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

Analysis No: HM20240019
Cust No: 33700-12070

## Well/Lease Information

| | | | |
|---|---|---|---|
| Customer Name: | HARVEST MIDSTREAM | Source: | Inlet |
| Well Name: | La Jara Station; Inlet | Well Flowing: | Y |
| County/State: | Rio Arriba NM | Pressure: | 170 PSIG |
| Location: | | Flow Temp: | 56 DEG. F |
| Lease/PA/CA: | | Ambient Temp: | 60 DEG. F |
| Formation: | | Flow Rate: | 223,450 MCF/D |
| Cust. Stn. No.: | | Sample Method: | Purge & Fill |
| | | Sample Date: | 03/20/2024 |
| | | Sample Time: | 2.12 PM |
| | | Sampled By: | Ryan Antonson |
| Heat Trace: | N | Sampled by (CO): | Harvest |
| Remarks: | Calculated Molecular Weight = 19.1606 | | |

## Analysis

| Component: | Mole%: | Unormalized %: | **GPM: | *BTU: | *SP Gravity: |
|---|---|---|---|---|---|
| Nitrogen | 0.3521 | 0.3468 | 0.0390 | 0.00 | 0.0034 |
| CO2 | 2.3438 | 2.3084 | 0.4010 | 0.00 | 0.0356 |
| Methane | 87.4222 | 86.1012 | 14.8580 | 882.96 | 0.4842 |
| Ethane | 5.4022 | 5.3206 | 1.4480 | 95.60 | 0.0561 |
| Propane | 2.6404 | 2.6005 | 0.7290 | 66.44 | 0.0402 |
| Iso-Butane | 0.4583 | 0.4514 | 0.1500 | 14.90 | 0.0092 |
| N-Butane | 0.7218 | 0.7109 | 0.2280 | 23.55 | 0.0145 |
| Neopentane 2,2 dmc3 | 0.0000 | 0.0000 | 0.0000 | 0.00 | 0.0000 |
| I-Pentane | 0.2452 | 0.2415 | 0.0900 | 9.81 | 0.0061 |
| N-Pentane | 0.1803 | 0.1776 | 0.0660 | 7.23 | 0.0045 |
| Neohexane | 0.0058 | N/R | 0.0020 | 0.27 | 0.0002 |
| 2-3-Dimethylbutane | 0.0070 | N/R | 0.0030 | 0.33 | 0.0002 |
| Cyclopentane | 0.0073 | N/R | 0.0020 | 0.27 | 0.0002 |
| 2-Methylpentane | 0.0473 | N/R | 0.0200 | 2.25 | 0.0014 |
| 3-Methylpentane | 0.0168 | N/R | 0.0070 | 0.80 | 0.0005 |
| C6 | 0.0489 | 0.2300 | 0.0200 | 2.33 | 0.0015 |
| Methylcyclopentane | 0.0302 | N/R | 0.0110 | 1.36 | 0.0009 |
| Benzene | 0.0049 | N/R | 0.0010 | 0.18 | 0.0001 |
| Cyclohexane | 0.0136 | N/R | 0.0050 | 0.61 | 0.0004 |
| 2-Methylhexane | 0.0052 | N/R | 0.0020 | 0.28 | 0.0002 |
| 3-Methylhexane | 0.0049 | N/R | 0.0020 | 0.27 | 0.0002 |
| 2-2-4-Trimethylpentane | 0.0007 | N/R | 0.0000 | 0.04 | 0.0000 |
| i-heptanes | 0.0030 | N/R | 0.0010 | 0.16 | 0.0001 |
| Heptane | 0.0093 | N/R | 0.0040 | 0.51 | 0.0003 |

| | | | | | |
|---|---|---|---|---|---|
| Methylcyclohexane | 0.0173 | N/R | 0.0070 | 0.90 | 0.0006 |
| Toluene | 0.0051 | N/R | 0.0020 | 0.23 | 0.0002 |
| 2-Methylheptane | 0.0014 | N/R | 0.0010 | 0.09 | 0.0001 |
| 4-Methylheptane | 0.0007 | N/R | 0.0000 | 0.04 | 0.0000 |
| i-Octanes | 0.0005 | N/R | 0.0000 | 0.03 | 0.0000 |
| Octane | 0.0013 | N/R | 0.0010 | 0.08 | 0.0001 |
| Ethylbenzene | 0.0001 | N/R | 0.0000 | 0.01 | 0.0000 |
| m, p Xylene | 0.0008 | N/R | 0.0000 | 0.04 | 0.0000 |
| o Xylene (& 2,2,4 tmc7) | 0.0002 | N/R | 0.0000 | 0.01 | 0.0000 |
| i-C9 | 0.0004 | N/R | 0.0000 | 0.03 | 0.0000 |
| C9 | 0.0002 | N/R | 0.0000 | 0.01 | 0.0000 |
| i-C10 | 0.0004 | N/R | 0.0000 | 0.03 | 0.0000 |
| C10 | 0.0001 | N/R | 0.0000 | 0.01 | 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 | 0.0000 | N/R | 0.0000 | 0.00 | 0.0000 |
| Total | 100.00 | 98.489 | 18.100 | 1111.67 | 0.6609 |

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

| | | | |
|---|---|---|---|
| COMPRESSIBLITY FACTOR (1/Z): | 1.0028 | CYLINDER #: | 1678 |
| BTU/CU.FT IDEAL: | 1114.2 | CYLINDER PRESSURE: | 186 PSIG |
| BTU/CU.FT (DRY) CORRECTED FOR (1/Z): | 1117.4 | ANALYSIS DATE: | 03/25/2024 |
| BTU/CU.FT (WET) CORRECTED FOR (1/Z): | 1098.0 | ANALYIS TIME: | 01:47:10 AM |
| DRY BTU @ 15.025: | 1139.8 | ANALYSIS RUN BY: | PATRICIA KING |
| REAL SPECIFIC GRAVITY: | 0.6625 | | |

**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: 03/25/2024**
**GC Method: C12+BTEX Gas**

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

| | | | |
|---|---|---|---|
| **Lease:** | La Jara Station; Inlet | Inlet | 03/25/2024 |
| **Stn. No.:** | | | 33700-12070 |
| **Mtr. No.:** | | | |

| | |
|---|---|
| Smpl Date: | 03/20/2024 |
| Test Date: | 03/25/2024 |
| Run No: | HM20240019 |
| Nitrogen: | 0.3521 |
| CO2: | 2.3438 |
| Methane: | 87.4222 |
| Ethane: | 5.4022 |
| Propane: | 2.6404 |
| I-Butane: | 0.4583 |
| N-Butane: | 0.7218 |
| 2,2 dmc3: | 0.0000 |
| I-Pentane: | 0.2452 |
| N-Pentane: | 0.1803 |
| Neohexane: | 0.0058 |
| 2-3- | 0.0070 |
| Cyclopentane: | 0.0073 |
| 2-Methylpentane: | 0.0473 |
| 3-Methylpentane: | 0.0168 |
| C6: | 0.0489 |
| Methylcyclopentane: | 0.0302 |
| Benzene: | 0.0049 |
| Cyclohexane: | 0.0136 |
| 2-Methylhexane: | 0.0052 |
| 3-Methylhexane: | 0.0000 |
| 2-2-4- | 0.0007 |
| i-heptanes: | 0.0030 |
| Heptane: | 0.0093 |
| Methylcyclohexane: | 0.0173 |
| Toluene: | 0.0051 |
| 2-Methylheptane: | 0.0014 |
| 4-Methylheptane: | 0.0007 |
| i-Octanes: | 0.0005 |
| Octane: | 0.0013 |
| Ethylbenzene: | 0.0001 |
| m, p Xylene: | 0.0008 |
| o Xylene (& 2,2,4 | 0.0002 |
| i-C9: | 0.0004 |
| C9: | 0.0002 |
| i-C10: | 0.0004 |
| C10: | 0.0001 |
| i-C11: | 0.0000 |
| C11: | 0.0000 |
| C12P: | 0.0000 |
| BTU: | 1117.4 |
| GPM: | 18.1130 |
| SPG: | 0.6625 |

2030 Afton Place, Farmington, NM 87401 - (505) 325-6622 186#

GAS ANALYSIS SERVICE

C6+ ☐ C6+w/H2S ☐ C9+ ☐ C12+ BTEX ☐

Helium ☐ Sulfurs ☐ Ext. Liquid ☐

Other _____ From COFC Date 3-20-24 DL

Sampled By:(Co.) Harvest Midstream Time N/A DL ☐AM ☐PM

Sampled by:(Person) Ryan Anderson Well Flowing: ☑ Yes ☐ No

Company: Harvest Midstream Heat Trace: ☐ Yes ☑ No

Well Name: La Jara Station N/C Flow Pressure (PSIG): 170

API #: _____ Flow Temp (°F): 56

Lease#: _____ Ambient Temp (°F): 60

County: Rio Arriba State: NM Formation: _____ Flow Rate (MCF/D): 223,450

Source: ☐ Meter Run ☐ Tubing ☐ Casing ☐ Bradenhead ☑ Other Station Inlet

Sample Type: ☑ Spot ☐ Composite Sample Method: ☑ Purge & Fill ☐ Other _____

Meter Number: _____ Cylinder Number: 1678

Contact: Harvest Midstream

Remarks: 33700-12070 HM 20240019

## ASME Relief Valve Sizing

**18-Feb-25**

| | | |
|---|---|---|
| Enter One Value Only | | SCFM |
| or | | MMscf/d |
| or | - | lb/hr |
| Flow Required | | MMscf/D |

| | | |
|---|---|---|
| **490** | Relieving Pressure (Psig) | |
| **12.50** | Atmospheric Pressure (Psia) | |
| **50** | Relieving Temp (F) | |
| **0.65** | Specific Gravity of Gas (SG) | |
| **0.975** | ASME Flow Coefficient (K) | |
| **344** | Gas Constant (C) | |
| **4.34** | Area (in**2) | |

| | | |
|---|---|---|
| **Calculated** | **44,668** | **SCFM** |
| **Relief Valve Capacity** | **64.322** | **MMscf/d** |
| | **132,934** | **lb/hr** |
| **Or Area** | **-** | **Area (In**2)** |

| | |
|---|---|
| PSV Manufacturer: | Anderson Greenwood |
| Orifice Size: | 4.34 sq in |
| Relief Pressure: | 490 psig |
| PSV Relief Capacity at Relief Pressure: | 44,668 SCFM |
| Duration: | 45 min |
| Gas Loss: | 2,010 Mcf |

## Sizing Calculations

| | | | |
|---|---|---|---|
| 503 | Relieving Pressure | P (psia) | (Selected Relieving Pressure Should Include Allowable Buildup.) |
| 570 | Relieving Temp | T (Deg R) | |
| 14.7 | P base | psia | |
| 520 | T base | Deg R | |
| 1.0 | Z base | | |
| 1.0 | Z relieving | z | (Can assume z = 1.0 to be conservative.) |
| 18.8 | Molecular Weight | M | =SG*MW of Air (28.964) |
| 0.04960 | Gas Density | lb/ft**3 | =Pbase*(MW)/(Zbase*R(10.73)*Tbase) (At exit conditions, STP) |
| 0.975 | Flow Coefficient | K | (Use Manufacture's Coefficient.) |
| 344 | Gas Constant | C | (Normally 344 for .6 SG, Natural Gas) |
| - | SCFM | | |
| - | MMscf/d | | |
| - | lb/hr | | |
| 4.3400 | Actual Flow Area | A (in**2) | |

| | | |
|---|---|---|
| - | Given SCFM solving for Area (in**2) | =(SCFM*Density*60)/(K*C*P*(SQRT(M/zT))) |
| - | Given MMscf/d solving for Area (in**2) | =(MMscfd*Density*1000000/24)/(K*C*P*(SQRT(M/zT))) |
| - | Given lb/hr solving for Area (in**2) | =(lb/hr)/(K*C*P*(SQRT(M/zT))) |
| 44,668 | Given Area Solving for SCFM | =(K*A*C*P)/(Density*60)*(SQRT(M/zT)) |
| 64.322 | Given Area Solving for MMscf/d | =(K*A*C*P)/(Density*1000000/24)*(SQRT(M/zT)) |
| 132,934 | Given Area Solving for lb/hr | =(K*A*C*P)*(SQRT(M/zT)) |

Note: Reference equations are from Appendix 11, Section VIII of the ASME Boiler and Pressure Vessel Code.

**CUSTOMER:** Harvest Midstream
**ADDRESS:** LA JARA Twin Peaks

# QUADCO, LLC

**SAFETY RELIEF VALVE REPORT ©**

**R.O. NO:** 10033818
**DATE REC'D:** 7/23/2024
**ITEM:** 34 of 39

**PO#:**
**Priority:** Standard **Type:** Repair

## IDENTIFICATION

**CUST ID #** PSV-10236
**LOC** Trunk A By Pass

**MFG** A.g.co
**TYPE NO** 24312N46/S1
**SERIAL NO** V03-19202
**ORIFICE** N
**INLET** 4 in 600# RF FLG
**OUTLET** 6 in 150# RF FLG
**PREVIOUS R.O.** 10030145-34
**P.I.D.**

## VALVE DATA

| | Current | Required |
|---|---|---|
| SET PRESS | 500 | 500 |
| BACK PRESS | Atm. | Atm. |
| C.D. PRESS | 500 | 500 |
| TEMP | Amb. | Amb. |
| BLOWDOWN | Adj. | Adj. |
| CAPACITY | 43423 scfm | 43423 scfm |
| MEDIA | Vapor | Vapor |

**VALVE CONVERSION** No
**CODE STAMP** UV NB

## MATERIAL/ DESIGN

**Pilot**
**BASE:** C.S
**BODY:** C.S.
**TRIM:** S.S./UVVV
**SPRING:** S.S.
**CAP & LEVER:**
**Closed**
**COMPLETED BY**
Valdez, James
**DATE** 7/23/2024

## ORIGINAL NAMEPLATE DATA

**TYPE** 24312N46/S1
**SET PRESS** 500
**BACK PRE** N.O.T
**C.D. PRESS** N.O.T.
**TEMP** N.O.T
**CAP.** 43423 scfm
**BLOWDOWN** N.O.T.
**MANUFACTURED**
**CODE STAMP** UV NB

## WORK

- [x] Pretest
- [ ] Reset
- [ ] Overhaul
- [ ] Warranty
- [ ] Assembly

## PRELIMINARY TEST RESULTS

**TEST MEDIA** Nitrogen **GAUGE S/N** QF5K-2
**SET PRESSURE** 500 **CAL DUE** 9/1/2024
**BLOWDOWN** Adj. **TESTED BY** Valdez, James
**TIGHTNESS** Good **TEST DATE** 7/23/2024

**SPRING DATA CHECKED?**
**SPRING #**
**REPLACE**

## AS FOUND ADJ

**COMP SCREW**
**LOWER ADJ RING**
**UPPER ADJ RING**
**OVERLAP COLLAR**

**DISASSEMBLED BY:** **DATE** **INSPECTED BY:** **DATE**

| ITEM | AS FOUND CONDITION | WORK PERFORMED | INSPECTOR COMMENTS |
|---|---|---|---|
| BONNET | | | |
| BODY | | | |
| INTERNAL PARTS | | | Tested good @ 500 psi<br>Ok to use |

**Previous Repair Company:** **R.O. Number:** **Date:**

**RECORD OF PARTS REQUIRED FOR REPAIR**

| PART NUMBER | DESCRIPTION | P.O. # |
|---|---|---|
| | | |
| | | |
| | | |

**FINAL ASSEMBLY ADJUSTMENT**

**COMPRESSION SCREW**
**LOWER ADJUSTMENT RING**
**UPPER ADJUSTMENT RING**
**OVERLAP COLLAR**
**ASSEMBLED BY:** **DATE**
**DUPLICATE TAG INSTALLED** ○ Yes ● No

## RECORD OF FINAL TEST RESULTS

**TEST MEDIA** Nitrogen **GAUGE S/N** QF5K-2
**SET PRESSURE** 500 **CAL DUE** 9/1/2024
**BLOWDOWN** Adj. **TESTED BY** Valdez, James
**TIGHTNESS** Good **TEST DATE** 7/23/2024

## RECORD OF FINAL ASSEMBLY

**ADJ LKD & SEALED** Yes
**NAMEPLATE INSTALLED** Yes
**VR'D** No
**FINAL ASSEM. BY:** Valdez, James **DATE** 7/23/2024

If No VR Cert. is issued, Give Reason Below:
Test Only

**AGCO Series 60 and 80 Spring Operated PSV**

NOZZLE COEFFICIENT AND AVAILABLE ORIFICE SIZES, $in^2$ ($cm^2$)

| Valve type | K | 0.049 (0.316) (-4) | 0.077 (0.497) (-5) | 0.110 (0.710) (-6) | 0.150 (0.968) (-7) | 0.196 (1.265) (-8 or E) | 0.307 (1.981) (F) | 0.503 (3.245) (G) | 0.785 (5.065) (H) | 1.287 (8.303) (J) |
|---|---|---|---|---|---|---|---|---|---|---|
| 81 | 0.816 | X | | X | | X | X | X | X | X |
| 81P | 0.720 | X | | | | X | | X | | X |
| 83 | 0.816 | X | | X | | X | X | X | X | X |
| 63B | 0.835 | | X | | | | | | | |
| 63B | 0.861 | | | | X | | | | | |

| Relief Valve Orifice Size | | |
|---|---|---|
| Letter | Bore Dimensions | |
| | $in^2$ | $cm^2$ |
| D | 0.110 | 0.71 |
| E | 0.196 | 1.26 |
| F | 0.307 | 1.98 |
| G | 0.503 | 3.24 |
| H | 0.785 | 5.06 |
| J | 1.287 | 8.30 |
| K | 1.838 | 11.85 |
| L | 2.853 | 18.40 |
| M | 3.600 | 23.23 |
| N | 4.340 | 28.00 |
| P | 6.380 | 41.16 |
| Q | 11.050 | 71.29 |
| R | 16.000 | 103.22 |
| T | 26.000 | 167.74 |

www.Control and Instrumentation.com

TABLE 4-1 - FULL BORE VS API ORIFICES

| Valve Size in (mm) | API $in^2$ ($mm^2$) | Full Bore $in^2$ ($mm^2$) | |
|---|---|---|---|
| 1.5 x 2 (40 x 50) | 0.785 (506.5) | 1.496 (965.2) | +90% |
| 2 x 3 (50 x 80) | 1.287 (830.3) | 2.895 (1868) | +125% |
| 3 x 4 (80 x 100) | 2.853 (1841) | 6.733 (4344) | +135% |
| 4 x 6 (100 x 150) | 6.380 (4116) | 10.75 (6941) | +68% |
| 6 x 8 (150 x 200) | 16.00 (10,320) | 23.32 (15,050) | +45% |
| 8 x 10 (200 x 250) | 26.00 (16,770) | 44.17 (28,500) | +70% |

## Sizing

| Valve Size in [mm] | Types 253, 453, 853 Type 259 | Types 243, 443, 843 Type 249 Type 546[1] | Types 263[2], 463[2], 863[2] Type 269[2] Type 566[1,2] | Type 727 |
|---|---|---|---|---|
| 1 x 2 [25 x 50] | 0.110 ('D') [0.710] | 0.307 ('F') [1.981] | — | — |
| 1½ x 2 [40 x 50] | 0.196 ('E') [1.265] | | | |
| 1½ x 2 [40 x 50] | 0.503 ('G') [3.245][3] | 0.785 ('H') [5.065][3] | 1.320 [8.516] | — |
| 1½ x 3 [40 x 80] | 0.503 ('G') [3.245] | 0.785 ('H') [5.065] | — | — |
| 2 x 3 [50 x 80] | 0.503 ('G') [3.245] | 1.287 ('J') [8.303] | 2.554 [16.47] | 0.503 ('G') [3.245] |
| | 0.785 ('H') [5.065] | | | 0.785 ('H') [5.065] |
| | | | | 1.287 ('J') [8.303] |
| 2 x Dual 3 [50 x Dual 80] | — | — | 2.554 [16.47] | — |
| 3 x 4 [80 x 100] | 1.287 ('J') [8.303] | 2.853 ('L') [18.41] | 5.938 [38.31] | 1.287 ('J') [8.30] |
| | 1.838 ('K') [11.86] | | | 1.838 ('K') [11.86] |
| | | | | 2.853 ('L') [18.41] |
| 3 x Dual 4 [80 x Dual 100] | — | — | 5.938 [38.31] | — |
| 4 x 6 [100 x 150] | 2.853 ('L') [18.41] | 6.380 ('P') [41.16] | 9.489 [61.21] | 2.853 ('L') [18.41] |
| | 3.600 ('M') [23.23] | | | 3.600 ('M') [23.23] |
| | 4.340 ('N') [28.00] | | | 4.340 ('N') [28.00] |
| | | | | 6.380 ('P') [41.16] |
| 4 x Dual 6 [100 x Dual 150] | — | — | 9.489 [61.21] | — |
| 6 x 8 [150 x 200] | 11.05 ('Q') [71.29] | 16.00 ('R') [103.2] | 20.57 [137.7] | 11.05 ('Q') [71.29] |
| | | | | 16.00 ('R') [103.23] |
| | | | | 18.58 ('RR') [119.8][4] |
| 6 x Dual 8 [150 x Dual 200] | — | — | 20.57 [137.7] | — |
| 8 x Dual 8 [200 x Dual 200] | — | — | 28.36 [182.9] | — |
| 8 x 10 [200 x 250] | — | 26.00 ('T') [167.7] | 38.96 [251.3] | 26.00 ('T') [167.74] |
| 8 x Dual 10 [200 x Dual 250] | — | — | 38.96 [251.3] | — |
| 10 x 14[5] [250 x 355] | — | — | 63.50 [409.7] | — |

1. Not available in 1" x 2" or 1½" x 2" sizes.
2. There are no recognized API 'full-bore' orifice areas. These effective areas are specific to Anderson Greenwood.
3. Threaded body only.
4. Series 700 is available in a non-standard RR orifice 18.580 in² [119.871 cm²].
5. Certified for gas or steam service only.

| Service | $K_d$ |
|---|---|
| Gas | 0.975 |
| Liquid | 0.650 |
| Steam | 0.975 |

## Discharge Coefficients

| Valve Series | ASME Gas/Vapor Discharge Coefficient | ASME Liquid Discharge Coefficient | ASME Gas/Vapor Slope | ASME Liquid Flow Factor | API Gas/Vapor Discharge Coefficient | API Liquid Discharge Coefficient |
|---|---|---|---|---|---|---|
| **8100 Series** 1/2" Diameter Orifice | .798* | .639* | 3.10 | 5.15 | .975 | .650 |
| **8100 Series** 3/4" Diameter Orifice | .833* | .711* | 7.21 | 12.77 | .975 | .650 |
| **9100 Series** | .818 | .707 | — | — | .975 | .650 |
| **9100 Series** Model 20 | .818 | .707 | — | — | .975 | .650 |
| **1400 Series** | .794* | — | .291 | — | — | — |
| **9500 Series** API Orifice Letter | .870 | .731 | — | — | .975 | .650 |
| **9500 Series** Full Bores | .820 | — | — | — | .975 | — |

* = 8100 Series and 1400 Series are certified under the slope method. The discharge coefficients for these orifices have been calculated from the slopes and Flow Factors.

# Orifice Selection

Available Orifice Sizes for Type HF and HL Pilot-Operated Relief Valves
Valve Coefficient: 0.859 (gas), 0.674 (liquid)

| Valve Size | Outlet | Orifice | Orifice Area (Sq. In.) |
|---|---|---|---|
| 1" X 2" | Single | D | 0.110 |
| | | E | 0.196 |
| | | F | 0.307 |
| | | G | 0.503 |
| | | GX | 0.652 |
| | | 1" | 0.785 |
| 1-1/2" x 2" | Single | D | 0.110 |
| | | E | 0.196 |
| | | F | 0.307 |
| | | G | 0.503 |
| | | H | 0.785 |
| | | J | 1.287 |
| | | JX | 1.633 |
| | | 1-1/2" | 1.767 |
| 1-1/2" x 3" | Single | G | 0.503 |
| | | H | 0.785 |
| | | J | 1.287 |
| | | JX | 1.633 |
| | | 1-1/2" | 1.767 |
| 2" x 3" | Single | G | 0.503 |
| | | H | 0.785 |
| | | J | 1.287 |
| | | JX | 1.633 |
| | | K | 1.838 |
| | | KX | 2.776 |
| | | 2" | 3.141 |

| Valve Size | Outlet | Orifice | Orifice Area (Sq. In.) |
|---|---|---|---|
| 3" x 4" | Single | J | 1.287 |
| | | K | 1.838 |
| | | L | 2.853 |
| | | M | 3.600 |
| | | N | 4.340 |
| | | P | 6.380 |
| | | 3" | 7.068 |
| 4" x 6" | Single/Dual | L | 2.853 |
| | | M | 3.600 |
| | | N | 4.340 |
| | | P | 6.380 |
| | | 4" | 12.566 |
| 6" x 8" | Single/Dual | Q | 11.045 |
| | | R | 16.000 |
| | | T | 26.000 |
| | | 6" | 28.270 |
| 8" x 8" | Dual | Q | 11.045 |
| | | R | 16.000 |
| | | T | 26.000 |
| | | 7" | 38.484 |
| | | 7-1/2" | 44.178 |
| 8" x 10" | Single/Dual | Q | 11.045 |
| | | R | 16.000 |
| | | T | 26.000 |
| | | 7" | 38.484 |
| | | 7-1/2" | 44.178 |

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
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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

| | |
|---|---|
| Operator:<br>Harvest Four Corners, LLC<br>1755 Arroyo Dr<br>Bloomfield, NM 87413 | OGRID:<br>373888 |
| | Action Number:<br>433085 |
| | Action Type:<br>[C-129] Amend Venting and/or Flaring (C-129A) |

**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 433085

## QUESTIONS

| | |
|---|---|
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**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 ID (n#) | *Unavailable.* |
| Incident Name | *Unavailable.* |
| Incident Type | **Flare** |
| Incident Status | *Unavailable.* |
| Incident Facility | **[fCS00000000129] WFS LA JARA CS** |
| *Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section) that are assigned to your current operator can be amended with this C-129A application.* | |

| **Determination of Reporting Requirements** | |
|---|---|
| *Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide addional 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 | No |
| 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 | Gas Compressor Station |
| Additional details for Equipment Involved. Please specify | PSV lift on Trunk A at La Jara due to harvest downstream turbine going down. |

| **Representative Compositional Analysis of Vented or Flared Natural Gas** | |
|---|---|
| *Please provide the mole percent for the percentage questions in this group.* | |
| Methane (CH4) percentage | 87 |
| 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 | 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 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 (continued)

| | |
|---|---|
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**QUESTIONS**

| **Date(s) and Time(s)** | |
|---|---|
| Date vent or flare was discovered or commenced | 02/05/2025 |
| Time vent or flare was discovered or commenced | 07:02 AM |
| Time vent or flare was terminated | 07:47 AM |
| Cumulative hours during this event | 1 |

| **Measured or Estimated Volume of Vented or Flared Natural Gas** | |
|---|---|
| Natural Gas Vented (Mcf) Details | Cause: High Line Pressure \| Valve \| Natural Gas Vented \| Released: 2,010 Mcf \| Recovered: 0 Mcf \| Lost: 2,010 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 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 | |
| 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 | El Cedro Turbine compression shut down due to power loss causing high line pressure on Trunk A at La Jara. PSV lifted due to the high pressure and lifted by design |
| Steps taken to limit the duration and magnitude of vent or flare | El Cedro turbine was put back online as soon as possible |
| Corrective actions taken to eliminate the cause and reoccurrence of vent or flare | PSV lifted by design |

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## ACKNOWLEDGMENTS

| | |
|---|---|
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**ACKNOWLEDGMENTS**

| | |
|---|---|
| ☑ | I acknowledge that with this application I will be amending an existing incident file (assigned to this operator) for a vent or flare event, pursuant to 19.15.27 and 19.15.28 NMAC. |
| ☑ | I acknowledge that amending an incident file does not replace original submitted application(s) or information and understand that any C-129 forms submitted to the OCD will be logged and stored as public record. |
| ☑ | I hereby certify the statements in this amending 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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**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| chadsnell | If the information provided in this report requires further amendment(s), submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event. | 2/18/2025 |