Page 1 of 4 SCHEDULE 13G (1996) Amendment No. 5 DAWSON GEOPHYSICAL C Cusip # 239359102 Page 2 of 4 Cusip # 239359102 Item 1: REPORTING PERSONS Dimensional Fund Advisors Inc. (Tax ID: 22-2370029) Item 4: CITIZENSHIP Delaware Corporation SOLE VOTING POWER Item 5: 148.300 * Persons who are officers of Dimensional Fund Advisors Inc. also serve as officers of DFA Investment Dimensions Group Inc., (the "Fund") and The DFA Investment Trust Company (the "Trust"), each an open-end management investment company registered under the Investment Company Act of 1940. In their capacities as officers of the Fund and the Trust, these persons vote 44,700 additional shares which are owned by the Fund and 29,100 shares which are owned by the Trust. (Included in Item 7 of this page of this Schedule) Item 6: SHARED VOTING POWER --None SOLE DISPOSITIVE POWER --Item 7: 222,100 SHARED DISPOSITIVE POWER --Item 8: AGGREGATE AMOUNT BENEFICIALLY OWNED --Item 9: 222,100 Item 11: PERCENT OF CLASS REPRESENTED BY LINE 9 --5.34 Item 12: TYPE OF REPORTING PERSON --ТΔ ------Page 3 of 4 ITEM 1(A). NAME OF ISSUER DAWSON GEOPHYSICAL C ADDRESS OF ISSUER ITEM 1(B). 208 South Marienfeld St. MIDLAND TX 79701-5113 ITEM 2(A). NAME OF PERSON FILING Dimensional Fund Advisors ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE 1299 Ocean Avenue, 11th Floor, Santa Monica, CA 90401 ITEM 2(C). CITIZENSHIP A Delaware Corporation TITLE OF CLASS OF SECURITIES ITEM 2(D). Common Stock

ITEM 2(E).	CUSIP NUMBER
	239359102
ITEM 3.	This statement is filed pursuant to Rule 13d-1 (b), or 13d-2 (b) and the person filing is an investment advisor registered under section 203 of the Investment Advisors Act of 1940.
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ITEM 4. ITEM 4(a). ITEM 4(b).	AMOUNT BENEFICIALLY OWNED See Page 2, Item No. 9 PERCENT OF CLASS
ITEM 4(c). (i). (ii).	SOLE POWER TO VOTE OR DIRECT THE VOTE See Page 2, Item No. 5
(iii). (iv).	None SOLE POWER TO DISPOSE OR TO DIRECT DISPOSITION OF See Page 2, Item No. 9
ITEM 5.	OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS If this statement is being filed to report the fact that as of 12/31/96 the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: []
ITEM 6.	OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON All Securities reported upon in this schedule are onwed by advisory clients Dimensional Fund Advisors Inc., no one of which to the knowledge of Dimensional Fund Advisors Inc. owns more than 5% of the class
ITEM 7.	IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY: Not Applicable
ITEM 8.	IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP Not Applicable
ITEM 9.	NOTICE OF DISSOLUTION OF GROUP Not Applicable
ITEM 10.	CERTIFICATION By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purposes or effect.

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete are correct.

Signature

Wednesday, February 5, 1997 Date

Michael T. Scardina Vice President and Chief Finacial Officer Name/Title