

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No. _____)*

TGC Industries, Inc.

(Name of Issuer)

Common Stock, \$.10 Par Value

(Title of Class of Securities)

892417916

(CUSIP Number)

Check the following box if a fee is being paid with this statement [x]. (A fee is not required only if the filing person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class). (See Rule 13d-7).

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of the cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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(1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Special Situations Fund III, L.P. ("The Fund")
F13-3737427

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) | |
(b) |X|

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF (5) SOLE VOTING POWER 1,187,500
SHARES

BENEFICIALLY (6) SHARED VOTING POWER None
OWNED BY

EACH (7) SOLE DISPOSITIVE POWER 1,187,500
REPORTING

PERSON WITH (8) SHARED DISPOSITIVE POWER None

(9) AGGREGATE AMOUNT BENEFICALLY OWNED BY EACH REPORTING PERSON

1,187,500

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES
CERTAIN SHARES*

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

16.5

(12) TYPE OF REPORTING PERSON*

IV

 (1) NAME OF REPORTING PERSON
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

MGP Advisers Limited Partnership ("MGP")
 F13-3263120

 (2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) | |
 (b) |X|

 (3) SEC USE ONLY

 (4) CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES	(5) SOLE VOTING POWER	None
BENEFICIALLY OWNED BY	(6) SHARED VOTING POWER	None
EACH	(7) SOLE DISPOSITIVE POWER	1,187,500
REPORTING PERSON WITH	(8) SHARED DISPOSITIVE POWER	None

 (9) AGGREGATE AMOUNT BENEFICALLY OWNED BY EACH REPORTING PERSON

1,187,500

 (10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES
 CERTAIN SHARES*

 (11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

16.5

 (12) TYPE OF REPORTING PERSON*

IA

 (1) NAME OF REPORTING PERSON
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

AWM Investment Company, Inc. ("AWM")
 11-2086452

 (2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) | |
 (b) |X|

 (3) SEC USE ONLY

 (4) CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES	(5) SOLE VOTING POWER	390,833
BENEFICIALLY OWNED BY	(6) SHARED VOTING POWER	None
EACH	(7) SOLE DISPOSITIVE POWER	1,578,333
REPORTING PERSON WITH	(8) SHARED DISPOSITIVE POWER	None

 (9) AGGREGATE AMOUNT BENEFICALLY OWNED BY EACH REPORTING PERSON

1,578,333

 (10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES
 CERTAIN SHARES*

 (11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

21.0

 (12) TYPE OF REPORTING PERSON*

IA

 (1) NAME OF REPORTING PERSON
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Austin W. Marxe
 ###-##-####

 (2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) | |
 (b) |X|

 (3) SEC USE ONLY

 (4) CITIZENSHIP OR PLACE OF ORGANIZATION

United States

NUMBER OF SHARES	(5) SOLE VOTING POWER	390,333
BENEFICIALLY OWNED BY	(6) SHARED VOTING POWER	1,187,500
EACH	(7) SOLE DISPOSITIVE POWER	1,578,333
REPORTING PERSON WITH	(8) SHARED DISPOSITIVE POWER	None

 (9) AGGREGATE AMOUNT BENEFICALLY OWNED BY EACH REPORTING PERSON

1,578,333

 (10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES
 CERTAIN SHARES*

 (11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

21.0

 (12) TYPE OF REPORTING PERSON*

IN

Item 1.

- (a) Name of Issuer: TGC Industries, Inc.
- (b) Address of Issuer's Principal Executive Offices:
1304 Summit Ave., Ste 2, Plano, TX 75074

Item 2.

- (a)-(c) Name of Person Filing; Address of Principal Business Office; and Place of Organization: This statement is filed on behalf of (i) Special Situations Fund III, L.P., a Delaware limited partnership (the "Fund"), (ii) MGP Advisers Limited Partnership, a Delaware Limited Partnership ("MGP"), (iii) AWM Investment Company, Inc., a Delaware corporation ("AWM") and (iv) Austin W. Marx. Each of the foregoing is hereinafter individually referred to as a "Reporting Person" and collectively as the "Reporting Persons." The principal office and business address of the Reporting Persons is 153 East 53 Street, New York, New York 10022. The business of the Fund is to acquire, purchase, invest in, sell, convey, transfer, exchange and otherwise trade in principally equity and equity related securities.
MGP is a general partner of and investment adviser to the Fund. MGP is registered as an investment adviser under the Investment Advisers Act of 1940, as amended. The principal business of MGP is to act as a general partner of and investment adviser to

the Fund. AWM, a Delaware corporation primarily owned by Austin W. Marxe, serves as the sole general partner of MGP. AWM is a registered investment adviser under the Investment Advisers Act of 1940 and also serves as the investment adviser to, and general partner of, Special Situations Cayman Fund, L.P., a limited partnership formed under the laws of the Cayman Islands (the "Cayman Fund"). Austin W. Marxe is the principal limited partner of MGP and is the President and Chief Executive Officer of AWM. Mr. Marxe is also an associated person of MGP and is principally responsible for the selection, acquisition and disposition of the portfolio securities by AWM on behalf of MGP, the Fund and the Cayman Fund.

- 2(b) Title of Class of Securities: See cover sheets.
 2(c) CUSIP Number: See cover sheets.
 Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b), check whether the person filing is a:
- (a) () Broker or Dealer registered under section 15 of the Act
 - (b) () Bank as defined in section 3(a) (6) of the Act
 - (c) () Insurance Company as defined in section 3(a) (19) of the Act
 - (d) (x) Investment Company registered under section 8 of the Investment Company Act
 - (e) (x) Investment Adviser registered under section 203 of the Investment Advisers Act of 1940
 - (f) () Employee Benefit Plan, Pension Fund which is subject to the provisions of the Employee Retirement Income Security Act of 1974 or Endowment Fund
 - (g) (x) Parent Holding Company, in accordance with §240.13d-1 (b) (ii) (G)
 - (h) () Group, in accordance with §240.13d-1 (b) (1) (ii) (H)

See Exhibit A attached hereto.

Item 4. Ownership:

- (a) Amount Beneficially Owned: 1,578,333 shares of Common Stock are beneficially owned by AWM and Austin Marxe. This amount is composed of 187,500 shares of Common Stock and 150,000 Series C 8% Convertible Exchangeable Preferred Stock convertible into 1,000,000 shares of Common Stock owned by the Fund, along with 57,500 shares of Common Stock and 50,000 Series C 8% Convertible Exchangeable Preferred Stock convertible into 333,333 shares of Common Stock owned by the Cayman Fund. The Fund and MGP beneficially own 1,187,500 shares of common stock by virtue of owning 187,500 common shares directly and 150,000 Series C 8% Convertible Exchangeable Preferred Stock.
- (b) Percent of Class: 21 percent are owned by AWM and Austin Marxe. 16.5 percent are owned by the Fund and MGP.
- (c) Number of Shares as to Which Such Person Has Rights to Vote and/or Dispose of Securities: The Special Situations Fund

III, L.P. has the sole power to vote or to direct the vote and to dispose or to direct the disposition of all securities reported hereby which are beneficially owned by the Fund. AWM has the sole power to vote or to direct the vote of securities reported hereby which are beneficially owned by AWM by virtue of it being the Investment Adviser to the Cayman Fund. Austin Marxe has sole power to vote or to direct the vote of securities reported hereby which are beneficially owned by Austin Marxe by virtue of being the primary owner of and President and Chief Executive Officer of AWM. Austin Marxe has shared power to vote or to direct the vote of all securities owned by Austin Marxe by virtue of being an Individual General Partner of the Fund. MGP, AWM and Austin Marxe have the sole power to dispose or to direct the disposition of all securities reported hereby which are beneficially owned respectively by MGP, AWM and Austin Marxe.

Item 5. Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof 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: The Fund and the Cayman Fund as owners of the securities in question, have the right to receive any dividends from, or proceeds from the sale of, such securities.

Item 7. Identification and Classification of the Subsidiary

Which Acquired the Security being Reported on by the Parent Holding Company: See Exhibit A attached hereto.

Item 8. Identification and Classification of Members of the Group: Not applicable.

Item 9. Notices of Dissolution of Group: Not applicable.

Item 10. Certification:

Each of the undersigned certifies that, to the best of its or his knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were 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 purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of his knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: January 8, 1997

SPECIAL SITUATIONS FUND III, L.P.

By:/s/ Austin W. Marxe
Austin W. Marxe
Individual General Partner

MGP ADVISERS LIMITED PARTNERSHIP
By: AWM Investment Company, Inc,

By: /s/ Austin W. Marxe
Austin W. Marxe
President and Chief
Executive Officer

AWM INVESTMENT COMPANY, INC.

By: /s/ Austin W. Marxe
Austin W. Marxe
President and Chief
Executive Officer

/s/ Austin W. Marxe
AUSTIN W. MARXE

EXHIBIT A

This Exhibit explains the relationship between the Reporting Persons. AWM is the sole general partner of MGP, a registered investment adviser under the Investment Advisers Act of 1940, as amended. MGP is a general partner of and investment adviser to the Fund. AWM is a registered investment adviser under the Investment Advisers Act of 1940 and also serves as the general partner of, and investment adviser to, the Cayman Fund. Austin W. Marx is the principal owner and President of AWM.