

**ARMSTRONG GAS LABS, INC.**

P.O. Box 988  
 Monahans, Texas 79756  
 (432) 943-8844 (FAX) 943-8855

**GAS ANALYSIS REPORT**

Analysis No.: 540370  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	3.0033	0.000	0.029		<b>Producer:</b> <b>Well / Sta. Name: CHORIZO 602 INJECTION</b> <b>Sta. No.: 7132</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: N/L</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/13/24 Date Analyzed: 11/20/24 Effective Date:  Sample Press. (PSIG): 1159 Line Press. (PSIG): 1159 Sample Temp. (F): 98 Fl. Gas Temp. (F): 98 Amb. Temp. (F): 50  Del. To: Sampled By: JL Cylinder No.: 476
Methane	73.4768	739.793	0.407		
CO2	6.0491	0.000	0.092		
Ethane	9.9739	175.956	0.104	2.661	
H2S	0.0003	0.000	0.000		
Propane	4.7047	118.004	0.072	1.293	
Iso-Butane	0.5784	18.750	0.012	0.189	
Butane	1.3467	43.796	0.027	0.424	
Iso-Pentane	0.2933	11.698	0.007	0.107	
Pentane	0.2807	11.217	0.007	0.102	
Hexanes C6+	0.2928	14.971	0.009	0.127	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1134.185</b>	<b>0.765</b>	<b>4.903</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 3.0  
 Field H2S (Grains): 0.19

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9965607  
 Z Factor (Act.): 0.9965607

Dry BTU w/ H2S: 1138.10
Sat BTU w/ H2S: 1118.61
As Del. BTU w/ H2S: 1138.10

**Dry BTU W/O H2S (Real): 1138.10**  
**Sat. BTU W/O H2S (Real): 1118.61**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1138.10**

*BTU Calc: Dry*

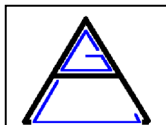
**Sp. Gravity (Real): 0.7678**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 4.903**  
**GPM Propane+ (Real): 2.242**  
**GPM IC5+ (Real): 0.336**

GPA 2145 / 2172

**Fld. Remarks: TAG: NO API PER WHITNEY**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540369  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.2820	0.000	0.022	
Methane	79.1951	797.367	0.439	
CO2	1.6926	0.000	0.026	
Ethane	9.6579	170.381	0.100	2.577
H2S	0.0008	0.000	0.000	
Propane	4.4636	111.957	0.068	1.227
Iso-Butane	0.5518	17.888	0.011	0.180
Butane	1.2932	42.056	0.026	0.407
Iso-Pentane	0.2869	11.443	0.007	0.105
Pentane	0.2657	10.618	0.007	0.096
Hexanes C6+	0.3104	15.871	0.010	0.135
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
<b>Totals</b>	<b>100.0000</b>	<b>1177.580</b>	<b>0.715</b>	<b>4.727</b>

**Producer:**  
**Well / Sta. Name:** CHIMICHANGA 12 SR COM 601H INJ  
**Sta. No.:** 99635  
**Formation:**  
**Field:** New Mexico  
**County:**  
**API Number:** N/L  
**Spot / Composite:** SP  
 Date / Time On:  
 Date / Time Off: 11/18/24  
 Date to Lab: 11/18/24  
 Date Analyzed: 11/20/24  
 Effective Date:  
 Sample Press. (PSIG): 1084  
 Line Press. (PSIG): 1084  
 Sample Temp. (F): 121  
 Fl. Gas Temp. (F): 121  
 Amb. Temp. (F): 65  
 Del. To:  
 Sampled By: IF  
 Cylinder No.: 846

**Field H2O (#/mm):**

Field H2S (PPM): 8.0  
 Field H2S (Grains): 0.50

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9967428  
 Z Factor (Act.): 0.9967428

Dry BTU w/ H2S: 1181.43
Sat BTU w/ H2S: 1161.19
As Del. BTU w/ H2S: 1181.43

**Dry BTU W/O H2S (Real): 1181.43**  
**Sat. BTU W/O H2S (Real): 1161.19**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1181.43**

*BTU Calc: Dry*

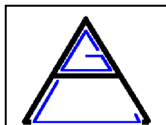
**Sp. Gravity (Real): 0.7175**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 4.727**  
**GPM Propane+ (Real): 2.150**  
**GPM IC5+ (Real): 0.336**

GPA 2145 / 2172

**Fld. Remarks: TAG: NO API PER WHITNEY**

**Lab Remarks: HIGH TEMP**



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**GAS ANALYSIS REPORT**

Analysis No.: 540368  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.1179	0.000	0.020	
Methane	78.1019	786.360	0.433	
CO2	2.2365	0.000	0.034	
Ethane	10.2045	180.024	0.106	2.723
H2S	0.0100	0.000	0.000	
Propane	4.6359	116.279	0.071	1.274
Iso-Butane	0.5830	18.899	0.012	0.190
Butane	1.2503	40.661	0.025	0.393
Iso-Pentane	0.2707	10.797	0.007	0.099
Pentane	0.2397	9.579	0.006	0.087
Hexanes C6+	0.3496	17.876	0.011	0.152
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
<b>Totals</b>	<b>100.0000</b>	<b>1180.474</b>	<b>0.724</b>	<b>4.918</b>

**Producer:** Centennial  
**Well / Sta. Name:** Tostada 7 State Com 501H  
**Sta. No.:** 70003  
**Formation:**  
**Field:** New Mexico  
**County:**  
**API Number:** 3002550705  
**Spot / Composite:** SP  
 Date / Time On:  
 Date / Time Off: 11/13/24  
 Date to Lab: 11/14/24  
 Date Analyzed: 11/20/24  
 Effective Date:  
 Sample Press. (PSIG): 203  
 Line Press. (PSIG): 203  
 Sample Temp. (F): 76  
 Fl. Gas Temp. (F): 76  
 Amb. Temp. (F): 77  
 Del. To:  
 Sampled By: RO  
 Cylinder No.: AGL-665

**Field H2O (#/mm):**

Field H2S (PPM): 100.0  
 Field H2S (Grains): 6.29

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9966697  
 Z Factor (Act.): 0.9966697

Dry BTU w/ H2S: 1184.48
Sat BTU w/ H2S: 1164.19
As Del. BTU w/ H2S: 1184.48

**Dry BTU W/O H2S (Real): 1184.42**  
**Sat. BTU W/O H2S (Real): 1164.13**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1184.42**

*BTU Calc: Dry*

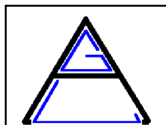
**Sp. Gravity (Real): 0.7266**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 4.918**  
**GPM Propane+ (Real): 2.195**  
**GPM IC5+ (Real): 0.338**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540367  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.1617	0.000	0.021		<b>Producer: Centennial</b> <b>Well / Sta. Name: Gordita 6 State Com 601H</b> <b>Sta. No.: 59523</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002549034</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/14/24 Date Analyzed: 11/20/24 Effective Date:  Sample Press. (PSIG): 198 Line Press. (PSIG): 198 Sample Temp. (F): 88 Fl. Gas Temp. (F): 88 Amb. Temp. (F): 86  Del. To: Sampled By: RO Cylinder No.: AGL-475
Methane	78.0226	785.562	0.432		
CO2	0.9998	0.000	0.015		
Ethane	11.0092	194.220	0.114	2.938	
H2S	0.0007	0.000	0.000		
Propane	4.8905	122.665	0.074	1.344	
Iso-Butane	0.5749	18.637	0.012	0.188	
Butane	1.3354	43.428	0.027	0.420	
Iso-Pentane	0.2850	11.367	0.007	0.104	
Pentane	0.2788	11.141	0.007	0.101	
Hexanes C6+	0.4414	22.570	0.014	0.192	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1209.589</b>	<b>0.724</b>	<b>5.287</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 7.0  
 Field H2S (Grains): 0.44

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9965911  
 Z Factor (Act.): 0.9965911

Dry BTU w/ H2S: 1213.73
Sat BTU w/ H2S: 1192.94
As Del. BTU w/ H2S: 1213.73

**Dry BTU W/O H2S (Real): 1213.73**  
**Sat. BTU W/O H2S (Real): 1192.94**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1213.73**

*BTU Calc: Dry*

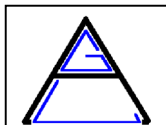
**Sp. Gravity (Real): 0.7258**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.287**  
**GPM Propane+ (Real): 2.349**  
**GPM IC5+ (Real): 0.397**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540366  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.1251	0.000	0.021		<b>Producer: Centennial</b> <b>Well / Sta. Name: Eric Cartman 6 State Com 601H</b> <b>Sta. No.: 67652</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002549776</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/14/24 Date Analyzed: 11/20/24 Effective Date:  Sample Press. (PSIG): 197 Line Press. (PSIG): 197 Sample Temp. (F): 69 Fl. Gas Temp. (F): 69 Amb. Temp. (F): 53  Del. To: Sampled By: EL Cylinder No.: 466
Methane	78.0559	785.897	0.432		
CO2	0.9768	0.000	0.015		
Ethane	11.3104	199.534	0.117	3.018	
H2S	0.0100	0.000	0.000		
Propane	4.8127	120.713	0.073	1.323	
Iso-Butane	0.5402	17.512	0.011	0.176	
Butane	1.2635	41.090	0.025	0.397	
Iso-Pentane	0.2700	10.769	0.007	0.099	
Pentane	0.2602	10.398	0.006	0.094	
Hexanes C6+	0.3752	19.185	0.012	0.163	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1205.097</b>	<b>0.720</b>	<b>5.270</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 100.0  
 Field H2S (Grains): 6.29

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9966275  
 Z Factor (Act.): 0.9966275

Dry BTU w/ H2S: 1209.24
Sat BTU w/ H2S: 1188.53
As Del. BTU w/ H2S: 1209.24

**Dry BTU W/O H2S (Real): 1209.17**

**Sat. BTU W/O H2S (Real): 1188.46**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1209.17**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.7222**

Field Gravity:

Lab Gravitometer:

**GPM Ethane+ (Real): 5.270**

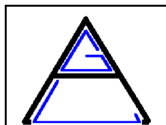
**GPM Propane+ (Real): 2.252**

**GPM IC5+ (Real): 0.356**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



**ARMSTRONG GAS LABS, INC.**

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**GAS ANALYSIS REPORT**

Analysis No.: 540365  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.1884	0.000	0.021		<b>Producer: Centennial</b> <b>Well / Sta. Name: MARGARITA 12 STATE COM 501H</b> <b>Sta. No.: 70005</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002549902</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/18/24 Date to Lab: 11/18/24 Date Analyzed: 11/20/24 Effective Date:  Sample Press. (PSIG): 175 Line Press. (PSIG): 175 Sample Temp. (F): 89 Fl. Gas Temp. (F): 89 Amb. Temp. (F): 46  Del. To: Sampled By: IF Cylinder No.: 788
Methane	78.5106	790.475	0.435		
CO2	1.9763	0.000	0.030		
Ethane	9.7025	171.168	0.101	2.589	
H2S	0.0050	0.000	0.000		
Propane	4.5008	112.890	0.069	1.237	
Iso-Butane	0.5778	18.731	0.012	0.189	
Butane	1.3328	43.344	0.027	0.419	
Iso-Pentane	0.3314	13.217	0.008	0.121	
Pentane	0.3175	12.688	0.008	0.115	
Hexanes C6+	0.5569	28.475	0.018	0.242	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1190.988</b>	<b>0.728</b>	<b>4.912</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 50.0  
 Field H2S (Grains): 3.15

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9966121  
 Z Factor (Act.): 0.9966121

Dry BTU w/ H2S: 1195.07
Sat BTU w/ H2S: 1174.60
As Del. BTU w/ H2S: 1195.07

**Dry BTU W/O H2S (Real): 1195.04**  
**Sat. BTU W/O H2S (Real): 1174.57**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1195.04**

*BTU Calc: Dry*

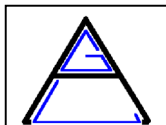
**Sp. Gravity (Real): 0.7300**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 4.912**  
**GPM Propane+ (Real): 2.323**  
**GPM IC5+ (Real): 0.478**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540364  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.1132	0.000	0.020		<b>Producer: Centennial</b> <b>Well / Sta. Name: ERIC CARTMAN 6 STATE COM 501H</b> <b>Sta. No.: T230193868</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002550932</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/14/24 Date to Lab: 11/18/24 Date Analyzed: 11/20/24 Effective Date:  Sample Press. (PSIG): 174 Line Press. (PSIG): 174 Sample Temp. (F): 84 Fl. Gas Temp. (F): 84 Amb. Temp. (F): 51  Del. To: Sampled By: EL Cylinder No.: 719
Methane	77.4677	779.975	0.429		
CO2	2.1636	0.000	0.033		
Ethane	10.4782	184.852	0.109	2.796	
H2S	0.0100	0.000	0.000		
Propane	4.8014	120.430	0.073	1.320	
Iso-Butane	0.5830	18.899	0.012	0.190	
Butane	1.3320	43.318	0.027	0.419	
Iso-Pentane	0.3084	12.300	0.008	0.112	
Pentane	0.2827	11.297	0.007	0.102	
Hexanes C6+	0.4598	23.510	0.015	0.200	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1194.582</b>	<b>0.732</b>	<b>5.139</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 100.0  
 Field H2S (Grains): 6.29

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9965736  
 Z Factor (Act.): 0.9965736

Dry BTU w/ H2S: 1198.75
Sat BTU w/ H2S: 1178.22
As Del. BTU w/ H2S: 1198.75

**Dry BTU W/O H2S (Real): 1198.69**  
**Sat. BTU W/O H2S (Real): 1178.16**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1198.69**

*BTU Calc: Dry*

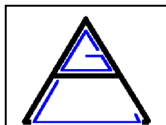
**Sp. Gravity (Real): 0.7346**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.139**  
**GPM Propane+ (Real): 2.343**  
**GPM IC5+ (Real): 0.414**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540363  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.4762	0.000	0.024		<b>Producer: Centennial</b> <b>Well / Sta. Name: King Eider 12 Fed Com 501H</b> <b>Sta. No.: 70230</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002550328</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/12/24 Date to Lab: 11/13/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 20 Line Press. (PSIG): 20 Sample Temp. (F): 76 Fl. Gas Temp. (F): 76 Amb. Temp. (F): 68  Del. To: Sampled By: EL Cylinder No.: 835
Methane	66.8284	672.854	0.370		
CO2	2.1705	0.000	0.033		
Ethane	16.6627	293.957	0.173	4.450	
H2S	0.0200	0.000	0.000		
Propane	7.8516	196.936	0.120	2.160	
Iso-Butane	0.8007	25.956	0.016	0.262	
Butane	1.7748	57.718	0.036	0.559	
Iso-Pentane	0.4051	16.157	0.010	0.148	
Pentane	0.3448	13.779	0.009	0.125	
Hexanes C6+	0.6652	34.013	0.021	0.290	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1311.370</b>	<b>0.812</b>	<b>7.994</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 200.0  
 Field H2S (Grains): 12.59

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9956740  
 Z Factor (Act.): 0.9956740

Dry BTU w/ H2S: 1317.19
Sat BTU w/ H2S: 1294.67
As Del. BTU w/ H2S: 1317.19

**Dry BTU W/O H2S (Real): 1317.07**

**Sat. BTU W/O H2S (Real): 1294.55**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1317.07**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.8148**

Field Gravity:

Lab Gravitometer:

**GPM Ethane+ (Real): 7.994**

**GPM Propane+ (Real): 3.544**

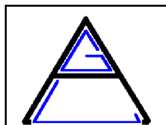
**GPM IC5+ (Real): 0.563**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks: CP @ LAB 150 PSIG**





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**GAS ANALYSIS REPORT**

Analysis No.: 540348  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.1912	0.000	0.021		<b>Producer: Centennial</b> <b>Well / Sta. Name: Tostada 7 State Com 502H</b> <b>Sta. No.: 70002</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002550706</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/14/24 Date to Lab: 11/14/24 Date Analyzed: 11/18/24 Effective Date:  Sample Press. (PSIG): 204 Line Press. (PSIG): 204 Sample Temp. (F): 69 Fl. Gas Temp. (F): 69 Amb. Temp. (F): 43  Del. To: Sampled By: JL Cylinder No.: 826
Methane	78.5144	790.513	0.435		
CO2	1.8720	0.000	0.028		
Ethane	10.3330	182.291	0.107	2.757	
H2S	0.0100	0.000	0.000		
Propane	4.4266	111.029	0.067	1.217	
Iso-Butane	0.5145	16.679	0.010	0.168	
Butane	1.2809	41.656	0.026	0.403	
Iso-Pentane	0.2621	10.454	0.007	0.096	
Pentane	0.2468	9.863	0.006	0.089	
Hexanes C6+	0.3485	17.819	0.011	0.152	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1180.303</b>	<b>0.719</b>	<b>4.882</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 100.0  
 Field H2S (Grains): 6.29

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9967047  
 Z Factor (Act.): 0.9967047

Dry BTU w/ H2S: 1184.27
Sat BTU w/ H2S: 1163.98
As Del. BTU w/ H2S: 1184.27

**Dry BTU W/O H2S (Real): 1184.21**

**Sat. BTU W/O H2S (Real): 1163.92**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1184.21**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.7213**

Field Gravity:

Lab Gravitometer:

**GPM Ethane+ (Real): 4.882**

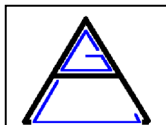
**GPM Propane+ (Real): 2.125**

**GPM IC5+ (Real): 0.337**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540347  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.1341	0.000	0.021	
Methane	79.1070	796.480	0.438	
CO2	2.2219	0.000	0.034	
Ethane	9.4166	166.124	0.098	2.512
H2S	0.0025	0.000	0.000	
Propane	4.3276	108.546	0.066	1.189
Iso-Butane	0.5407	17.528	0.011	0.176
Butane	1.2360	40.196	0.025	0.389
Iso-Pentane	0.2938	11.718	0.007	0.107
Pentane	0.2721	10.874	0.007	0.098
Hexanes C6+	0.4477	22.892	0.014	0.195
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
Totals	100.0000	1174.357	0.720	4.666

**Producer:** Centennial  
**Well / Sta. Name:** Gordita 6 State Com #502H  
**Sta. No.:** 77006  
**Formation:**  
**Field:** New Mexico  
**County:**  
**API Number:** 3002550703  
**Spot / Composite:** SP  
 Date / Time On:  
 Date / Time Off: 11/13/24  
 Date to Lab: 11/14/24  
 Date Analyzed: 11/18/24  
 Effective Date:  
 Sample Press. (PSIG): 195  
 Line Press. (PSIG): 195  
 Sample Temp. (F): 76  
 Fl. Gas Temp. (F): 76  
 Amb. Temp. (F): 59  
 Del. To:  
 Sampled By: RO  
 Cylinder No.: AGL-670

**Field H2O (#/mm):**

Field H2S (PPM): 25.0  
 Field H2S (Grains): 1.57

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9967091  
 Z Factor (Act.): 0.9967091

Dry BTU w/ H2S: 1178.25
Sat BTU w/ H2S: 1158.07
As Del. BTU w/ H2S: 1178.25

**Dry BTU W/O H2S (Real): 1178.23**  
**Sat. BTU W/O H2S (Real): 1158.05**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1178.23**

*BTU Calc: Dry*

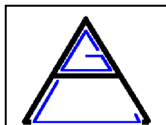
**Sp. Gravity (Real): 0.7225**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 4.666**  
**GPM Propane+ (Real): 2.154**  
**GPM IC5+ (Real): 0.400**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540346  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	3.2790	0.000	0.032		<b>Producer: Centennial</b> <b>Well / Sta. Name: ERIC CARTMAN 6 STATE COM 304H</b> <b>Sta. No.: N/L</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002552304</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/14/24 Date Analyzed: 11/18/24 Effective Date:  Sample Press. (PSIG): 193 Line Press. (PSIG): 193 Sample Temp. (F): 113 Fl. Gas Temp. (F): 113 Amb. Temp. (F): 53  Del. To: Sampled By: EL Cylinder No.: 716
Methane	69.6549	701.312	0.386		
CO2	7.8856	0.000	0.120		
Ethane	9.8595	173.937	0.102	2.632	
H2S	0.3200	0.000	0.004		
Propane	5.0654	127.052	0.077	1.393	
Iso-Butane	0.6344	20.565	0.013	0.207	
Butane	1.6536	53.777	0.033	0.520	
Iso-Pentane	0.4441	17.712	0.011	0.162	
Pentane	0.4534	18.119	0.011	0.164	
Hexanes C6+	0.7501	38.354	0.024	0.327	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1150.828</b>	<b>0.813</b>	<b>5.405</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 3,200.0  
 Field H2S (Grains): 201.38

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9961653  
 Z Factor (Act.): 0.9961652

Dry BTU w/ H2S: 1157.30
Sat BTU w/ H2S: 1137.49
As Del. BTU w/ H2S: 1157.30

**Dry BTU W/O H2S (Real): 1155.26**  
**Sat. BTU W/O H2S (Real): 1135.49**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1155.26**

*BTU Calc: Dry*

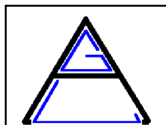
**Sp. Gravity (Real): 0.8158**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.405**  
**GPM Propane+ (Real): 2.773**  
**GPM IC5+ (Real): 0.653**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540345  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.2272	0.000	0.022	
Methane	78.2058	787.406	0.433	
CO2	0.9866	0.000	0.015	
Ethane	10.7570	189.771	0.112	2.870
H2S	0.0010	0.000	0.000	
Propane	4.9268	123.575	0.075	1.354
Iso-Butane	0.5951	19.291	0.012	0.194
Butane	1.3618	44.287	0.027	0.428
Iso-Pentane	0.2755	10.988	0.007	0.101
Pentane	0.2650	10.590	0.007	0.096
Hexanes C6+	0.3982	20.361	0.013	0.173
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
Totals	100.0000	1206.269	0.722	5.216

**Producer:** Centennial  
**Well / Sta. Name:** Tostada 7 State Com 602H  
**Sta. No.:** T0602  
**Formation:**  
**Field:** New Mexico  
**County:**  
**API Number:** 3002549587

**Spot / Composite:** SP  
 Date / Time On:  
 Date / Time Off: 11/13/24  
 Date to Lab: 11/14/24  
 Date Analyzed: 11/18/24  
 Effective Date:

Sample Press. (PSIG): 193  
 Line Press. (PSIG): 193  
 Sample Temp. (F): 82  
 Fl. Gas Temp. (F): 82  
 Amb. Temp. (F): 81

Del. To:  
 Sampled By: RO  
 Cylinder No.: AGL-692

**Field H2O (#/mm):**

Field H2S (PPM): 10.0  
 Field H2S (Grains): 0.63

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9966159  
 Z Factor (Act.): 0.9966159

Dry BTU w/ H2S: 1210.37
Sat BTU w/ H2S: 1189.64
As Del. BTU w/ H2S: 1210.37

**Dry BTU W/O H2S (Real): 1210.36**  
**Sat. BTU W/O H2S (Real): 1189.63**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1210.36**

*BTU Calc: Dry*

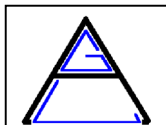
**Sp. Gravity (Real): 0.7241**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.216**  
**GPM Propane+ (Real): 2.346**  
**GPM IC5+ (Real): 0.370**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540344  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	3.3598	0.000	0.032		<b>Producer: Centennial</b> <b>Well / Sta. Name: ERIC CARTMAN 6 STATE COM 301H</b> <b>Sta. No.: N/L</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002551986</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/14/24 Date Analyzed: 11/18/24 Effective Date:  Sample Press. (PSIG): 191 Line Press. (PSIG): 191 Sample Temp. (F): 98 Fl. Gas Temp. (F): 98 Amb. Temp. (F): 53  Del. To: Sampled By: EL Cylinder No.: 671
Methane	68.5724	690.413	0.380		
CO2	9.1225	0.000	0.139		
Ethane	9.8433	173.652	0.102	2.628	
H2S	0.2800	0.000	0.003		
Propane	5.0725	127.230	0.077	1.395	
Iso-Butane	0.6156	19.956	0.012	0.201	
Butane	1.6048	52.190	0.032	0.505	
Iso-Pentane	0.4142	16.520	0.010	0.151	
Pentane	0.4271	17.068	0.011	0.154	
Hexanes C6+	0.6878	35.168	0.022	0.300	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1132.196</b>	<b>0.821</b>	<b>5.334</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 2,800.0  
 Field H2S (Grains): 176.21

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9961700  
 Z Factor (Act.): 0.9961700

Dry BTU w/ H2S: 1138.33
Sat BTU w/ H2S: 1118.85
As Del. BTU w/ H2S: 1138.33

**Dry BTU W/O H2S (Real): 1136.55**

**Sat. BTU W/O H2S (Real): 1117.10**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1136.55**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.8241**

Field Gravity:

Lab Gravimeter:

**GPM Ethane+ (Real): 5.334**

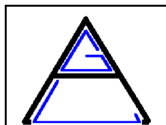
**GPM Propane+ (Real): 2.706**

**GPM IC5+ (Real): 0.605**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540343  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.3545	0.000	0.023		<b>Producer: Centennial</b> <b>Well / Sta. Name: Eric Cartman 6 State Com 603H</b> <b>Sta. No.: 68208</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002549778</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/14/24 Date Analyzed: 11/18/24 Effective Date:  Sample Press. (PSIG): 189 Line Press. (PSIG): 189 Sample Temp. (F): 81 Fl. Gas Temp. (F): 81 Amb. Temp. (F): 53  Del. To: Sampled By: EL Cylinder No.: 457
Methane	77.3235	778.523	0.428		
CO2	1.1416	0.000	0.017		
Ethane	11.0612	195.137	0.115	2.952	
H2S	0.0100	0.000	0.000		
Propane	5.2111	130.706	0.079	1.432	
Iso-Butane	0.5969	19.350	0.012	0.195	
Butane	1.3926	45.289	0.028	0.438	
Iso-Pentane	0.2704	10.785	0.007	0.099	
Pentane	0.2589	10.346	0.006	0.094	
Hexanes C6+	0.3793	19.394	0.012	0.165	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1209.530</b>	<b>0.728</b>	<b>5.375</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 100.0  
 Field H2S (Grains): 6.29

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9965717  
 Z Factor (Act.): 0.9965717

Dry BTU w/ H2S: 1213.75
Sat BTU w/ H2S: 1192.97
As Del. BTU w/ H2S: 1213.75

**Dry BTU W/O H2S (Real): 1213.69**

**Sat. BTU W/O H2S (Real): 1192.91**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1213.69**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.7302**

Field Gravity:

Lab Gravitometer:

**GPM Ethane+ (Real): 5.375**

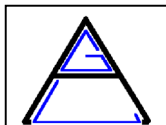
**GPM Propane+ (Real): 2.423**

**GPM IC5+ (Real): 0.358**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540342  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.1019	0.000	0.020	
Methane	77.8671	783.996	0.431	
CO2	1.0674	0.000	0.016	
Ethane	10.7932	190.409	0.112	2.880
H2S	0.0020	0.000	0.000	
Propane	5.0629	126.989	0.077	1.392
Iso-Butane	0.6305	20.439	0.013	0.206
Butane	1.4435	46.944	0.029	0.454
Iso-Pentane	0.2981	11.889	0.007	0.109
Pentane	0.2878	11.501	0.007	0.104
Hexanes C6+	0.4456	22.784	0.014	0.194
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
Totals	100.0000	1214.952	0.728	5.339

**Producer: Centennial**  
**Well / Sta. Name: Gordita 6 State Com 603H**  
**Sta. No.: 59517**  
**Formation:**  
**Field: New Mexico**  
**County:**  
**API Number: 3002549036**

**Spot / Composite: SP**  
 Date / Time On:  
 Date / Time Off: 11/13/24  
 Date to Lab: 11/14/24  
 Date Analyzed: 11/18/24  
 Effective Date:

Sample Press. (PSIG): 188  
 Line Press. (PSIG): 188  
 Sample Temp. (F): 85  
 Fl. Gas Temp. (F): 85  
 Amb. Temp. (F): 87

Del. To:  
 Sampled By: RO  
 Cylinder No.: AGL-695

**Field H2O (#/mm):**

Field H2S (PPM): 20.0  
 Field H2S (Grains): 1.26

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9965493  
 Z Factor (Act.): 0.9965493

Dry BTU w/ H2S: 1219.17
Sat BTU w/ H2S: 1198.29
As Del. BTU w/ H2S: 1219.17

**Dry BTU W/O H2S (Real): 1219.16**  
**Sat. BTU W/O H2S (Real): 1198.28**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1219.16**

*BTU Calc: Dry*

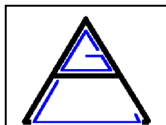
**Sp. Gravity (Real): 0.7298**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.339**  
**GPM Propane+ (Real): 2.459**  
**GPM IC5+ (Real): 0.407**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540341  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.1581	0.000	0.021	
Methane	79.7754	803.210	0.442	
CO2	2.2268	0.000	0.034	
Ethane	9.0677	159.969	0.094	2.419
H2S	0.0030	0.000	0.000	
Propane	4.0371	101.260	0.061	1.110
Iso-Butane	0.4882	15.826	0.010	0.159
Butane	1.1338	36.872	0.023	0.357
Iso-Pentane	0.2968	11.838	0.007	0.108
Pentane	0.2876	11.493	0.007	0.104
Hexanes C6+	0.5255	26.870	0.017	0.229
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
<b>Totals</b>	<b>100.0000</b>	<b>1167.336</b>	<b>0.716</b>	<b>4.486</b>

**Producer: Centennial**  
**Well / Sta. Name: Gordita 6 State Com 501H**  
**Sta. No.: 59433**  
**Formation:**  
**Field: New Mexico**  
**County:**  
**API Number: 3002550702**

**Spot / Composite: SP**  
 Date / Time On:  
 Date / Time Off: 11/13/24  
 Date to Lab: 11/14/24  
 Date Analyzed: 11/19/24  
 Effective Date:

Sample Press. (PSIG): 185  
 Line Press. (PSIG): 185  
 Sample Temp. (F): 74  
 Fl. Gas Temp. (F): 74  
 Amb. Temp. (F): 55

Del. To:  
 Sampled By: RO  
 Cylinder No.: AGL-422

**Field H2O (#/mm):**

Field H2S (PPM): 30.0  
 Field H2S (Grains): 1.89

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9967516  
 Z Factor (Act.): 0.9967516

Dry BTU w/ H2S: 1171.16
Sat BTU w/ H2S: 1151.10
As Del. BTU w/ H2S: 1171.16

**Dry BTU W/O H2S (Real): 1171.14**  
**Sat. BTU W/O H2S (Real): 1151.08**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1171.14**

*BTU Calc: Dry*

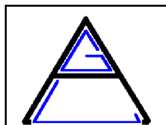
**Sp. Gravity (Real): 0.7183**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 4.486**  
**GPM Propane+ (Real): 2.067**  
**GPM IC5+ (Real): 0.441**

GPA 2145 / 2172

**Fld. Remarks:**  
**Lab Remarks:**





**ARMSTRONG GAS LABS, INC.**

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**GAS ANALYSIS REPORT**

Analysis No.: 540340  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.1774	0.000	0.021	
Methane	78.1910	787.257	0.433	
CO2	1.0660	0.000	0.016	
Ethane	10.8369	191.180	0.113	2.891
H2S	0.0010	0.000	0.000	
Propane	4.8760	122.301	0.074	1.340
Iso-Butane	0.5819	18.864	0.012	0.190
Butane	1.3279	43.184	0.027	0.418
Iso-Pentane	0.2743	10.940	0.007	0.100
Pentane	0.2678	10.702	0.007	0.097
Hexanes C6+	0.3998	20.442	0.013	0.174
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
Totals	100.0000	1204.871	0.722	5.210

**Producer:** Centennial  
**Well / Sta. Name:** Tostada 7 State Com 601H  
**Sta. No.:** 59515  
**Formation:**  
**Field:** New Mexico  
**County:**  
**API Number:** 3002549586

**Spot / Composite:** SP  
 Date / Time On:  
 Date / Time Off: 11/14/24  
 Date to Lab: 11/14/24  
 Date Analyzed: 11/18/24  
 Effective Date:

Sample Press. (PSIG): 181  
 Line Press. (PSIG): 181  
 Sample Temp. (F): 74  
 Fl. Gas Temp. (F): 74  
 Amb. Temp. (F): 43

Del. To:  
 Sampled By: JL  
 Cylinder No.: 819

**Field H2O (#/mm):**

Field H2S (PPM): 10.0  
 Field H2S (Grains): 0.63

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9966188  
 Z Factor (Act.): 0.9966188

Dry BTU w/ H2S: 1208.96
Sat BTU w/ H2S: 1188.26
As Del. BTU w/ H2S: 1208.96

**Dry BTU W/O H2S (Real): 1208.96**  
**Sat. BTU W/O H2S (Real): 1188.25**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1208.96**

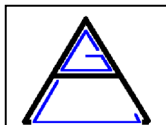
*BTU Calc: Dry*

**Sp. Gravity (Real): 0.7240**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.210**  
**GPM Propane+ (Real): 2.319**  
**GPM IC5+ (Real): 0.371**

GPA 2145 / 2172

**Fld. Remarks:**  
**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 540339  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	4.0554	0.000	0.039		<b>Producer: Centennial</b> <b>Well / Sta. Name: Cheddar Fed Com 401H (FKA 701H)</b> <b>Sta. No.: 59525</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002546298</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/11/24 Date to Lab: 11/12/24 Date Analyzed: 11/18/24 Effective Date:  Sample Press. (PSIG): 155 Line Press. (PSIG): 155 Sample Temp. (F): 89 Fl. Gas Temp. (F): 89 Amb. Temp. (F): 53  Del. To: Sampled By: JL Cylinder No.: 739
Methane	68.9794	694.511	0.382		
CO2	6.9900	0.000	0.106		
Ethane	10.5625	186.339	0.110	2.819	
H2S	0.0003	0.000	0.000		
Propane	5.6199	140.960	0.086	1.545	
Iso-Butane	0.6919	22.429	0.014	0.226	
Butane	1.6563	53.864	0.033	0.521	
Iso-Pentane	0.3918	15.626	0.010	0.143	
Pentane	0.4097	16.372	0.010	0.148	
Hexanes C6+	0.6428	32.867	0.021	0.280	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1162.970</b>	<b>0.811</b>	<b>5.682</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 3.0  
 Field H2S (Grains): 0.19

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9961927  
 Z Factor (Act.): 0.9961927

Dry BTU w/ H2S: 1167.42
Sat BTU w/ H2S: 1147.44
As Del. BTU w/ H2S: 1167.42

**Dry BTU W/O H2S (Real): 1167.42**

**Sat. BTU W/O H2S (Real): 1147.44**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1167.42**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.8133**

Field Gravity:

Lab Gravimeter:

**GPM Ethane+ (Real): 5.682**

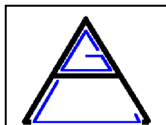
**GPM Propane+ (Real): 2.863**

**GPM IC5+ (Real): 0.571**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks: CP @ LAB 124 PSIG**



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**GAS ANALYSIS REPORT**

Analysis No.: 540338  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	1.6410	0.000	0.016		<b>Producer: Centennial</b> <b>Well / Sta. Name: CHEDDAR 3BS FEDERAL COM 1H</b> <b>Sta. No.: 2893</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002544692</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/11/24 Date to Lab: 11/12/24 Date Analyzed: 11/18/24 Effective Date:  Sample Press. (PSIG): 145 Line Press. (PSIG): 145 Sample Temp. (F): 79 Fl. Gas Temp. (F): 79 Amb. Temp. (F): 53  Del. To: Sampled By: JL Cylinder No.: 756
Methane	70.8972	713.820	0.393		
CO2	0.1266	0.000	0.002		
Ethane	15.1826	267.845	0.158	4.055	
H2S	0.0001	0.000	0.000		
Propane	7.4473	186.795	0.113	2.049	
Iso-Butane	0.8560	27.749	0.017	0.280	
Butane	2.2101	71.874	0.044	0.696	
Iso-Pentane	0.4414	17.605	0.011	0.161	
Pentane	0.5036	20.125	0.013	0.182	
Hexanes C6+	0.6941	35.490	0.022	0.302	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1341.304</b>	<b>0.789</b>	<b>7.725</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 1.0  
 Field H2S (Grains): 0.06

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9957190  
 Z Factor (Act.): 0.9957190

Dry BTU w/ H2S: 1347.07
Sat BTU w/ H2S: 1324.04
As Del. BTU w/ H2S: 1347.07

**Dry BTU W/O H2S (Real): 1347.07**

**Sat. BTU W/O H2S (Real): 1324.04**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1347.07**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.7920**

Field Gravity:

Lab Gravitometer:

**GPM Ethane+ (Real): 7.725**

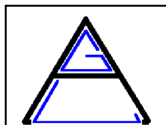
**GPM Propane+ (Real): 3.670**

**GPM IC5+ (Real): 0.645**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 344106  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal) BTU</u>	<u>(Ideal) SG</u>	<u>(Real) GPM</u>	
Nitrogen	3.4499	0.000	0.033		<b>Producer: Centennial</b> <b>Well / Sta. Name: ERIC CARTMAN 6 STATE COM 303H</b> <b>Sta. No.: N/L</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002552228</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/14/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 211 Line Press. (PSIG): 211 Sample Temp. (F): 105 Fl. Gas Temp. (F): 105 Amb. Temp. (F): 53  Del. To: Sampled By: EL Cylinder No.: 814
Methane	70.9765	714.619	0.393		
CO2	7.8913	0.000	0.120		
Ethane	9.4266	166.300	0.098	2.516	
H2S	0.2000	0.000	0.002		
Propane	4.6170	115.805	0.070	1.269	
Iso-Butane	0.5417	17.560	0.011	0.177	
Butane	1.4364	46.713	0.029	0.452	
Iso-Pentane	0.3924	15.650	0.010	0.143	
Pentane	0.4045	16.164	0.010	0.146	
Hexanes C6+	0.6637	33.936	0.021	0.289	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1126.748</b>	<b>0.798</b>	<b>4.992</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 2,000.0  
 Field H2S (Grains): 125.87

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9963536  
 Z Factor (Act.): 0.9963536

Dry BTU w/ H2S: 1132.15
Sat BTU w/ H2S: 1112.77
As Del. BTU w/ H2S: 1132.15

**Dry BTU W/O H2S (Real): 1130.87**

**Sat. BTU W/O H2S (Real): 1111.51**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1130.87**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.8004**

Field Gravity:

Lab Gravimeter:

**GPM Ethane+ (Real): 4.992**

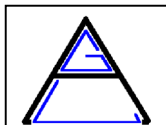
**GPM Propane+ (Real): 2.476**

**GPM IC5+ (Real): 0.578**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 344105  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.3413	0.000	0.023		<b>Producer: Centennial</b> <b>Well / Sta. Name: Eric Cartman 6 State Com 604H</b> <b>Sta. No.: 67651</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002549779</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/14/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 206 Line Press. (PSIG): 206 Sample Temp. (F): 78 Fl. Gas Temp. (F): 78 Amb. Temp. (F): 53  Del. To: Sampled By: EL Cylinder No.: 863
Methane	78.3656	789.015	0.434		
CO2	1.3750	0.000	0.021		
Ethane	10.5238	185.657	0.109	2.808	
H2S	0.0100	0.000	0.000		
Propane	4.8477	121.591	0.074	1.332	
Iso-Butane	0.5093	16.510	0.010	0.166	
Butane	1.1757	38.235	0.024	0.370	
Iso-Pentane	0.2738	10.920	0.007	0.100	
Pentane	0.2587	10.338	0.006	0.094	
Hexanes C6+	0.3191	16.316	0.010	0.139	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1188.582</b>	<b>0.718</b>	<b>5.009</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 100.0  
 Field H2S (Grains): 6.29

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9966956  
 Z Factor (Act.): 0.9966956

Dry BTU w/ H2S: 1192.59
Sat BTU w/ H2S: 1172.16
As Del. BTU w/ H2S: 1192.59

**Dry BTU W/O H2S (Real): 1192.52**  
**Sat. BTU W/O H2S (Real): 1172.10**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1192.52**

*BTU Calc: Dry*

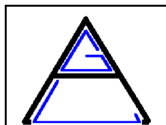
**Sp. Gravity (Real): 0.7202**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.009**  
**GPM Propane+ (Real): 2.201**  
**GPM IC5+ (Real): 0.333**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 344104  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.2623	0.000	0.022		<b>Producer: Centennial</b> <b>Well / Sta. Name: Eric Cartman 6 State Com 602H</b> <b>Sta. No.: 68203</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002549777</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/14/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 199 Line Press. (PSIG): 199 Sample Temp. (F): 73 Fl. Gas Temp. (F): 73 Amb. Temp. (F): 53  Del. To: Sampled By: EL Cylinder No.: 832
Methane	78.3760	789.120	0.434		
CO2	1.1936	0.000	0.018		
Ethane	10.7099	188.940	0.111	2.857	
H2S	0.0100	0.000	0.000		
Propane	4.8638	121.995	0.074	1.337	
Iso-Butane	0.5354	17.356	0.011	0.175	
Butane	1.2308	40.027	0.025	0.387	
Iso-Pentane	0.2526	10.075	0.006	0.092	
Pentane	0.2405	9.611	0.006	0.087	
Hexanes C6+	0.3251	16.623	0.010	0.142	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1193.746</b>	<b>0.718</b>	<b>5.077</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 100.0  
 Field H2S (Grains): 6.29

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9966817  
 Z Factor (Act.): 0.9966817

Dry BTU w/ H2S: 1197.78
Sat BTU w/ H2S: 1177.27
As Del. BTU w/ H2S: 1197.78

**Dry BTU W/O H2S (Real): 1197.72**

**Sat. BTU W/O H2S (Real): 1177.20**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1197.72**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.7198**

Field Gravity:

Lab Gravitometer:

**GPM Ethane+ (Real): 5.077**

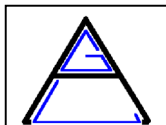
**GPM Propane+ (Real): 2.220**

**GPM IC5+ (Real): 0.321**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 344103  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.1111	0.000	0.020	
Methane	77.8653	783.978	0.431	
CO2	1.1165	0.000	0.017	
Ethane	10.9010	192.311	0.113	2.909
H2S	0.0005	0.000	0.000	
Propane	5.1233	128.504	0.078	1.408
Iso-Butane	0.5899	19.123	0.012	0.193
Butane	1.3692	44.528	0.027	0.431
Iso-Pentane	0.2799	11.163	0.007	0.102
Pentane	0.2728	10.902	0.007	0.099
Hexanes C6+	0.3705	18.944	0.012	0.161
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
Totals	100.0000	1209.453	0.725	5.303

**Producer:** Centennial  
**Well / Sta. Name:** Gordita 6 State Com 602H  
**Sta. No.:** 59535  
**Formation:**  
**Field:** New Mexico  
**County:**  
**API Number:** 3002549035

**Spot / Composite:** SP  
 Date / Time On:  
 Date / Time Off: 11/13/24  
 Date to Lab: 11/14/24  
 Date Analyzed: 11/19/24  
 Effective Date:

Sample Press. (PSIG): 194  
 Line Press. (PSIG): 194  
 Sample Temp. (F): 84  
 Fl. Gas Temp. (F): 84  
 Amb. Temp. (F): 86

Del. To:  
 Sampled By: RO  
 Cylinder No.: AGL-407

**Field H2O (#/mm):**

Field H2S (PPM): 5.0  
 Field H2S (Grains): 0.31

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9965858  
 Z Factor (Act.): 0.9965858

Dry BTU w/ H2S: 1213.60
Sat BTU w/ H2S: 1192.82
As Del. BTU w/ H2S: 1213.60

**Dry BTU W/O H2S (Real): 1213.60**  
**Sat. BTU W/O H2S (Real): 1192.81**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1213.60**

*BTU Calc: Dry*

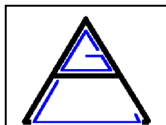
**Sp. Gravity (Real): 0.7271**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.303**  
**GPM Propane+ (Real): 2.394**  
**GPM IC5+ (Real): 0.362**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



**ARMSTRONG GAS LABS, INC.**

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 (432) 943-8844 (FAX) 943-8855

**GAS ANALYSIS REPORT**

Analysis No.: 344102  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.1098	0.000	0.020	
Methane	78.2508	787.859	0.433	
CO2	2.0947	0.000	0.032	
Ethane	9.9642	175.784	0.103	2.659
H2S	0.0040	0.000	0.000	
Propane	4.7007	117.904	0.072	1.292
Iso-Butane	0.5687	18.436	0.011	0.186
Butane	1.3317	43.308	0.027	0.419
Iso-Pentane	0.3130	12.484	0.008	0.114
Pentane	0.2839	11.345	0.007	0.103
Hexanes C6+	0.3785	19.353	0.012	0.165
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
Totals	100.0000	1186.474	0.726	4.938

**Producer:** Centennial  
**Well / Sta. Name:** Gordita 6 State Com #503H  
**Sta. No.:** 70004  
**Formation:**  
**Field:** New Mexico  
**County:**  
**API Number:** 3002550704  
**Spot / Composite:** SP  
 Date / Time On:  
 Date / Time Off: 11/13/24  
 Date to Lab: 11/14/24  
 Date Analyzed: 11/19/24  
 Effective Date:  
 Sample Press. (PSIG): 191  
 Line Press. (PSIG): 191  
 Sample Temp. (F): 80  
 Fl. Gas Temp. (F): 80  
 Amb. Temp. (F): 74  
 Del. To:  
 Sampled By: RO  
 Cylinder No.: AGL-415

**Field H2O (#/mm):**

Field H2S (PPM): 40.0  
 Field H2S (Grains): 2.52

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9966426  
 Z Factor (Act.): 0.9966426

Dry BTU w/ H2S: 1190.50
Sat BTU w/ H2S: 1170.10
As Del. BTU w/ H2S: 1190.50

**Dry BTU W/O H2S (Real): 1190.47**  
**Sat. BTU W/O H2S (Real): 1170.08**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1190.47**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.7281**  
 Field Gravity:  
 Lab Gravitometer:

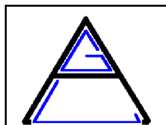
**GPM Ethane+ (Real): 4.938**  
**GPM Propane+ (Real): 2.279**  
**GPM IC5+ (Real): 0.382**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**





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**GAS ANALYSIS REPORT**

Analysis No.: 344101  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.0033	0.000	0.019		<b>Producer: Centennial</b> <b>Well / Sta. Name: ERIC CARTMAN 6 STATE COM 502H</b> <b>Sta. No.: N/L</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002550933</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/13/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 171 Line Press. (PSIG): 171 Sample Temp. (F): 97 Fl. Gas Temp. (F): 97 Amb. Temp. (F): 56  Del. To: Sampled By: JL Cylinder No.: 741
Methane	74.4305	749.395	0.412		
CO2	3.3734	0.000	0.051		
Ethane	10.8469	191.357	0.113	2.895	
H2S	0.0200	0.000	0.000		
Propane	5.5649	139.580	0.085	1.530	
Iso-Butane	0.6896	22.355	0.014	0.225	
Butane	1.6218	52.742	0.033	0.510	
Iso-Pentane	0.4077	16.261	0.010	0.149	
Pentane	0.3785	15.125	0.009	0.137	
Hexanes C6+	0.6634	33.921	0.021	0.289	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1220.736</b>	<b>0.768</b>	<b>5.735</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 200.0  
 Field H2S (Grains): 12.59

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9962489  
 Z Factor (Act.): 0.9962489

Dry BTU w/ H2S: 1225.46
Sat BTU w/ H2S: 1204.49
As Del. BTU w/ H2S: 1225.46

**Dry BTU W/O H2S (Real): 1225.33**  
**Sat. BTU W/O H2S (Real): 1204.36**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1225.33**

*BTU Calc: Dry*

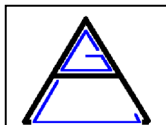
**Sp. Gravity (Real): 0.7704**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.735**  
**GPM Propane+ (Real): 2.840**  
**GPM IC5+ (Real): 0.575**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 344100  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.8058	0.000	0.027	
Methane	74.3167	748.249	0.412	
CO2	0.7007	0.000	0.011	
Ethane	12.1505	214.354	0.126	3.243
H2S	0.0000	0.000	0.000	
Propane	6.1301	153.757	0.093	1.686
Iso-Butane	0.7098	23.010	0.014	0.232
Butane	1.7729	57.656	0.036	0.558
Iso-Pentane	0.3806	15.180	0.009	0.139
Pentane	0.4007	16.013	0.010	0.145
Hexanes C6+	0.6322	32.325	0.020	0.275
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
Totals	100.0000	1260.544	0.759	6.278

**Producer:** Centennial  
**Well / Sta. Name:** Cheddar Fed Com 501H  
**Sta. No.:** N/L  
**Formation:**  
**Field:** New Mexico  
**County:**  
**API Number:** 3002544861  
**Spot / Composite:** SP  
 Date / Time On:  
 Date / Time Off: 11/11/24  
 Date to Lab: 11/12/24  
 Date Analyzed: 11/19/24  
 Effective Date:  
 Sample Press. (PSIG): 169  
 Line Press. (PSIG): 169  
 Sample Temp. (F): 89  
 Fl. Gas Temp. (F): 89  
 Amb. Temp. (F): 53  
 Del. To:  
 Sampled By: JL  
 Cylinder No.: 468

**Field H2O (#/mm):**

**Field H2S (PPM):** 0.0  
 Field H2S (Grains): 0.0

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9962238  
 Z Factor (Act.): 0.9962238

Dry BTU w/ H2S: 1265.32
Sat BTU w/ H2S: 1243.67
As Del. BTU w/ H2S: 1265.32

**Dry BTU W/O H2S (Real): 1265.32**  
**Sat. BTU W/O H2S (Real): 1243.67**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1265.32**

*BTU Calc: Dry*

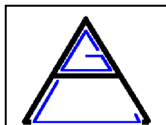
**Sp. Gravity (Real): 0.7611**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 6.278**  
**GPM Propane+ (Real): 3.035**  
**GPM IC5+ (Real): 0.559**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 344099  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.0519	0.000	0.020		<b>Producer: Centennial</b> <b>Well / Sta. Name: Cheddar Fed Com 651H (FKA 602H)</b> <b>Sta. No.: 48112</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002546297</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/11/24 Date to Lab: 11/12/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 166 Line Press. (PSIG): 166 Sample Temp. (F): 88 Fl. Gas Temp. (F): 88 Amb. Temp. (F): 53  Del. To: Sampled By: JL Cylinder No.: 736
Methane	75.1170	756.307	0.416		
CO2	0.1318	0.000	0.002		
Ethane	12.7338	224.645	0.132	3.399	
H2S	0.0000	0.000	0.000		
Propane	6.1073	153.185	0.093	1.679	
Iso-Butane	0.6772	21.953	0.014	0.221	
Butane	1.8003	58.547	0.036	0.566	
Iso-Pentane	0.3703	14.769	0.009	0.135	
Pentane	0.4277	17.092	0.011	0.155	
Hexanes C6+	0.5827	29.794	0.019	0.254	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1276.292</b>	<b>0.751</b>	<b>6.409</b>	

**Field H2O (#/mm):**

**Field H2S (PPM):** 0.0  
 Field H2S (Grains): 0.0

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9962023  
 Z Factor (Act.): 0.9962023

Dry BTU w/ H2S: 1281.16
Sat BTU w/ H2S: 1259.23
As Del. BTU w/ H2S: 1281.16

**Dry BTU W/O H2S (Real): 1281.16**  
**Sat. BTU W/O H2S (Real): 1259.23**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1281.16**

*BTU Calc: Dry*

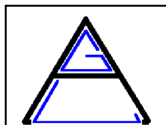
**Sp. Gravity (Real): 0.7540**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 6.409**  
**GPM Propane+ (Real): 3.010**  
**GPM IC5+ (Real): 0.544**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 344098  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	3.4146	0.000	0.033		<b>Producer: Centennial</b> <b>Well / Sta. Name: ERIC CARTMAN 6 STATE COM 302H</b> <b>Sta. No.: N/L</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002551987</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/13/24 Date to Lab: 11/14/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 146 Line Press. (PSIG): 146 Sample Temp. (F): 102 Fl. Gas Temp. (F): 102 Amb. Temp. (F): 53  Del. To: Sampled By: EL Cylinder No.: 151
Methane	70.1139	705.934	0.388		
CO2	7.8815	0.000	0.120		
Ethane	9.6691	170.578	0.100	2.581	
H2S	0.2400	0.000	0.003		
Propane	4.9413	123.939	0.075	1.359	
Iso-Butane	0.5898	19.120	0.012	0.193	
Butane	1.5739	51.185	0.032	0.495	
Iso-Pentane	0.4263	17.002	0.011	0.156	
Pentane	0.4394	17.559	0.011	0.159	
Hexanes C6+	0.7102	36.314	0.023	0.309	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1141.631</b>	<b>0.807</b>	<b>5.252</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 2,400.0  
 Field H2S (Grains): 151.04

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9962404  
 Z Factor (Act.): 0.9962404

Dry BTU w/ H2S: 1147.47
Sat BTU w/ H2S: 1127.83
As Del. BTU w/ H2S: 1147.47

**Dry BTU W/O H2S (Real): 1145.94**

**Sat. BTU W/O H2S (Real): 1126.33**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1145.94**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.8101**

Field Gravity:

Lab Gravitometer:

**GPM Ethane+ (Real): 5.252**

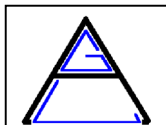
**GPM Propane+ (Real): 2.671**

**GPM IC5+ (Real): 0.624**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks: CP @ LAB 180 PSIG**



**ARMSTRONG GAS LABS, INC.**

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**GAS ANALYSIS REPORT**

Analysis No.: 344097  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	3.3781	0.000	0.033		<b>Producer: Centennial</b> <b>Well / Sta. Name: WOODY 22 FEDERAL COM 502H</b> <b>Sta. No.: 230599648</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002551395</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/11/24 Date to Lab: 11/12/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 107 Line Press. (PSIG): 107 Sample Temp. (F): 93 Fl. Gas Temp. (F): 93 Amb. Temp. (F): 64  Del. To: Sampled By: RO Cylinder No.: AGL-843
Methane	70.4406	709.223	0.390		
CO2	0.5873	0.000	0.009		
Ethane	13.3113	234.833	0.138	3.555	
H2S	0.0003	0.000	0.000		
Propane	7.3053	183.233	0.111	2.010	
Iso-Butane	0.8528	27.645	0.017	0.279	
Butane	2.1612	70.284	0.043	0.680	
Iso-Pentane	0.5260	20.979	0.013	0.192	
Pentane	0.4948	19.773	0.012	0.179	
Hexanes C6+	0.9423	48.181	0.030	0.411	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1314.152</b>	<b>0.797</b>	<b>7.306</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 2.5  
 Field H2S (Grains): 0.16

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9957926  
 Z Factor (Act.): 0.9957926

Dry BTU w/ H2S: 1319.71
Sat BTU w/ H2S: 1297.14
As Del. BTU w/ H2S: 1319.71

**Dry BTU W/O H2S (Real): 1319.71**

**Sat. BTU W/O H2S (Real): 1297.14**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1319.70**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.8005**

Field Gravity:

Lab Gravitometer:

**GPM Ethane+ (Real): 7.306**

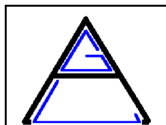
**GPM Propane+ (Real): 3.751**

**GPM IC5+ (Real): 0.782**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 142277  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	2.3179	0.000	0.022	
Methane	76.6370	771.611	0.424	
CO2	0.3607	0.000	0.005	
Ethane	11.5162	203.164	0.120	3.074
H2S	0.0010	0.000	0.000	
Propane	5.3803	134.950	0.082	1.479
Iso-Butane	0.6752	21.888	0.014	0.221
Butane	1.7543	57.051	0.035	0.552
Iso-Pentane	0.4029	16.069	0.010	0.147
Pentane	0.4049	16.180	0.010	0.146
Hexanes C6+	0.5496	28.102	0.018	0.239
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
<b>Totals</b>	<b>100.0000</b>	<b>1249.016</b>	<b>0.740</b>	<b>5.858</b>

**Producer:** Centennial  
**Well / Sta. Name:** Chorizo 12 State Com 601H  
**Sta. No.:** 9796  
**Formation:**  
**Field:** New Mexico  
**County:**  
**API Number:** 3002545353  
**Spot / Composite:** SP  
 Date / Time On:  
 Date / Time Off: 11/18/24  
 Date to Lab: 11/13/24  
 Date Analyzed: 11/19/24  
 Effective Date:  
 Sample Press. (PSIG): 152  
 Line Press. (PSIG): 152  
 Sample Temp. (F): 83  
 Fl. Gas Temp. (F): 83  
 Amb. Temp. (F): 62  
 Del. To:  
 Sampled By: IF  
 Cylinder No.: 818

**Field H2O (#/mm):**

Field H2S (PPM): 10.0  
 Field H2S (Grains): 0.63

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9963680  
 Z Factor (Act.): 0.9963680

Dry BTU w/ H2S: 1253.58
Sat BTU w/ H2S: 1232.12
As Del. BTU w/ H2S: 1253.58

**Dry BTU W/O H2S (Real): 1253.57**  
**Sat. BTU W/O H2S (Real): 1232.11**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1253.57**

*BTU Calc: Dry*

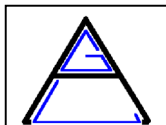
**Sp. Gravity (Real): 0.7428**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 5.858**  
**GPM Propane+ (Real): 2.784**  
**GPM IC5+ (Real): 0.532**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



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**GAS ANALYSIS REPORT**

Analysis No.: 142276  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	1.4635	0.000	0.014		<b>Producer:</b> <b>Well / Sta. Name:</b> CATTLEMAN FED COM CHECK METER <b>Sta. No.:</b> Sales <b>Formation:</b> <b>Field:</b> New Mexico <b>County:</b> <b>API Number:</b> N/L  <b>Spot / Composite:</b> SP Date / Time On: Date / Time Off: 11/09/24 Date to Lab: 11/13/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 149 Line Press. (PSIG): 149 Sample Temp. (F): 70 Fl. Gas Temp. (F): 70 Amb. Temp. (F): 29  Del. To: Sampled By: JL Cylinder No.: 717
Methane	73.7364	742.407	0.408		
CO2	6.3480	0.000	0.096		
Ethane	9.7240	171.547	0.101	2.595	
H2S	0.0005	0.000	0.000		
Propane	5.1321	128.725	0.078	1.411	
Iso-Butane	0.7267	23.558	0.015	0.237	
Butane	1.6118	52.417	0.032	0.507	
Iso-Pentane	0.4050	16.153	0.010	0.148	
Pentane	0.3659	14.622	0.009	0.132	
Hexanes C6+	0.4861	24.855	0.016	0.212	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1174.283</b>	<b>0.780</b>	<b>5.242</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 5.0  
 Field H2S (Grains): 0.31

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9962943  
 Z Factor (Act.): 0.9962943

Dry BTU w/ H2S: 1178.65
Sat BTU w/ H2S: 1158.48
As Del. BTU w/ H2S: 1178.65

**Dry BTU W/O H2S (Real): 1178.65**

**Sat. BTU W/O H2S (Real): 1158.48**

**H2O (# / mmcf): 0.0**

**AS DEL. BTU W/O H2S (Real): 1178.65**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.7825**

Field Gravity:

Lab Gravitometer:

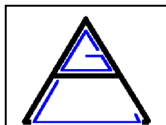
**GPM Ethane+ (Real): 5.242**

**GPM Propane+ (Real): 2.647**

**GPM IC5+ (Real): 0.492**

**Fld. Remarks: TAG: NO API PER WHITNEY**

**Lab Remarks: CP @ LAB 168 PSIG**



**ARMSTRONG GAS LABS, INC.**

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 Monahans, Texas 79756  
 (432) 943-8844 (FAX) 943-8855

**GAS ANALYSIS REPORT**

Analysis No.: 142275  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	2.8504	0.000	0.028		<b>Producer: Centennial</b> <b>Well / Sta. Name: Cheddar Fed Com 502H</b> <b>Sta. No.: 48118</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002549737</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/11/24 Date to Lab: 11/12/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 147 Line Press. (PSIG): 147 Sample Temp. (F): 93 Fl. Gas Temp. (F): 93 Amb. Temp. (F): 53  Del. To: Sampled By: JL Cylinder No.: 662
Methane	74.5873	750.974	0.413		
CO2	0.4781	0.000	0.007		
Ethane	11.8145	208.427	0.123	3.154	
H2S	0.0000	0.000	0.000		
Propane	6.0182	150.950	0.092	1.655	
Iso-Butane	0.7362	23.866	0.015	0.240	
Butane	1.8963	61.669	0.038	0.597	
Iso-Pentane	0.4329	17.266	0.011	0.158	
Pentane	0.4670	18.662	0.012	0.169	
Hexanes C6+	0.7191	36.769	0.023	0.313	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1268.582</b>	<b>0.761</b>	<b>6.286</b>	

**Field H2O (#/mm):**

**Field H2S (PPM):** 0.0  
 Field H2S (Grains): 0.0

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9961832  
 Z Factor (Act.): 0.9961832

Dry BTU w/ H2S: 1273.44
Sat BTU w/ H2S: 1251.65
As Del. BTU w/ H2S: 1273.44

**Dry BTU W/O H2S (Real): 1273.44**  
**Sat. BTU W/O H2S (Real): 1251.65**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1273.44**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.7633**  
 Field Gravity:  
 Lab Gravitometer:

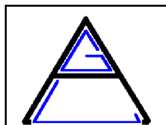
**GPM Ethane+ (Real): 6.286**  
**GPM Propane+ (Real): 3.132**  
**GPM IC5+ (Real): 0.640**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**





**ARMSTRONG GAS LABS, INC.**

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**GAS ANALYSIS REPORT**

Analysis No.: 142274  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>	
Nitrogen	3.7174	0.000	0.036		<b>Producer: Centennial</b> <b>Well / Sta. Name: WOODY 22 FEDERAL COM 501H</b> <b>Sta. No.: 230599654</b> <b>Formation:</b> <b>Field: New Mexico</b> <b>County:</b> <b>API Number: 3002551394</b>  <b>Spot / Composite: SP</b> Date / Time On: Date / Time Off: 11/12/24 Date to Lab: 11/12/24 Date Analyzed: 11/19/24 Effective Date:  Sample Press. (PSIG): 110 Line Press. (PSIG): 110 Sample Temp. (F): 86 Fl. Gas Temp. (F): 86 Amb. Temp. (F): 67  Del. To: Sampled By: RO Cylinder No.: AGL-852
Methane	73.9259	744.314	0.409		
CO2	0.5170	0.000	0.008		
Ethane	12.0287	212.206	0.125	3.210	
H2S	0.0060	0.000	0.000		
Propane	6.0675	152.187	0.092	1.668	
Iso-Butane	0.6435	20.860	0.013	0.210	
Butane	1.7177	55.861	0.034	0.540	
Iso-Pentane	0.3885	15.495	0.010	0.142	
Pentane	0.3975	15.885	0.010	0.144	
Hexanes C6+	0.5903	30.183	0.019	0.257	
Hydrogen	N/A				
Helium	N/A				
Oxygen	N/A				
CO	N/A				
<b>Totals</b>	<b>100.0000</b>	<b>1246.991</b>	<b>0.757</b>	<b>6.171</b>	

**Field H2O (#/mm):**

Field H2S (PPM): 60.0  
 Field H2S (Grains): 3.78

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9963075  
 Z Factor (Act.): 0.9963075

Dry BTU w/ H2S: 1251.65
Sat BTU w/ H2S: 1230.23
As Del. BTU w/ H2S: 1251.65

**Dry BTU W/O H2S (Real): 1251.61**  
**Sat. BTU W/O H2S (Real): 1230.19**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1251.61**

*BTU Calc: Dry*

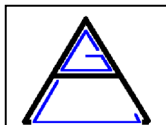
**Sp. Gravity (Real): 0.7591**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 6.171**  
**GPM Propane+ (Real): 2.961**  
**GPM IC5+ (Real): 0.543**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**



**ARMSTRONG GAS LABS, INC.**

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 (432) 943-8844 (FAX) 943-8855

**GAS ANALYSIS REPORT**

Analysis No.: 142273  
 Customer: Centennial

<u>Component</u>	<u>Mol. %</u>	<u>(Ideal)</u> <u>BTU</u>	<u>(Ideal)</u> <u>SG</u>	<u>(Real)</u> <u>GPM</u>
Nitrogen	3.0206	0.000	0.029	
Methane	69.2249	696.983	0.383	
CO2	0.9543	0.000	0.015	
Ethane	13.6603	240.990	0.142	3.649
H2S	0.0020	0.000	0.000	
Propane	7.6875	192.820	0.117	2.115
Iso-Butane	0.9432	30.576	0.019	0.308
Butane	2.3335	75.887	0.047	0.735
Iso-Pentane	0.5866	23.396	0.015	0.214
Pentane	0.5444	21.755	0.014	0.197
Hexanes C6+	1.0427	53.315	0.034	0.454
Hydrogen	N/A			
Helium	N/A			
Oxygen	N/A			
CO	N/A			
Totals	100.0000	1335.722	0.814	7.672

**Producer:** Centennial  
**Well / Sta. Name:** WOODY 22 FEDERAL COM 504H  
**Sta. No.:** 231105838  
**Formation:**  
**Field:** New Mexico  
**County:**  
**API Number:** 3002551397  
**Spot / Composite:** SP  
 Date / Time On:  
 Date / Time Off: 11/11/24  
 Date to Lab: 11/12/24  
 Date Analyzed: 11/19/24  
 Effective Date:  
 Sample Press. (PSIG): 105  
 Line Press. (PSIG): 105  
 Sample Temp. (F): 94  
 Fl. Gas Temp. (F): 94  
 Amb. Temp. (F): 74  
 Del. To:  
 Sampled By: RO  
 Cylinder No.: AGL-790

**Field H2O (#/mm):**

Field H2S (PPM): 20.0  
 Field H2S (Grains): 1.26

**Pressure Base: 14.65**  
**Temp. Base: 60**

Z Factor (Dry): 0.9955899  
 Z Factor (Act.): 0.9955899

Dry BTU w/ H2S: 1341.65
Sat BTU w/ H2S: 1318.72
As Del. BTU w/ H2S: 1341.65

**Dry BTU W/O H2S (Real): 1341.64**  
**Sat. BTU W/O H2S (Real): 1318.70**  
**H2O (# / mmcf): 0.0**  
**AS DEL. BTU W/O H2S (Real): 1341.64**

*BTU Calc: Dry*

**Sp. Gravity (Real): 0.8168**  
 Field Gravity:  
 Lab Gravitometer:

**GPM Ethane+ (Real): 7.672**  
**GPM Propane+ (Real): 4.023**  
**GPM IC5+ (Real): 0.865**

GPA 2145 / 2172

**Fld. Remarks:**

**Lab Remarks:**

Volumes associated with this C-129 filing are estimations and may be subject to change as data is reconciled. The operator's current practice consists of metering volumes and report in accordance with NMAC 19.15.27.

For inquiries regarding this filing, please contact the operator.

Sante Fe Main Office  
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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 500168

**DEFINITIONS**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 500168
	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:

- 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 500168

**QUESTIONS**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 500168
	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	Unavailable.
Incident Facility	[fAPP2220946441] Chorizo 36 CTB 1

<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 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, minor 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 <b>at least 50 MCF</b> 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>	
<i>Please provide the mole percent for the percentage questions in this group.</i>	
Methane (CH4) percentage	73
Nitrogen (N2) percentage, if greater than one percent	3
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	6
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.

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QUESTIONS, Page 2

Action 500168

**QUESTIONS (continued)**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 500168
	Action Type: [C-129] Venting and/or Flaring (C-129)

**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	08/19/2025
Time vent or flare was discovered or commenced	12:00 AM
Time vent or flare was terminated	11:00 PM
Cumulative hours during this event	23

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Power Failure   Tank (Any)   Natural Gas Flared   Released: 107 Mcf   Recovered: 0 Mcf   Lost: 107 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 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	VRU lost power due to power outage
Steps taken to limit the duration and magnitude of vent or flare	Open valves to divert gas to a second midstream company to relieve pressure off the line
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Clear consistent communication with midstream provider



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ACKNOWLEDGMENTS

Action 500168

**ACKNOWLEDGMENTS**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 500168
	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 500168

**CONDITIONS**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 500168
	Action Type: [C-129] Venting and/or Flaring (C-129)

**CONDITIONS**

Created By	Condition	Condition Date
jdoolingpr	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.	8/28/2025