Public Quarterly Report

Date of Report: 12th Quarterly Report – September 30, 2024

Contract Number: 693JK3211RA0001 **Prepared for:** DOT PHMSA

Project Title: Using Alternative-Steel and Composite Material in Gas and

Hazardous Liquid Pipeline Systems

Prepared by: *GTI Energy*

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For quarterly period ending: September 30, 2024

1: Work Performed During this Quarterly Period

Completed Task 7 on evaluation and testing of composites for degradation under UV and H2S-containing product fluids. Performed long-term tests on the composite samples. The interim report was submitted in the last quarterly.

Completed Task 9. Mapped existing related aspects of 49 CFR Parts 192 and Part 195 to the composite's application. This task provided a summary of research, practices, domestic and international standards for the safe adoption of spoolable fiber and steel-reinforced composites for use in gathering and transmission lines. The task provides a comparison of the various API, ASME, and CSA standards to address a comprehensive listing of RTP/SCP concerns. It also investigated reported failures, their causes, and their relationship with current standards and practices. The task report is submitted in this report.

Technical and Deliverable Milestone Schedule												
Item No.	Task No.	Activity/Deliverable	Quarte r No.	Expected Completion Date/Mos	Payable Milestone	Federal Payment	Resource- Share	*Total				
	proposal)	ACTIVITY/DELIVERABLE			TITLE							
27	9	Map existing related aspects of 49 CFR Parts 192 and Part 195 to the composites application. Prepare and Submit Draft Final Report	11	33 months	Map existing related aspects of 49 CFR Parts 192 and Part 195 to the composites application. Task 9 Report Included with Draft Final Report.	102,686.00	23,418.00	126,104.00				

Figure 1 - 12th Quarter Deliverables Milestone

2: Items Not Completed During this Quarterly Period:

Complete Task 11: Additional testing of composites and submit related report as deliverable No. 29.

3: Project Schedule

Figure 2 shows the project time schedule.

The report 'Review of Code Requirements For Composite Pipes' covers Task 9, item No 27 of the deliverables table as shown in Figure 1.

											(06/30,	/2024		
	T 1	Duration in Quarters													
	Tasks	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Kickoff and Technical Advisory Panel (TAP)														
2	Material Properties and Testing Procedures														
3	Design for Max Allowable Operating Pressure														
4	Construction Damage and Quality Assurance														
5	Assessment of Corrosion/Erosion Damage														
6	Assessment of Other Integrity Threats														
7	Degradation of Composite Material														
8	Field Inspection and Monitoring for IM														
9	Review Code Requirements														
10	Project Management and Reporting														
11	Testing of SafeGaurd and other composites.														
		NOTES	5:												
		Denotes task duration extension from original plan													
		- Task 11 was added in a 'contract modification' for testing additional material.													

Figure 2 - Project time schedule