

Brooks, David K., EMNRD

From: Tom Kellahin [tkellahin@comcast.net]
Sent: Monday, July 23, 2007 7:45 AM
To: Ezeanyim, Richard, EMNRD; Brooks, David K., EMNRD
Cc: Alan Alexander
Subject: NMOCD Case 13933
Follow Up Flag: Follow up
Flag Status: Red
Attachments: Copy of EPNG COM A #1 INJ well tabulation.xls; cement calcs.xls

Richard,

At the hearing on Burlington's CO2 Sequestration case 13933 presented to you and Mr.. Brooks on June 21, 2007, I agreed to provide you with a revised tabulation of the area of review and the calculation for cement tops. Please find that information attached.

Tom Kellahin
Kellahin & Kellahin
Attorneys at Law
706 Gonzales Road
Santa Fe, NM 87501
ph 505-982-4285
fx 505-982-2047
tkellahin@comcast.net

From: Alexander, Alan E [mailto:Alan.E.Alexander@conocophillips.com]
Sent: Monday, July 23, 2007 8:03 AM
To: Tom Kellahin
Subject: FW: Cement Calcs

Here is the new spreadsheet for the CO2 sequestration hearing.

From: Schlabaugh, James L
Sent: Friday, July 20, 2007 7:52 AM
To: Alexander, Alan E
Subject: Cement Calcs

<<Copy of EPNG COM A #1 INJ well tabulation.xls>> <<cement calcs.xls>>

These are in R:\RAM\COAL\Sequestration Project\DOE Project\Hearing if you need them in the future.

Jim

This inbound email has been scanned by the MessageLabs Email Security System.

8/13/2007

Cement Top Calculations for C108 Item VI

State Com K 7R cement calculations

7" 20# casing set at 3598' with 470 sacks cement

$470 \text{ sx} \times 1.32 \text{ cu-ft/sx} = 620.4 \text{ cu-ft}$

$620.4 \text{ cu-ft} / 0.1503 \text{ cu-ft per ft of annulus} = 4128 \text{ ft}$

$4128 \text{ ft} \times 0.5 \text{ safety factor} = 2064 \text{ ft of cement}$

$3598 \text{ ft} - 2064 \text{ ft} = \mathbf{1534 \text{ ft at top of cement}}$

State Com AL 36 cement calculations

7 5/8" 26.4# casing set at 33456' with 930 cu-ft cement

$930 \text{ cu-ft} / 0.1882 \text{ cu-ft per ft of annulus} = 4942 \text{ ft}$

$4942 \text{ ft} \times 0.5 \text{ safety factor} = 2471 \text{ ft of cement}$

$3456 \text{ ft} - 2470 \text{ ft} = \mathbf{986 \text{ ft at top of cement}}$

BURLINGTON RESOURCES OIL & GAS COM, LP
C108 ITEM VI - Well Tabulation in Review Area
EPNG COM A INJ #1 - CO2 Sequestration Project

Operator	Well Name	API No.	County	Sec. Twn	Type	Status	Spud Date	Comp Date	TD	PBTD	Com Zone	Comp Interval	Casing Program	TOC
1 Burlington	EPNG Com A #300S	30-045-31929	San Juan	32-31N-8W	Gas	Act.	5/15/2004	7/16/2004	3440'	3440'	Basin FC	3157'-3249'	9-5/8" 32.3# @ 222' w/207 cf 7" 20# @ 3067' w/906 cf	Circ.
2 Burlington	EPNG Com A #2	30-045-10044	San Juan	32-31N-8W	gas	act.	12/3/1966	12/21/1966	5520'	5465'	MV	4712'-5452'	9-5/8" 25.4# @ 180' w/125 sx 7" 20 & 23# @ 4600' w/300 sx 4-1/2" 10.5# @ 5520' w/125 sx	Circ. no cement 2880' - Temp Surv
3 Burlington	EPNG Com A #2A	30-045-20934	San Juan	32-31N-8W	gas	act.	8/22/1971	9/24/1971	7872'	6080'	MV	5211'-5952'	9-5/8" 32.3# @ 235' w/190 sx 7" 20# @ 3652' w/240 sx	Circ. 2010' - Temp
4 Burlington	EPNG Com I #10	30-045-21304	San Juan	32-31N-8W	gas	act.	7/29/1973	8/14/1973	7987'	7978'	DK	7724'-7922'	5-1/2" 15.5# @ 6569' w/100 sx 10-3/4" 32.75# @ 221' w/240 cf 7-5/8" 26.4# @ 3655' w/476 cf	Circ. 2260' - Temp 3285' - CBL
5 Burlington	EPNG Com I #10	30-045-21304	San Juan	32-31N-8W	gas	act.	7/29/1973	8/14/1973	7987'	7680'	MV	4157'-5658'	10-3/4" 32.75# @ 221' w/240 cf 7-5/8" 26.4# @ 3655' w/476 cf 4-1/2" 11.6# & 10.5# @ 7987' w/897 cf	Circ. 2260' - Temp 3285' - CBL
6 Burlington	EPNG Com A #300	30-045-26877	San Juan	32-31N-8W	gas	act.	4/27/1989	5/23/1989	3099'	3099'	FC	2885'-3097'	9-5/8" 36# @ 434' w/437 cf 7" 20# @ 2899' w/960 cf	Circ. no cement
7 ConocoPhillips	FC State Com #1	30-045-27479	San Juan	32-31N-8W	gas	act.	7/11/1990	4/25/1991	3158'	3158'	FC	2924'-3147'	5-1/2" 15.5# @ 2836-3098' no cement 9-5/8" 36# @ 235' w/150 sx 7" 23# @ 2820' w/400 sx	Circ. no cement
8 ConocoPhillips	State Com K #7R	30-045-24039	San Juan	32-31N-8W	gas	act.	10/8/1980	12/17/1993	7821'	6440'	MV	5032'-5452'	10-3/4" 32.75# @ 2732'-3158' ; no cement 7" 20# @ 3598' w/470 sx 4-1/2" 11.6 & 10.5# @ 7794' w/225 sx	Circ. 1534' - Calc unknown
9 ConocoPhillips	State Com AL #36	30-045-20113	San Juan	32-31N-8W	gas	TA'd	7/18/1967	8/10/1967	7755'	7736'	DK	7518'-7700'	10-3/4" 32.75# @ 332' w/240 sx 7-5/8" 26.4# @ 3456' w/930 cf 4-1/2" 10.5# @ 7753' w/800 cf	Circ. 986' - Calc 3100' - Temp
10 ConocoPhillips	State Com AL #36	30-045-20113	San Juan	32-31N-8W	gas	act.	7/18/1967	10/1/2005	7755'	5590'	MV	4981'-5473'	10-3/4" 32.75# @ 332' w/240 sx 7-5/8" 26.4# @ 3456' w/930 cf 4-1/2" 10.5# @ 7753' w/800 cf	Circ. 986' - Calc 3100' - Temp
11 ConocoPhillips	State Com AL #36M	30-045-32897	San Juan	32-31N-8W	gas	act.	6/5/2006	9/1/2006	7949'	7929'	DK	7724'-7869'	9-5/8" 32.3# @ 244' w/285 sx 7" 20# @ 3677' w/700 sx 4-1/2" 11.6# @ 7930' w/484 sx	Circ. 2890' - CBL
12 ConocoPhillips	State Com AL #36M	30-045-32897	San Juan	32-31N-8W	gas	act.	6/5/2006	9/1/2006	7949'	7929'	MV	5182'-5710'	9-5/8" 32.3# @ 244' w/285 sx 7" 20# @ 3677' w/700 sx 4-1/2" 11.6# @ 7930' w/484 sx	Circ. 2890' - CBL
13 ConocoPhillips	State Com K #7A	30-045-21702	San Juan	32-31N-8W	gas	act.	6/15/1975	7/12/1975	5710'	5645'	MV	4992'-5500'	10-3/4" 32# @ 150' w/125 sx 7" 23# @ 3422' w/180 sx 4-1/2" 10.5# @ 2484' - 5705' w/365 sx	Circ. 1250' - temp