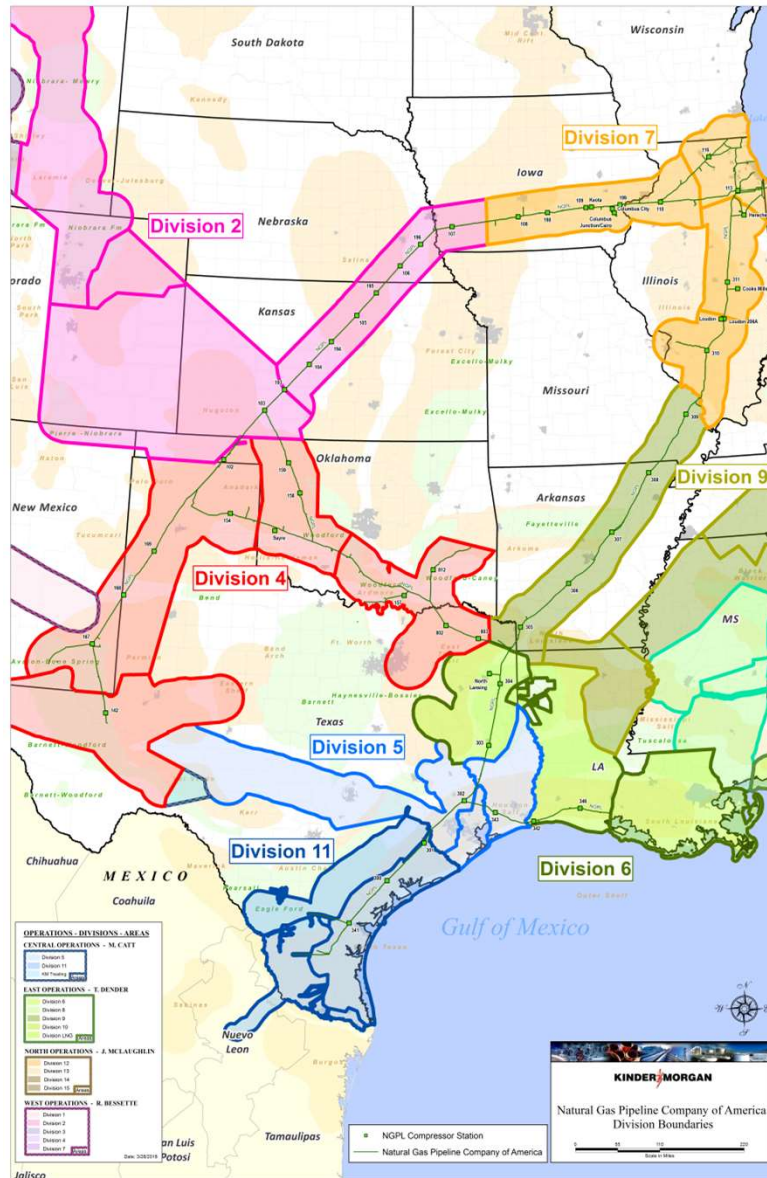


Natural Gas Pipeline Company of
America LLC (NGPL)
Integrity Spending for 2020 and 2021

Shipper Meeting
July 29, 2021

NGPL Divisions



Proprietary Information

Category Description

- In Line Inspection (ILI)
 - Smart tools used to:
 - identify general internal and external corrosion using ‘standard’ MFL
 - Identify longitudinal defects including long-seam corrosion using C-MFL (also known as an AFD tool)
- EMAT Runs
 - Smart tool used to identify Stress Corrosion Cracking (SCC)
- Pressure and Spike Tests
 - Hydrostatic pressure tests performed in pipeline sections that are not piggable or to complement EMAT in pipeline sections within high consequence areas (HCAs)
- Direct Assessment Testing for HCAs (DE, ECDA, SCCDA)
 - Visual pipe examinations performed in pipeline sections that are relatively short and/or not conducive to ILI or hydrostatic pressure tests
- KMI Assessment Digs
 - Excavations performed to prove-up the existence of SCC using the “KMI process”

Category Description

- Remediation
 - Pipeline repairs / remediation of anomalies identified by a smart tool run
- Wellhead Integrity Program
 - Activities related to down-hole logging (ILI) of storage wells and replacement of well head components
- Other (Geohazards, Misc)
 - Reviews, assessments, and mitigation of pipeline hazards created by geological events such as land slides, floods, erosion, etc.
- Make Piggable
 - Installing or replacing facilities to allow the use of smart tools in a previously unpiggable pipeline section
- Drip Replacement and Removal
 - Removal or replacement of pipeline drips that are no longer necessary and may pose an integrity risk

Acronyms

- DE, ECDA, SCCDA – various types of direct examination and assessment
- EMAT – electro-magnetic acoustic transducer
- MFL – magnetic flux leakage
- C-MFL – circumferential magnetic flux leakage
- KMI Process – analytical method and system for predicting the location of stress corrosion cracking in a steel gas pipeline system. (Patented in 2007)

Pipeline Integrity Cost Summary by Division

Location	Cost Category	Description	2020 (Actual)	2021 (Planned)
Division 2	NGPL O&M	ILI	\$ 989,402	\$ 2,968,885
	NGPL O&M	EMAT Runs (including chemical cleaning)	\$ 3,096,177	\$ -
	NGPL O&M	Remediation	\$ 2,435,775	\$ 3,083,726
	NGPL Capital	Make Piggable	\$ 14,033,226	\$ 5,881,041
	NGPL Capital	Drip Replacement and Removal	\$ 731,970	\$ 175,872
	NGPL Capital	Remediation - Pipeline Replacement over 100ft	\$ 81,739	\$ -
		Total	\$ 21,368,289	\$ 12,109,524
Division 4	NGPL O&M	ILI	\$ 567,281	\$ 1,285,821
	NGPL O&M	EMAT Runs (including chemical cleaning)	\$ 701,089	\$ 1,664,262
	NGPL O&M	Pressure & Spike Test	\$ 1,330,344	\$ -
	NGPL O&M	Remediation	\$ 2,889,891	\$ 3,351,681
	NGPL O&M	Wellhead Integrity Program	\$ 75,607	\$ 172,050
	NGPL Capital	Make Piggable	\$ 4,828,972	\$ 5,565,816
	NGPL Capital	Drip Replacement and Removal	\$ -	\$ 362,183
	NGPL Capital	Remediation - Pipeline Replacement over 100ft	\$ 49,429	\$ -
	Total	\$ 10,442,613	\$ 12,401,813	

Pipeline Integrity Cost Summary by Division

Location	Cost Category	Description	2020 (Actual)	2021 (Planned)
Division 5	NGPL O&M	ILI	\$ 647,435	\$ -
	NGPL O&M	Pressure & Spike Test	\$ 163,227	\$ -
	NGPL O&M	Remediation	\$ 47,235	\$ 282,259
	NGPL Capital	Pressure Test 192.624	\$ -	\$ 796,181
	NGPL Capital	Remediation - Pipeline Replacement over 100ft	\$ 1,888,767	\$ -
		Total	\$ 2,746,664	\$ 1,078,440
Division 6	NGPL O&M	ILI	\$ 1,798,436	\$ 1,036,362
	NGPL O&M	EMAT Runs (including chemical cleaning)	\$ 2,515,473	\$ 937,791
	NGPL O&M	Remediation	\$ 2,042,919	\$ 940,700
	NGPL O&M	Wellhead Integrity Program	\$ 189,279	\$ 131,900
	NGPL Capital	Make Piggable	\$ 1,088,983	\$ 2,827,703
	NGPL Capital	Pressure Test 192.624	\$ -	\$ 880,012
	NGPL Capital	Remediation - Pipeline Replacement over 100ft	\$ 706	\$ 376,637
		Total	\$ 7,635,796	\$ 7,131,105

Pipeline Integrity Cost Summary by Division

Location	Cost Category	Description	2020 (Actual)	2021 (Planned)
Division 7	NGPL O&M	ILI	\$ 7,053,798	\$ 7,732,092
	NGPL O&M	EMAT Runs (including chemical cleaning)	\$ 2,064,160	\$ 4,646,149
	NGPL O&M	Pressure & Spike Test	\$ 10,686,430	\$ -
	NGPL O&M	ECDA, SCCDA, and DE for HCAs or TRRC	\$ 620,257	\$ 296,501
	NGPL O&M	Remediation	\$ 4,461,420	\$ 3,230,965
	NGPL O&M	Wellhead Integrity Program	\$ 3,194,420	\$ 3,462,840
	NGPL Capital	Wellhead Integrity Capital Projects	\$ -	\$ 844,551
	NGPL Capital	Make Piggable	\$ 15,288,436	\$ 22,833,809
	NGPL Capital	Drip Replacement and Removal	\$ 33,889	\$ -
	NGPL Capital	Wellhead Integrity Capital Projects	\$ 258,150	\$ -
	Total		\$ 43,660,960	\$ 43,046,907
Division 9	NGPL O&M	ILI	\$ 433,879	\$ -
	NGPL O&M	EMAT Runs (including chemical cleaning)	\$ -	\$ 1,186,423
	NGPL O&M	ECDA, SCCDA, and DE for HCAs or TRRC	\$ 212,137	\$ -
	NGPL O&M	Remediation	\$ 958,522	\$ 869,744
	NGPL Capital	Remediation - Pipeline Replacement over 100ft	\$ 203,400	\$ -
		Total		\$ 1,807,938

Pipeline Integrity Cost Summary by Division

Location	Cost Category	Description	2020 (Actual)	2021 (Planned)
Division 11	NGPL O&M	ILI	\$ 2,089,765	\$ -
	NGPL O&M	Remediation	\$ 126,309	\$ 3,638,693
	NGPL Capital	Pressure Test 192.624	\$ -	\$ 1,425,521
	NGPL Capital	Drip Replacement and Removal	\$ -	\$ 89,570
	NGPL Capital	Remediation - Pipeline Replacement over 100ft	\$ 709,295	\$ -
		Total	\$ 2,925,369	\$ 5,153,784
Other	NGPL O&M	Other (Geohazards, Wrinkle Bend, Misc)	\$ 172,112	\$ 1,242,523
Grand Total			\$ 90,759,741	\$ 84,220,263

2020 Actual Expenditures & Timing

	Capital	O & M	Total
1st Quarter	\$ 1,361,720	\$ 5,389,917	\$ 6,751,637
2nd Quarter	\$ 11,933,086	\$ 15,480,401	\$ 27,413,487
3rd Quarter	\$ 21,187,786	\$ 18,688,761	\$ 39,876,547
4th Quarter	\$ 4,694,370	\$ 12,023,700	\$ 16,718,070
Total	\$ 39,176,962	\$ 51,582,779	\$ 90,759,741

2021 Planned Expenditures & Timing

	Capital	O & M	Total
1st Quarter	\$ 934,892	\$ 5,920,608	\$ 6,855,500
2nd Quarter	\$ 14,578,139	\$ 18,634,596	\$ 33,212,735
3rd Quarter	\$ 21,063,155	\$ 13,301,186	\$ 34,364,341
4th Quarter	\$ 5,482,710	\$ 4,304,977	\$ 9,787,687
Total	\$ 42,058,896	\$ 42,161,367	\$ 84,220,263

Summary of Annual IMP Spending

- NGPL committed to spending \$400,000,000 on pipeline integrity in the 5-year period from 2017 through 2021
- Actual IMP spend rate
 - 2017 - \$88.4 MM
 - 2018 - \$79.5 MM
 - 2019 - \$89.9 MM
 - 2020 - \$90.7 MM
- Planned 2021 IMP spend = \$84.2 MM
- Actual and Planned IMP spend = ~\$433 MM

Outage Postings

- Natural updates a list of upcoming projects on its interactive website on a weekly basis.
- For a current list of projects, please follow this link:
 - https://pipeline2.kindermorgan.com/Documents/NGPL/NGPL_OutageImpactReport.pdf

Natural Gas Pipeline Company of America LLC Outage Impact Report

Updated 7/22/2021
Natural Gas Pipeline 2021 Pipeline Outage and Maintenance Summary

This is a summary of the current status of all NGPL 2021 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 additions. 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 tool	# 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

Outage #	Revised	Start Date	End Date	Reason Changed	Prev. Start Date	Prev. End Date	System	Line	Segment	Location	Scheduling Location	Maintenance Activity	Restriction Level	Pool Location	Meter(s) in Impacted Area
X20-87776		09/24/20	UFN				AM	INDIAN BASIN	7	CS 167	CS 167	Force Majeure - See latest Force Majeure Posting on Natura's EBB	Effective for gas day Thursday, September 24, 2020, Intraday 1 Cycle, Natural will schedule all transports to 0% of contract MDQ into and out of Segment 7. Segment 8 and Segment 9 of the Permian Zone are not impacted by this force majeure event.		
X20-889288		12/01/20	07/30/21				AM		8	168		Station Maintenance	This project has an impact to maximum capacity. However, in order to mitigate customer impact and based on current operating conditions, Natural does not anticipate limiting primary firm transport services, at this time. If conditions change Natural will post an update.		
X20-1128226		05/04/21	08/05/21				GC	GC #2	22	300/341	TBD	Pipeline Integrity	If remediation is required, all transport services are at risk of not being fully scheduled.		
X20-1108164	***	07/05/21	07/29/21	Project Change	7/05/21	7/25/21	AM	AM #2	14	110	110	Install Launcher and Receiver	No Anticipated Impact		
X20-1097583		07/05/21	10/22/21				GC	GC #1	28	311/312		Install Launcher and Receiver	No Anticipated Impact		
X20-1128316	***	07/15/21	07/17/21	Completed			GC	GC #2	22	302/301	301	Force Majeure - See latest Force Majeure Posting on Natura's EBB	Primary/SIP Firm transports will be scheduled to no less than 76% of contract MDQ through CS 301. AOR/ITS and Secondary out-of-path Firm transports are not available. Transports associated with storage injections and withdrawals will be impacted.	South TX: South of Constraint	
X20-1090082		07/15/21	07/30/21				GC	GC #3	26	303	303	Pipeline Maintenance	Primary/SIP Firm transports will be scheduled to no less than 73% of contract MDQ through CS 303. AOR/ITS and Secondary out-of-path Firm transports are not available. Transports associated with storage injections and withdrawals will be impacted.	TEXOK GC: North of Constraint	
X20-1066122		07/19/21	07/22/21				AM	AM #2	12	107		ILI Tool Runs - Cleaning/Gauge 7/19, Cleaning 7/20, MFL/Caliper 7/21, Hard Spot 7/22	This project has an impact to maximum capacity. However, in order to mitigate customer impact and based on current operating conditions, Natural does not anticipate limiting primary firm transport services, at this time. If conditions change Natural will post an update.		
X20-1046842		07/19/21	07/23/21				MKT	O'HARE #1	30	O'Hare Lateral #1	TBD	ILI Tool Runs - Cleaning/Gauge 7/21, MFL 7/21, AFD 7/22	No Anticipated Impact		
X21-356472		07/20/21	07/27/21				AM	AM #2	10	103		Install Launcher and Receiver	This project has an impact to maximum capacity. However, in order to mitigate customer impact and based on current operating conditions, Natural does not anticipate limiting primary firm transport services, at this time. If conditions change Natural will post an update.		
X21-340145		07/20/21	07/30/21				GC	GC #2	26	302		Station Maintenance	No Anticipated Impact		
X20-1066123		07/26/21	07/29/21				AM	AM #2	12	107		ILI Tool Runs - Cleaning/Gauge 7/26, Cleaning 7/27, MFL/Caliper 7/28, Hard Spot 7/29	This project has an impact to maximum capacity. However, in order to mitigate customer impact and based on current operating conditions, Natural does not anticipate limiting primary firm transport services, at this time. If conditions change Natural will post an update.		

Natural Gas Pipeline Company of America LLC Outage Impact Report

X20-1066113		07/27/21	07/29/21				AM	AM #3	6	102		ILI Tool Runs - Cleaning/Gauge 7/27, MFL/Caliper 7/29	This project has an impact to maximum capacity. However, in order to mitigate customer impact and based on current operating conditions, Natural does not anticipate limiting primary firm transport services, at this time. If conditions change Natural will post an update.		
X21-44756	***	07/29/21	08/20/21	Project Change	7/20/21	8/20/21	AM	OE #1	5	156/184		Force Majeure - See latest Force Majeure Posting on Natura's EBB	The following locations are unavailable: LOC 10655 Cimarex Rocky #1 Washita, LOC 10849 Cimarex Oakdale #1 Kiowa, LOC 11285 Cimarex Oakdale #2 Kiowa, LOC 41771 Cimarex Gotebo #1 Washita, LOC 42720 Adparo Rocky Washita, LOC 3695 TEX SW Washita, LOC 5332 MIDCSTTX #1 Washita, LOC 44537 Adparo Elston State Washita. No transport services will be scheduled.		LOC 10655 Cimarex Rocky #1 Washita, LOC 10849 Cimarex Oakdale #1 Kiowa, LOC 11285 Cimarex Oakdale #2 Kiowa, LOC 41771 Cimarex Gotebo #1 Washita, LOC 42720 Adparo Rocky Washita, LOC 3695 TEX SW Washita, LOC 5332 MIDCSTTX #1 Washita, LOC 44537 Adparo Elston State Washita
X20-1066093		08/02/21	08/18/21				MKT	CRAWFORD #1	31	113	TBD	Pipeline Integrity	If remediation is required, all transport services are at risk of not being fully scheduled.		
X20-1128300		08/03/21	08/26/21				GC	GC #3	26	303/302	303	Force Majeure - See latest Force Majeure Posting on Natura's EBB	Primary/SIP Firm transports will be scheduled to no less than 52% of contract MDQ through CS 303. AOR/ITS and Secondary out-of-path Firm transports are not available. Transports associated with storage injections and withdrawals will be impacted.	TEXOK GC: North of Constraint	
X21-159159		08/14/21	08/18/21				AM	AM #2	14	110	110	Pipeline Maintenance	No Anticipated Impact		
X21-692216	***	08/16/21	09/01/21	Added			AM	AM #2	11	104	TBD	Pipeline Integrity	If remediation is required, all transport services are at risk of not being fully scheduled.		
X20-1066117	***	08/17/21	08/17/21	Project Change	7/07/21	7/15/21	AM	AM #2	13	107/108		ILI Tool Runs - MFL/Caliper 8/17	This project has an impact to maximum capacity. However, in order to mitigate customer impact and based on current operating conditions, Natural does not anticipate limiting primary firm transport services, at this time. If conditions change Natural will post an update.		
X20-1066105		08/19/21	10/26/21				MKT		32	113	TBD	Pipeline Integrity	If remediation is required, all transport services are at risk of not being fully scheduled.		
X21-220601		08/31/21	09/07/21				AM	AM #3	14	110	110	ILI Tool Runs - Cleaning 8/31, Gauge 9/2, MFL/Caliper 9/7	No anticipated impact.		
X20-1128328		09/01/21	10/15/21					GC #3	26	304/303	TBD	Pipeline Integrity	If remediation is required, all transport services are at risk of not being fully scheduled.		
X19-1077708		09/03/21	09/11/21				GC	LA #1	23	343/342	302	Pipeline Maintenance	Natural will schedule Primary/SIP Firm transports only eastbound into Segment 25 at CS 302. AOR/ITS and Secondary out-of-path Firm transports are not available.	TEXOK GC: West of Constraint	
X21-578797		09/07/21	09/10/21				GC		25	302	CS 302	Station Maintenance	Primary/SIP Firm transports will be scheduled to no less than 79% of contract MDQ through CS 302. AOR/ITS and Secondary out-of-path Firm transports are not available. Transports associated with storage injections and withdrawals will be impacted.	TEXOK GC: West of Constraint	
X21-110273	***	09/13/21	10/15/21	Project Change	7/26/21	9/30/21	AM	AM #2	11	105/106	TBD	Pipeline Integrity	If remediation is required, all transport services are at risk of not being fully scheduled.		
X21-614904		09/21/21	09/28/21				AM	AM #2	10	103		Install Launcher and Receiver	This project has an impact to maximum capacity. However, in order to mitigate customer impact and based on current operating conditions, Natural does not anticipate limiting primary firm transport services, at this time. If conditions change Natural will post an update.		
X21-444580		10/12/21	10/14/21				AM	PERMIAN #2	8	168		ILI Tool Run - AFD 9/28, EMAT 9/30	This project has an impact to maximum capacity. However, in order to mitigate customer impact and based on current operating conditions, Natural does not anticipate limiting primary firm transport services, at this time. If conditions change Natural will post an update.		
X20-1108168		10/22/21	10/31/21				AM	AM #2	14	110	110	Install Launcher and Receiver	No Anticipated Impact		

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