



Natural Gas Service Group, Inc.
404 Veterans Airpark Lane, Suite 300
Midland, Texas 79705
Phone: (432) 262-2700
Fax: (432) 262-2701

December 13, 2021

Via Edgar

United States Securities and Exchange Commission
Division of Corporate Finance, Office of Energy and Transportation
100 F Street, N.E.
Washington, DC 20549-5561
Attn.: Michael Purcell, Law Clerk

Re: Natural Gas Services Group, Inc.
Form S-3/A
File No. 333-261091

Ladies and Gentlemen:

Pursuant to Rule 461 of the General Rules and Regulations under the Securities Act of 1933, as amended, we hereby request acceleration of the effective date of the referenced Form S-3/A Registration Statement for Natural Gas Service Group, Inc. (the "Company"), to 1:00 p.m. Eastern Time on December 15, 2021, or as soon thereafter as practicable.

If there are any comments or questions with respect to the Registration Statement or the acceleration thereof, please contact our legal counsel, David A. Thayer, at (303) 785-1623.

Very truly yours,

/s/ Stephen C. Taylor

Stephen C. Taylor
Chief Executive Officer