CEMENTING TREATMENT REPORT

PIONEER NATURAL RESOURCES

TREATMENT NUMBER	DATE
FG2012016	11/6/2012
STAGE 1	**JOB TYPE** P&A

WELL NAME AND NO.	LOCATION (LEGAL)	
PCW 44-9	SE/SE 9-T34S-R65W	
FIELD Raton / Long Canyon	**FORMATION** Raton	
COUNTY Las Animas	**STATE** Colorado	**API NO.** 05-071-06393

RIG FORMAN: Eddie Morris

CEMENT SUPER: Frank L. Gonzales

Jose Madrid

SPECIAL INSTRUCTIONS

Personnel - Mike Vecellio, Barry Clemmenson, Roberto Romero, Ronald Trujillo, Gary Hessling

LIFT PRESSURE		psi		
PRESSURE LIMIT	1000	psi	**BUMP PLUG TO**	N/A
			NO. of Centralizers	N/A

RIG NAME: Coil #

CEMENT PUMPER: 23004

WELL DATA			BOTTOM	FT	TOP		FT
BIT SIZE		**CSG/Liner Size**	4 1/2				
TOTAL DEPTH		**WEIGHT**	10.5				
MUD TYPE		**FOOTAGE**	1120				
☐ BHST		**GRADE**	J55				
☐ BHCT		**THREAD**					
MUD DENSITY		SHOE JOINT(S)					TOTAL:
MUD VISC		**Disp. Capacity**					0

Include Footage From Ground Level To Head In Disp. Capacity

SHOE FLOAT			Stage Tool			
TYPE				TYPE		
DEPTH				DEPTH		
TYPE				TYPE		
DEPTH				DEPTH		

Head & Plugs		☑ TBG	☐ D.P.	CIBP	
		SIZE	2 7/8	TOOL TYPE	
☐ Double Box 6	**WEIGHT**	6.4		DEPTH	680
☐ Single	**GRADE**	J-55		**TAIL PIPE:** SIZE	DEPTH
☐ Swage	**THREADS**	EUE		**TUBING VOLUME**	BBLs
☐ Knockout	☐ New	☑ Used		**CSG VOL BELOW TOOL**	BBLs
	DEPTH	680		**TOTAL**	BBLs
	CEMENT TEMPERATURE:	60		**ANNULAR VOLUME**	BBLs
	WATER QUALITY:	8	**pH**	**SG** 52	**TEMP**

TIME	PRESSURE		VOLUME PUMPED		JOB SCHEDULED FOR			ARRIVE ON LOCATION			RIG UP			LEFT LOCATION		
0001 to 2400	TBG	CSG	INCR	CUM	**TIME:** 8:00	**DATE:** 11/6/2012		**TIME:** 7:30	**DATE:** 11/6/2012		**TIME:** 7:40	**DATE:** 11/6/2012		**TIME:** 11:30	**DATE:** 11/6/2012	
					RATE	FLUID TYPE	DENSITY									
8:42	17		20	20	2	H2O	8.3	Load hole								
8:55	1000		1	21	2	H2O	8.3	Pressure Test								
10:03	145		12	33	2	Cmt.	15.8	Pump Cement @ 15.8 PPG / 60 Sks.								
10:10	115		17.8	50.8	2	H2O	8.3	Pump Displacement								
10:18	30				2	H2O	8.3	Circulated good cement to surface with 17 Displ. Gone								
10:28	30		2.2	53	2	Cmt.	15.8	Top Off								
10:30			2.5	55.5	2	H2O	8.3	Wash out Tubing								
10:50			40	95.5	4	H2O	8.3	Wash up Pump and Lines								
11:10								RIG DOWN								

System Used	No.of Sacks	Yield ft^3/sk	COMPOSITION OF SYSTEM	SLURRY MIXED BBLS	SLURRY MIXED DENSITY
Class G	60	1.15	60 sacks Class G Cement	12	15.8
			14.1 lbs Dispersant		
			21 gal 7.5% Acid - Used to clean out coil		
			.06 gal Corrosion Inhibitor - Used to clean out coil		

CIRCULATION	☑ Yes	☐ No	**WASHED CASING DOWN**	☐ Yes	☑ No	**BREAKDOWN** 17 **PSI**	**FINAL** 30 **PSI**
DISPLACEMENT VOL.	17.8	**BBLS**	**RETURNED TO SURFACE** N/A			BEFORE PLUG BUMP **PRESSURE** N/A **PSI**	**RATE** 2 **BPM**