

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL

OMB Number: 3235-0104
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1. Name and Address of Reporting Person* <u>Brown Mary Rose</u> (Last) (First) (Middle) <u>2330 NORTH LOOP 1604 WEST</u> (Street) <u>SAN TX 78248</u> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>02/26/2009</u>	3. Issuer Name and Ticker or Trading Symbol <u>NuStar Energy L.P. [NS]</u> 4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <div>Director 10% Owner</div> <div><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)</div> <div><u>Senior Vice President</u></div>	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <div><input checked="" type="checkbox"/> Form filed by One Reporting Person</div> <div>Form filed by More than One Reporting Person</div>
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Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Units	3,025	D	
Common Units	800 ⁽¹⁾	D	
Common Units	2,400 ⁽²⁾	D	
Common Units	2,900 ⁽³⁾	D	

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

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Performance Units	(4)(5)	04/30/2014	Common Units	362	0	D	
Performance Units	(4)(6)	01/24/2015	Common Units	1,166	0	D	
Performance Units	(4)(7)	01/22/2016	Common Units	2,200	0	D	
Employee Unit Options (right to buy)	(8)	04/30/2014	Common Units	1,700	69.15	D	

Explanation of Responses:

1. Restricted units remaining unvested from original grant of 1,000 restricted units on April 30, 2007. The restricted units vest annually in equal increments over a five-year period beginning on the first anniversary of the grant date.
2. Restricted units remaining unvested from original grant of 3,000 restricted units on November 16, 2007. The restricted units vest annually in equal increments over a five-year period beginning on the first anniversary of the grant date.
3. Restricted units remaining unvested from original grant of 2,900 restricted units on November 6, 2008. The restricted units vest annually in equal increments over a five-year period beginning on the first anniversary of the grant date.
4. Performance units vest annually in 1/3 increments over three years beginning on the first anniversary of their grant date. Upon vesting, the performance units are converted into a number of NuStar Energy L.P. (NuStar) units based on NuStar's total unitholder return (TUR) during rolling three-year periods that end of December 31 of each year following the date of grant. At the end of each performance period, NuStar's TUR is compared to NuStar's peer group and ranked by quartile. Holders of the performance units then earn 0%, 50%, 100% or 150% of that portion of the initial grant that is vesting, depending upon whether NuStar's TUR is in the last, third, second or first quartile, respectively; holders earn 200% if NuStar ranks first in the Peer Group. Amounts not earned in a given performance period can be carried forward for one additional performance period and up to 100% of the carried amount can still be earned, depending upon the quartile achieved for that subsequent period.
5. Performance units from original grant of 725 performance units on April 30, 2007 that remain available for future vest. For the period ended December 31, 2007, NuStar's TUR was in the fourth quartile of it and the Peer Group, which resulted in no vesting for participants. Ms. Brown received no vested performance units for the 2007 period. For the period ended December 31, 2008, NuStar's TUR was in the third quartile of it and the Peer Group, which resulted in a 50% vest for participants. Ms. Brown received a total of 242 units with respect to this grant for the 2008 performance period.
6. Performance units from original grant of 1,400 performance units on January 24, 2008 that remain available for future vest. For the period ended December 31, 2008, NuStar's TUR was in the third quartile of it and the Peer Group, which resulted in a 50% vest for participants. Ms. Brown received a total of 234 units with respect to this grant for the 2008 performance period.
7. Performance units from original grant of 2,200 performance units on January 22, 2009 that remain available for future vest.
8. Unit options remaining unvested or unexercised from original grant of 1,700 unit options on April 30, 2007. The unit options vest annually in equal increments over a five-year period beginning on the first anniversary of the grant date.

Elizabeth E. Clifton as
Attorney-In-Fact for Mary
Rose Brown
03/10/2009

** Signature of Reporting Person Date

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

* If the form is filed by more than one reporting person, see Instruction 5 (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 is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.