

SERVER

GAS MIGRATION INVESTIGATION
GAS WELL DRILL DATE

Area Cabot Wells

API	Farm/Well	Start	End	Perf	Stim	Perf	Stim
115-20010	Teel #2	2/25/2008	5/22/2008	(1) 4/28/08	(1) 4/30/08	(2) 4/30/08	(2) 4/30/08
115-20011	Teel #6	12/2/2008	12/21/2008				
115-20015	Ely #2	24-Jul	10/31/2008	(4) 10/13/08	(4) 10/15/08	(2) 10/15/08	(2) 10/16/08
115-20019	Gesford #3	9/25/2008	10/8/2008				
115-20019	Gesford #3S	10/13/2008					
115-20023	Teel #7	5/8/2008	10/24/2008	(1) 8/7/08	(1) 8/8/08	(3) 8/8/08	(3) 8/9/08
115-20024	Teel #5	5/19/2008	7/21/2008	(4) 7/2/08	(4) 7/15/08	(3) 8/8/08	(3) 8/9/08
115-20026	Baker #1	8/13/2008	8/31/2008	(4) 11/9/08	(4) 11/10/08	(2) 11/10/08	(2) 11/11/08
115-20030	Lewis #2	5/28/2008	9/6/2008	(4) 8/13/08	(4) 8/18/08	(2) 8/18/08	(2) 8/19/08
115-20033	Gesford #2	9/20/2008	10/14/2008	(1) 11/14/08	(1) 11/18/08	(2) 12/10/08	(2) 12/10/08
115-20034	Ely #4	3/30/2008	4/14/2008	(1) 11/6/08	(1) 11/6/08	(1) 11/7/08	(1) 11/8/08
115-20035	Lewis #1	6/16/2008	9/10/2008	(4) 8/20/08	(4) 8/21/08	(2) 8/21/08	(2) 8/22/08
115-20036	Costello #1	7/26/2008	10/14/2008	(1) 9/29/08	(1) 9/30/08	(2) 9/30/08	(2) 10/1/08
115-20039	Hubbard #1	10/11/2008	10/29/2008	(4) 12/15/08	(4) 12/16/08	(2) 12/16/08	(2) 12/16/08
115-20041	Ely #6H	4/17/2008	8/11/2008	6 Stages, 10/1/08 through 11/4/08			
115-20043	Costello #2	8/19/2008	10/28/2008				
115-20048	Black #1H	6/14/2008	9/11/2008				
115-20049	Ely #1H	10/23/2008	11/12/2008				
115-20050	Heitsman A. #1H	10/16/2008	1/3/2009				
115-20051	Brooks #1H	10/6/2008	11/18/2008				
115-20056	Black #2H	7/11/2008	9/30/2008				

Perf **Stim**

Key:

- (1) Marcellus
- (2) Upper Marcellus
- (3) Middle Marcellus
- (4) Lower Marcellus

(2) 10/3/08 (2) 10/5/08

(2) 11/7/08 (2) 11/7/08

Well Name	4 1/2" Casing Pressure
BAKER 1	503.8
COSTELLO 1	644.7
ELY 1H	479.3
ELY 2	706.9
ELY 4	1857.5
ELY 6H	1396.3
GESFORD 2	618.5
GREENWOOD 1	583.9
HUBBARD 1	516.9
LEWIS 1	796.4
LEWIS 2	674.5
TEEL 1	688.2
TEEL 2	754.3
TEEL 5	226.1
TEEL 7	837

SERVER

GAS MIGRATION INVESTIGATION
WELL PRESSURES

	1/21/2009	1/26/2009	1/27/2009
Baker 1	7" 520		
Brooks 1	7" 0		
Black 1	Fracking		
Black 2H	Fracking		
Costello 1 7"	350		Venting
Costello 1 4 1/2"			750
Costello 1 Tubing			450
Costello 2	7" 0		fishing
Ely 1	Natural Feeding		
Ely 2	7" 0		
Ely 4 7"	1200	1150	1100
Ely 4 4 1/2"		1200	1050
Ely 4 Tubing		1005	1000
Ely 5H	drilling		tripping
Ely 6H	7" 400		
Greenwood 1	7" 85		
Gesford 2	7" 590		
Gesford 3			
Gesford 3A		282'	286 shut down
Heitsman 1	7" 0		
Hubbard 1	7" 200		
Lewis 1	7" 0		
Lewis 2	7" ounces		
Ratzel 1	drilling		
Rozanski 1	drilling 140		
Teel 1	7" 790		
Teel 2	valves obstructed		
Teel 5	7" 200		
Teel 6	7" 110		
Teel 7	7" 80		
Teel 8H	drilling		

Welsh

Address on well records suite 500, address on plats suite 1500

Are formation logs lacking? Need to see some radio active logs.

Cetralizers as needed? What does this mean?

There is no coal protective casing.

What size of pipe has an OD of 9.675?

If the 9 5/8 is the surface casing no hole size issue. If the 7" is the surface casing we may have a hole size issue.

Baker 1 115-20026

Water Supplies

Black 1H 115-20048

Water Supplies, casing depths

Black 2H 115-20056

Water Supplies

1H and 2H are only about 50' apart

Casing depths

Water shows are different

Brooks 1H 115-20051

Water Supplies

Casing depths

Deviation Log

Costello 1 115-20036

Water Supplies

Water shows don't match between log and diagram

Costello 2 115-20043

Water Supplies

Need specs on BJ Surflite

Ely 1H 115-20049

Not finished. Feeding natural.

Ely 2 115-20015

TD of 7145', 7306' of 4 1/2" casing.

Ely 4 115-20034

Water Supplies

Casing depths

How was the horizontal section plugged?

Ely 6H 1115-20041

Water Supply

Casing depths

Gesford 2 115-20033

Water Supplies

Casing depths

Gesford 3 and 3A 115-20019

Need NOI and plat

Water Supplies

Need 4 ½" pipe depth

Water shows, casing depths

Well record and diagram don't match on water depths or cement amounts.

Greenwood 1 115-20008

Water Supplies

Casing depths

Heitsman 1H 115-20050

No water supplies

Need angular survey

Hubbard 1 115120039

Water Supplies

Casing depths

Lewis 1 115-20035

No issues.

Lewis 2 115-20030

Water Supplies

Casing depths

Fresh water under 13 3/8

Didn't cement back into surface casing on 9 5/8 as required.

Teel 1 115-20007

No water supplies

Why so much cement on the 7"?

Teel 2 115-20010

Water Supplies

No issues

Teel 5 115-20024

Water Supplies

No issues

Teel 6 115-20011

No water supplies

Gas at 7484, 4 1/2" 7428. Issue?

Teel 7 115-20023

No water Supplies

No Issues

O'Donnell

RECEIVED

FEB 20 2009

ENVIRONMENTAL PROTECTION
NORTHWEST REGIONAL OFFICE

4	Noble	Spring	✓	101	Meth/Eth	Weaver	✓
	11/20/08				No detect	11/5/09	
6	Maye	clear	✓	102	Seymour	942 + AI	
	12/16/08				170' casing	230'	11/5/09 ✓
7	Pre treatment	cloudy	✓	103	Shelly Weaver	11/8/09	
	Sautner	12/16/08			No detect	Meth/Eth	✓
T	Post	clear	✓	104	Weaver	11/8/09	✓
		12/16/08			SAC 942 + AI		
	Errentino	942	11/5/09 ✓	105	Burke	11/12	✓
		942			Meth		
	Meth/Eth	4,000 ppb or less	11/5/09 ✓	106	Sautner	11/12	✓
					Meth		
	942 + AI	Shelly Weaver	✓	107	Maye	11/12	✓
11/5/09		273-9151			Meth		

Brown	1/13	✓	114	Hubert	280'
Meth	8:00 AM		13:50	Meth	1/18 ✓
Last H ₂ O for 3 months					
Brown	1/13				270-280'
Q12	9:45	✓	115	Mike Ely	1/18 ✓
14:45					
Carter Sr.	1/13			Meth	2300'
Meth	10:20	✓	116	Ron Carter Jr	1/18 ✓
10:15					
Farnelli	1/13				278-2148
Meth	10:40	✓	117	Schneider	12:30
1/20					
Harzy Gied	1/15			Meth	1/20 ✓
Meth	10:10	✓			
180' deep					
Shelia Ely	280'	Water	118	Rodney Baker	1/21 ✓
Meth	1/18	Water		Meth/Eth	
10:00					
10:30					
Printed	1/23/09	↑	119	Hein	1/21 ✓
To	113			Meth/Eth	

120	Marazzo	✓ 1/22	✓ 127	Mike Ely	10:33
	Meth/Eth			Meth/Eth	11
121	Switzer	✓ 1/26	128	Scott Ely	12:2
	Meth/Eth			Meth/Eth	1/2-
122	Seymour	✓ 1/26	129	Cohen	12:40
	Meth/Eth			Meth/Eth	1/2
123	Raymond Kumble	✓ 1/26	130	Shelia Ely	13:0
	Meth/Eth				1/2
124	Burke	✓ 8:53	131	Larry Scott	14:0
	Meth/Eth			Meth/Eth	1/2
125	Carter Sr.	✓ 9:39	132	Julie Sawyer	9:20
	Meth/Eth			Meth	1/2
126	R. Carter Sr.	✓ 9:54	133	Debbie Maye	10:05
	Meth/Eth			Meth	1/2

134	Fireantmo	13:50	✓ 141	Emerson Sands	10:30
			2/3	Meth/Eth	21
	P.O. Box 92 Dimok	278-3260		Sauter	8:50
135	Tom Sipe	9:10 ✓ 142		Johnson	21
	No info on well Meth/Eth	2/4		942 + #1	
	John R.R. 6150	278-4214			11:05
136	Debbie Mills	9:30 ✓ 143		Christian	2
	500' Meth/Eth	2/4		942 + #1	
		11:47			11:10
137	R. Carter Sc.	✓ 144		Christian	2
	Meth/Eth	2/4		Meth/Eth	
		13:10			
138	Karl Gesford	✓ 145		Woodward	8
	Meth/Eth	2/4		942 + #1	21
139		9:00			
	George Lotter	146		Woodward	8:
		2/6		Meth/Eth	2
		9:50			
140	Cosullo	147		Locay #1 well	11:15
	Meth/Eth	2/10		Meth/Eth	21

148

Locey #2 Well

2/17

12:15

Meth/Eth

~~149~~

Grasso

2/17

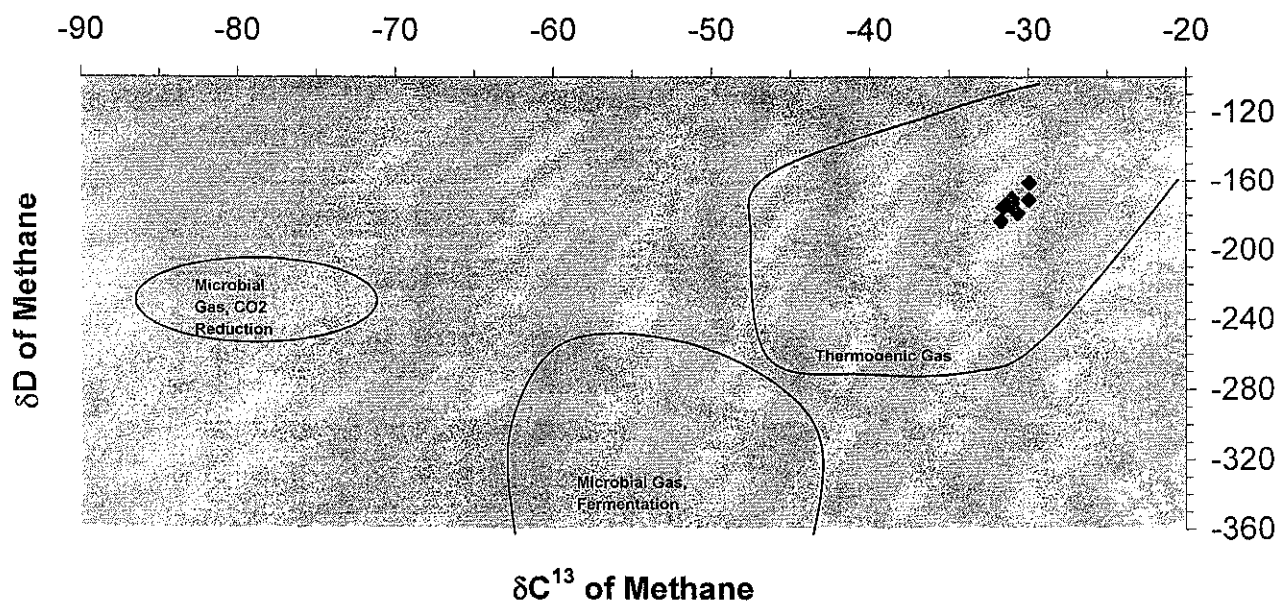
12:48

Meth/Eth

Ansell

δC^{13} of Methane	δD of Methane	Sample Location	Sample Number
-29.91	-161.1	115-20026 Production	
-29.96	-161.1	Cabot Pipeline	
-31.01	-173.1	Baker #1 Annular	
-31.03	-173.1	Florentino WW	
-31.09	-173.8	Gesford #3 Composite	
-30.66	-178.7	Sautner WW	G01120801
-31.2	-173.9	Gesford #3 20"	G01130801
-31.59	-175.3	Gesford #3 13 3/8	G01130802
-31.04	-170.3	Mike Ely	x
-29.95	-171.1	Ely #4 7" Casing Annular	2030902
-31.72	-183.2	Baker #1 7" Annular	2020901

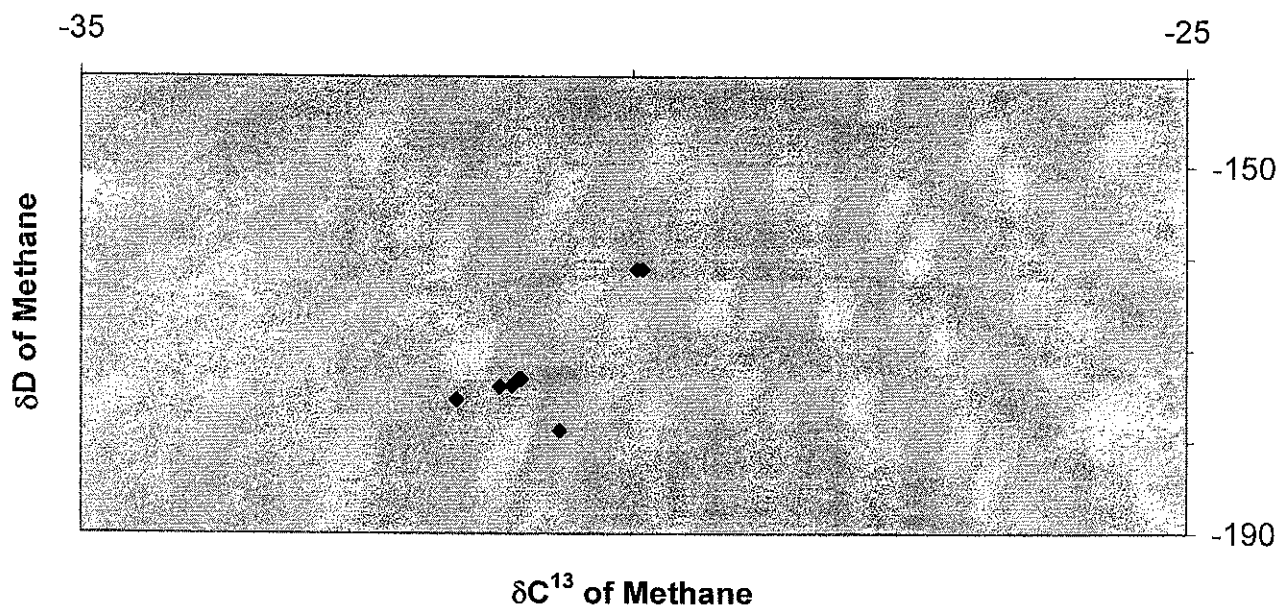
Carter Road Isotope Crossplot All Sampling Events



δC^{13} of Methane	δD of Methane	Sample Location	Sample Number
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-29.91	-161.1	115-20026 4 1/2 Production	
-29.96	-161.1	Cabot Pipeline	
-31.01	-173.1	Baker #1 7" Annular	
-31.03	-173.1	Florentino WW	
-31.09	-173.8	Gesford #3 Composite	
-30.66	-178.7	Sautner WW	G01120801
-31.2	-173.9	Gesford #3 20"	G01130801
-31.59	-175.3	Gesford #3 13 3/8	G01130802
-32.04	-170.3	Mike Ely	
-29.95	-171.1	Ely #4 7" Casing Annular	2030902
-31.72	-183.2	Baker #1 7" Annular	2020901

Carter Road Isotope Crossplot All Sampling Events



120

160

200

240

280

320

360

150

190

Karlinsky
2-20-09

2-9-09

~~COSTELLO 2 WELL VENTING~~

ELT 4 2" PLUMBED IN NOT

PRODUCING

FIEOTIN ^{FORGETTING} 20%

BAKER VENTING

GE S FORD 3A

414 DRILLING CO
FLUID

ELT 4 475

COSTELLO 870

BAKER 520

CABOT BAKER

115-20026

WELL PRODUCING

ANNULUS HAS

1" NOSE ON IT TO THE LEAD LINE

WITH CHECK VAL

SHELLY WEAVER

RR6 BOX 6212

MONT RO SE

570-278 9151

1-6-08

GESFORD 3

WELL DRILLED NOT FRACED

CELLAR LOADED WITH GAS

GESFORD 2

WELL FRACED & PRODUCING LOCATION

NOT RECLAIMED

HUBBARD

WELL PRODUCING LOCATION NOT

RECLAIMED NO WELL TAGS

RATZEL 1H

WELL DRILLED NOT FRACED YET

LOCATION BEING RECLAIMED

ELY 6

WELL PRODUCING

ELY 4

WELL PRODUCING

020

RIGGING DOWN TO HOLE

HISTORIAN 11

IN CELLAR

WELL DRILLING NOTHING SHOWING

TEEL 6

1534 7"

9 1/8 80'

COMP 80'

1569

172 1985

TEEL 8

WELL PRODUCING

ELT 11

14" THICK 1/4" PLATE

695 V 1808

695 1776

46 1/2 7 2015

28 9 1/8 11.00

44 12 DRILLING CEMENT

ELT 5H

ANNUALS SALT

WELL PRODUCING

ELT 2

2-6-09

6 TENDS 20 %
5 FLOW 30' NIPPLING UP
ON LCL COME TO BACK
APPROX 30' OPEN HOLE
CASING
ORD 3 CELLAR BUBBLING TOON
2-10-09
ELLO 2 TRIPPING FISH
ELLO 1 FLOWING
2-1-
STARTED PUMPIN KCL PILL
TILL WELL
STARTED PUMPING GEL

~~CABOT BAKER 1~~

~~ANNULUS OPEN PIPED TO 2" TO
THE DEHYDRATOR RICKIN WATER
EVERY NOW AND THEN VENTING INTO
THE BRINE TANKS~~

~~COSTELLO VENTING TO ATMOSPHERE
ELY 4H~~

~~7" 1150 TUBING 4 1/2 1005 4 1/2 1200~~

~~BAKER 525~~

~~COSTELLO TUBING 4 1/2 1005 4 1/2 1200~~

~~CABOT ELY 4H 237 4" ANNULUS TUBING 4 1/2 1005 4 1/2 1200~~

~~232 DRILLING ON FLUID~~

~~CANT SEE ANYTHING ON GAS TODAY~~

~~1-27-09~~

~~COSTELLO 2 FISHING TOOLS OUT~~

1-09-09

BOT 1-12-09 ELY SHASTA
BUILDING MLD OESADP

HOUSE NO
1-13-09

ORD 3 CABOT

DRILLED SHUT IN CEDAR
ILING AROUND 20 "

MINION TW 408

260 ON EOT 103A 43' D66P

FIRE TANK 20 %

GESFORD 3A NIPPLING UP

15% ON 26L
WITH APPROX 30' OPEN HOLE
IN CASING

G6SFORD 3 CELLAR BUBBLING TOOM

2-10-09

COSTELLO 2 TRIPPING FISH

~~COSTELLO 1 FLOWING~~

~~BAKER 1~~

~~H100 STARTED RUMPER KEE PIEL
TO KILL WELL~~

TZELL
30 TRIPPING IN HOLE
4 SH
RUNNING ~~5~~ 4 1/2 CASING 10392
ING TO PUMP THRU HOLE
2-3-09
STELL 1 STILL FISHING
FELLO 2 WELL PRODUCING STILL
b
FORD 3A
P(1) MOTOR OUT MISSED
498' WAITING ON LOGGING TRUCK
~~HARRIS HARDICK 2H~~
~~1/2" 120 120' 16"~~
~~26 3594~~ AGAIN
44 736 ANNULUS 600
UR 1 582

LEWIS 2 ~~TO SMALL TO CASE~~
LEWIS 1 0 20035 13.30
ROZANSKI 1 9 5/8 707 140 PSI
TEEL 2 ~~CANT ACCESS 20010 30~~
TEEL 1 7" 790 PSI 1765536
TEEL 6 7" 110 9 5/2 FROZEN 20011
TEEL 5 9" 200 20024 1765544
TEEL 7 7" 80
ELT 64 7" 110
GLY 4H 7" 1200
ELT 24 7" 0
BROOKS 14 0 20051
HUSTMAN 0 20050 1765557
ROZANSKI 380
1765563 20057
GCSFORD 3A
160 CLEAN HOLE TO TRIP OUT AND
PUT MILL ON
TW 508 64' TRYING TO WASH
OVER

1-20-09

~~5 GAS SEARCH MOUND~~
~~IS FORD 3~~

~~66 FORD 2~~

~~PRODUCING ANNULUS OPEN~~

~~WELL WITH JUMPER HOSE~~

~~1 ANNULUS OPEN WITH JUMPER~~

~~RD 1 WELL PRODUCING ANNULUS~~

~~IN 115 20039 1764267~~

~~WOOD 1 WELL PRODUCING ANNULUS~~

~~IN 20008 1764280~~

~~WELL RTG 13 RIGGING UP~~

~~20003 20023~~

~~64 WELL PRODUCING 20041~~

~~ANNULUS SHUT IN~~

~~4" WELL PRODUCING~~

~~WELL SHUT IN 20034~~

~~2 WELL PRODUCING ANNULUS~~

~~IN 20015~~

~~WIS 2 WELL PRODUCING~~

~~ANNULUS OPEN THRU 1/2" NUGGET~~

1-27-09

BAKER 1

ANNULUS 680

TUBING 690

WELL PRODUCING

FIORENTINO WELL

BEFORE UNTARPING CHECKED NO
SHOW

WATER WELL 75% GAS

PULLED SAMPLE

TEEL HOUSE 6149 NOTHING

MARRAZZO BINS CARTER RD

~~NOBODY HOME~~ NOTHING

BURKE HOUSE 6148A

NOTHING

MAY HOUSE NO SHOW

LO 6 HOME NO ONE HOME

GISI CARTER RD

NO SHOW

BROOKS WELL DRILLED LOCATION
NOT RECLAIMED NOT FRACKED

O'Donnell

RECEIVED

FEB 20 2009

ENVIRONMENTAL PROTECTION
NORTHWEST REGIONAL OFFICE

11:45

Jenny Teal

RR 6 Box 6149

Manitowish

No gas 218-2678

Marla 270

11:58

RR 6 Box 6145

Manitowish

~~No gas over time~~

No gas 278-3102

400 Beck & Burke 12:05

845-9376

Ed Burke 6:10

20 No Gas 278-4572

Sentinel

530

480' Sch 80

Water - 160' from

Surface

No gas

Tim Moya

No gas

Log House across from

Clerk Quarry

No one Home

Box 151 Pat Farnell

No Gas

278-7250

House w/ tank

wouldn't answer door

~~Marazas~~

Marazas not home

Cresswell Drilling

Lackawanna T-1

Marcy Carter

Mr. Brown

Burke Slight Deflect $\frac{1}{15}$

Richard Marcy

$\frac{1}{15}$

278-9097

6146

Jeff Slight 67 240-1399

Hunt

house for sale

Sauter

60% on well
bore

$\frac{1}{15}$

1/20/09 Gas Migration Inv.

Hubert

9:30

Slight deflection
kitchen sink

0.75% well pit

Shelia Ely

9:45

on well casing
slight deflection basement
water

Ron Casper

problem in 11/03

75
casing ~~300~~ 375
400 ft

55% 10-20

46 defect

1000

George Brown

Burtner

55% well
11:30

Bucke

11:45
1:50

Weaver

12:00

No Defect

Joseph Schneider

278-2357
No defect basement
or well

278-2357

12:11

278-2357

Well

Mike Ely casing 2.5%

13:10

Static 100

300'

SCOTT ELY

12:25

no pump at 275' casing 60

11/21/09 ~~Gas~~ Gas Markham Inv.

Rodney Baker RR6 Box 6209
Nº detect basement 278-1869

Test cut fire No defect
basin Recommend vent well outside

Ron Carter Sr. well bore 50% Gas Sample
10:48

Hubert
11:30
Gas Sample
10%

Bulke 0.5%

Sautner	15%
"	less bubbling

Msy 40% Just opened

Plaza 220 410-420

No Defect 30 min.
Fluorantino 60% vanted defect

1/26 Gas Migration Inv.

Kemblake / Shoppert 0

Floratino

2.5% 6" vent

Mike Ely

4.5%

Weaver

0

Approx same
depth as N.F.
Says 15 ft.

Scott
Nolan Ely

N 300'

0

Burke

0.5%

Farwelli

Closed

Teal

Closed

Masanzo

Closed

Santner

40%

Maye

17%

Boonin

0

Carter Sr.

19

1/21 Gas Migration Inv.

Fiorentino

2%

Hubert

12%

Burke

0.4%

Mike Ely

Noise in well
24%

Souther

22%

Shelia Ely

13:
0

Hayes

Slight Deflect

Scott Ely

12:25

Brown

0

Stations Pump 275' 300'

600' casing
400'

R. Carter Sr.

23

Lawrence Scarfotzi

0

Pesty Carter

0

Martazzo

Closed

Farnelli

Closed

11/29 Migration Inv.	
Saunders	39%
Meyer	Cabot tested 1/28 low 10%
Fiscentino	6.5%
Burke	0.2%
Weaver	0
Brown	0
R. Becker Sr.	17%
Hubert	10%

Mike Fly	Bubbling Fly 22	6%
Scott Nolan Fly		Closed
Skalia Fly		0

2/3 Migration	Time	Wad	Scott Ely	0
Florentino	%			
Burke	0.3		Mike Ely	20
Weaver	0		Shelia	0
Saunders	20%			
Maye	20%			
Brown	0			
Carter Sr.	21%			
Carter Jr.	0			
Halbert	45			

2/4 Migration Inv.

Florentino

2%

Burke

1

Weaver

0

Sautter

18%

Moyle

5

R Carter Sr.

12%

Habert

4%

Scott Ely

Closed

Mike Ely

12%

Kemble

0

Seymour

0

Switzer

Closed

Cohen

Closed

Costello

Closed

2/5 Migration Inv

Florentino 0.2

Burke 0.4

Santner 20%

Maye 10%

Carter Sr 12%

Hubert 3.5

Mike Fly 20%

Dusty Carter

R Carter Sr

bubbling

23%

2/10 Migration Inv

Switzer 0

Seymour 0

Costello 0

Kembale 0

Scott Fly 0

well up back of 40
18%

Mike Fly

Hubert

11%

0

Brown	0	2/13 Migration June	
Saunders	20%	Fiorentino	8%
Maye	2%	Burke	0
Burke	2%	Saunders	21%
Weaver	0	Maye	0.5
Fiorentino	1%	Carter	22%
		Hubert	8%
		Mike Fly	8%

Welsh
2/18/09

Needed Repair, drilling
mud (water + bentonite)
gates ditch on outside of
drilling pad flowed
around site into field
made it about 200'
from site. Crew + Cabot
working on stopping flow on
site pumping to pit.
Brought IN WATER crew
to pump ditch

1840 Back L Service Rig,
Rig up to Swab And,
7" valves closed.

Tim Curry @ 930 about JW
operating and bottom
hole location

11 AM Hubbard 2 115-2007
no well site or Rd.

Gesford 3A @ 1120 ^{posted} back

608 Side track #2

Clogged plugger back 500 ft
1701 WOC. Start on
1944 on side track

NO. 3. Doing redo mud
system

12:55 ELY ~~A~~ ^B Valve on
7" is open to line

Welsh

W

1-2-09 @ 194

570-278-3236

Grandmother, ~~Cap~~ ^{picked up} ~~pick up~~ gas

when lid covers the water well
flow ~~concrete~~ ^{concrete} lid of and 1 sac of blocks
pressure tank + vented gas in pit.

Cap stayed on well, as it coming through
wall of pit. Most gas comes toward
well. Heard air blowing

4
1
A
H

ZZZ

1-5-09 @ 12:45

Heir- NO gas - nothing under tank, outside,
nothing @ gas well, Annulus is open has pressure,
no gauge on annulus, annulus is being fed.

ZZZ

ables

M.

to

1-13-09 @ 0

Her - Gasford 3 Gas samples outside of 30", between
13th - 9th, nothing done @ first two, didn't ask to
blow 9" down on wells

M.

pl

super

MM

1-14-09 e

Mr. Libatore Cabot about problem in Carter Rd area. Updated him.

Told Craig about the sewer flowing problems asked for report, asked about venting 4'x7" annulus, got a sampler from a shallow source before its cased and cement.

pbom

MM

#9

DATE

W

What about the lawyer
a caper (a neighbor)
a hand ~~and~~ ~~fold~~ here is a cement
for go bed?

MM

Susquehanna City Comm. left Herb a message

forwarded to Freda
Susquehanna County Office
Marianne Warren 570-378-4600 ext 108

Herb - should be logging shallow, hearing (Locals)
that water wells have been abandoned because
of gas, wants to set on top hole,

Baker I maybe a few thousand cft, bringing
water. Few thousand on Costello's I

MM

Condition

2-2-09 1:31
 4 1/2
 Codello 870
 Ely 475 # on 7", Codello 870
 4 1/2
 570 on 4 1/2" probably tomorrow morning
 on 4 1/2"

Boba still working
 Fortner 30% LEL can have building
 Ely 4 planned but value about
 Codello 2 still working
 4 1/4' drilling on fluid
 3 200 gallon fuel pipe,
 fuel pipe cleaned up, dug dirt put in
 dumpster.

2-2-09 11:58

*
 1022

1-30-09 150

2-3-09 @ 916

Geoford 498' trapping missed Mackerel Bunging

a logging tank EDA 4 PM

Costello 2 still fishing

Baker sampled pit tank vent.

Ely 4 Not vented.

Waiting on pressures

Costello 1 venting.

Ratyl 5920' trapping water.

Ely 5A 10,372, no gas noticed. didn't

get in among all the activity.

11

h

Ch

Wed

*

k

ed

PPPT

BAKER # 1
API 37 - 115 - 20026
CURRENT CONFIGURATION

Ground Elev. 1545'
 KB Elev. 1555'

Water @ 990'

Damp @ 2300'

Upper Marcellus Perfs from 6890' to 6945'

Lower Marcellus Perfs from 7100' - 7240'

Depths reported from KB
 13-3/8" - 37# Conductor @ 44'
 Grouted w/ 25 sks Portland Cement

9-5/8"-26# Csg @ 1094'
 Cmt w/ 380 sks Class "A" w/ 2% CaCl
 Circulated 10 bbls Cmt to pit

7" - 23# - J55 Csg @ 1534'
 Cmt w/ 140 sks Class "A" w/ 4% Gel & 2% CaCl
 and 100 sks Class "A" w/ 2% CaCl
 Circulated 10 bbls Cmt to pit

CBL TOC Sq. @ 5490'

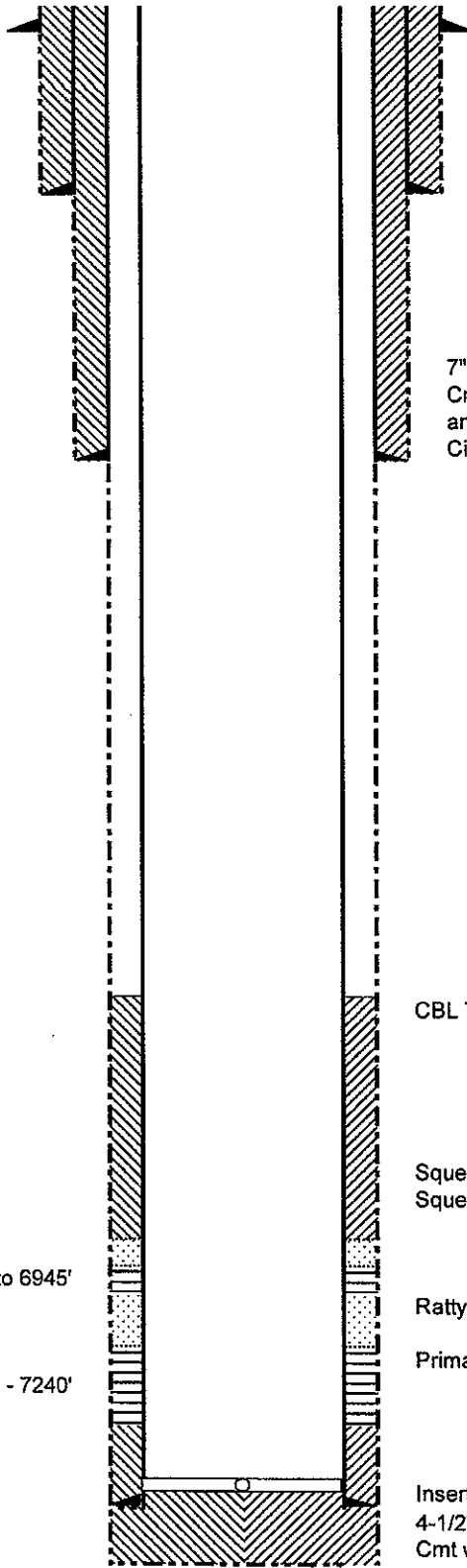
Squeeze hole @ 6860' - 6861' (4SPF)
 Squeeze with 195 sks Class "A"

Ratty Cement from 6890' to 7100'

Primary TOC @ 7100'

Insert @ 7308'
 4-1/2" 11.6# P110 Csg @ 7311'
 Cmt w/ 365 sks Class A w/ 2% Gel
 Gas Check @ TD = 363 mcf/d

DTD @ 7450'



COSTELLO # 1
API 37 - 115 - 20036
CURRENT CONFIGURATION

Ground Elev. 1200'
 KB Elev. 1210'

Water @ 300' (1")

Water @ 650' (3")

Wet @ 964' (3/4")

Damp @ 3024'

Depths reported from KB
 13-3/8" - 48# Conductor @ 72'
 Grouted w/ 25 sks Class "A"

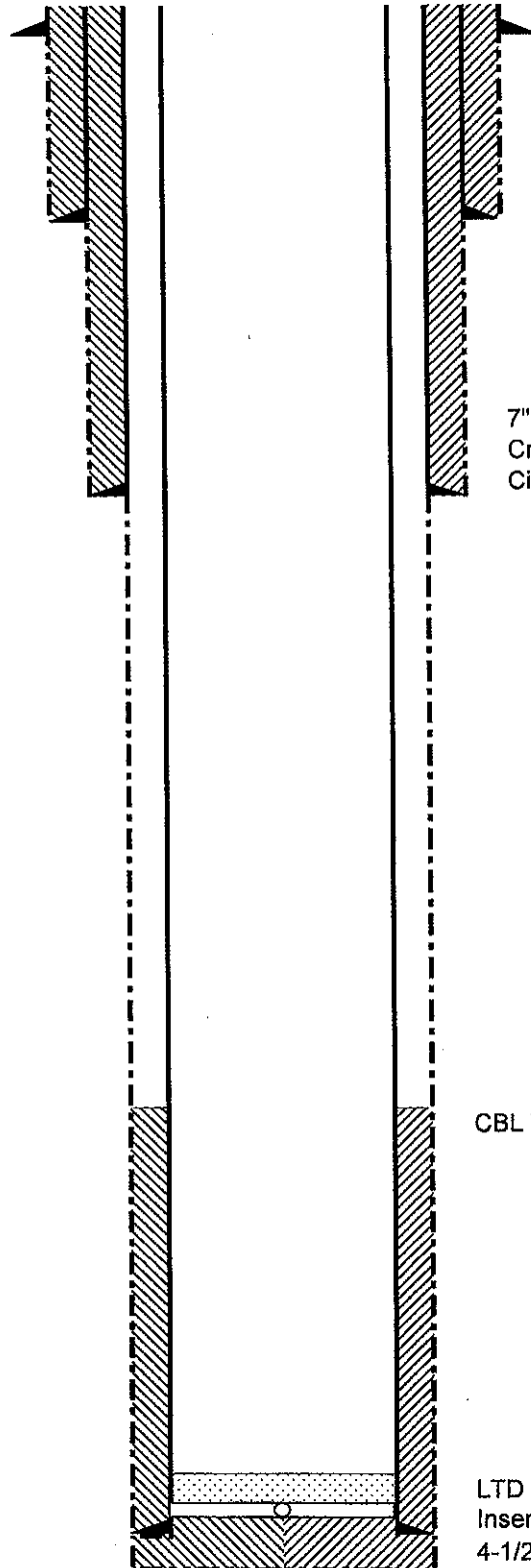
9-5/8"-26# Csg @ 727'
 Cmt w/ 300 sks Class "A"
 Circulated 10 bbls Cmt to pit

7" - 19# Csg @ 1566'
 Cmt w/ 155 sks Poz & 100 sks Class "A"
 Circulated 12 bbls Cmt to pit

CBL TOC @ 5950'

LTD on CBL @ 6902'
 Insert @ 6980'
 4-1/2" 11.6# P110 Csg @ 6990'
 Cmt w/ 175 sks Class A w/ 2% Gel

LTD @ 7014'



GESFORD # 3 - Original Hole
API 37 - 115 - 20019
CURRENT CONFIGURATION

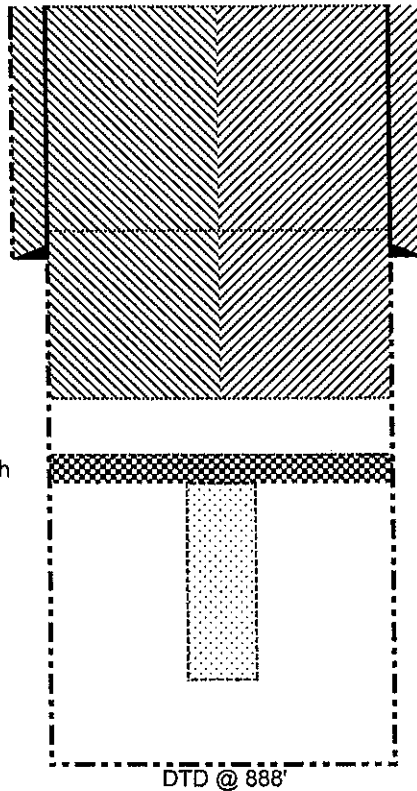
Ground Elev. 1295'
KB Elev. 1305'
 Cement Plug from 180' to Surface
 Cement w/ 170 sks Class "A"

Depths reported from KB

Cement Plug from 360' to 180'
 Cement w/ 160 sks Class "A"

Water @ 350' (2")

30" Fill On Top of Fish



13-3/8" - 48# Conductor @ 190'
 Cemented w/ 132 sks Class "A"
 Circulated 1 bbl cement

Top of Fill @ 412'
 Top of Fish @ 442'
 Looking up is 4-1/2" XH Box

Fish Consists of 5-6" DC, 1 Bit sub, & Bit
 total length is 153'

Bottom of Fish @ 595'

GESFORD # 3S
API 37 - 115 - 20019
CURRENT CONFIGURATION

Ground Elev. 1282'
KB Elev. 1292'

Water @ 300' (1")

Water @ 650' (3")

Wet @ 964' (3/4")

Damp @ 3024'

Depths reported from KB
13-3/8" - 48# Conductor @ 72'
Grouted w/ 25 sks Class "A"

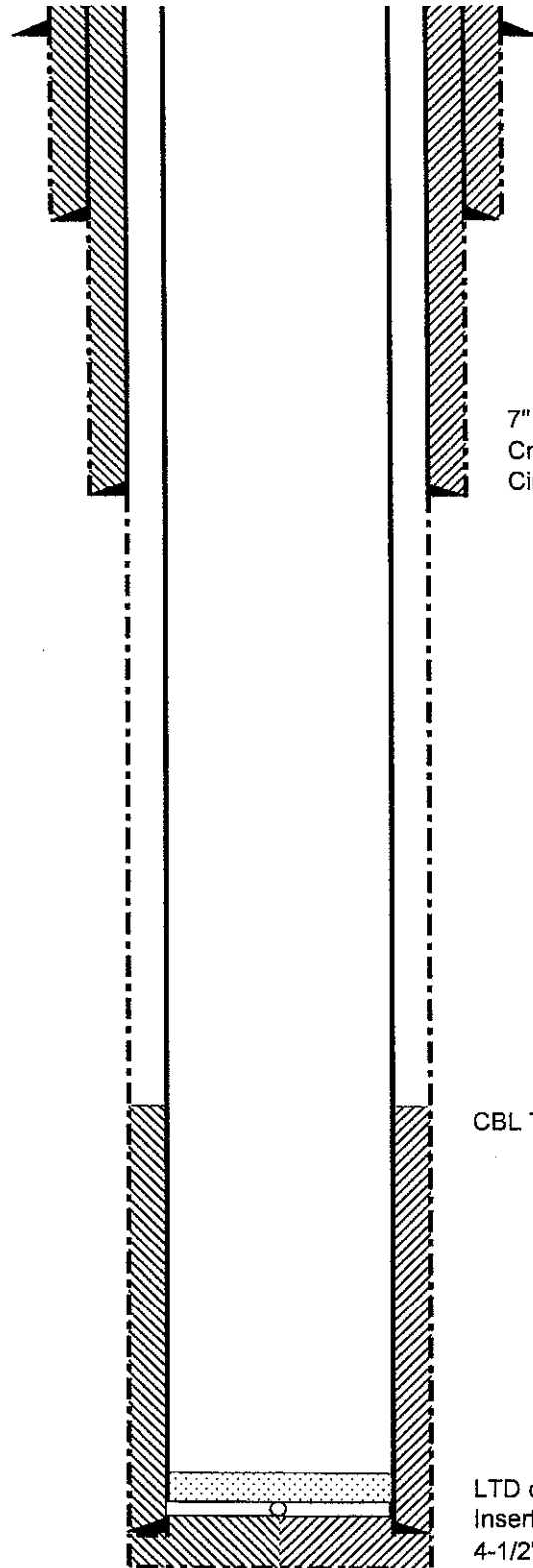
9-5/8"-26# Csg @ 727'
Cmt w/ 300 sks Class "A"
Circulated 10 bbls Cmt to pit

7" - 19# Csg @ 1566'
Cmt w/ 155 sks Poz & 100 sks Class "A"
Circulated 12 bbls Cmt to pit

CBL TOC @ 5950'

LTD on CBL @ 6902'
Insert @ 6980'
4-1/2" 11.6# P110 Csg @ 6990'
Cmt w/ 175 sks Class A w/ 2% Gel

LTD @ 7014'





**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS MANAGEMENT PROGRAM**

WELL RECORD AND COMPLETION REPORT

DEP USE ONLY	
Site Id	Primary Facility Id
Client Id	Sub-facility Id

Well Operator Cabot Oil & Gas Corporation		DEP ID# 43513	Well API # (Permit / Reg) 37-115-20034	Project Number	Acres
Address 900 Lee St, East - Suite 500			Well Farm Name ELY	Well # 4	Serial #
City Charleston	State WV	Zip Code 25301	County Susquehanna	Municipality Dimock Township	
Phone 304-347-1600	Fax 304-347-1635	USGS 7.5 min. quadrangle map Hop Bottom			

Check all that apply: ☒ Original Well Record ☒ Original Completion Report ☐ Amended Well Record ☐ Amended Completion Report

WELL RECORD Also complete Log of Formations on back (page 2)

Well Type	☒ Gas ☐ Oil ☐ Combination Oil & Gas ☐ Injection ☐ Storage ☐ Disposal						
Drilling Method	☒ Rotary - Air ☐ Rotary - Mud ☐ Cable Tool						
Date Drilling Started 3/30/08	Date Drilling Completed 4/14/08	Surface Elevation 1210 ft.	Total Depth - Driller 7244 ft.	Total Depth - Logger 7245 ft.			
Casing and Tubing		Cement returned on surface casing? ☒ Yes ☐ No Cement returned on coal protective casing? ☒ Yes ☐ No ☐ N/A					
Hole Size	Pipe Size	Wt.	Thread / Weld	Amount in Well (ft)	Material Behind Pipe Type and Amount	Packer / Hardware / Centralizers Type Size Depth	Date Run
17.5"	13.375"	37	LT&C	35	Sanded in.	Cent As Needed	4/14/08
12.25"	9.675"	26	LT&C	406	150 sks Class A w/ 2% CaCl	Cent As Needed	3/31/08
8.75"	7"	19	LT&C	1490	140 sks Cls A w/4% Gel & 2% CaCl		4/2/08
					100 sks Cls A w/ 2% CaCl		
6.25"	4.5"	11.6	ST&C	7225	130 Class A w/2% Gel & 2% CaCl	Cent As Needed	4/14/08
	2.375	4.7	EUE	6757			12/07/08

COMPLETION REPORT

Perforation Record			Stimulation Record						
Date	Interval Perforated From	To	Date	Interval Treated	Fluid Type	Amount	Propping Agent Type	Amount	Average Injection
11/06/08	7115	7170	11/06/08	Marcellus	Sik	Water	Sand	218167	6513
11/07/08	6985	7045	11/08/08	Marcellus	Sik	Water	Sand	219711	6497
11/07/08	6790	6840	11/07/08	Upper Marcellus	Sik	Water	Sand	159636	5957

Natural Open Flow	TSTM	Natural Rock Pressure	N/A	Hours	8 Days
After Treatment Open Flow	Too wet to gauge	After Treatment Rock Pressure	Not gauged	192 Hours	8 Days

Well Service Companies -- Provide the name, address, and phone number of all well service companies involved.

Name BJ Services	Name Schlumberger	Name GDS, Inc.
Address 660 Longview Road	Address 95 Rutherford Run	Address 466 Airport Industrial Park Road
City - State - Zip Fairmont City, PA	City - State - Zip Bradford, PA	City - State - Zip Parkersburg, WV
Phone 814-365-2003	Phone 814-362-7441	Phone 304-464-4666

Well Name	4-1/2" Casing Pressure
BAKER 1	503.8
COSTELLO 1	644.7
ELY 1H	479.3
ELY 2	706.9
ELY 4	1857.5
ELY 6H	1396.3
GESFORD 2	618.5
GREENWOOD 1	583.9
HUBBARD 1	516.9
LEWIS 1	796.4
LEWIS 2	674.5
TEEL 1	688.2
TEEL 2	754.3
TEEL 5	226.1
TEEL 7	837

FREE HEADSPACE ANALYSES DETERMINED BY DEP																
Location (Well depth)	1/5/2009	1/8/2009	1/12/2009	1/15/2009	1/18/2009	1/20/2009	1/21/2009	1/22/2009	1/26/2009	1/27/2009	1/29/2009	2/3/2009	2/4/2009	2/5/2009	2/9/2009	2/10/2009
Fiorentino Well	100%							60%	2.50%	2%	<1%	1%	2%	<1%	20%LEL	1%
Sautner Well (480')			40%	60%		55%	10%	10%	40%	22%	39%	20%	18%	20%		20%
Burke Well (~400)			3%	<1%		1.50%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%		2%
Bill Ely Faucet					3%											
Bill Ely Well (250')					ND	ND		ND			ND	ND				
Mike Ely Faucet					<1%											
Mike Ely Well (280')					20%			5%	4.50%	24%	6%	20%	12%	20%		18%
Hubert Well (280')					1.50%		10%	10%		12%	10%	4.50%		3.50%		11%
Hubert Faucet					ND	<1%							4.50%			
Carter Sr. Well (>400')						55%	50%	25%	19%	23%	17%	21%	12%	12%		23%
Carter Jr. Well (300')					ND	ND				ND	ND	ND				ND
Weaver Well						ND			ND		ND	ND	ND			ND
Brown Well (unknown)						ND				ND	ND	ND				ND
Maye Well (unknown)								40%	17%	<1%	10%	20%	5%	10%		2%
Schnieder (288')						ND										
Hein							ND									
Marazzo (420')								ND	ND	Closed						
Teel								ND	Closed							
Kemble/Shopperth (225')									ND				ND			ND

Scott Ely	ND	Closed	ND	Closed	ND
Seymour				ND	ND
Switzer				Closed	opened ND
Cohen				Closed	
Costello				Closed	ND
Baker					

FREE HEADSPACE ANALYSES DETERMINED BY DEP																																					
Location (Well depth)																			1/5/2009	1/8/2009	1/12/2009	1/15/2009	1/18/2009	1/20/2009	1/21/2009	1/22/2009	1/26/2009	1/27/2009	1/29/2009	2/3/2009	2/4/2009	2/5/2009	2/9/2009	2/10/2009			
Fiorentino Well																			100%						60%	2.50%	2%	<1%	1%	2%	<1%	20%LEL	1%				
Sautner Well (480')																			40%	40%	60%	55%	10%	10%	40%	22%	39%	20%	18%	20%	20%	20%					
Burke Well (~400')																			3%	<1%	1.50%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	1%	<1%	2%				
Bill Ely Faucet																			3%																		
Bill Ely Well (250')																			ND	ND					ND		ND										
Mike Ely Faucet																				<1%																	
Mike Ely Well (280')																			20%						5%	4.50%	24%	6%	20%	12%	20%	18%					
Hubert Well (280')																			1.50%	10%	10%		10%		12%	10%	4.50%		3.50%	11%							
Hubert Faucet																			ND	<1%									4.50%								
Carter Sr. Well (>400')																				55%	50%	25%	19%	23%	17%	21%	12%	12%									
Carter Jr. Well (300')																			ND	ND					ND	ND	ND										
Weaver Well																			ND	ND					ND	ND	ND	ND									
Brown Well (unknown)																			ND						ND	ND	ND										
Maye Well (unknown)																									17%	<1%	10%	20%	5%	10%			2%				
Schnieder (288')																			ND																		
Hein																				ND																	
Marazzo (420')																									ND												
Teel																									ND												
Kemble/Shoppert (225')																																					

DERIVED GAS ANALYSIS INVESTIGATION FREE GAS DETECTOR

Scott Ely									ND		Closed	ND	Closed			ND
Seymour													ND			ND
Switzer													Closed		opened	ND
Cohen													Closed			
Costello													Closed			ND

mg/l	1/5/2009	1/8/2009	1/12/2009	1/13/2009	1/15/2009	1/18/2009	1/20/2009	1/21/2009	1/22/2009	1/26/09	1/27/2009	1/29/2009	2/3/2009	2/4/2009	2/6/2009
Fiorentino	4.0												12.3		
Weaver	ND	ND													
Burke			0.008							0.014					
Sautner			17.6								18.2				
Maye			7.99								14.2				
Brown				0.32											
Carter Sr.				17.9							10.2			18.8	
Carter Sr. (post treat)											22.3				
Farnelli				0.008											
Marcy/Steel					ND										
Bill Ely						47.7					2.14				
Mike Ely						30.9					5.56				
Hubert						42.7									
Carter Jr.						0.0178									
Schneider							0.618								
Baker								ND							
Hein								0.0665							
Marazzo									ND						
Switzer										8.2					
Seymour										0.395					

Comble/Shopperth	0.015	
Nolan "Scott" Ely	20.9	
Cohen	0.385	
Scarzotti	ND	
Sipe		ND
Mills		ND
Gesford		ND
Lotter		at lab