



Wild Goose Storage, LLC
A Rockpoint Gas Storage Company

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June 15, 2022

Ms. Emma Johnston
Safety Policy Division
California Public Utilities Commission
505 Van Ness Ave.
San Francisco, CA 94102
Emma.Johnston@cpuc.ca.gov

VIA ELECTRONIC MAIL

RE: Wild Goose Storage, LLC
R15-01-008 2022 Annual Report

Dear Ms. Johnston:

Wild Goose Storage, LLC (WGS) respectfully submits this 2022 Annual Report to the California Public Utilities Commission (CPUC) pursuant to R15-01-008. The attached 2022 Annual Report is comprised of this cover letter and the following documents:

- Supplemental Questionnaire R.15-01-008 2022 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.

Sincerely,

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

Gregory N. Clark
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 2022 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 2022 Annual Report

Date: 6/15/22

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 2022 Annual Report.

1. A summary of changes to utility leak and emission management practices from January 1, 2021 to December 31, 2021. The report must include a detailed summary of changes, including the reasoning behind each change and an explanation of how each change will reduce methane leaks and emissions.

Response:

Various work was performed by Wild Goose Storage, LLC (WGS) during the 2021 Calendar Year, with the intent of minimizing methane emissions to the environment. WGS continued implementing best practices that were already in place and made efforts to further enhance this initiative.

Implementation of SB 1371 Best Practices is fully described in the 2022 Methane Leak Abatement Compliance Plan, submitted to CPUC in March 2022. The SB 1371 Best Practice's that impacted methane emissions reduction during 2020 and 2021 are as follows:

- BP #1 - Compliance Plan – General impact on reduction. Operations group greater awareness of importance to minimize methane release to atmosphere.
- BP #2 - Methane Potent GHG Policy – General impact on reduction. Operations group greater awareness of importance to minimize methane release to atmosphere.
- BP #3 - Pressure Reduction Policy or Procedure – Operations have attempted to reduce pressure as much as possible before blowing down piping/equipment.
- BP #4 - Scheduling Projects Policy or Procedure – Operations have minimized gas release by running equipment longer before requiring blowdown.
- BP #5 - Methane Evacuation Implementation Procedures – Operations are more consistent with methane evacuation process, having procedures in place.
- BP #7 - Bundling Work Policy – More effort being made to bundle work activities, delaying blowdown, and reducing overall methane volume released.
- BP #9 – Recordkeeping – More detailed record keeping by operations has resulted in greater accuracy for CARB annual reporting and reduction of assumptions.
- BP #11 - Methane Emissions Reductions Policies Training – General impact on reduction. Operations group greater awareness of importance to minimize methane release to atmosphere.

- BP #12 - Knowledge Continuity Training Programs – Staff became directly involved with blowdown of piping/equipment and LDAR during 2019.
- BP #23 - Minimize Fugitive & Vented Methane Emissions – Greater overall effort by operations to proactively inspect equipment for leaks and minimize the amount of volume blown down.

- 2. A list of new graded and ungraded gas leaks discovered, tracked by geographic location in a Geographic Information System (GIS) or best equivalent, by grade, component or equipment, pipe size, schedule and material, pressure, age, date discovered and annual volume of gas leaked for each, by month, from January 1, 2021 through December 31, 2021.**

Response:

See Appendices

- 3. A list of graded and ungraded gas leaks repaired, tracked by geographic location in a Geographic Information System (GIS) or best equivalent, by month, from January 1, 2021 through December 31, 2021. Include the grade, component or equipment, pipe size, schedule and material, pressure, age, date discovered, date of repair, annual volume of gas leaked for each and the number of days from the time the leak was discovered until the date of repair.**

Response:

See Appendices

- 4. A list of ALL open graded and ungraded leaks, regardless of when they were found, tracked by geographic location in a Geographic Information System (GIS) or best equivalent that are being monitored, or are scheduled to be repaired, by month, from January 1, 2021 through December 31, 2021. Include the grade, component or equipment, pipe size, schedule and material, pressure, age, date discovered, scheduled date of repair, and annual volume of gas leaked for each.**

Response:

See Appendices

- 5. System-wide gas leak and emission rate data, along with any data and computer models used in making that calculation, for the 12 months from January 1, 2021 through December 31, 2021.**

Response:

See Appendices

- 6. Calculable or estimated emissions and non-graded gas leaks, as defined in Data Request [Company Name] R15-01-008 2018 Annual Report for the 12 months from January 1, 2021 through December 31, 2021.**

Response:

See Appendices

Wild Goose Storage, LLC, June 15, 2022

**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 - 2022 June Report
Appendix 1 - Rev. 03/30/22**

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, 2021.

Sum total 0

Wild Goose Storage, LLC, June 15, 2022

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 - 2022 June Report

Appendix 1 - Rev. 03/30/22

Notes:

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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, 2021.

Sum total 0

Wild Goose Storage, LLC, June 15, 2022

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 - 2022 June Report

Appendix 1 - Rev. 03/30/22

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 Blowdowns:

ID	Geographic Location	Number of Blowdown Events	Annual Emissions (Mscf)	Explanatory Notes / Comments
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There were no transmission pipeline blowdowns during the period January 1 - December 31, 2021.

Sum total

0

Wild Goose Storage, LLC, June 15, 2022

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 2022 June Report
Appendix 1 - Rev. 03/30/22

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, 2021.

Sum total 0

Wild Goose Storage, LLC, June 15, 2022

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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

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, 2021.

Sum total 0

Wild Goose Storage, LLC, June 15, 2022

**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 2022 June Report
Appendix 1 - Rev. 03/30/22**

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, 2021.

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, 2022

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In Response to Data Request, R15-01-008 2022 June Report
Appendix 7; Rev. 03/30/22

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, 2022
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 2021 June Report
 Appendix 7: Rev. 03/30/21

Note:
 Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste 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 Blowdown 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 "Other" in addition, a measurement of emissions (EF) should be taken during Other mode, to ensure that no emissions are emitting from the system.
 - 4) Alternate emission measurement method, where applicable and measured by the operator.
 - 5) Alternate emission measurement method, where applicable and measured by the operator.
- Blowdown and Isolation values
 - 6) Monitor centrifugal compressor emissions additional columns added for these emissions:
 - Dry seal
 - Wet seal
 - Wet seal degassing vents in Pressurized Life mode

Transmission Compressor Vented Emissions:

Use these EF columns as well as the columns for the Compressor Measurements noted in Columns 9 thru 18 when they are applicable. If 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.

If no measurements are taken in 2022, then enter N/A

The Columns 9 thru 18 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.

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 EF, 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 that EF was measured in the prior year.

ID	Geographic Location	Compressor Type	Prime Mover	Number of Cylinders	Number of Stems	Seal Type	Measurement Frequency	Emission Factor Measurement Date - Pressurized Operations	Operating Mode: Pressurized Operating (Hours)	Operating Mode: Pressurized Life (Hours)	Operating Mode: Depressurized Life (Hours)	Operating Mode: Other (Hours)	Emission Factor: Pressurized Operating (lb/HP)	Emission Factor: Pressurized Life (lb/HP)	Emission Factor: Depressurized Life (lb/HP)	Emission Factor: Other (lb/HP)	Emission Factor: Pressurized Operating Red Packing (lb/HP)	Emission Factor: Pressurized Operating Wet Seal (lb/HP)	Emission Factor: Pressurized Operating Wet Seal Degassing Vents (lb/HP)	Emission Factor: Pressurized Operating Dry Seal (lb/HP)	Emission Factor: Pressurized Life - Red Packing (lb/HP)	Emission Factor: Pressurized Life - Wet Seal (lb/HP)	Emission Factor: Pressurized Life - Dry Seal (lb/HP)	Emission Factor: Pressurized Life - Isolation Valve (lb/HP)	Annual Emissions (lb/yr)	Explanatory Notes / Comments	
Plant #1 C101A	95948	R	C	6	N/A	N/A	A	9/21/2021	1486	0	7274	N/A	348.6	N/A	0.0	N/A	297	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	157.85	red packing, 8D valve, iso valve
Plant #1 C101B	95948	R	C	6	N/A	N/A	A	9/21/2021	557	0	8208	N/A	249.6	N/A	0.0	N/A	131.4	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	137.80	red packing, 8D valve, iso valve
Plant #1 C101A-2	95948	R	C	6	N/A	N/A	A	9/21/2021	2985	0	5775	N/A	97.8	N/A	0.0	N/A	120.6	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	291.93	red packing, 8D valve, iso valve
Plant #1 C101B-2	95948	R	C	6	N/A	N/A	A	9/21/2021	2411	0	6349	N/A	93	N/A	0.0	N/A	120	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	224.10	red packing, 8D valve, iso valve
Plant #1 C101A-3	95948	R	C	6	N/A	N/A	A	9/21/2021	2853	0	5907	N/A	385.2	N/A	0.0	N/A	481.2	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1098.58	red packing, 8D valve, iso valve
Plant #1 C101B-3	95948	R	C	6	N/A	N/A	A	9/21/2021	2764	0	5996	N/A	3	N/A	0.0	N/A	477.6	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.20	red packing, 8D valve, iso valve
Plant #1 C101A-4	95948	R	C	6	N/A	N/A	A	9/21/2021	2800	582	802	N/A	37	0.0	0.0	N/A	138.4	0.0	N/A	N/A	N/A	N/A	N/A	N/A	602.38	red packing, 8D valve, iso valve	
Plant #1 C101B-4	95948	R	C	6	N/A	N/A	A	9/21/2021	2808	5276	876	N/A	27.6	0.0	0.0	N/A	381.2	0.0	N/A	N/A	N/A	N/A	N/A	N/A	71.98	red packing, 8D valve, iso valve	

Sum Total **3281.33**

Wild Goose Storage, LLC, June 15, 2022

**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 2022 June Report

Appendix 7; Rev. 03/30/22

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 Blowdowns:

ID	Geographic Location	Source	Compressor Type	Number of Blowdown Events	Annual Emissions (Mscf)	Explanatory Notes / Comments
Compressor Station	95948	C	R	235	10,066.69	Compressor unit blowdowns when changing the mode of operation
Compressor Station	95948	P	Not applicable	4	493.26	Piping within the compressor station that's blown down to accommodate a mode change
				Sum Total	10,559.95	

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In Response to Data Request, R15-01-008 2022 June Report
Appendix 7; Rev. 03/30/22**

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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 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
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Wild Goose Storage, LLC, June 15, 2022

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Appendix 7; Rev. 03/30/22

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

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):

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Pressure (psi)	Discovery Date (MM/DD/YY)	12/31/2021	1/1/2021	Number of Days Leaking	Emission Factor or Engineering Estimate (Mscf/day)	Emissions (Mscf)	Explanatory Notes / Comments
							Repair Date (MM/DD/YY)	Prior Survey Date (MM/DD/YY)				
1st Quarter Leak Survey												
Plant	95948 V	NA		Grove / Aerial	1350	03/21/21	12/31/21	12/17/20	333	0.3562	118.6146	1 valve - CARB Delay of Repair
Plant	95948 C	NA		Not applicable	1200	03/23/21	04/06/21	12/17/20	63	0.1342	33.8184	Includes 4 components
Plant	95948 V	NA		Grove / Aerial	1200	03/23/21	04/05/21	12/17/20	62	0.3562	353.3504	Includes 16 components
Wellpad	95953 V	NA		Grove	1250	03/24/21	03/31/21	12/17/20	57	0.3562	20.1253	Includes 1 component
											525.91	
2nd Quarter Leak Survey												
Plant	95948 V	NA		Grove / Aerial	1600	05/18/21	05/26/21	03/21/21	38	0.3562	67.678	Includes 5 components
Plant	95948 C	NA		Not applicable	1600	05/18/21	05/24/21	03/21/21	36	0.1342	43.4808	Includes 9 components
Plant	95948 C	NA		Not applicable	1600	05/18/21	12/31/21	03/21/21	257	0.1342	34.4894	1 connector - CARB Delay of Repair
											145.65	
3rd Quarter Leak Survey												
Plant	95948 V	NA		Grove / Aerial	1500	9/20/2021	10/6/2021	5/18/2021	80	0.3562	169.9074	Includes 6 components
Plant	95948 C	NA		Not applicable	1500	9/22/2021	9/24/2021	5/18/2021	67	0.1342	62.4701	Includes 7 components
											232.38	
4th Quarter Leak Survey												
Plant	95948 V	NA		Grove / Aerial	1350	12/14/2021	12/20/2021	9/20/2021	50	0.3562	176.319	Includes 10 components
Plant	95948 C	NA		Not applicable	1350	12/13/2021	12/20/2021	9/20/2021	50	0.1342	60.39	Includes 9 components
											236.709	
											Sum Total	1,140.64

Wild Goose Storage, LLC, June 15, 2022

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 2022 June Report
Appendix 7; Rev. 03/30/22**

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	23,780,703.00	0	N	0	Total volume of gas withdrawn from WGS in 2021 was 47,561,406 Mscf
Plant #3	95948	Glycol	Y	11,890,351.50	0	N	0	Total volume of gas withdrawn from WGS in 2021 was 47,561,406 Mscf
Plant #4	95948	Glycol	Y	11,890,351.50	0	N	0	Total volume of gas withdrawn from WGS in 2021 was 47,561,406 Mscf
Sum Total							0.00	

Wild Goose Storage, LLC, June 15, 2022
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 Appendix 8; Rev. 03/30/22

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

Summary Tables:

System Categories	Emission Source Categories	Fugitive or Vented	For Reference Only: Original 2015 Baseline Emissions (Mscf)	2015 Proposed Adjusted Baseline Emissions (Mscf)	2020 Total Annual Volume of Leaks & Emissions (Mscf)	2020 Total Annual Count of Leak & Emission Items	2021 Total Annual Volume of Leaks & Emissions (Mscf)	2021 Total Annual Count of Leak & Emission Items	Emission Change for Year Over Year Comparison from 2020 to 2021 (Mscf)	Percentage Change for Year Over Year Comparison from 2020 to 2021	Count Change for Year Over Year Comparison from 2020 to 2021	Percentage Change for Year Over Year Comparison from 2020 to 2021	Emission Change for Year Over Year Comparison from 2015 to 2021 (Mscf)	Percentage Change for Year Over Year Comparison from 2015 to 2021	Explanation for Significant Percentage Change for Year Over Year Comparison from 2020 to 2021
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 Emissions	Vented							-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Component Leaks	Fugitive							-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Odorizers	Vented							-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
Transmission M&R Stations	Station Leaks & Emissions	Fugitive							-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Blowdowns	Vented							-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
Transmission Compressor Stations	Compressor Emissions	Vented							-	#DIV/0!	-	#DIV/0!	0	#DIV/0!	
	Compressor Leaks	Fugitive							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Blowdowns	Vented							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Component Emissions	Vented							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Component Leaks	Fugitive							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Storage Tank Leaks & Emissions	Vented							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
Distribution Main & Service Pipelines	Pipeline Leaks	Fugitive							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	All Damages	Fugitive							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Blowdowns	Vented							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Component Emissions	Vented							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Component Leaks	Fugitive							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Station Leaks & Emissions	Fugitive							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
Distribution M&R Stations	All Damages	Fugitive							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Blowdowns	Vented							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Meter Leaks	Fugitive							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
Customer Meters	All Damages	Fugitive							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Vented Emissions	Vented							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Storage Leaks & Emissions	Fugitive	0		13		0		(13)	(100.0%)	-	#DIV/0!	-	#DIV/0!	
Underground Storage	Compressor Emissions	Vented	5847		6190		3281		(2,909)	(47.0%)	-	#DIV/0!	(2,566.00)	(43.9%)	Low emissions packing installed on select compressors
	Compressor Leaks	Fugitive							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Blowdowns	Vented	15491		12061		10560		(1,501)	(12.4%)	-	#DIV/0!	(4,931.00)	(31.8%)	
	Component Emissions	Vented	126		126		126		-	0.0%	-	#DIV/0!	-	0.0%	
	Component Leaks	Fugitive	2539		1286		1141		(145)	(11.3%)	-	#DIV/0!	(1,398.00)	(55.1%)	
	Dehydrator Vent Emissions	Fugitive	0		0		0		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
	Unusual Large Leaks	(Description)							-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	
		Total	24003		19676	NA	15108	NA	(4,568)	-23%	NA	NA	(8,895.00)	(37.1%)	

Wild Goose Storage, LLC, June 15, 2022

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 2022 June Report
Appendix 8; Rev. 03/30/22

System Wide Leak Rate Data

1/1/2021 - 12/31/2021

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	57,722,057	39,729,609	432,401	47,561,406	

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.

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Appendix 8; Rev. 03/30/22

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		