Updated 9/10/19

Natural Gas Pipeline 2019 Pipeline Outage and Maintenance Summary

This is a summary of the current status of all NGPL 2019 Pipeline Outages and Maintenance Projects. This document is subject to change as the season progresses to reflect the updated status of all outages and maintenance projects including, but not limited to, project delays, cancellations and additionally, anticipated impact and restrictions are subject to change.

\*Unless otherwise noted, all listed meters will be physically shut-in for the duration of the project.

\*Unless otherwise noted, all scheduled dates represent gas days as defined in the Natural Gas Pipeline tariff to mean a period of twenty-four consecutive hours, beginning and ending at 9:00 a.m. (Central Clock Time).

\*Typical Timeline for ILI reporting is below.

Type of In- Line Inspection	# of weeks to determine a successful run	# of weeks to Preliminary Report	# of Weeks to Final Aligned Report
MFL	1-2	3-4	8-13
AFD	2-3	3-4	12-16
EMAT	2-3	N/A	17-30

\*\*\* Indicates revision

Revised	Start Date	End Date	Reason Changed	Prev. Start Date	Prev. End Date	Segment	Line	Compressor Station(s)	Unit/Location	Description	Scheduling Location	Transport Impact	Storage Impact	Pool Location	Pipeline System
	7/3/19	9/27/19				22	GC #2	300/341		Pipeline Integrity	CS 302	Natural will schedule Primary only southbound into segment 22. AOR/TTS and Secondary out-of- path Firm transports are not available. Primary firm transports are at risk.	Transports associated with Storage withdrawals will be impacted.	SOUTH TX: South of Constraint	GC
	7/31/19	10/31/19				11	AM #2	104		Pipeline Integrity	TBD if Needed	If remediation is required, all transport services are at risk of not being fully scheduled.			AM
***	8/5/19	10/15/19	Date Change		9/13/19	14	AM #2	110		Install Launcher and Receiver		No anticipated impact		Iowa-IL AM: West of Constraint	AM
	8/7/19	9/30/19				29	Illinois Lateral #1	116		Install Launcher and Receiver		No anticipated impact		Iowa-IL AM: West of Constraint	MARKET
***	8/19/19	9/7/19	Completed			13	AM #2	107		Install Launcher and Receiver		No anticipated impact		Amarillo M/L: West of Constraint	AM
***	8/19/19	9/6/19	Completed			26	GC #2	303		Pipeline Integrity	TBD if Needed	If remediation is required, all transport services are at risk of not being fully scheduled.			GC
	8/20/19	10/1/19				40	VOLO #1	113		Pipeline Integrity		No anticipated impact.			MARKET
	8/20/19	10/1/19				40	VOLO #2	113		Pipeline Integrity		No anticipated impact.			MARKET
	8/21/19	Not before 1st Qtr 2020				7	Indian Basin	167		Force Majeure	Segment 7	Primary/SIP Firm transports will be scheduled to 0% of contract MDQ northbound and southbound into and out of Segment 7. AOR/ITS and Secondary out-of- path Firm transports are not available.	Transports associated with Storage will be impacted.	Permian: South of Constraint	АМ
	8/21/19	Thru Mid- October 2019				22	GC #2	300/341		Remediation Work - See latest Force Majeure Posting on Natural's EBB	CS 300	Primary/SIP Firm transports will be scheduled to a capacity of 400,000 dth/day, not less than 66% of contract MDQ through CS 300. AOR/ITS and Secondary out-of- path Firm transports are not available.	Transports associated with Storage withdrawals will be impacted.	SOUTH TX: North of Constraint	GC
	8/26/19	10/1/19				31	Crawford #2	113		Install Launcher and Receiver		No anticipated impact			MARKET
	8/26/19	9/11/19				13	Oskaloosa Lateral	109		Pipeline Maintenance		No anticipated impact			AM
***	8/26/19	9/13/19	Date Change		9/11/19	26	GC #3	303/302		Pipeline Intergrity	TBD if Needed	If remediation is required, all transport services are at risk of not being fully scheduled.			GC

Revised	Start Date	End Date	Reason Changed	Prev. Start Date	Prev. End Date	Segment	Line	Compressor Station(s)	Unit/Location	Description	Scheduling Location	Transport Impact	Storage Impact	Pool Location	Pipeline System
***	9/3/19	9/12/19	Date Change		9/06/19	8	Perm #1	168		Station Maintenance	CS 167	Natural will schedule Primary only northbound through CS 167. AOR/ITS and Secondary out-of- path Firm transports are not available.	Transports associated with Storage injections will be impacted.	Permian: South of Constraint	АМ
	9/6/19	9/17/19				26	GC #1	303		Pipeline Integrity	TBD if Needed	If remediation is required, all transport services are at risk of not being fully scheduled.			GC
	9/16/19	9/20/19				13	AM #4	107		Pipeline Maintenance		No anticipated impact		Amarillo M/L: West of Constraint	AM
	9/17/19	10/11/19				22			LOC 908197	ILI Tool Run - MFL	LOC 908197 Enstor Katy	LOC 908197 Enstor Katy is unavailable. No transport services will be scheduled.		SOUTH TX: South of Constraint	GC
	9/23/19	10/12/19				13	AM #2	107/108		Install Launcher and Receiver		No Impact		Amarillo M/L: East of Constraint	AM
	9/24/19	9/24/19				6	OE #2	154		ILI Tool Run - Caliper		No anticipated impact		Midcontinent: East of Constraint	AM
	9/25/19	9/25/19				6	OE #2	154		ILI Tool Run - MFL	LOC 905570 ONEOKWES CARSON	LOC 905570 Oneokwes Carson is unavailable. No transport services will be scheduled.		Midcontinent: East of Constraint	AM
	9/26/19	9/26/19				6	OE #2	154		ILI Tool Run - MFL		No anticipated impact		Midcontinent: East of Constraint	AM
***	9/28/19	11/8/19	Date Change	9/13/19	10/24/19	27	GC #3	309		Pipeline Integrity	TBD if Needed	If remediation is required, all transport services are at risk of not being fully scheduled.			GC
	10/1/19	10/1/19				8	Perm #1	167/168		ILI Tool Run - MFL	CS 167	Primary/SIP Firm transports will be scheduled to a capacity of 100,000 dth/day, not less than 27% of contract MDQ through CS 167. AOR/ITS and Secondary out-of- path Firm transports are not available.	Transports associated with Storage will be impacted.	Permian: South of Constraint	АМ
	10/1/19	10/30/19				27	GC #1	307		Pipeline Integrity	TBD if Needed	If remediation is required, all transport services are at risk of not being fully scheduled.			GC
	10/1/19	10/30/19				27	GC #1	307		Pipeline Integrity	TBD if Needed	If remediation is required, all transport services are at risk of not being fully scheduled.			GC
***	10/3/19	10/6/19				9	Perm #1	167		Hot Tap Installation		No anticipated impact			AM
***	10/8/19	10/11/19	Date Change	9/10/19	9/12/19	8	Perm #1	168		Station Maintenance	CS 167	Natural will schedule Primary only northbound through CS 167. AOR/ITS and Secondary out-of- path Firm transports are not available.	Transports associated with Storage injections will be impacted.	Permian: South of Constraint	АМ
	10/15/19	10/15/19				6	OE #2	154		ILI Tool Run - AFD		No anticipated impact		Midcontinent: East of Constraint	AM
	10/15/19	10/15/19				6	OE #2	154		ILI Tool Run - EMAT		No anticipated impact		Midcontinent: East of Constraint	AM
	10/15/19	10/15/19				35	GC #3	201/113		ILI Tool Run - Cleaning		No anticipated impact			MARKET
	10/17/19	10/17/19				35	GC #3	201/113		ILI Tool Run - Cleaning		No anticipated impact			MARKET
	10/22/19	10/22/19				35	GC #3	201/113		ILI Tool Run - AFD		No anticipated impact			MARKET
	10/24/19	10/24/19				35	GC #3	201/113		ILI Tool Run - EMAT		No anticipated impact			MARKET
	10/29/19	10/29/19				30		113		ILI Tool Run - MFL		No anticipated impact.			MARKET
	10/31/19	10/31/19				30		113		ILI Tool Run - Hard Spot		No anticipated impact.			MARKET
***	11/9/19	11/13/19	Date Change	9/09/19	9/12/19	27	GC #2	309		Pipeline Integrity	TBD if Needed	If remediation is required, all transport services are at risk of not being fully scheduled.			GC

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	11/20/19	11/21/19				11	AM #3	104/105		ILI Tool Run - EMAT	CS 104	Primary/SIP Firm transports will be scheduled to a capacity of 425,000 dth/day, not less than 38% of contract MDQ through CS 104. AOR/ITS and Secondary out-of- path Firm transports are not available.	Transports associated with Storage will be impacted.	Midcontinent: South of Constraint	AM
	12/12/19	12/19/19				25	LA #1	343		Pipeline Maintenance	CS 343	Natural will schedule Primary Firm only eastbound thru CS 343. AOR/ITS and Secondary out-of- path Firm transports are not available.	Transports associated with Storage will be impacted.	TEXOK GC: West of Constraint	GC
	1/4/20	1/8/20				25	LA #2	343		Pipeline Maintenance	CS 343	Natural will schedule Primary Firm only eastbound thru CS 343. AOR/ITS and Secondary out-of- path Firm transports are not available.	Transports associated with Storage will be impacted.	TEXOK GC: West of Constraint	GC