

July 26, 2011

*Via EDGAR*

Securities and Exchange Commission  
100 F Street NE  
Washington, D.C. 20549  
Attention: H. Roger Schwall  
Assistant Director, Division of Corporation Finance

Re: Dawson Geophysical Company  
Registration Statement on Form S-4  
Filed June 10, 2011  
File No. 333-174843

Dear Mr. Schwall:

As discussed yesterday in a telephone conversation with the Staff (the "Staff") of the Division of Corporation Finance of the Securities and Exchange Commission (the "Commission"), we have enclosed, for the Staff's convenience, additional disclosure which Dawson Geophysical Company ("Dawson") intends to incorporate into the next pre-effective amendment of its Registration Statement on Form S-4 (File No. 333-174843), originally filed on June 10, 2011 and amended on July 20, 2011 (as amended, the "Registration Statement").

Appendix A attached hereto sets forth a new section entitled "Dawson Recent Developments" setting forth summary financial results of Dawson's most recently ended fiscal quarter. These results were publicly announced and filed on Form 8-K today. The disclosure has been incorporated into the Registration Statement summary immediately following the subsection entitled "Selected Historical Financial Data of Dawson".

Appendix B attached hereto includes the tables on pages 70 and 72 of the Registration Statement which now incorporate the quarterly projections previously withheld until Dawson's third fiscal quarter earnings announcement. As indicated in response #3 in its July 20, 2011 letter to the Staff, Dawson promised to include such missing quarterly projections in a subsequent pre-effective amendment to the Registration Statement.

July 26, 2011

Appendix C attached hereto includes new disclosure updating the "Background of the Merger" section of the Registration Statement.

Dawson intends to include the information shown in Appendices A, B and C in its next filing of a pre-effective amendment to the Registration Statement.

As discussed with the Staff, under the terms of the Agreement and Plan of Merger, dated March 20, 2011 (the "Merger Agreement"), by and among Dawson, Acquisition Corp., a wholly owned subsidiary of Dawson, and TGC Industries, Inc., to which the Registration Statement relates, the Merger Agreement may be terminated unless Dawson and TGC each hold a special shareholder meeting on or prior to August 31, 2011. Accordingly, Dawson seeks to cause the proxy statement/prospectus included in the Registration Statement to be mailed to Dawson and TGC shareholders as soon as possible during the first week of August. Dawson appreciates the Staff's efforts in helping achieve this goal.

If you have any questions with respect to the foregoing responses or require further information, please contact the undersigned at (214) 953-6954 or Sarah Rechter at (214) 953-6419.

Very truly yours,

/s/ Neel Lemon

Neel Lemon

cc: Stephen C. Jumper  
*Dawson Geophysical Company*

Sarah Rechter  
*Baker Botts L.L.P.*

Alexandra M. Ledbetter, Attorney-Advisor

Enclosures

## Appendix A

### Dawson Recent Developments

On July 26, 2011, Dawson announced its financial results for its third fiscal quarter and first nine months of fiscal 2011. The following is a summary of Dawson's unaudited results for the quarter and the nine months ended June 30, 2011 and 2010. This summary is not intended to be a comprehensive statement of Dawson's unaudited financial results for these periods. Full financial results will be included in Dawson's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011, which is expected to be filed with the SEC on or about August 9, 2011.

	<b>Three Months Ended June 30,</b>		<b>Nine Months Ended June 30,</b>	
	<u>2011</u> (Unaudited)	<u>2010</u> (Unaudited)	<u>2011</u> (Unaudited)	<u>2010</u> (Unaudited)
<b>Operating revenues</b>	\$98,033,000	\$61,178,000	\$249,023,000	\$146,093,000
<b>Income (loss) from operations</b>	898,000	(1,571,000)	(8,464,000)	(12,621,000)
<b>Net income (loss)</b>	<u>\$ 334,000</u>	<u>\$ (1,019,000)</u>	<u>\$ (6,190,000)</u>	<u>\$ (7,941,000)</u>
<b>Basic income (loss) per common share</b>	<u>\$ 0.04</u>	<u>\$ (0.13)</u>	<u>\$ (0.79)</u>	<u>\$ (1.02)</u>
<b>Diluted income (loss) per common share</b>	<u>\$ 0.04</u>	<u>\$ (0.13)</u>	<u>\$ (0.79)</u>	<u>\$ (1.02)</u>
<b>Weighted average equivalent common shares outstanding</b>	7,812,519	7,779,256	7,801,396	7,776,740
<b>Weighted average equivalent common shares outstanding- assuming dilution</b>	<u>7,925,181</u>	<u>7,779,256</u>	<u>7,801,396</u>	<u>7,776,740</u>

Dawson revenues for the third fiscal quarter of 2011 were \$98,033,000, compared to \$61,178,000 for the same quarter in fiscal 2010, an increase of 60 percent. Net income for the third quarter of fiscal 2011 was \$334,000 compared to net loss of \$1,019,000 in the same quarter of fiscal 2010. Earnings per share for the third quarter of fiscal 2011 were \$0.04 compared to a loss per share of \$0.13 for the third quarter of fiscal 2010. EBITDA for the third quarter of fiscal 2011 was \$8,821,000 compared to \$5,591,000 in the same quarter of fiscal 2010, an increase of 58 percent.

For the nine months ended June 30, 2011, Dawson reported revenues of \$249,023,000 compared to \$146,093,000 for the nine months ended June 30, 2010, an increase of 70 percent. Net loss for the period decreased to \$6,190,000 in 2011 from \$7,941,000 in 2010. Loss per share for the first nine months of fiscal 2011 was \$0.79 compared to a loss per share of \$1.02 for the first nine months of fiscal 2010. EBITDA for the fiscal 2011 nine month period increased to \$14,939,000 compared to \$7,868,000 in the same period of fiscal 2010, an increase of 90 percent.

Dawson's revenues in the third quarter and first nine months of fiscal 2011 increased significantly over the same periods of fiscal 2010 due to an increase in active crew count to fourteen working crews, including the two formerly provisional crews added during the second fiscal quarter, and significantly higher third-party charges, which constituted one-half of the growth in revenues during these periods. The third-party charges are related to Dawson's use of helicopter support services, specialized survey technologies and dynamite energy sources in areas with limited access such as the Appalachian Basin, Oklahoma, East Texas and Arkansas. Dawson is reimbursed for these expenses by its clients. Dawson's fiscal third quarter and nine month results also included approximately \$1,465,000 and \$2,421,000, or \$0.19 per share and \$0.31 per share, respectively, of expenses related to the merger, and an \$884,000 and \$2,579,000, respectively, of depreciation charges related to Dawson's continued investment in new recording equipment and energy source units.

During the third fiscal quarter, Dawson purchased the 14,850 single-channel OYO GSR units it had initially leased in its second fiscal quarter by exercising the purchase option under the lease agreement. The conversion of the equipment lease to a purchase resulted in an increase of approximately \$0.02 per share per month of depreciation charges and a decrease of approximately \$0.06 per share per month of lease expense compared to March 2011, the month in which the equipment was initially leased. The purchase of the equipment was financed through a new term loan facility in the amount of \$16,427,000. Dawson still retains its \$20,00,000 revolving facility, and at the date of this joint proxy statement/prospectus, no amounts were drawn under the revolving facility.

Dawson's order book has grown to its highest level since late fiscal 2008 with added projects in the Eagle Ford, Bakken, Niobrara and Avalon liquids and oil-rich shales. Drilling activity remains relatively high in the Marcellus, Barnett and Haynesville natural gas shales while demand is increasing in many conventional oil basins. Pricing and contract terms are showing continued improvements as activity levels in the lower 48 states continue to increase. Dawson continues to operate on several projects contracted in early 2010 with less favorable contract terms, and believes it will complete work on these projects during calendar 2011. Demand for Dawson's services remains strong. Although Dawson's clients may cancel their service contracts on short notice, Dawson's order book currently reflects commitments sufficient to maintain full operation of fourteen crews through the end of calendar 2011.

During the third fiscal quarter, Dawson's Board of Directors approved a \$5,000,000 increase to its capital budget and approved the purchase of the previously leased OYO GSR equipment, bringing the total amount of Dawson's fiscal 2011 capital budget to \$61,918,000. As of the date of this joint proxy statement/prospectus, Dawson has spent \$56,264,000 of the

---

capital budget primarily to purchase 2,000-station OYO GSR four-channel recording system along with three-component geophones, 24,850 single-channel OYO GSR recording boxes, additional conventional geophones, cables for existing systems, vehicles to improve our fleet and ten INOVA vibrator energy source units. Dawson will use the remaining balance of its fiscal 2011 capital budget for maintenance capital purposes.

The financial information set forth in this “Dawson Recent Developments” section regarding EBITDA (defined as earnings before interest, income taxes, depreciation and amortization expense) may be considered a non-GAAP financial measure. Dawson provided this information because Dawson believes it could be useful in evaluating Dawson’s operating performance. EBITDA should not be considered in isolation from, or as a substitute for, financial information presented in compliance with GAAP, and EBITDA as used by Dawson may not be comparable to similarly titled amounts used by other companies. The below table reconciles Dawson’s EBITDA for the three- and nine-months ended June 30, 2011 and 2010 to Dawson’s net income (loss) during the same period.

**Reconciliation of EBITDA to Net Income (Loss)**

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2011	2010	2011	2010
	(in thousands)		(in thousands)	
Net income (loss)	\$ 334	\$(1,019)	\$ (6,190)	\$(7,941)
Depreciation	7,900	7,016	22,767	20,188
Income tax expense (benefit)	587	(406)	(1,638)	(4,379)
EBITDA	<u>\$8,821</u>	<u>\$ 5,591</u>	<u>\$14,939</u>	<u>\$ 7,868</u>

## Appendix B

The following tables incorporates the quarterly projections previously withheld until Dawson's third fiscal quarter earnings announcement:

### Dawson Geophysical Company Unaudited Prospective Financial Information

(\$ in millions)	Projected Calendar Quarter Ended					
	March 31, 2011 Actual	March 31, 2011 Projected	June 30, 2011 Actual	June 30, 2011 Projected	September 30, 2011 Projected	December 31, 2011 Projected
Operating revenue	\$ 78.3	\$ 73.8	\$ 98.0	\$ 82.9	\$ 85.5	\$ 82.7
(Loss) income before income taxes	(6.5)	(5.9)	0.9	4.4	7.6	5.0
Net (loss) income	(4.9)	(4.0)	0.3	3.0	5.2	3.4
EBITDA	1.2	2.0	8.8	12.0	14.9	12.5

### TGC Industries, Inc. Unaudited Prospective Financial Information

(\$ in millions)	Projected Calendar Quarter Ended					
	March 31, 2011 Actual	March 31, 2011 Projected	June 30, 2011 Actual	June 30, 2011 Projected	September 30, 2011 Projected	December 31, 2011 Projected
Total revenue	\$ 50.2	\$ 41.4	\$ 30.2	\$ 28.1	\$ 30.4	\$ 32.9
Pre-tax income (loss)	8.8	5.7	1.0	(.02)	1.2	1.8
Net income (loss)	5.8	3.8	0.6	(.01)	0.7	1.2
EBITDA	13.5	9.9	6.0	4.1	5.3	5.9

### **Appendix C**

The following paragraph will be inserted at the end of the “Background of the Merger” section:

On July 19, 2011, the senior management and most of the members of the board of directors of each of Dawson and TGC met at the Dallas office of Haynes and Boone to discuss upcoming financial results of the companies for the quarter ended June 30, 2011 as well as other matters related to the progress of the merger. Representatives of the legal and financial advisors of Dawson and TGC also participated in the meeting.