## FORM 4

obligations may continue. See

Instruction 1(b)

Check this box if no longer subject to Section 16. Form 4 or Form 5

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington,	D.C.	20549

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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

1. Name and Address of Reporting Person*  PETERSEN GARY R						2. Issuer Name and Ticker or Trading Symbol PLAINS ALL AMERICAN PIPELINE LP PAA PAA										eck all app X Direc	eck all applicable)				to Issuer  O% Owner  ther (specify	
(Last) (First) (Middle) 1100 LOUISIANA, # 3150						3. Date of Earliest Transaction (Month/Day/Year) 12/10/2009																
(Street) HOUSTON TX 77002 (City) (State) (Zip)				-   4.   -	4. If Amendment, Date of Original Filed (Month/Day/Year)									Line	5. Individual or Joint/Group Filing (Check Applicable Line)  X 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  2. Deemed  3.  4. Securities Acquired (A) or  5. Amount of  6. Ownership  7. Nature of																						
				Date (Month/Day/Year)		Execution Date, if any (Month/Day/Year)		Co	Transaction Code (Instr. 8)					s, 4 and 5	·	Securities Beneficially Owned Following Reported		Form: Direct (D) or Indirect (I) (Instr. 4)		Indirect Beneficial Ownership (Instr. 4)		
								Co	ode	v	Amount		(A) or (D)	Price		Transactio (Instr. 3 ar				(	,	
Common Units			12/10/200	9				P		1,070,66	<b>3</b> (1)	A	\$51.1	.5	1,689,559		I		Through Partnership <sup>(2)</sup>			
Common Units			12/10/200	)9				S		1,361,35	<b>)</b> (3)	D	D \$49.3 <sup>(4)</sup>		328,200		I		Through Partnership <sup>(2)</sup>			
Common Units																5,200		D				
		Та	ble	II - Derivat (e.g., p							sposed o					Owned						
Derivative Security (Instr. 3)  Conversion or Exercise Price of Derivative Security  Date (Month/Day/Year)  (Month/Day/Year)  Execution Date, if any (Month/Day/Year)  (Month/Day/Year)					action (Instr.	5. Nu of Deriv Secu Acqu (A) or Dispo of (D) (Instr and 5	ative rities ired osed	6. Date Exercisable and Expiration Date (Month/Day/Year)			7. Title Amoun Securit Underly Derivat Securit and 4)	t of ies /ing	t		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)		.e ercisab		UII	Title	Shares								

## **Explanation of Responses:**

- 1. Pursuant to that certain Purchase Agreement dated October 29, 2009, on December 10, 2009 (the "Purchase Agreement"), E-Holdings III, L.P. ("E-Holdings III") and E-Holdings V, L.P. ("E-Holdings V", and together with E-Holdings III, "E-Holdings") acquired an aggregate amount of 1,070,663 common units representing limited partnership interests (the "Purchase Transaction") in Plains All American Pipeline, L.P. (the "Issuer"). The securities acquired by E-Holdings in the Purchase Transaction were unrestricted securities.
- 2. Mr. Petersen is a principal of EnCap Investments, L.P., an affiliate of E-Holdings III and E-Holdings V, which own the common units. The reporting person disclaims any beneficial ownership of the common
- 3. On December 10, 2009, the common units were sold by E-Holdings in a single block trade.
- 4. Pursuant to the Purchase Agreement, based on post-closing adjustments, E-Holdings received an additional payment of approximately \$590,000.

## Remarks:

Gary R. Petersen

12/14/2009

\*\* 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 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.