CEMENTING TREATMENT REPORT

PIONEER NATURAL RESOURCES

TREATMENT NUMBER	GH2011012
DATE	4/28/2011
STAGE	1
JOB TYPE	P&A

WELL NAME AND NO.	Cody 41-19 Tr	LOCATION (LEGAL)	NENE Sec 19-T33S R65W
FIELD		FORMATION	Raton
COUNTY	Las Animas	STATE	Colorado
API NO.	05-071-06755-0000		

RIG NAME: P.N.R Rig #3

CEMENT PUMPER: 2305

RIG FORMAN: Billy Vigiol

CEMENT SUPER: Gary Hessling

Crew on location : Madrid, Wagner, Hessling

SPECIAL INSTRUCTIONS: P&A

WELL DATA			BOTTOM		FT	TOP		FT
BIT SIZE		CSG/Liner Size	5.5					
TOTAL DEPTH	594	WEIGHT	17					
MUD TYPE		FOOTAGE						
☐ BHST		GRADE						
☐ BHCT		THREAD						
MUD DENSITY		LESS FOOTAGE SHOE JOINT(S)						TOTAL:
MUD VISC		Disp. Capacity						0

Include Footage From Ground Level To Head In Disp. Capacity

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

Head & Plugs		☐ TBG	☐ D.P.	SQUEEZE JOB		
		SIZE		TOOL	TYPE	
☐ Double Box 6	WEIGHT				DEPTH	
☐ Single	GRADE			TAIL PIPE:	SIZE	DEPTH
☐ Swage	THREADS			TUBING VOLUME		BBLs
☐ Knockout	☐ New	☐ Used		CSG VOL BELOW TOOL		BBLs
	DEPTH			TOTAL		BBLs
CEMENT TEMPERATURE:				ANNULAR VOLUME		BBLs
WATER QUALITY:					SG	TEMP

LIFT PRESSURE		psi	
PRESSURE LIMIT		psi	BUMP PLUG TO
NO. of Centralizers			

JOB SCHEDULED FOR			ARRIVE ON LOCATION			RIG UP			LEFT LOCATION		
TIME: 11:00	DATE: 4/28/2011		TIME: 10:45	DATE: 4/28/2011		TIME: 11:00	DATE: 4/28/2011		TIME: 14:30	DATE: 4/28/2011	

TIME 0001 to 2400	PRESSURE TBG	PRESSURE CSG	VOLUME PUMPED INCR	VOLUME PUMPED CUM	RATE	FLUID TYPE	DENSITY	
10:45								Arrive on location
11:50		0	12			H2o	8.34	Load casing 12bbls
12:00		0	3	15	2	Cmt	15.8	Mix and pump 3 bbls 15.3 cement
12:02		20	1.5	16.5	1.5	H2o	8.34	Displace with 1.5 bbls H2o
12:05								PUH to 333
12:23		0	7.25	23.75	1.5	Cmt	15.8	Mix and pump top plug 7.25 bbls @ 15.8
								Weak cement to surface pump an additional 1bbl for good cement to surface
								POOH with 2-3/8 tubing
14:00			0.75	24.5	1	Cmt	15.8	top off to 9 ft from surface
2:15								Rig down a leave location

System Used	No. of Sacks	Yield ft^3/sk	COMPOSITION OF SYSTEM	SLURRY MIXED BBLS	SLURRY MIXED DENSITY
Class G	58	1.16	60 Sacks Class G Cement	12	15.8
			112.80 lbs Calcium Chloride		

CIRCULATION x	☑ Yes ☐ No	WASHED CASING DOWN	☐ Yes ☑ No	BREAKDOWN PSI	FINAL PSI
DISPLACEMENT VOL. BBLS		RETURNED TO SURFACE		BEFORE PLUG BUMP PRESSURE PSI	RATE 1 BPM