

# Wetzel County Action Group (WCAG)

**Mission.** The Wetzel County Action Group will support economic development for the county and state; and work to insure that economic development does not negatively impact the safety, economic interests, and quality of life of the Citizens of Wetzel County.

# **Typical Production Sequence for Marcellus Shale Gas Operations**

1. Site preparation: clearing, road, grading, gravel, drainage
2. Drill rig move, set up; Drilling operations; remove rig
3. Hydraulic fracturing; sand kings, frac pumps, sand cans
4. Completions; condensate and brine tanks;
5. Gas processing on well pads
6. Pipelines and Compressor
7. Compressors and Gas Processing Plants

**What we see on the roads, tells us what is occurring on the well pads.**





CNX Convoy  
After Near Collision



Truck Size





05 am

# Heavy Equipment for Well Pad Work

Notice size for comparison in next few slides







08/16/2012 2:45 pm









01/04/2012 12:05 pm



# Stone Energy Howell Well Pad Site Preparation

Wetzel County, WV



Photo by Skytruth



# Drill Pad Site Clearing



**Stone Energy Pad 3 LWWMA**



# Wetzel County Stone Energy Bowyers Pad





# Assorted Dump Trucks Hauling Gravel to Well Pads















03/04/2010 2:55 pm

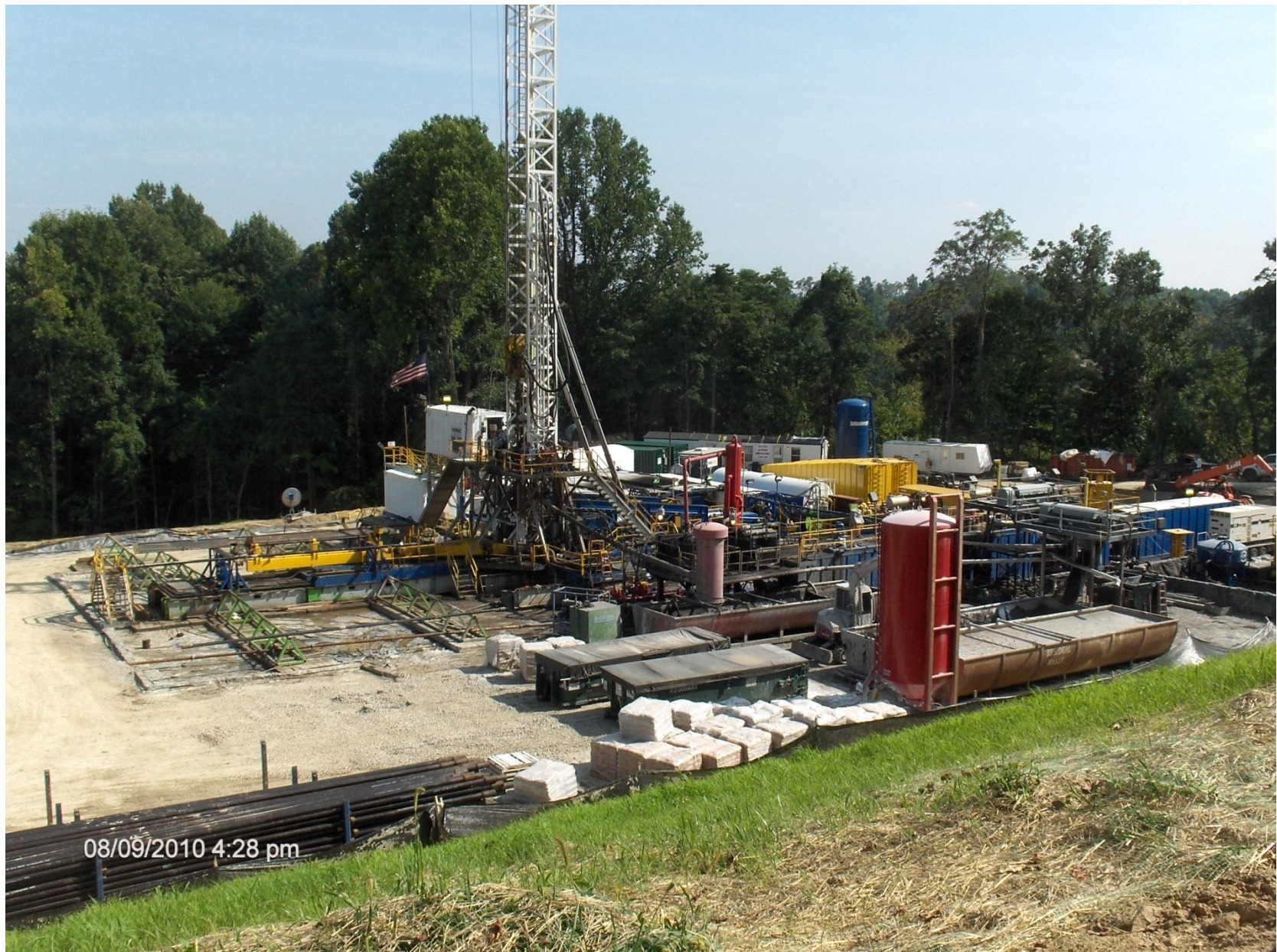


# Stone Pad 3 Drilling in Progress

Stone Energy Pad 3  
LWWMA, Wetzel Co. WV  
39-30.587 N---80-40.377 W  
Photo by SKYTRUTH--Nov. 2012









# Drill Rig at Work















03/19/2013 4:27 pm



# Drill Rig Parts











02/23/2011 12:00 pm







Savanna Rig 654 at EQT Pad Big 182 Mobley WV



# Pipes for Drilling







03/12/2010 3:23 pm





04/11/2010 12:54 pm





08/23/2010 6:10 pm









04/15/2013 9:32 am





07/23/2010 5:25 pm





01/08/2011 8:48 am



# Cement trucks for well casing



02/24/2010





06/21/2010 4:32 pm



# Hydraulic Fracturing Equipment

- Cleared out well pad with some fluid storage tanks
- Well heads prepared to accept frack hardware
- Sand kings
- 10-18 Fracturing pumps put into place
- Frack chemical tanks
- Crane to hold pipes and flex hoses
- Start running sand cans





04/15/2012 4:49 pm



# Another Frac in process









# Wetzel County Stone Energy Bowyers Pad

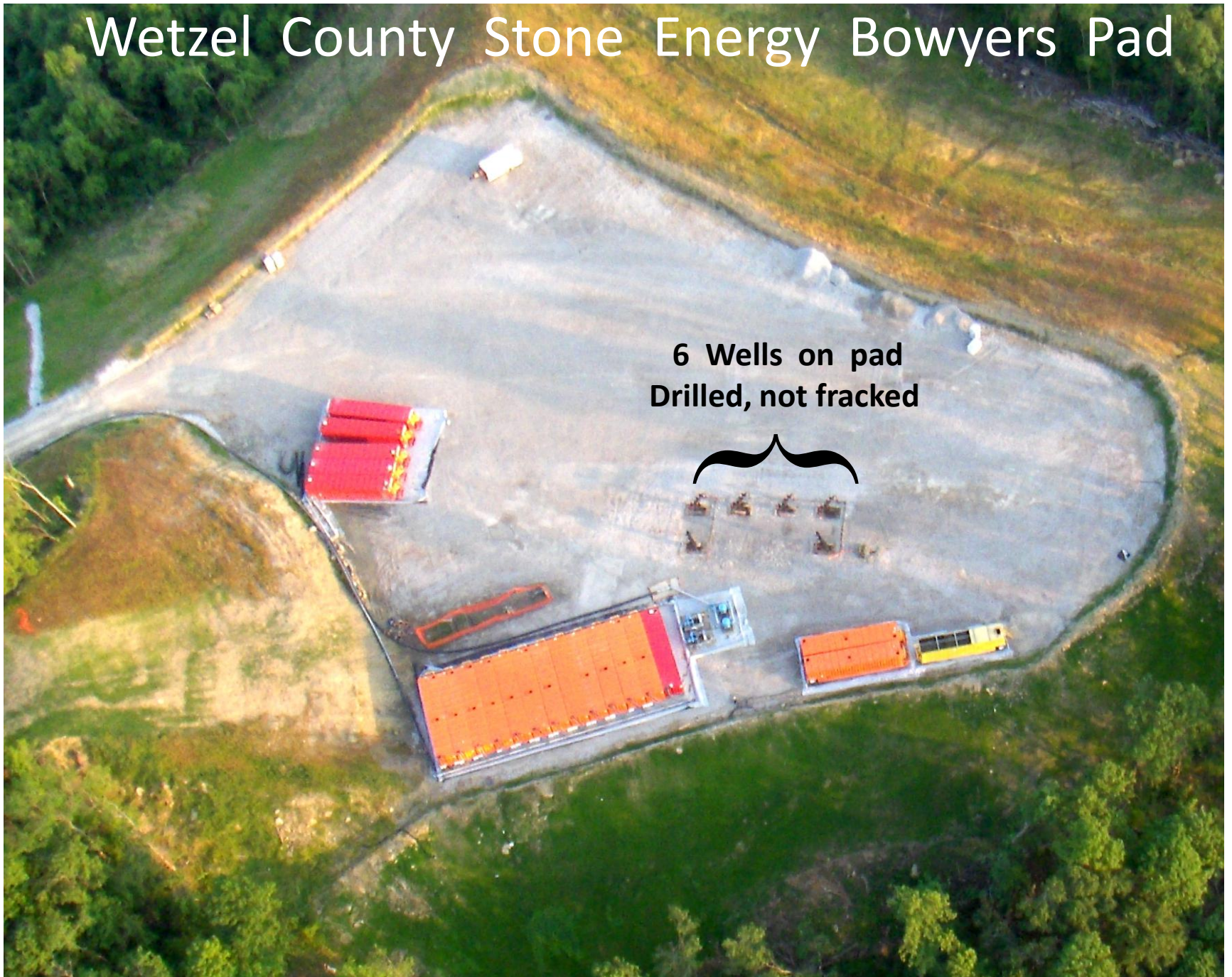
07/05/2013 7:50 pm





# Wetzel County Stone Energy Bowyers Pad

6 Wells on pad  
Drilled, not fracked



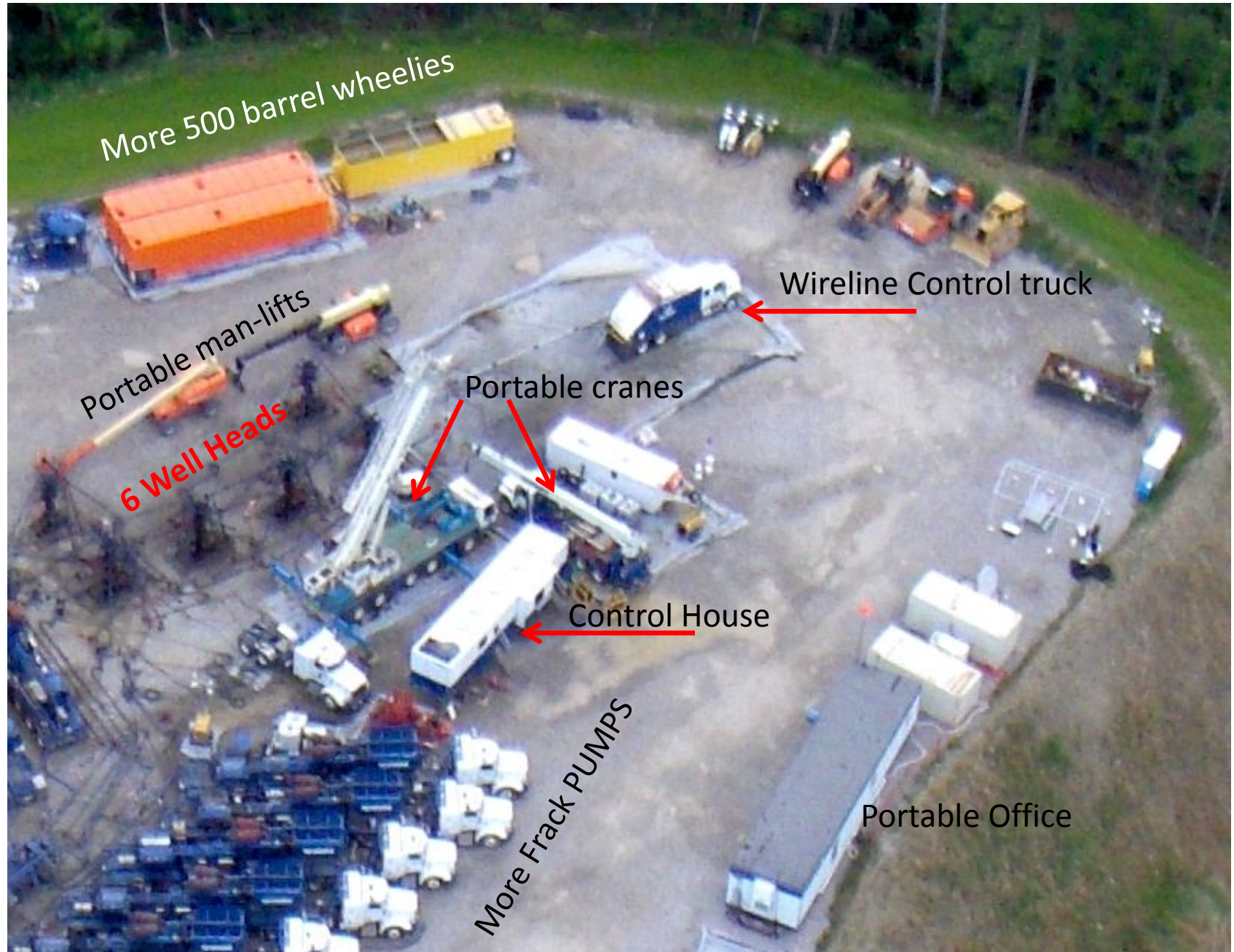


# Wetzel County Stone Energy Bowyers Pad





Top Right





Bottom Right





Top Left

Liquid storage tanks—500 barrel wheelies  
Each holds 500 barrels X 42 gal/bar = 21000  
 $13 \times 5000 \times 13 = 273,000$  gallons.

Also called “frack tanks”

Frack PUMPS





Bottom Left





**102 Tanks at this site**  
**Each tank = 500 Barrels of fluid**  
**One barrel = 42 gallons**  
**Total capacity here is**  
**2,142,000 Gal**



09/01/2012 4:06 pm





06/20/2010 4:24 pm





06/26/2012 6:37 pm









03/03/2012 4:05 pm





03/10/2010 12:47 pm





04/27/2012 5:17 pm









03/16/2010 3:59 pm





10/18/2010 5:49 pm





























04/27/2012 5:17 pm













07/09/2012 2:51 pm









03/10/2010 7:00 am





04/13/2010 8:28 pm









03/26/2011 4:26 pm



# 14 Schlumberger Fracturing Pumps



















03/11/2010 7:02 am





03/04/2010 5:19 pm













06/20/2010 10:17 am







# Hydrochloric Acid Tanker

Being pulled up hill















SCHÜTZ TICKET SERVICE FORM

**KROFF**  
CHEMICAL COMPANY INC.

**WFR-5**

The following components of this product are listed in accordance with right to know laws:  
CAS No. 1330-08-1  
Batch No. 100015480  
Date of Mfg. 10/10/09  
Date of Exp. 10/10/14  
Lot No. 100015480

BATCH 100015480

Made in US

Plant Plant 100015480  
Lot 100015480  
Date 10/10/09

**SCHÜTZ**

**R-5**

Gal. 1.6  
200  
100  
0  
TUBE  
100  
200  
300  
400  
500  
600  
700  
800  
900  
1000

08/06/2010 3:41 pm









02/27/2011 12:54 pm









07/21/2010 3:03 pm





12/05/2010 4:00 pm





03/04/2010 5:40 pm





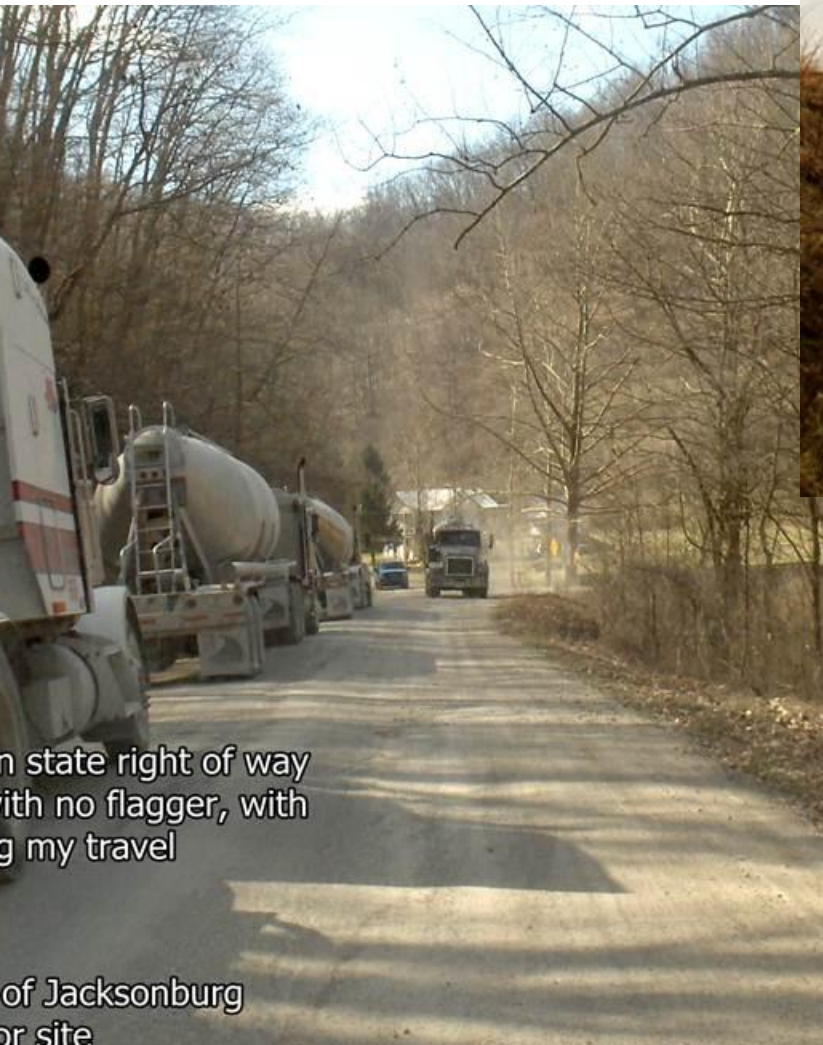




09/19/2010 3:32 pm



**Sand trucks again waiting on CR 58  
outside of HG Energy Hoyt 404 well pad.**

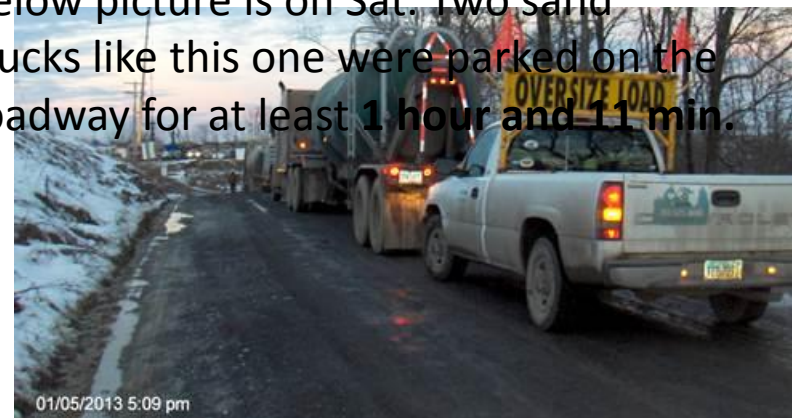


on state right of way  
with no flagger, with  
g my travel

of Jacksonville  
or site

01/15/2013 3:17 pm

Below picture is on Sat. Two sand  
trucks like this one were parked on the  
roadway for at least 1 hour and 11 min.



01/05/2013 5:09 pm





03/16/2010 1:55 pm









05/30/2013 2:56 pm





04/15/2011 2:57 pm





04/15/2011 2:58 pm





05/26/2013 5:14 pm





03/01/2012 2:42 pm





















05/22/2012 7:25 pm





03/16/2010 1:55 pm





08/19/2012 3:31 pm













03/20/2013 12:39 pm









06/23/2010 10:52 am









04/13/2010 6:46 pm





04/24/2010 2:44 pm





07/16/2010 8:31 pm





07/16/2010 8:31 pm





Service Rig



# Tanker Truck at stream bank ? ?







07/23/2010 5:46 pm





06/11/2013 4:32 pm



North Fork, HG Energy withdraw site  
 39° 34.780'N--- 80° 39.723'W  
 July 2, 2013 at 7:04 PM



Brine  
 tank  
 Truck  
 Watering Road--? or not

05/17/2013 11:56 am

