

Brown Mary Rose
Form 5
February 14, 2011

FORM 5

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

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).
Form 3 Holdings Reported Form 4 Transactions Reported

ANNUAL STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person *
Brown Mary Rose

(Last) (First) (Middle)

2330 NORTH LOOP 1604 WEST

(Street)

SAN ANTONIO, TX 78248

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
NuStar Energy L.P. [NS]

3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year)
12/31/2010

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director 10% Owner
 Officer (give title below) Other (specify below)

SVP - Administration

6. Individual or Joint/Group Reporting

(check applicable line)

Form Filed by One Reporting Person
 Form Filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned at end of Issuer's Fiscal Year (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
				Amount	(A) or (D)	Price			
Common Units	01/07/2010	Â	P4	229	A	\$ 56.83	229	I	By Daughter
Common Units	01/07/2010	Â	P4	229	A	\$ 56.83	229	I	By Son
Common Units	12/14/2010	Â	P4	244	A	\$ 70.66	473	I	By Daughter
Common Units	12/14/2010	Â	P4	244	A	\$ 70.66	473	I	By Son

Common Units 15,987 D

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

Table with 9 columns: 1. Title of Derivative Security, 2. Conversion or Exercise Price of Derivative Security, 3. Transaction Date, 3A. Deemed Execution Date, 4. Transaction Code, 5. Number of Derivative Securities, 6. Date Exercisable and Expiration Date, 7. Title and Amount of Underlying Securities, 8. Price of Derivative Security, 9. of Derivative Security. Includes sub-columns for Date Exercisable and Expiration Date, and Amount or Number of Shares.

Reporting Owners

Table with 2 main columns: Reporting Owner Name / Address, Relationships (Director, 10% Owner, Officer, Other). Includes entry for Brown Mary Rose at 2330 NORTH LOOP 1604 WEST SAN ANTONIO, TX 78248.

Signatures

/s/ Matthew D. Willcox, as Attorney-in-Fact for Mary Rose Brown 02/14/2011

**Signature of Reporting Person Date

Explanation of Responses:

* If the form is filed by more than one reporting person, see Instruction 4(b)(v).
** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
Note: File three copies of this Form, one of which must be manually signed. If space provided is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.