



Wild Goose Storage, LLC
A Rockpoint Gas Storage Company

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June 15, 2023

Mr. Gary Ermann
Safety Policy Division
California Public Utilities Commission
505 Van Ness Ave.
San Francisco, CA 94102
Gary.Ermann@cpuc.ca.gov

VIA ELECTRONIC MAIL

RE: Wild Goose Storage, LLC
R15-01-008 2023 Annual Report

Dear Mr. Ermann:

Wild Goose Storage, LLC (WGS) respectfully submits this 2023 Annual Report to the California Public Utilities Commission (CPUC) pursuant to R15-01-008. The attached 2023 Annual Report is comprised of this cover letter and the following documents:

- Supplemental Questionnaire R.15-01-008 2023 Annual Report
- Appendix 1 – Transmission Pipelines
- Appendix 7 – Underground Storage
- Appendix 8 – Summary Tables

If you have any questions, or require more information, please contact me at greg.clark@rockpointgs.com or at (209) 368-9277 x3.

Sincerely,

A handwritten signature in blue ink that reads 'Gregory N. Clark'.

Gregory N. Clark
Senior Compliance Manager

Enclosures (Supplemental Questionnaire, Appendix 1, Appendix 7, Appendix 8)

cc: A. Mrowka (Andrew.Mrowka@arb.ca.gov)
A. Anderson, G. Bozarth, J. Dubchak, M. Fournier (via e-mail)

SUPPLEMENTAL QUESTIONNAIRE

R.15-01-008, 2023 Annual Report

Wild Goose Storage, LLC

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

In partial fulfillment of Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

In Response to Data Request R15-01-008, 2023 Annual Report

Date: 6/15/23

The following data have been prepared to comply with Senate Bill 1371 (Leno, 2014), Section 2, Article 3, Order Instituting Rulemaking (OIR) 15-01-008, and to provide responses to Data Request R. 15-01-008, 2023 Annual Report.

1. Please provide the following for the period from January 1, 2022 to December 31, 2022:
 - a. Describe any current projects or studies related to SB 1371.
 - b. Describe the activity changes between the previous year's reporting and the current year's reporting that affected the change in the total emissions. For example, changes in maintenance activities may have changed blowdown emissions from previous years and resulted in changes to total emissions.
 - c. Describe advances in abatement efforts, similar to the executive summary in the best practices reporting.
 - d. Describe improvements in reporting that are not discernable by reviewing the reporting data. For example, report the installation of a new data management or leak tracking system.
 - e. For smaller utilities, confirm if there were no leaks in distribution mains and services pipelines.
 - f. Identify any additional tables to be included in the Joint Report. Staff will place these tables in an appendix.

Response:

The specific elements of the supplemental questionnaire data request are provided as follows:

- a. Wild Goose Storage, LLC (WGS) did not have any projects or studies related to SB 1371 during the 2022 calendar year.
- b. WGS experienced an increase in compressor runtime hours from 18,265 during the 2021 calendar year to 22,558 during the 2022 calendar year. Despite this increase in compressor runtime hours, overall compressor vented emissions decreased year over year by 1,772 MCF due to the installation of low emissions packing on select compressors.
- c. WGS has continued implementation of SB 1371 Best Practices during the 2022 calendar year, with the intent of minimizing methane emissions to the environment.
- d. WGS modified the startup and shutdown logic and operating procedures on the Plant 2 and Plant 3 compressors so that the units remain pressurized after shutdowns and remain pressurized during restarts. This decreased the amount of gas released/vented during normal operations.
- e. N/A – WGS does not own or operate any distribution pipelines.

- f. N/A – WGS did not include any additional tables in its R15-01-008 Annual Report. Please note that Appendix 1, Appendix 7, and Appendix 8 have been included as part of the R15-01-008 Annual Report.

Wild Goose Storage, LLC, June 15, 2023

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.
 In Response to Data Request, R15-01-008 - 2023 June Report
 Appendix 1; Rev. 03/30/2023

Notes:

Emissions included in the Report are based on miles of transmission pipeline. Therefore provide the miles of transmission pipeline in your system here.
 The following data on transmission pipeline leaks is **for information purposes** and will not be used to report transmission pipeline leak emissions this year.
 Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.
 At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.

Transmission Pipeline Leaks:

ID	Geographic Location	Pipe Material	Pipe Size (nominal)	Pipe Age (months)	Pressure (psi)	Leak Grade	Above Ground or Below Ground	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Scheduled Repair Date (MM/DD/YY)	Reason for Not Scheduling a Repair	Number of Days Leaking	Emission Factor (Mscf/Day)	Annual Emissions (Mscf)	Explanatory Notes / Comments
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There were no transmission pipeline leaks during the period January 1 - December 31, 2022.

Sum total 0

Wild Goose Storage, LLC, June 15, 2023

**Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.
In Response to Data Request, R15-01-008 - 2023 June Report
Appendix 1; Rev. 03/30/2023**

Notes:
Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.
At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

Transmission Pipeline Damage (3rd party dig-ins, natural disasters, etc.):

ID	Geographic Location	Damage Type	Pipe Material	Pipe Size (nominal)	Pipe Age (months)	Pressure (psi)	Leak Grade	Above Ground or Below Ground	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/Day)	Annual Emissions (Mscf)	Explanatory Notes / Comments
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The transmission pipeline did not incur any form of damage during the period January 1 - December 31, 2022. No 3rd party damage emissions in 2022

Sum total 0

Wild Goose Storage, LLC, June 15, 2023

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Consistent with Senate Bill 1371, Leno.**

**In Response to Data Request, R15-01-008 - 2023 June Report
Appendix 1; Rev. 03/30/2023**

Notes:
Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.
At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.
The emissions reported under the column Methane Abatement (Mscf) are for information purposes only, and should be separated from the emissions reported under the column for Annual Emissions (Mscf).

Transmission Pipeline Blowdowns:

ID	Geographic Location	Number of Blowdown Events	Reason	Emission Reduction Strategy	Annual Emissions (Mscf)	Explanatory Notes / Comments	Methane Abatement (Mscf)
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There were no transmission pipeline blowdowns during the period January 1 - December 31, 2022.

Total

0

Wild Goose Storage, LLC, June 15, 2023

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Appendix 1; Rev. 03/30/2023

Notes:
Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.
At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange
The emissions captured on this tab represent the emissions associated with the operational design and function of the component. Any intentional release of natural gas for safety or maintenance purposes should be included in the Blowdowns worksheet.

Transmission Pipeline Component Vented Emissions:

Total Number of Devices	Device Type	Bleed Rate	Manufacturer	Emission Factor (Mscf/day)	Annual Emission (Mscf)	Explanatory Notes / Comments
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There were no transmission pipeline component vented emissions during the period January 1 - December 31, 2022.

Sum total 0

Wild Goose Storage, LLC, June 15, 2023

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At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

The emissions captured on this tab represent the emissions associated unintentional leaks that if repaired would not leaking. If the component is releasing gas or "bleeding" as a result of its design or function then it is not to be captured in this tab.

Transmission Pipeline Component Fugitive Leaks:

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/day)	Annual Emission (Mscf)	Explanatory Notes / Comments
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There were no transmission pipeline component fugitive leaks during the period January 1 - December 31, 2022.

Sum total 0

Wild Goose Storage, LLC, June 15, 2023

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Appendix 1; Rev. 03/30/2023**

Notes:

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At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.

Transmission Pipeline Odorizers:

ID	Geographic Location	Number of Units	Emission Factor (Mscf/yr)	Annual Emission (Mscf)	Explanatory Notes / Comments
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There were no transmission pipeline odorizer emissions during the period January 1 - December 31, 2022.

Note that the odorizer injection system is operated /managed by PG&E within their meter station.

Sum total

0

Wild Goose Storage, LLC, June 15, 2023

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In Response to Data Request, R15-01-008 2023 June Report
Appendix 7; Rev. 03/30/2023**

Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.

At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

Use the Population based emission factor if facility is not surveyed. Use Leaker based emission factor if facility is surveyed, and report only the found leaking components.

Underground Storage Facility Leaks and Emissions:

ID	Geographic Location	Source	Number of Sources	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/day/dev)	Annual Emissions (Mscf)	Explanatory Notes / Comments
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Sum Total 0.00

Wild Goose Storage, LLC, June 15, 2023
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Notes:
 Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.
 At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.
 The emissions captured on this tab represent the emissions associated with the operational design and function of the compressor. Any intentional release of natural gas for safety or maintenance purposes should be included on the Blowdowns worksheet.

- Previous Reporting Changes:**
- 1) New Column for Measurement Frequency - See box comments.
 - 2) Added new column for Emission Factor Measurement Date - Pressurized Operations.
 - 3) Added a fourth compressor operating mode "Offline". In addition, a measurement of emissions (EF) should be taken during Offline mode, to ensure that no emissions are emanating from the system.
 - 4) Alternate emissions measurement method, where applicable and measured by the operator.
 - 5) Alternate emissions measurement method, where applicable and measured by the operator.
 - Blowdown and Isolation valves
 - 6) Measure centrifugal compressor emissions additional columns added for these emissions:
 - Dry seals
 - Wet seals
 - Wet seal oil degassing vents in Pressurized Idle mode

Transmission Compressor Vented Emissions:

ID	Geographic Location	Compressor Type	Prime Mover	Number of Cylinders	Number of Seals	Seal Type	Measurement Frequency	Emission Factor: Measurement Date - Pressurized Operations	Operating Mode: Pressurized Operating (hours)	Operating Mode: Pressurized Idle (hours)	Operating Mode: Depressurized Idle (hours)	Operating Mode: Offline (Hours)	Emission Factor: Pressurized Operating (kg/hr)	Emission Factor: Pressurized Idle (kg/hr)	Emission Factor: Depressurized Idle (kg/hr)	Emission Factor: Pressurized Operating - Rod Packing (kg/hr)	Emission Factor: Pressurized Operating - Blowdown Valve (kg/hr)	Emission Factor: Pressurized Idle - Rod Packing (kg/hr)	Emission Factor: Pressurized Idle - Blowdown Valve (kg/hr)	Annual Emissions (kg/yr)	Explanatory Notes / Comments
Plant #1 C101A	9548	R	C	6	N/A	N/A	A	11/30/2022	1475	0	7285	N/A	251.4	N/A	0.0	251.4	0.0	N/A	N/A	370.84	rod packing, BD valve, iso valve
Plant #1 C101B	9548	R	C	6	N/A	N/A	A	11/30/2022	872	0	7889	N/A	242.4	N/A	0.0	242.4	0.0	N/A	N/A	211.25	rod packing, BD valve, iso valve
Plant #2 C101A-2	9548	R	C	6	N/A	N/A	A	9/12/2022	3752	2327	2680	N/A	142.2	0.0	0.0	142.2	0.0	N/A	N/A	533.58	rod packing, BD valve, iso valve
Plant #2 C101B-2	9548	R	C	6	N/A	N/A	A	9/12/2022	2832	3322	2606	N/A	71.4	0.0	0.0	71.4	0.0	0.0	N/A	202.20	rod packing, BD valve, iso valve
Plant #3 C101A-3	9548	R	C	6	N/A	N/A	A	9/12/2022	3228	3304	2228	N/A	1.8	0.0	0.0	1.8	0.0	0.0	N/A	5.81	rod packing, BD valve, iso valve
Plant #3 C101B-3	9548	R	C	6	N/A	N/A	A	9/12/2022	3468	2853	2439	N/A	20.4	0.0	0.0	20.4	0.0	0.0	N/A	70.74	rod packing, BD valve, iso valve
Plant #4 C101A-4	9548	R	C	6	N/A	N/A	A	9/12/2022	3191	4693	876	N/A	23.4	0.0	0.0	23.4	0.0	0.0	0.0	74.67	rod packing, BD valve, iso valve
Plant #4 C101B-4	9548	R	C	6	N/A	N/A	A	9/12/2022	3741	4144	876	N/A	10.8	0.0	0.0	10.8	0.0	0.0	0.0	40.40	rod packing, BD valve, iso valve
Sum Total																				1,509	

CPUC Staff strongly encourage more frequent measurement of the following compressor vented emissions. Compliance minimum is once annually, though Staff suggest the minimum frequency should be quarterly and measured at roughly the same time each quarter (e.g. on or around the component survey given mode of operation). More frequent measurements, e.g. monthly would be better due to the temporal changes in conditions that effect emissions. The more frequent measurements also provide an opportunity to detect worn rod packing or seals, which exacerbate emissions, and with timely awareness of suboptimal operations gas operators have an opportunity for accelerating maintenance to correct worn parts. The following steps for reporting more frequent measurements in 2019 are outlined in the adjacent cell, and should be provided if available.

The Columns P thru T were added to the template and should be used for the indicated measured compressor emissions, which include Centrifugal compressors in accordance with OGR and your operating practice.

Use these EF columns as well as the columns for the Compressor Measurements noted in Columns G thru T when they are applicable, the data is not captured by the operator, then add a note explaining why the applicable measurement data was not recorded or available in the Explanatory Notes / Comments column.

For the 2022 data reporting of compressor vented emissions: Where more than one measurement was taken during the year (e.g. after a maintenance cycle*, monthly, or quarterly), use the measured EF multiplied by the activity hours that occurred during the corresponding period. For example, if the compressor measurement was taken quarterly, then the measured EF should be multiplied by the activity hours that occurred in the respective quarter, and the same for more frequent measurements (e.g. monthly, weekly etc.). For each compressor devote one row per measurement period (see example provided). In the case of a single annual measurement (if, then that EF would apply to the activity hours for each respective mode for the entire year (which is consistent with prior year reporting practice).

* If a measurement is taken after a maintenance cycle and no other measurements were taken during the remainder of the year, then use this measured EF for the activity hours occurring after the measurement date thru 12/31/xx. The activity hours prior to the maintenance of the compressor from the beginning of the year should use the previously measured EF, even if the EF was measured in the prior year.

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Appendix 7; Rev. 03/30/2023**

Notes:

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At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

Underground Storage Blowdowns:

ID	Geographic Location	Source	Compressor Type	Number of Blowdown Events	Annual Emissions (Mscf)	Explanatory Notes / Comments
Compressor Station	95948	C	R	105	3,940.16	Compressor unit blowdowns when changing the mode of operation
Compressor Station	95948	P	Not applicable	5	483.02	Piping within the compressor station that's blown down to accommodate a mode change
Sum Total					4,423.18	

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Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.

At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

The emissions captured on this tab represent the emissions associated with the operational design and function of the component. Any intentional release of natural gas for safety or maintenance purposes should be included on the Blowdowns worksheet.

Underground Storage Component Vented Emissions (See note above):

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Pressure (psi)	Survey Date (MM/DD/YY)	Number of Days Emitting	Emission Factor, Engineering or Manufacturer's based Estimate of Emissions (Mscf/day)	Annual Emissions (Mscf)	Explanatory Notes / Comments
Delevan MS	95979	P	I	Becker	1000	Not applicable	365	0.0576	126	6 components at same emission factor
Sum total									126	

All other instrument devices (at the wellpad and compressor station) run on instrument air.

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Appendix 7; Rev. 03/30/2023

Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.

At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

The emissions captured on this tab represent the emissions associated unintentional leaks that if repaired would not leaking. If the component is releasing gas or "bleeding" as a result of its design or function then it is not to be captured in this tab.

Underground Storage: Compressor and Component Fugitive Leaks (see note above):

12/31/2021 1/1/2021

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Pressure (psi)	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Prior Survey Date (MM/DD/YY)	Number of Days Leaking	Emission Factor or Engineering Estimate (Mscf/day)	Emissions (Mscf)	Explanatory Notes / Comments	
1st Quarter Leak Survey													
Plant	95948 V	NA	Grove / Aerial	1350	01/01/22	03/22/22	12/14/21	90	0.3562	64.116	Carryover leak from 2021. CARB Oil & Gas Rule Delay of Repair, leak not repaired by year end 2021. Includes 2 components.		
Plant	95948 C	NA	Not applicable	1350	01/01/22	03/21/22	12/14/21	89	0.1342	11.9438	Carryover leak from 2021. CARB Oil & Gas Rule Delay of Repair, leak not repaired by year end 2021. Includes 1 component.		
Plant	95948 V	NA	Grove / Aerial	1200	02/22/22	04/04/22	12/14/21	77	0.3562	411.411	Includes 15 components.		
Plant	95948 C	NA	Not applicable	1200	02/22/22	03/04/22	12/14/21	46	0.1342	92.598	Includes 15 components.		
Delevan	95979 C	NA	Not applicable	1000	02/28/22	03/09/22	12/14/21	48	0.1342	6.4416	Includes 1 component.		
											586.5104		
2nd Quarter Leak Survey													
Plant	95948 V	NA	Grove / Aerial	1200	06/24/22	12/31/22	02/22/22	252	0.3562	179.5248	Carb Oil & Gas Rule Delay of Repair, leak not repaired by year end 2022. Includes 2 components.		
Plant	95948 V	NA	Grove / Aerial	1200	06/24/22	07/08/22	02/22/22	76	0.3562	54.1424	Includes 2 components.		
Plant	95948 C	NA	Not applicable	1200	06/23/22	07/04/22	02/22/22	72.5	0.1342	87.5655	Includes 9 components.		
Wellpad	95953 V	NA	Not applicable	1400	06/23/22	07/05/22	02/22/22	73.5	0.3562	52.3614	Includes 2 components.		
Wellpad	95953 C	NA	Not applicable	1400	06/23/22	06/24/22	02/22/22	62.5	0.1342	8.3875	Includes 1 component.		
											381.9816		
3rd Quarter Leak Survey													
Plant	95948 V	NA	Grove / Aerial	1500	09/12/22	09/25/22	06/23/22	54.5	0.3562	135.8903	Includes 7 components.		
Plant	95948 C	NA	Not applicable	1500	09/13/22	09/25/22	06/23/22	54	0.1342	65.2212	Includes 9 components.		
Wellpad	95953 C	NA	Not applicable	1550	09/16/22	09/26/22	06/23/22	53.5	0.1342	7.1797	Includes 1 component.		
											208.2912		
4th Quarter Leak Survey													
Plant	95948 V	NA	Grove / Aerial	1350	11/16/22	11/18/22	09/12/22	35.5	0.3562	101.1608	Includes 8 components.		
Plant	95948 C	NA	Not applicable	1350	11/15/22	11/18/22	09/12/22	36	0.1342	43.4808	Includes 9 components.		
Delevan	95979 V	NA	Not applicable	1000	11/14/22	11/17/22	09/12/22	35.5	0.3562	12.6451	Includes 1 component.		
											157.2867		
											Sum Total	1,334.07	

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**In Response to Data Request, R15-01-008 2023 June Report
Appendix 7; Rev. 03/30/2023**

Pursuant to SB 1371, Leno - Natural gas: leakage abatement, the California Public Utilities Commission (CPUC) requests that the following information be transmitted to the CPUC and the California Air Resources Board (CARB):
Note - Definitions in Data Request, R15-01-008 2022 June Report

The following question in the above mentioned data request is answered using the spreadsheets in this Appendix (#7):
(6) Calculable or estimated emissions and non-graded gas leaks, as defined in Data Request R15-01-008 2022 June Report.

Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.

At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

Underground Storage Dehydrator Vented Emissions:

ID	Geographic Location	Type of Dehydrator (Glycol or Desiccant)	Vapor Recovery Unit or Thermal Oxidizer (Y/N)	Annual Volume of Gas Withdrawn (Mscf)	Emission Factor (Y/N)	Engineering Estimate (Y/N)	Annual Emissions (Mscf)	Explanatory Notes / Comments
Plant #1 & #2	95948	Glycol	Y	29,239,119.50	0	N	0	Total volume of gas withdrawn from WGS in 2022 was 58,478,239 Mscf
Plant #3	95948	Glycol	Y	14,619,559.75	0	N	0	Total volume of gas withdrawn from WGS in 2022 was 58,478,239 Mscf
Plant #4	95948	Glycol	Y	14,619,559.75	0	N	0	Total volume of gas withdrawn from WGS in 2022 was 58,478,239 Mscf
Sum Total							0.00	

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 Appendix 8: Rev. 03/30/2023

Notes:
 Please round all natural gas emissions to nearest Mscf.

Summary Tables:

System Categories	Emission Source Categories	Fugitive or Vented	For Informational and Reference Purposes Only: Original 2015 Baseline Emissions (Mscf)	Approved 2015 Baseline Emissions (Mscf)	Proposed Adjusted 2015 Baseline Emissions (Mscf)	2021 Total Annual Volume of Leaks & Emissions (Mscf)	2021 Total Annual Count of Leak & Emission Items	2022 Total Annual Volume of Leaks & Emissions (Mscf)	2022 Total Annual Count of Leak & Emission Items	Emission Change for Year Over Year Comparison from 2021 to 2022 (Mscf)	Percentage Change for Year Over Year Comparison from 2021 to 2022	Count Change for Year Over Year Comparison from 2021 to 2022	Percentage Change for Year Over Year Comparison from 2021 to 2022	Emission Change for Year Over Year Comparison from 2015 to 2022 (Mscf)	Percentage Change for Year Over Year Comparison from 2015 to 2022	Explanation for Significant Percentage Change for Year Over Year Comparison from 2021 to 2022
Transmission Pipelines	Pipeline Leaks	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	All Damages	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Blowdowns	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Component Vented Emissions	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Component Fugitive Leaks	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
Transmission M&R Stations	Odorizers	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Station Leaks & Emissions	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
Transmission Compressor Stations	Blowdowns	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Component Vented Emissions	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Component Fugitive Leaks	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Storage Tank Leaks & Emissions	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Compressor Emissions	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
Distribution Main & Service Pipelines	Compressor Leaks	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Blowdowns	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Component Vented Emissions	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Component Fugitive Leaks	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Station Leaks & Emissions	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
Distribution M&R Stations	All Damages	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Blowdowns	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Meter Leaks	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
Customer Meters	All Damages	Fugitive								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Vented Emissions	Vented								-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
Underground Storage	Storage Leaks & Emissions	Fugitive	0	0		0		0		-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Compressor Vented Emissions	Vented	5847	5847		3281		1509		(1,772)	(54.0%)	-	#DIV/0!	(4,338.00)	(74.2%)	Low emissions package installed on select compressors
	Blowdowns	Vented	15491	15491		10560		4423		(6,137)	(58.1%)	-	#DIV/0!	(11,068.00)	(71.4%)	Improved compressor startup/shutdown logic and operating procedures
	Component Vented Emissions	Vented	126	126		126		126			0.0%	-	#DIV/0!	-	0.0%	
	Compressor and Component Fugitive Leaks	Fugitive	2539	2539		1141		1334		193	16.9%	-	#DIV/0!	(1,205.00)	(47.5%)	
Unusual Large Leaks	Dehydrator Vent Emissions	Fugitive	0	0		0		0		-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	(Description)									-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
Total			24003			15108	NA	7392	NA	(7,716)	-51%	NA	NA	(16,611.00)	(69.2%)	

Wild Goose Storage, LLC, June 15, 2023

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

In Response to Data Request, R15-01-008, 2023 June Report
Appendix 8; Rev. 03/30/2023

System Wide Leak Rate Data

1/1/2022 - 12/31/2022

The highlighted cells show the volumes that are summed together as the throughput for calculating the system wide leak rate.

Gas Storage Facilities:

Average Close of the Month Cushion Gas Storage Inventory (Mscf)	Average Close of the Month Working Gas Storage Inventory (Mscf)	Total Annual Volume of Injections into Storage (Mscf)	Total Annual Volume of Gas Used by the Gas Department (Mscf)	Total Annual Volume of Withdrawals from Storage (Mscf)	Explanatory Notes / Comments
11,000,000	52,214,314	43,942,303	532,127	58,478,239	

Transmission System:

Total Annual Volume of Gas Used by the Gas Department (Mscf)	Total Annual Volume of Gas Transported to or for Customers* in State (Mscf)	Total Annual Volume of Gas Transported to or for Customers* out of State (Mscf)	Total Annual Volume of Gas Transported to utility-owned or third-party storage fields for injection into storage (Mscf)	Explanatory Notes / Comments

Distribution System:

Total Annual Volume of Gas Used by the Gas Department (Mscf)	Total Annual Volume of Gas Transported to or for Customers* in State (Mscf)	Total Annual Volume of Gas Transported to or for Customers* out of State (Mscf)	Explanatory Notes / Comments

*The term customers includes anyone that the utility is transporting gas for, including customers who purchase gas from the utility.

Customers can be anyone including residential, businesses, other utilities, gas transportation companies, etc.

Wild Goose Storage, LLC, June 15, 2023

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In Response to Data Request, R15-01-008, 2023 June Report

Appendix 8; Rev. 03/30/2023

Summary Tables:

Natural Gas Properties	Average Mole Percent	Explanatory Notes / Comments
Methane		Gas is supplied from PG&E's transmission system via meter station / interconnect. Gas is returned to PG&E's system when Wild Goose is on withdrawal, meeting required natural gas quality / specification for their transmission line.
Carbon Dioxide		
Ethane		
C3+		
C6+		
Oxygen		
Hydrogen		
Sulfur		
Water		
Carbon Monoxide		
Particulate Matter		
Inert Gas		
Odorant		