3Q2023 LEAK MONITORING SURVEY REPORT SUMMARY

Transcontinental Gas Pipe Line Company, LLC
Compressor Station 190 – Howard County, Maryland
Part 70 Operating Permit No 24-027-00223

Pursuant to COMAR 26.11.41.07. 07A(1)(c), Transco hereby posts the following quarterly report summary of the leak monitoring survey conducted at Compressor Station 190 in Howard County, Maryland.

The summary report includes the information required in COMAR 26.11.41.07. 07A(1)(a), which includes the following:

(i) Date of the survey;

(ii) A list of each fugitive emission and repair;

(iii) Any deviations from the initial methane monitoring plan or a statement that there were no deviations from the initial methane monitoring plan;

(iv) Number and type of components for which fugitive emissions were detected;

(v) Number and type of difficult-to-monitor fugitive emission components monitored;

(vi) Instrument reading of each fugitive emissions component that requires repair when EPA Method 21 (40 CFR 60, Appendix A-7) is used for monitoring;

(vii) Number and type of fugitive emissions components that were not repaired;

(viii) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair;

(ix) The date of successful repair of the fugitive emissions component; and

(x) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

Each LDAR survey summary report will be posted on the website for a period of at least two years from the date of the survey.

Quarterly Monitoring Survey Report Summary		
Facility	Transco Compressor Station 190	
Regulation(s)	COMAR 26.11.41	
Survey Method(s)	OGI	
Equipment	GFx320	
Report Summary		**Required by**
Survey Date	9/21-22/2023	COMAR 26.11.41.07A.(1)(a)(i)
A List of Each Leak and Repair	See Table 1	COMAR 26.11.41.07A.(1)(a)(ii)
Deviated from Monitoring Plan	No	COMAR 26.11.41.07A.(1)(a)(iii)
Number and Type of Components found to have fugitive emissions.	47	COMAR 26.11.41.07A.(1)(a)(iv)
Number and type of difficult-to-monitor components monitored	NA	COMAR 26.11.41.07A.(1)(a)(v)
Number and type of components not repaired	24	COMAR 26.11.41.07A.(1)(a)(vii) - See Table 1
Number and type of Components placed on Delay of Repair	9	COMAR 26.11.41.07A.(1)(a)(viii) - See Table 1
Repair Date	See Table 1	COMAR 26.11.41.07A.(1)(a)(ix)
Method to Resurvey Repaired Components	See Table 1	COMAR 26.11.41.07A.(1)(a)(x)

NA = Not Applicable

TABLE 1

MONITORING SURVEY SUMMARY

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
AR 26.11.41.07A.	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	09/21/2023	Connector	Connector	Threaded Connection to Bottom of Filter for Bottom West Regulator on Fuel Gas Run, Unit 13.	Not Repaired	-	-	No	
190 Station	09/21/2023	Connector	Grease Zerk	West Grease Fitting on Valve BV-03-489, Unit 13.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/21/2023	Valve	Block Valve	Seat of Fuel Gas BDV XV-3016, Unit 13.	Not Repaired	-	-	No	
190 Station	09/21/2023	Compressor	Compressor	Head End Unloader Seal of Cylinder 1, Unit 12.	Repair Confirmed	10/10/2023	Method 21- Soap Bubbles	No	
190 Station	09/21/2023	Connector	Plug	Threaded Connection of Plug to Vent Valve BV-03-393 on Top Fuel Gas line, Unit 12.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/21/2023	Other	Other	Unloader Seal 116, Unit 11.	Repair Confirmed	9/28/2023	Method 21- Soap Bubbles	No	
190 Station	09/21/2023	Connector	Connector	Upper Tubing Connection to West Lube Line above Head End of Cylinder 1, Unit 11.	Repair Confirmed	9/28/2023	Method 21- Soap Bubbles	No	
190 Station	09/21/2023	Other	Other	Actuator Seal of Automatic BDV, Unit 12.	Not Repaired	-	-	No	
190 Station	09/21/2023	Valve	Block Valve	Packing of Bypass Valve, Unit 12.	Repair Confirmed	10/9/2023	Method 21- Soap Bubbles	No	
190 Station	09/21/2023	Flange	Flange	Middle Flange South of Valve BV-03-372 on Fuel Gas Run Exterior of Building, Unit 11.	Not Repaired	-	-	No	
190 Station	09/21/2023	Connector	Union	Union above Valve BV-02-283 On Fuel Gas Run Exterior of Building, Unit 11.	Not Repaired	-	-	No	
190 Station	09/21/2023	Valve	Block Valve	Packing of Automatic BDV, Unit 11.	Repair Confirmed	10/9/2023	Method 21- Soap Bubbles	No	
190 Station	09/21/2023	Valve	Block Valve	Packing of Suction Loading Valve, Unit 11.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/21/2023	Valve	Regulator Valve	Body Seal of Regulator PCV-0161, Fuel Gas Skid.	Delay of Repair	-	-	Yes	The repair requires parts or equipment that takes longer than 30 days to be ordered and delivered.
190 Station	09/21/2023	Valve	Block Valve	Actuator Seal of Valve CV-99604, Fuel Gas Skid.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/21/2023	Open Ended Line	OEL	OEL below Tee on Shared PSV line in between Valves CV-99604 and CV-99602.	Delay of Repair	-	-	Yes	The repair requires a vent blowdown to complete.
190 Station	09/21/2023	Connector	Connector	Threaded Connection to Top of 3 Way Gate Valve LG-7103 below Site Glass, Fuel Gas Skid.	Repair Confirmed	9/28/2023	Method 21- Soap Bubbles	No	
190 Station	09/21/2023	Valve	Block Valve	Packing of Discharge Valve, Unit 1.	Not Repaired	-	-	No	
190 Station	09/21/2023	Pressure Relief D	Pressure Relief Dev	Seat of Discharge PRV, Unit 4.	Delay of Repair	-	-	Yes	The repair requires parts or equipment that takes longer than 30 days to be ordered and delivered.
190 Station	09/21/2023	Valve	Block Valve	Packing of Bypass Valve, Unit 5.	Not Repaired	-	-	No	
190 Station	09/21/2023	Connector	Connector	West Threaded Connection above Discharge PRV, Unit 8.	Not Repaired	-	-	No	
190 Station	09/21/2023	Valve	Block Valve	Packing of Bypass Valve, Unit 8.	Not Repaired	-	-	No	
190 Station	09/21/2023	Valve	Block Valve	Packing of Discharge Valve, Unit 9.	Not Repaired	-	-	No	
190 Station	09/21/2023	Connector	Connector	West Threaded Connection above Discharge PRV, Unit 9.	Delay of Repair	-	-	Yes	The repair requires a vent blowdown to complete.
190 Station	09/21/2023	Connector	Connector	West Threaded Connection above Discharge PRV, Unit 10.	Delay of Repair	-	-	Yes	The repair requires parts or equipment that takes longer than 30 days to be ordered and delivered.

TABLE 1

MONITORING SURVEY SUMMARY

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
AR 26.11.41.07A.	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	09/21/2023	Valve	Block Valve	Packing of Bypass Valve, Unit 10.	Not Repaired	-	-	No	
190 Station	09/22/2023	Valve	Block Valve	Packing of Fuel Gas Valve BV-03-035, Metering Station.	Delay of Repair	-	-	Yes	The repair requires a facility shutdown to complete.
190 Station	09/22/2023	Connector	Plug	Threaded Connection of Plug to Filter East of Fuel Gas Regulator PCV-7003, Metering Building.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Other	Other	Unloader Seal 104, Unit 3.	Repair Confirmed	10/3/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Other	Other	Unloader Seal 304, Unit 4.	Repair Confirmed	10/3/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Flange	Flange	Seal Between Distance Piece and Cylinder 1, Unit 5.	Delay of Repair	-	-	Yes	The repair requires a vent blowdown to complete.
190 Station	09/22/2023	Other	Other	Unloader Seal 201, Unit 5.	Repair Confirmed	10/10/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Flange	Flange	Head End Flange of Cylinder 3, Unit 5.	Repair Confirmed	10/10/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Other	Other	Unloader Seal 201, Unit 7.	Repair Confirmed	10/4/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Valve	Block Valve	Packing of Outlet Block Valve for Scrubber 4.	Repair Confirmed	10/10/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Connector	Grease Zerk	East Grease Fitting on North side of Valve CV-98601.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Connector	Connector	North Threaded Connection of South Tee on Power Gas Line to Valve S7.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Connector	Connector	Top Threaded Connection to Drain Valve below Welker Filter on Power Gas Line to Valve S7.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Connector	Cap	Yale Cap above Valve B-1, South of Valve MD-19.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Connector	Connector	Threaded Connection of Plug above Vent Valve BV-1P-200, South of Valve MD-19.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Valve	Block Valve	Packing of Valve MD-19.	Not Repaired	-	-	No	
190 Station	09/22/2023	Valve	Block Valve	Packing of Valve 190B0.	Delay of Repair	-	-	Yes	The repair requires a vent blowdown to complete.
190 Station	09/22/2023	Open Ended Line	OEL	OEL of Station Yard Blowdown Stack.	Not Repaired	-	-	No	
190 Station	09/22/2023	Valve	Block Valve	Seat of EBD Valve S4.	Repair Completed, Pending Confirmation	-	-	No	
190 Station	09/22/2023	Connector	Connector	Threaded Connection of Plug to Valve, West of Valve MD43B.	Repair Confirmed	9/27/2023	Method 21- Soap Bubbles	No	
190 Station	09/22/2023	Connector	Grease Zerk	Top Grease Fitting on North side of BDV S-14.	Delay of Repair	-	-	Yes	The repair requires a vent blowdown to complete.
190 Station	09/22/2023	Valve	Block Valve	Seat of BDV S-12.	Repair Completed, Pending Confirmation	-	-	No	

2Q2023 LEAK MONITORING SURVEY REPORT SUMMARY

Transcontinental Gas Pipe Line Company, LLC
Compressor Station 190 – Howard County, Maryland
Part 70 Operating Permit No 24-027-00223

Pursuant to COMAR 26.11.41.07. 07A(1)(c), Transco hereby posts the following quarterly report summary of the leak monitoring survey conducted at Compressor Station 190 in Howard County, Maryland.

The summary report includes the information required in COMAR 26.11.41.07. 07A(1)(a), which includes the following:

(i) Date of the survey;

(ii) A list of each fugitive emission and repair;

(iii) Any deviations from the initial methane monitoring plan or a statement that there were no deviations from the initial methane monitoring plan;

(iv) Number and type of components for which fugitive emissions were detected;

(v) Number and type of difficult-to-monitor fugitive emission components monitored;

(vi) Instrument reading of each fugitive emissions component that requires repair when EPA Method 21 (40 CFR 60, Appendix A-7) is used for monitoring;

(vii) Number and type of fugitive emissions components that were not repaired;

(viii) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair;

(ix) The date of successful repair of the fugitive emissions component; and

(x) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

Each LDAR survey summary report will be posted on the website for a period of at least two years from the date of the survey.

Quarterly Monitoring Survey Report Summary		
Facility	Transco Compressor Station 190	
Regulation(s)	COMAR 26.11.41	
Survey Method(s)	OGI	
Equipment	GF320	
Report Summary		**Required by**
Survey Date	6/20/2023	COMAR 26.11.41.07A.(1)(a)(i)
A List of Each Leak and Repair	See Table 1	COMAR 26.11.41.07A.(1)(a)(ii)
Deviated from Monitoring Plan	No	COMAR 26.11.41.07A.(1)(a)(iii)
Number and Type of Components found to have fugitive emissions.	16	COMAR 26.11.41.07A.(1)(a)(iv)
Number and type of difficult-to-monitor components monitored	NA	COMAR 26.11.41.07A.(1)(a)(v)
Number and type of components not repaired	3	COMAR 26.11.41.07A.(1)(a)(vii) - See Table 1
Number and type of Components placed on Delay of Repair	3	COMAR 26.11.41.07A.(1)(a)(viii) - See Table 1
Repair Date	See Table 1	COMAR 26.11.41.07A.(1)(a)(ix)
Method to Resurvey Repaired Components	See Table 1	COMAR 26.11.41.07A.(1)(a)(x)

NA = Not Applicable

TABLE 1
MONITORING SURVEY SUMMARY

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	06/20/2023	Compressor	Pocket Flange	Pocket Cap on Throw 1, Unit 4	Repair Confirmed	6/29/2023	Method 21- Soap Bubbles	No	
190 Station	06/20/2023	Compressor	Compressor	Head End Flange on Throw 3, Unit 7	Repair Confirmed	7/5/2023	Method 21- Soap Bubbles	No	
190 Station	06/20/2023	Compressor	Pocket Flange	Pocket Cap on Throw 2, Unit 7	Repair Confirmed	7/6/2023	Method 21- Soap Bubbles	No	
190 Station	06/20/2023	Compressor	Pocket Flange	Pocket Cap on Throw 2, Unit 8	Repair Confirmed	7/10/2023	Method 21- Soap Bubbles	No	
190 Station	06/20/2023	Connector	Fitted Connection	Threaded Connection East of Throw 1, Unit 9	Repair Confirmed	7/5/2023	Method 21- Soap Bubbles	No	
190 Station	06/20/2023	Connector	Fitted Connection	North Threaded Connection of Valve DCV-0501. In Yard East of Unit 4	Repair Confirmed	6/23/2023	Method 21- Soap Bubbles	No	
190 Station	06/21/2023	Valve	Ball Valve	Seat of Unit 3 Suction Valve.	Repair Confirmed	6/23/2023	Method 21- Soap Bubbles	No	
190 Station	06/21/2023	Connector	Fitted Connection	Threaded Connection to Manifold on Unit 1 Discharge Line outside of	Repair Confirmed	7/6/2023	Method 21- Soap Bubbles	No	
190 Station	06/21/2023	Valve	Ball Valve	Seat of Valve 190D0	Repair Confirmed	7/5/2023	Method 21- Soap Bubbles	No	
190 Station	06/21/2023	Connector	Fitted Connection	Threaded Connection on Side of Valve 190B0.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	06/21/2023	Connector	Hatch Seal	Head End Seal below Valve MD 86B.	Repair Confirmed	6/28/2023	Method 21- Soap Bubbles	No	
190 Station	06/21/2023	Compressor	Pocket Flange	Plug on Throw 1, Unit 11	Repair Confirmed	7/11/2023	Method 21- Soap Bubbles	No	
190 Station	06/21/2023	Flange	Flange	Flange Connection between Throws 4 and 6, Unit 12	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	06/21/2023	Flange	Flange	Flange Connection on West side of Throw 1, Unit 12.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	06/21/2023	Valve	Ball Valve	Plug above Vent Valve on Discharge Line, Unit 11.	Repair Confirmed	6/21/2023	Method 21- Soap Bubbles	No	
190 Station	06/21/2023	Connector	Grease Zerk	Grease Fitting below Valve MD 39. Northwest Yard.	Repair Confirmed	7/5/2023	Method 21- Soap Bubbles	No	

1Q2023 LEAK MONITORING SURVEY REPORT SUMMARY

Transcontinental Gas Pipe Line Company, LLC
Compressor Station 190 – Howard County, Maryland
Part 70 Operating Permit No 24-027-00223

Pursuant to COMAR 26.11.41.07. 07A(1)(c), Transco hereby posts the following quarterly report summary of the leak monitoring survey conducted at Compressor Station 190 in Howard County, Maryland.

The summary report includes the information required in COMAR 26.11.41.07. 07A(1)(a), which includes the following:

(i) Date of the survey;

(ii) A list of each fugitive emission and repair;

(iii) Any deviations from the initial methane monitoring plan or a statement that there were no deviations from the initial methane monitoring plan;

(iv) Number and type of components for which fugitive emissions were detected;

(v) Number and type of difficult-to-monitor fugitive emission components monitored;

(vi) Instrument reading of each fugitive emissions component that requires repair when EPA Method 21 (40 CFR 60, Appendix A-7) is used for monitoring;

(vii) Number and type of fugitive emissions components that were not repaired;

(viii) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair;

(ix) The date of successful repair of the fugitive emissions component; and

(x) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

Each LDAR survey summary report will be posted on the website for a period of at least two years from the date of the survey.

Quarterly Monitoring Survey Report Summary		
Facility	Transco Compressor Station 190	
Regulation(s)	COMAR 26.11.41	
Survey Method(s)	OGI	
Equipment	GF300	
Report Summary		**Required by**
Survey Date	2/20/2023	COMAR 26.11.41.07A.(1)(a)(i)
A List of Each Leak and Repair	See Table 1	COMAR 26.11.41.07A.(1)(a)(ii)
Deviated from Monitoring Plan	No	COMAR 26.11.41.07A.(1)(a)(iii)
Number and Type of Components found to have fugitive emissions.	24	COMAR 26.11.41.07A.(1)(a)(iv)
Number and type of difficult-to-monitor components monitored	NA	COMAR 26.11.41.07A.(1)(a)(v)
Number and type of components not repaired	11	COMAR 26.11.41.07A.(1)(a)(vii) - See Table 1
Number and type of Components placed on Delay of Repair	11	COMAR 26.11.41.07A.(1)(a)(viii) - See Table 1
Repair Date	See Table 1	COMAR 26.11.41.07A.(1)(a)(ix)
Method to Resurvey Repaired Components	See Table 1	COMAR 26.11.41.07A.(1)(a)(x)

NA = Not Applicable

TABLE 1
MONITORING SURVEY SUMMARY

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	02/20/2023	Connector	Hatch Seal	Middle bolt on top West distance piece plate, Unit 5.	Repair Confirmed	2/27/2023	Method 21- Soap Bubbles	No	
190 Station	02/20/2023	Connector	Screwed Connection	Threading of West tubing fitting on Northwest unloaded of cylinder 2, U	Repair Confirmed	2/27/2023	Method 21- Soap Bubbles	No	
190 Station	02/20/2023	Other	Other	Actuator seal of valve MD-38, Northwest side of yard.	Repair Confirmed	3/9/2023	OGI	No	
190 Station	02/20/2023	Connector	Screwed Connection	North threaded connection of South ball valve to PDI-1201A, Unit 11 ar	Repair Confirmed	2/27/2023	Method 21- Soap Bubbles	No	
190 Station	02/20/2023	Valve	Block Valve	Lower stem seal of bypass valve, Unit 1.	Repair Confirmed	3/9/2023	OGI	No	
190 Station	02/20/2023	Valve	Control Valve	Packing of discharge valve, Unit 4.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	02/20/2023	Valve	Ball Valve	Packing of suction loading valve, Unit 4.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	02/20/2023	Valve	Control Valve	Packing of suction valve, Unit 5.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	02/20/2023	Connector	Fitted Connection	Tubing to Middle East coupling on top East side of cylinder 2, Unit 11.	Repair Confirmed	2/27/2023	Method 21- Soap Bubbles	No	
190 Station	02/20/2023	Valve	Control Valve	Packing of discharge valve, Unit 8.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	02/20/2023	Valve	Control Valve	Packing of bypass valve, Unit 8.	Repair Confirmed	3/9/2023	OGI	No	
190 Station	02/20/2023	Valve	Control Valve	Packing of discharge valve, Unit 9.	Repair Confirmed	3/9/2023	OGI	No	
190 Station	02/20/2023	Pressure Relief D	Pressure Relief Device	Seat of PSV-1004, Unit 10.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	02/20/2023	Pressure Relief D	Pressure Relief Device	Seat of PSV-0204, Unit 2.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	02/20/2023	Pressure Relief D	Pressure Relief Device	Seat of PSV-0104, Unit 1.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	02/20/2023	Open Ended Line	OEL	OEL from pilot tubing on ESD2-0203, West side of compressor building	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	02/20/2023	Open Ended Line	OEL	OEL from pilot tubing on ESD2-0205, West side of compressor building	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	02/20/2023	Open Ended Line	OEL	OEL from overhead 2 inch ball valve at roof of Unit 11 and 12 building,	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	02/20/2023	Valve	Block Valve	Packing of inlet valve GV-02-055 on far South scrubber, scrubber area.	Repair Confirmed	3/9/2023	OGI	No	

TABLE 1
MONITORING SURVEY SUMMARY

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	02/20/2023	Valve	Block Valve	Packing of inlet valve GV-02-108 on West side of far North scrubber, sc	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	02/20/2023	Valve	Block Valve	Grease fitting on fuel gas scrubber valve PL-03-010, North side of scrub	Repair Confirmed	2/27/2023	Method 21- Soap Bubbles	No	
190 Station	02/20/2023	Connector	Screwed Connection	Plug of vent valve ND-1P-111 to hammer cap above valve B-2, Northwe	Repair Confirmed	2/27/2023	Method 21- Soap Bubbles	No	
190 Station	02/20/2023	Valve	Ball Valve	Packing of valve below vent valve South of 190B2, Northwest side of ya	Repair Confirmed	2/27/2023	Method 21- Soap Bubbles	No	
190 Station	02/20/2023	Other	Other	Internal seal of actuator on valve MD39, Northwest side of yard.	Repair Confirmed	3/9/2023	OGI	No	

4Q2022 LEAK MONITORING SURVEY REPORT SUMMARY

Transcontinental Gas Pipe Line Company, LLC
Compressor Station 190 – Howard County, Maryland
Part 70 Operating Permit No 24-027-00223

Pursuant to COMAR 26.11.41.07. 07A(1)(c), Transco hereby posts the following quarterly report summary of the leak monitoring survey conducted at Compressor Station 190 in Howard County, Maryland.

The summary report includes the information required in COMAR 26.11.41.07. 07A(1)(a), which includes the following:

(i) Date of the survey;

(ii) A list of each fugitive emission and repair;

(iii) Any deviations from the initial methane monitoring plan or a statement that there were no deviations from the initial methane monitoring plan;

(iv) Number and type of components for which fugitive emissions were detected;

(v) Number and type of difficult-to-monitor fugitive emission components monitored;

(vi) Instrument reading of each fugitive emissions component that requires repair when EPA Method 21 (40 CFR 60, Appendix A-7) is used for monitoring;

(vii) Number and type of fugitive emissions components that were not repaired;

(viii) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair;

(ix) The date of successful repair of the fugitive emissions component; and

(x) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

Each LDAR survey summary report will be posted on the website for a period of at least two years from the date of the survey.

Quarterly Monitoring Survey Report Summary		
Facility	Transco Compressor Station 190	
Regulation(s)	COMAR 26.11.41	
Survey Method(s)	OGI	
Equipment	GFX320	
Report Summary		**Required by**
Survey Date	12/1/2022	COMAR 26.11.41.07A.(1)(a)(i)
A List of Each Leak and Repair	See Table 1	COMAR 26.11.41.07A.(1)(a)(ii)
Deviated from Monitoring Plan	No	COMAR 26.11.41.07A.(1)(a)(iii)
Number and Type of Components found to have fugitive emissions.	31	COMAR 26.11.41.07A.(1)(a)(iv)
Number and type of difficult-to-monitor components monitored	NA	COMAR 26.11.41.07A.(1)(a)(v)
Number and type of components not repaired	9	COMAR 26.11.41.07A.(1)(a)(vii) - See Table 1
Number and type of Components placed on Delay of Repair	9	COMAR 26.11.41.07A.(1)(a)(viii) - See Table 1
Repair Date	See Table 1	COMAR 26.11.41.07A.(1)(a)(ix)
Method to Resurvey Repaired Components	See Table 1	COMAR 26.11.41.07A.(1)(a)(x)

NA = Not Applicable

TABLE 1
MONITORING SURVEY SUMMARY

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	12/01/2022	Open Ended Line	OEL	OEL on Main Line A and B Block Valve Control.	Repair Confirmed	12/6/2022	Method 21- Soap Bubbles	No	
190 Station	12/01/2022	Open Ended Line	OEL	OEL on Main Line C and D Block Valve Control.	Repair Confirmed	12/6/2022	Method 21- Soap Bubbles	No	
190 Station	12/01/2022	Compressor	Compressor	Seal Between Distance Piece and Cylinder 1, Main Unit 1.	DOR - Repair Confirmed	12/9/2022	Method 21- Soap Bubbles	No	
190 Station	12/01/2022	Compressor	Compressor	Seal Between Distance Piece and Cylinder 3, Main Unit 1.	DOR - Repair Confirmed	12/9/2022	Method 21- Soap Bubbles	No	
190 Station	12/01/2022	Compressor	Adjustable Pocket Sten	Seal of Unloader 111, Main Unit 2.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2022	Compressor	Compressor	Seal Between Distance Piece and Cylinder 1, Main Unit 2.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2022	Compressor	Adjustable Pocket Sten	Seal of Unloader 214, Main Unit 3.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2022	Compressor	Adjustable Pocket Sten	Seal of Unloader 311, Main Unit 8.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2022	Valve	Control Valve	Seat of EBD-4002 Suction Side Gates, Northwest Inlet/Discharge Piping.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Connector	Screwed Connection	Threaded Connection on Valve Above Yale Cap Above Valve B1, MD42 I	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Valve	Control Valve	Packing of Valve MD-39. (Actuator is Vented and leak is coming from Va	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2022	Valve	Block Valve	Packing of Valve 190B2, Northwest Inlet/Discharge Piping.	DOR - Repair Confirmed	12/28/2022	Method 21- Soap Bubbles	No	
190 Station	12/01/2022	Other	Other	Actuator Seal on 190A1, Northwest Inlet/Discharge Piping.	Repair Confirmed	12/28/2022	Method 21- Soap Bubbles	No	
190 Station	12/01/2022	Valve	Control Valve	Packing of Valve MD-38, Northwest Inlet/Discharge Piping.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	12/01/2022	Connector	Screwed Connection	Threaded Connection to Rosemount Transmitter, Top North Fuel Skid R	Repair Confirmed	12/14/2022	Method 21- Soap Bubbles	No	
190 Station	12/01/2022	Valve	Gate Valve	Packing of WKM Valve on East Side of Scrubber 4.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Valve	Block Valve	Packing of Valve GV-02-050, South Side of Scrubbers.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Valve	Gate Valve	Packing of Valve GV-1P-04.	Repair Confirmed	12/8/2022	Method 21- Soap Bubbles	No	
190 Station	12/01/2022	Connector	Plug	Threaded Connection of Plug on top of Valve Above B2, 190A Loop Line	Repair Confirmed	12/8/2022	Method 21- Soap Bubbles	No	

TABLE 1
MONITORING SURVEY SUMMARY

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	12/01/2022	Valve	Control Valve	Packing of Suction Valve, Main Unit 1.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Valve	Control Valve	Packing of Discharge Valve, Main Unit 2.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Valve	Control Valve	Packing of Suction Valve, Main Unit 2.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Valve	Control Valve	Packing of Discharge Valve, Main Unit 3.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Valve	Control Valve	Packing of Discharge Valve, Main Unit 5.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Valve	Control Valve	Packing of Suction Valve, Main Unit 5.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Valve	Control Valve	Packing of Discharge Valve, Main Unit 6.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Connector	Grease Zerk	Northwest Grease Fitting on Suction Valve, Main Unit 6.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	12/01/2022	Valve	Control Valve	Packing of Discharge Valve, Main Unit 7.	Repair Confirmed	12/13/2022	OGI	No	
190 Station	12/01/2022	Pressure Relief D	Pressure Relief Device	Body Seal of PRV, Main Unit 8.	Delay of Repair			Yes	Requires vent blowdown
190 Station	12/01/2022	Pressure Relief D	Pressure Relief Device	Body Seal of PRV, Main Unit 5.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2022	Other	Other	Seal of Actuator on Bypass Valve, Main Unit 1.	Repair Confirmed	12/13/2022	OGI	No	

3Q2022 LEAK MONITORING SURVEY REPORT SUMMARY

Transcontinental Gas Pipe Line Company, LLC
Compressor Station 190 – Howard County, Maryland
Part 70 Operating Permit No 24-027-00223

Pursuant to COMAR 26.11.41.07. 07A(1)(c), Transco hereby posts the following quarterly report summary of the leak monitoring survey conducted at Compressor Station 190 in Howard County, Maryland.

The summary report includes the information required in COMAR 26.11.41.07. 07A(1)(a), which includes the following:

(i) Date of the survey;

(ii) A list of each fugitive emission and repair;

(iii) Any deviations from the initial methane monitoring plan or a statement that there were no deviations from the initial methane monitoring plan;

(iv) Number and type of components for which fugitive emissions were detected;

(v) Number and type of difficult-to-monitor fugitive emission components monitored;

(vi) Instrument reading of each fugitive emissions component that requires repair when EPA Method 21 (40 CFR 60, Appendix A-7) is used for monitoring;

(vii) Number and type of fugitive emissions components that were not repaired;

(viii) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair;

(ix) The date of successful repair of the fugitive emissions component; and

(x) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

Each LDAR survey summary report will be posted on the website for a period of at least two years from the date of the survey.

Quarterly Monitoring Survey Report Summary		
Facility	Transco Compressor Station 190	
Regulation(s)	COMAR 26.11.41	
Survey Method(s)	OGI	
Equipment	GFX320	
Report Summary		**Required by**
Survey Date	8/29-30/2022	COMAR 26.11.41.07A.(1)(a)(i)
A List of Each Leak and Repair	See Table 1	COMAR 26.11.41.07A.(1)(a)(ii)
Deviated from Monitoring Plan	No	COMAR 26.11.41.07A.(1)(a)(iii)
Number and Type of Components found to have fugitive emissions.	39	COMAR 26.11.41.07A.(1)(a)(iv)
Number and type of difficult-to-monitor components monitored	NA	COMAR 26.11.41.07A.(1)(a)(v)
Number and type of components not repaired	17	COMAR 26.11.41.07A.(1)(a)(vii) - See Table 1
Number and type of Components placed on Delay of Repair	20	COMAR 26.11.41.07A.(1)(a)(viii) - See Table 1
Repair Date	See Table 1	COMAR 26.11.41.07A.(1)(a)(ix)
Method to Resurvey Repaired Components	See Table 1	COMAR 26.11.41.07A.(1)(a)(x)

NA = Not Applicable

TABLE 1
Monitoring Survey Summary

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	08/29/2022	Valve	Block Valve	Packing of MD-38.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/29/2022	Valve	Control Valve	Seat of Station Discharge BDV XV-9900.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	08/29/2022	Valve	Block Valve	Packing of Valve M-1 on North End of Domestic Fuel Gas Metering Building.	Not Repaired			No	
190 Station	08/29/2022	Connector	Connector	Threaded Connection of West Pilot to Manifold on Discharge PRV, Unit 1.	DOR - Repair Confirmed	9/7/2022	Method 21-Soap Bubbles	No	
190 Station	08/29/2022	Valve	Block Valve	Packing of Bypass Valve, Unit 2.	Not Repaired			No	
190 Station	08/29/2022	Valve	Needle Valve	Packing of South Pressure Transmitting Needle Block Valve Southeast of Unit 3's Discharge PRV.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/29/2022	Valve	Needle Valve	Threaded connection of Valve of North Middle Pressure Transmitting Needle Block Valve Southeast of Unit 3's Discharge PRV.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	08/29/2022	Valve	Block Valve	Packing of Discharge Valve, Unit 4.	Not Repaired			No	
190 Station	08/29/2022	Connector	Connector	Threaded Connection of West Pilot to Manifold on Discharge PRV, Unit 8.	Repair Confirmed	9/12/2022	Method 21-Soap Bubbles	No	
190 Station	08/29/2022	Valve	Block Valve	Packing of Discharge Valve, Unit 8.	Not Repaired			No	
190 Station	08/29/2022	Valve	Block Valve	Packing of Bypass Valve, Unit 8.	Not Repaired			No	
190 Station	08/29/2022	Connector	Connector	Threaded Connection of West Pilot to Manifold on Discharge PRV, Unit 9.	Not Repaired			No	
190 Station	08/29/2022	Compressor	Adjustable Pocket Ster	Unloader Seal 114 (#6), Unit 11.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/29/2022	Valve	Control Valve	Seat of Automatic Fuel Gas BDV on Inlet Line to Unit 13's Exterior FG Scrubber.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/29/2022	Connector	Hatch Seal	Hatch Seal below Insultion Cover on Unit 13's Domestic FG Scrubber.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/29/2022	Connector	Connector	Tubing to Coupling below Rosemount Transmitter PT-XX31/PT4430 on Measurement Panel, Unit 13.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/29/2022	Connector	Connector	West Threaded Connection of Seal Gas Inlet Ball Valve on Northwest Corner of Compressor Skid, Unit 13.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/29/2022	Connector	Plug	Plug below Power Gas Filter on BDV, Unit 13.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/29/2022	Valve	Control Valve	Seat of EBD-4001.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.

TABLE 1
Monitoring Survey Summary

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	08/29/2022	Connector	Connector	Bottom Threaded Connection of Union Downstream of Power Gas Ball Valve BV-1P-186 adjacent to Valve MD-39.	Not Repaired			No	
190 Station	08/29/2022	Connector	Plug	East Plug of Selector Valve on Valve MD-39.	Not Repaired			No	
190 Station	08/29/2022	Valve	Block Valve	Packing of Valve MD-39.	Not Repaired			No	
190 Station	08/29/2022	Connector	Connector	North Threaded Connection of Union Downstream of Ball Valve BV-1P-229, Southwest Pig Trap Area.	Not Repaired			No	
190 Station	08/29/2022	Valve	Control Valve	Actuator Seal on Suction Blowdown EBD-103, Southwest Pig Trap Area.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	08/29/2022	Connector	Hammer Union	Yale Cap above B2 on Jump Line of Valve 190C0.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	08/29/2022	Valve	Gate Valve	Packing of 6" Standalone WKM East of Valve 190S1.	Not Repaired			No	
190 Station	08/29/2022	Valve	Block Valve	Packing of Valve 190S1.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	08/29/2022	Connector	Grease Zerk	Bottom East Grease Fitting on Discharge Header ESD Valve CV-98601.	Not Repaired			No	
190 Station	08/29/2022	Valve	Gate Valve	Packing of North Capped Outlet Block Valve on Out-of-Service Scrubbers.	Not Repaired			No	
190 Station	08/29/2022	Valve	Control Valve	Seat of EBD Valve EBD-4000 South Discharge Header. (DOR on Target Track)	Not Repaired			No	
190 Station	08/29/2022	Connector	Union	Union on Power/Control Gas Line to EBD-104.	Not Repaired			No	
190 Station	08/30/2022	Valve	Block Valve	Packing of Discharge Valve, Unit 9.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	08/30/2022	Pressure Relief D	Pressure Relief Device	Seat of Discharge PRV-2863, Unit 11.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	08/30/2022	Compressor	Adjustable Pocket Ster	Head End Unloader Seal of Cylinder 3, Unit 3.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/30/2022	Compressor	Adjustable Pocket Ster	Head End Unloader Seal of Cylinder 3, Unit 4.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/30/2022	Compressor	Adjustable Pocket Ster	Head End Unloader Seal of Cylinder 3, Unit 5.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	08/30/2022	Compressor	Adjustable Pocket Ster	Unloader Seal 201, Unit 7.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	08/30/2022	Compressor	Adjustable Pocket Ster	Unloader Seal 111, Unit 8.	Not Repaired			No	
190 Station	08/30/2022	Valve	Block Valve	Packing of Discharge Valve, Unit 9.	Not Repaired			No	

2Q2022 LEAK MONITORING SURVEY REPORT SUMMARY

Transcontinental Gas Pipe Line Company, LLC
Compressor Station 190 – Howard County, Maryland
Part 70 Operating Permit No 24-027-00223

Pursuant to COMAR 26.11.41.07. 07A(1)(c), Transco hereby posts the following quarterly report summary of the leak monitoring survey conducted at Compressor Station 190 in Howard County, Maryland.

The summary report includes the information required in COMAR 26.11.41.07. 07A(1)(a), which includes the following:

(i) Date of the survey;

(ii) A list of each fugitive emission and repair;

(iii) Any deviations from the initial methane monitoring plan or a statement that there were no deviations from the initial methane monitoring plan;

(iv) Number and type of components for which fugitive emissions were detected;

(v) Number and type of difficult-to-monitor fugitive emission components monitored;

(vi) Instrument reading of each fugitive emissions component that requires repair when EPA Method 21 (40 CFR 60, Appendix A-7) is used for monitoring;

(vii) Number and type of fugitive emissions components that were not repaired;

(viii) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair;

(ix) The date of successful repair of the fugitive emissions component; and

(x) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

Each LDAR survey summary report will be posted on the website for a period of at least two years from the date of the survey.

Quarterly Monitoring Survey Report Summary		
Facility	Transco Compressor Station 190	
Regulation(s)	COMAR 26.11.41	
Survey Method(s)	OGI	
Equipment	GFX320	
Report Summary		**Required by**
Survey Date	4/29/2022	COMAR 26.11.41.07A.(1)(a)(i)
A List of Each Leak and Repair	See Table 1	COMAR 26.11.41.07A.(1)(a)(ii)
Deviated from Monitoring Plan	No	COMAR 26.11.41.07A.(1)(a)(iii)
Number and Type of Components found to have fugitive emissions.	12	COMAR 26.11.41.07A.(1)(a)(iv)
Number and type of difficult-to-monitor components monitored	NA	COMAR 26.11.41.07A.(1)(a)(v)
Number and type of components not repaired	6	COMAR 26.11.41.07A.(1)(a)(vii) - See Table 1
Number and type of Components placed on Delay of Repair	6	COMAR 26.11.41.07A.(1)(a)(viii) - See Table 1
Repair Date	See Table 1	COMAR 26.11.41.07A.(1)(a)(ix)
Method to Resurvey Repaired Components	See Table 1	COMAR 26.11.41.07A.(1)(a)(x)

NA = Not Applicable

TABLE 1
Monitoring Survey Summary

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	04/29/2022	Connector	Connector	Threaded Connection of Ball Valve on Unit 2 Cylinder 2.	Repair Confirmed	4/29/2022	OGI	No	
190 Station	04/29/2022	Flange	Flange	Unloader Flange Seal 111, Unit 2 Cylinder 1.	Delay of Repair			Yes	The repair requires parts or equipment that takes longer than 30 days to be ordered and delivered.
190 Station	04/29/2022	Flange	Flange	Unloader Flange Seal, Unit 2 Cylinder 2.	Delay of Repair			Yes	The repair requires parts or equipment that takes longer than 30 days to be ordered and delivered.
190 Station	04/29/2022	Flange	Flange	Head Seal of Unit 3 Cylinder 3.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	04/29/2022	Compressor	Compressor	Head End Seal, Unit 4 Cylinder 3.	Delay of Repair			Yes	The repair requires parts or equipment that takes longer than 30 days to be ordered and delivered.
190 Station	04/29/2022	Valve	Ball Valve	Seal of Suction Bypass Valve to Unit 5.	Repair Confirmed	5/25/2022	Method 21- Soap Bubbles	No	
190 Station	04/29/2022	Valve	Control Valve	Packing of Globe Valve DCV-0901 on Discharge Line from Unit 9.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	04/29/2022	Valve	Control Valve	Packing of Globe Valve BCV-0902 on Bypass Line from Unit 9.	Repair Confirmed	5/25/2022	Method 21- Soap Bubbles	No	
190 Station	04/29/2022	Connector	Fitted Connection	Plug of Needle Valve Above B1 South if MD-42.	Repair Confirmed	5/10/2022	Method 21- Soap Bubbles	No	
190 Station	04/29/2022	Valve	Control Valve	Seat of Valve EBD on S4 on Emergency Blowdown Stack.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	04/29/2022	Connector	Fitted Connection	Yale Cap North of 190C0, above Valve B2.	Repair Confirmed	5/9/2022	Method 21- Soap Bubbles	No	
190 Station	04/29/2022	Connector	Fitted Connection	Threaded Connection on EBD Control Gas Supply Line to EBD-400.	Repair Confirmed	5/18/2022	Method 21- Soap Bubbles	No	

1Q2022 LEAK MONITORING SURVEY REPORT SUMMARY

Transcontinental Gas Pipe Line Company, LLC
Compressor Station 190 – Howard County, Maryland
Part 70 Operating Permit No 24-027-00223

Pursuant to COMAR 26.11.41.07. 07A(1)(c), Transco hereby posts the following quarterly report summary of the leak monitoring survey conducted at Compressor Station 190 in Howard County, Maryland.

The summary report includes the information required in COMAR 26.11.41.07. 07A(1)(a), which includes the following:

(i) Date of the survey;

(ii) A list of each fugitive emission and repair;

(iii) Any deviations from the initial methane monitoring plan or a statement that there were no deviations from the initial methane monitoring plan;

(iv) Number and type of components for which fugitive emissions were detected;

(v) Number and type of difficult-to-monitor fugitive emission components monitored;

(vi) Instrument reading of each fugitive emissions component that requires repair when EPA Method 21 (40 CFR 60, Appendix A-7) is used for monitoring;

(vii) Number and type of fugitive emissions components that were not repaired;

(viii) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair;

(ix) The date of successful repair of the fugitive emissions component; and

(x) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

Each LDAR survey summary report will be posted on the website for a period of at least two years from the date of the survey.

Quarterly Monitoring Survey Report Summary		
Facility	Transco Compressor Station 190	
Regulation(s)	COMAR 26.11.41	
Survey Method(s)	OGI	
Equipment	GFX320	
Report Summary		**Required by**
Survey Date	2/2/2022	COMAR 26.11.41.07A.(1)(a)(i)
A List of Each Leak and Repair	See Table 1	COMAR 26.11.41.07A.(1)(a)(ii)
Deviated from Monitoring Plan	No	COMAR 26.11.41.07A.(1)(a)(iii)
Number and Type of Components found to have fugitive emissions.	7	COMAR 26.11.41.07A.(1)(a)(iv)
Number and type of difficult-to-monitor components monitored	NA	COMAR 26.11.41.07A.(1)(a)(v)
Number and type of components not repaired	4	COMAR 26.11.41.07A.(1)(a)(vii) - See Table 1
Number and type of Components placed on Delay of Repair	4	COMAR 26.11.41.07A.(1)(a)(viii) - See Table 1
Repair Date	See Table 1	COMAR 26.11.41.07A.(1)(a)(ix)
Method to Resurvey Repaired Components	See Table 1	COMAR 26.11.41.07A.(1)(a)(x)

NA = Not Applicable

TABLE 1
Monitoring Survey Summary

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	02/02/2022	Connector	Plug	Threading of Plug on Needle Valve Manifold, Top of MD 43B.	Repair Confirmed	2/17/2022	Method 21- Soap Bubbles	No	
190 Station	02/02/2022	Valve	Control Valve	Packing of Control Valve 190BO.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	02/02/2022	Connector	Plug	Main Unit 13 vent valve actuator.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	02/02/2022	Flange	Flange	Flange of Vent Ball Valve, Top of Discharge Line, East of Bettis Control	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	02/02/2022	Connector	Pressure Regulato	Main Unit 11 and 12 pocket gas regulator.	Delay of Repair			Yes	The repair requires parts or equipment that takes longer than 30 days to be ordered and delivered.
190 Station	02/02/2022	Valve	Gate Valve	Body of Gate Valve GV-02-108, West Side of #5 Scrubber.	Repair Confirmed	2/17/2022	Method 21- Soap Bubbles	No	
190 Station	02/02/2022	Compressor	Compressor	Middle Cylinder Head Seal, Unit #2.	Repair Confirmed	2/25/2022	Method 21- Soap Bubbles	No	

4Q2021 LEAK MONITORING SURVEY REPORT SUMMARY

Transcontinental Gas Pipe Line Company, LLC
Compressor Station 190 – Howard County, Maryland
Part 70 Operating Permit No 24-027-00223

Pursuant to COMAR 26.11.41.07. 07A(1)(c), Transco hereby posts the following quarterly report summary of the leak monitoring survey conducted at Compressor Station 190 in Howard County, Maryland.

The summary report includes the information required in COMAR 26.11.41.07. 07A(1)(a), which includes the following:

(i) Date of the survey;

(ii) A list of each fugitive emission and repair;

(iii) Any deviations from the initial methane monitoring plan or a statement that there were no deviations from the initial methane monitoring plan;

(iv) Number and type of components for which fugitive emissions were detected;

(v) Number and type of difficult-to-monitor fugitive emission components monitored;

(vi) Instrument reading of each fugitive emissions component that requires repair when EPA Method 21 (40 CFR 60, Appendix A-7) is used for monitoring;

(vii) Number and type of fugitive emissions components that were not repaired;

(viii) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair;

(ix) The date of successful repair of the fugitive emissions component; and

(x) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

Each LDAR survey summary report will be posted on the website for a period of at least two years from the date of the survey.

Quarterly Monitoring Survey Report Summary		
Facility	Transco Compressor Station 190	
Regulation(s)	COMAR 26.11.41	
Survey Method(s)	OGI	
Equipment	74900189 - GFX320 (Target GFX2)	
Report Summary		**Required by**
Survey Date	12/1/2021	COMAR 26.11.41.07A.(1)(a)(i)
A List of Each Leak and Repair	See Table 1	COMAR 26.11.41.07A.(1)(a)(ii)
Deviated from Monitoring Plan	No	COMAR 26.11.41.07A.(1)(a)(iii)
Number and Type of Components found to have fugitive emissions.	14	COMAR 26.11.41.07A.(1)(a)(iv)
Number and type of difficult-to-monitor components monitored	NA	COMAR 26.11.41.07A.(1)(a)(v)
Number and type of components not repaired	8	COMAR 26.11.41.07A.(1)(a)(vii) - See Table 1
Number and type of Components placed on Delay of Repair	8	COMAR 26.11.41.07A.(1)(a)(viii) - See Table 1
Repair Date	See Table 1	COMAR 26.11.41.07A.(1)(a)(ix)
Method to Resurvey Repaired Components	See Table 1	COMAR 26.11.41.07A.(1)(a)(x)

NA = Not Applicable

TABLE 1
Monitoring Survey Summary

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	12/01/2021	Valve	Gate Valve	Packing of Gate Valve GV-02-055 at Scrubbers.	Repair Confirmed	12/1/2021	OGI	No	
190 Station	12/01/2021	Compressor	Compressor	Distance Piece Connection to Cylinder 1, Unit 5.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2021	Compressor	Pocket Flange	Near Top Left Unloader Flange on Cylinder 1, Unit 4.	Repair Confirmed	12/22/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Compressor	Pocket Flange	Far Top Left Unloader Flange on Cylinder 2, Unit 4.	Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Connector	Connector	Threaded Connection from Kiene Valve to Cylinder 3, Unit 2.	Repair Confirmed	12/22/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Valve	Gate Valve	Packing of Gate Valve GV-02-108 at Scrubbers.	DOR - Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Valve	Control Valve	Seat of EBD Valve EBD-4000, South of Pig Area.	Delay of Repair			Yes	The repair requires a facility shutdown to complete.
190 Station	12/01/2021	Connector	Connector	Threaded Connection to PSV-0104 from tubing.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2021	Connector	Connector	Connection to manifold from Front Relief Valve Pilot, PSV-0104 outside	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2021	Connector	Union	Union to Tubing on North end of Bottle, Outside of Unit 2 Building.	Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Connector	Connector	Front Pilot Thread to Manifold on PSV-0304, Outside Unit 3 Building.	Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Connector	Union	Union to tubing on south side of PSV-0404, Outside Unit 4 Building.	Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Connector	Connector	Threaded Connection from Front Pilot on top of PSV-0904, Outside Uni	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2021	Connector	Connector	Threading from Front Pilot on PSV-1004, Outside Unit 10 Building.	Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Valve	Control Valve	Seat of PSV-2863, Outside of Unit 11 Building.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2021	Compressor	Pocket Flange	Top Right Unloader Flange Seal on Cylinder 3, Unit 10.	Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Compressor	Pocket Flange	Near Top Left Unloader Flange on Cylinder 2, Unit 10.	Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Compressor	Pocket Flange	Far Top Left Unloader Flange Seal on Cylinder 2, Unit 10.	Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Compressor	Pocket Flange	Near Top Right Unloader Flange on Cylinder 2, Unit 5.	Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Compressor	Pocket Flange	Far Top Right Unloader Flange on Cylinder 2, Unit 5.	Repair Confirmed	12/28/2021	Method 21- Soap Bubbles	No	
190 Station	12/01/2021	Connector	Union	Bottom Union to Pocket Filter at Ground Level by Unit 13 Hatch.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.
190 Station	12/01/2021	Connector	Union	Bottom Union to Filter at Ground Level by Unit 13 Hatch.	Delay of Repair			Yes	The repair requires a vent blowdown to complete.

3Q2021 LEAK MONITORING SURVEY REPORT SUMMARY

Transcontinental Gas Pipe Line Company, LLC
Compressor Station 190 – Howard County, Maryland
Part 70 Operating Permit No 24-027-00223

Pursuant to COMAR 26.11.41.07. 07A(1)(c), Transco hereby posts the following quarterly report summary of the leak monitoring survey conducted at Compressor Station 190 in Howard County, Maryland.

The summary report includes the information required in COMAR 26.11.41.07. 07A(1)(a), which includes the following:

(i) Date of the survey;

(ii) A list of each fugitive emission and repair;

(iii) Any deviations from the initial methane monitoring plan or a statement that there were no deviations from the initial methane monitoring plan;

(iv) Number and type of components for which fugitive emissions were detected;

(v) Number and type of difficult-to-monitor fugitive emission components monitored;

(vi) Instrument reading of each fugitive emissions component that requires repair when EPA Method 21 (40 CFR 60, Appendix A-7) is used for monitoring;

(vii) Number and type of fugitive emissions components that were not repaired;

(viii) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair;

(ix) The date of successful repair of the fugitive emissions component; and

(x) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

Each LDAR survey summary report will be posted on the website for a period of at least two years from the date of the survey.

Quarterly Monitoring Survey Report Summary		
Facility	Transco Compressor Station 190	
Regulation(s)	COMAR 26.11.41	
Survey Method(s)	OGI	
Equipment	74900189 - GFX320 (Target GFX2)	
Report Summary		**Required by**
Survey Date	9/17/2021	COMAR 26.11.41.07A.(1)(a)(i)
A List of Each Leak and Repair	See Table 1	COMAR 26.11.41.07A.(1)(a)(ii)
Deviated from Monitoring Plan	No	COMAR 26.11.41.07A.(1)(a)(iii)
Number and Type of Components found to have fugitive emissions.	27	COMAR 26.11.41.07A.(1)(a)(iv)
Number and type of difficult-to-monitor components monitored	NA	COMAR 26.11.41.07A.(1)(a)(v)
Number and type of components not repaired	16	COMAR 26.11.41.07A.(1)(a)(vii) - See Table 1
Number and type of Components placed on Delay of Repair	11	COMAR 26.11.41.07A.(1)(a)(viii) - See Table 1
Repair Date	See Table 1	COMAR 26.11.41.07A.(1)(a)(ix)
Method to Resurvey Repaired Components	See Table 1	COMAR 26.11.41.07A.(1)(a)(x)

NA = Not Applicable

TABLE 1
Monitoring Survey Summary

Facility Name	Leak Date	Component Type	Component Sub Type	Location Description	Status	Repair Confirmation Date	Confirmation Method	Delay Of Repair	DOR Reason
COMAR 26.11.41.07A.(1)(a)	(i)		(ii)	(ii)		(ix)	(x)	(viii)	(viii)
190 Station	9/17/2021	Connector	Union	Threaded Connection of Union, South of Valve BV-1P-229.	Repair Confirmed	9/27/2021	Method 21	No	
190 Station	9/17/2021	Connector	Fitted Connection	Threaded Connection of Pressure Alert Valve, North of Valve MD19 ab	Delay of Repair			Yes	The repair requires parts or equipment that takes longer than 30 days to be ordered and delivered.
190 Station	9/17/2021	Connector	Plug	Plug in Yale Cap South of Valve 190A0 above Valve B-1.	Delay of Repair			Yes	The repair requires a facility shutdown in order to complete.
190 Station	9/17/2021	Connector	Grease Zerk	North Grease Fitting, North of Valve 190A0 on Gate valve B-2.	Delay of Repair			Yes	The repair requires a facility shutdown in order to complete.
190 Station	9/17/2021	Connector	Screwed Connection	Threaded Connection of Stem on Valve 190-S2.	Delay of Repair			Yes	The repair requires a facility shutdown in order to complete.
190 Station	9/17/2021	Connector	Cap	Yale Cap South of Valve 190C0, above Valve B-1.	Repair Confirmed	10/1/2021	Method 21	No	
190 Station	9/17/2021	Connector	Cap	Yale Cap North of Valve 190C0, above Valve B-2.	Repair Confirmed	10/1/2021	Method 21	No	
190 Station	9/17/2021	Valve	Control Valve	Packing of Valve 190C0.	Delay of Repair			Yes	The repair requires a blowdown in order to complete.
190 Station	9/17/2021	Connector	Plug	Plug in Needle Valve South of Valve MD-42 above Valve B-1	Repair Confirmed	9/30/2021	Method 21	No	
190 Station	9/17/2021	Connector	Cap	Yale Cap North of Valve MD-31, above Valve B-2.	Repair Confirmed	9/27/2021	Method 21	No	
190 Station	9/17/2021	Connector	Cap	Yale Cap South of Valve MD-38, above Valve B-1.	Repair Confirmed	9/30/2021	Method 21	No	
190 Station	9/17/2021	Valve	Control Valve	Body Seal of Valve MD-38.	Delay of Repair			Yes	The repair requires a blowdown in order to complete.
190 Station	9/17/2021	Valve	Block Valve	Seat of Unit 13 Emergency Blowdown Valve.	Delay of Repair			Yes	The repair requires a blowdown in order to complete.
190 Station	9/17/2021	Flange	Flange	Unloader Flange Seal 311, Unit 2.	Repair Confirmed	10/1/2021	Method 21	No	
190 Station	9/17/2021	Flange	Flange	Unloader Flange Seal 104, Unit 4.	Repair Confirmed	10/1/2021	Method 21	No	
190 Station	9/17/2021	Flange	Flange	Unloader Flange Seal 211, Unit 8.	Repair Confirmed	10/5/2021	Method 21	No	
190 Station	9/17/2021	Flange	Flange	Unloader Flange Seal 314, Unit 8.	Repair Confirmed	10/5/2021	Method 21	No	
190 Station	9/17/2021	Flange	Flange	Unloader Flange Seal 211, Unit 9.	Repair Confirmed	10/5/2021	Method 21	No	
190 Station	9/17/2021	Compressor	Compressor	Seal between Distance Piece and Cylinder 3, Unit 10.	Delay of Repair			Yes	The repair requires a facility shutdown in order to complete.
190 Station	9/17/2021	Compressor	Compressor	Seal between Distance Piece and Cylinder 2, Unit 10.	Delay of Repair			Yes	The repair requires a blowdown in order to complete.
190 Station	9/17/2021	Connector	Plug	East Plug in Horizontal Fuel Gas Filter.	Delay of Repair			Yes	The repair requires a facility shutdown in order to complete.
190 Station	9/17/2021	Valve	Control Valve	Packing of Bypass Valve, Unit 11.	Repair Confirmed	10/6/2021	Method 21	No	
190 Station	9/17/2021	Valve	Control Valve	Packing of Bypass Valve, Unit 9.	Repair Confirmed	10/5/2021	Method 21	No	
190 Station	9/17/2021	Valve	Control Valve	Packing of Suction Valve, Unit 9.	Repair Confirmed	10/6/2021	Method 21	No	
190 Station	9/17/2021	Valve	Control Valve	Packing of Suction Valve, Unit 7.	Repair Confirmed	10/6/2021	Method 21	No	
190 Station	9/17/2021	Valve	Control Valve	Grease Fitting on Suction Valve, Unit 5	Delay of Repair			Yes	The repair requires a blowdown in order to complete.
190 Station	9/17/2021	Valve	Block Valve	Body Seal of PSV, Unit 8.	Repair Confirmed	10/5/2021	Method 21	No	