009
i-Octanes:	0.0013	0.0005
Octane:	0.0026	0.0016
Ethylbenzene:	0.0002	0.0001
m, p Xylene:	0.0027	0.0008
o Xylene (& 2,2,4	0.0004	0.0002
i-C9:	0.0003	0.0005
C9:	0.0007	0.0003
i-C10:	0.0003	0.0003
C10:	0.0002	0.0003
i-C11:	0.0000	0.0000
C11:	0.0000	0.0001
C12P:	0.0001	0.0000
BTU:	1143.7	1146.5
GPM:	18.3200	18.3630
SPG:	0.6683	0.6744



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276 #

C6+ ☐ C9+ ☐ C12+ BTEX ☐ Helium ☐N2 Flowback ☐ Sulfurs ☐ Ext. Liquid ☒

Other \_\_\_\_\_

Date 8/11/2020

Time 1130

☒ AM  
☐ PM

Sampled By: (Co.) Harvest Midstream

Sampled by: (Person) Anthony Lewis

Well Flowing: ☒ Yes ☐ No

Company: Harvest Midstream

Heat Trace: ☐ Yes ☒ No

Well Name: Chaco Compressor Suction Extended

Flow Pressure (PSIG): 275.31

Lease#: \_\_\_\_\_

Flow Temp (°F): 73°

County: San Juan

Formation: \_\_\_\_\_

Ambient Temp (°F): 79°

State: NM

Location: Chaco Compressor Station

Flow Rate (MCF/D): 61,614

Source: ☐ Meter Run ☐ Tubing ☐ Casing ☐ Bradenhead ☒ Other Inlet ManifoldSample Type: ☒ Spot ☐ Composite Sample Method: ☒ Purge & Fill ☐ Other \_\_\_\_\_

Meter Number: \_\_\_\_\_

Cylinder Number: 11

Contact: \_\_\_\_\_

Remarks: 33700-10025 HM 200072

### Gas Loss Calculation Chaco Discharge Line

Hole: ¼ orifice

Duration: 2 hrs

Pressure: 600 lbs

Gas Loss: 123 mcf

Lost gas equation:

$$Q = D^2 * P * T$$

Where:

Q=Volume of gas in Mcf

D=Equivalent diameter of orifice in inches

P=Absolute pressure in psi

T=Time in hours

In this particular case:

D=0.25"

P=600 psia

T=2 hours

Substituting these variables into the equation above gives us:

Q=123 Mcf

**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 53518

**QUESTIONS**

Operator: Harvest Four Corners, LLC 1111 Travis Street Houston, TX 77002	OGRID: 373888
	Action Number: 53518
	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	Not answered.
Incident Facility	[fAPP2123053718] Harvest Four Corners - Kutz System

**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 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	No
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 venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.	
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

**Equipment Involved**

Primary Equipment Involved	Pipeline (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	86
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	2
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.

**Date(s) and Time(s)**

Date venting and/or flaring was discovered or commenced	09/22/2021
Time venting and/or flaring was discovered or commenced	04:00 PM
Time venting and/or flaring was terminated	06:00 PM
Cumulative hours during this event	2

**Measured or Estimated Volume of Vented or Flared Natural Gas**

Natural Gas Vented (Mcf) Details	Cause: Human Error   Flow Line - Production   Natural Gas Vented   Released: 123 Mcf   Recovered: 0 Mcf   Lost: 123 Mcf
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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.	False
Please explain reason for why this event was beyond your operator's control	Planned maintenance with incident that resulted in gas loss.
Steps taken to limit the duration and magnitude of venting and/or flaring	Up and down stream pipeline traced to shut in pipeline.
Corrective actions taken to eliminate the cause and reoccurrence of venting and/or flaring	One time incident with human error, will not occur again.

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CONDITIONS

Action 53518

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Operator: Harvest Four Corners, LLC 1111 Travis Street Houston, TX 77002	OGRID: 373888
	Action Number: 53518
	Action Type: [C-129] Venting and/or Flaring (C-129)

**CONDITIONS**

Created By	Condition	Condition Date
lcupps	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.	10/4/2021