FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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1. Name and Addr	1 0	Person*	2. Issuer Name and Ticker or Trading Symbol PLAINS ALL AMERICAN PIPELINE LP		5. Relationship of Reporting Person(s) to Issuer (Check all applicable)				
PETERSEN	<u>GARI R</u>		[PAA]	X	Director Officer (give title below)	10% Owner			
(Last) 1100 LOUISIA	(First) ANA, # 3150	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 08/20/2010			Other (specify below)			
(Street)	ТХ	77002 (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indiv Line) X	vidual or Joint/Group Fili Form filed by One Re				
(City)	(State)				Form filed by More th Person				

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

Title of Security (Instr. 3)	Date (Month/Day/Year)		Transaction Code (Instr.					5. Amount of Securities Beneficially Owned Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership
			Code	v	Amount	(A) or (D)	Price	Reported Transaction(s) (Instr. 3 and 4)		(Instr. 4)

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

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transa Code (8)		of		6. Date Exerc Expiration Da (Month/Day/Y	ate	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Phantom Units ⁽¹⁾	(2)	08/20/2010		Α		5,000		(3)	(4)	Common Units	5,000	\$ <mark>0</mark>	5,000	D	

Explanation of Responses:

1. Grant of phantom units under Long-Term Incentive Plan (includes associated distribution equivalent rights (payable in cash)).

2. One common unit is deliverable, upon vesting, for each phantom unit that vests.

3. 1,250 phantom units vest annually on the August distribution date, with an automatic re-grant of equivalent amount.

4. Upon termination of service as director, other than because of death or disability.

Remarks:

1.

<u>/s/ Gary R. Petersen</u>

** Signature of Reporting Person Date

08/24/2010

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 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 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.