

1. D-2009-13-1

SPONSOR Stone Energy Corp.

LOCATION Mount Pleasant Township, Wayne

County, PA

TYPE Surface Water Withdrawal

OTHER

• A new withdrawal of up to 0.7 million gallons per day (mgd) of surface water from the West Branch Lackawaxen River (WBLR) to support Stone Energy Corp.'s natural gas exploration and development activities in the DRB for natural gas wells drilled into the Marcellus Shale and other shale formations.

- Located on the WBLR in the watershed of the WBLR
- Application submitted by Stone on March 5, 2009.





1. D-2009-18-1

SPONSOR Stone Energy Corp.

LOCATION Clinton Township, Wayne County,

PA

TYPE Natural Gas Well Targeting the

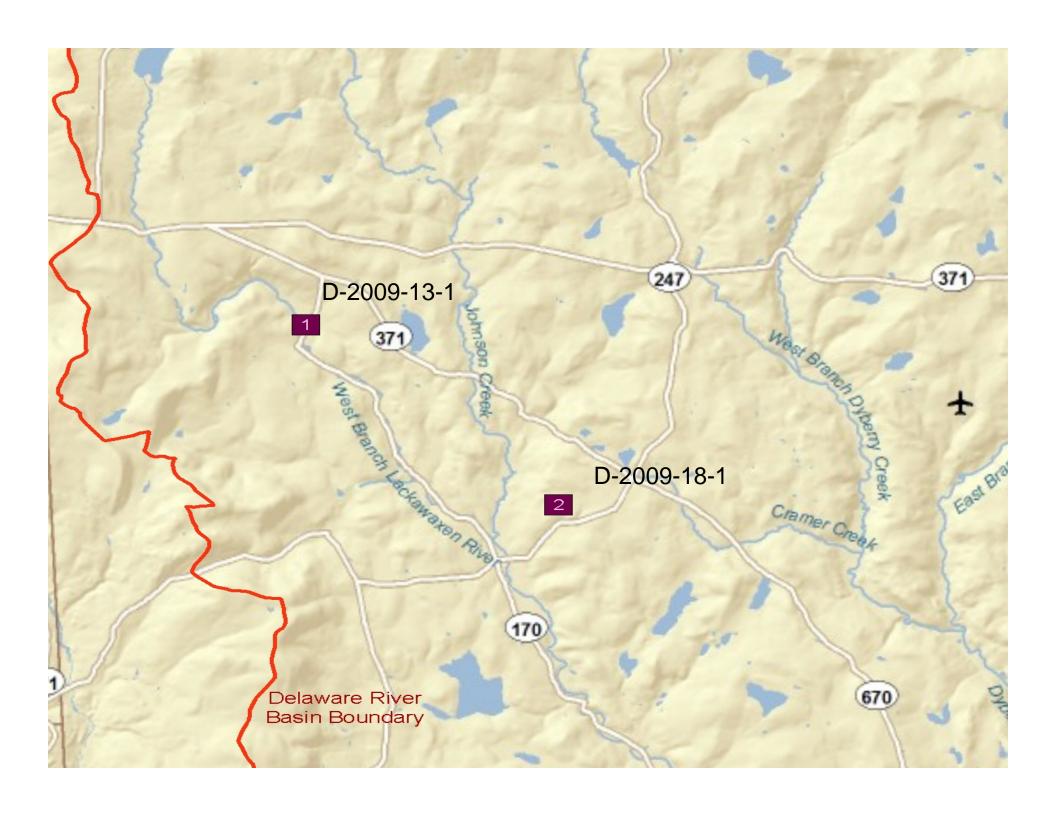
Marcellus Shale

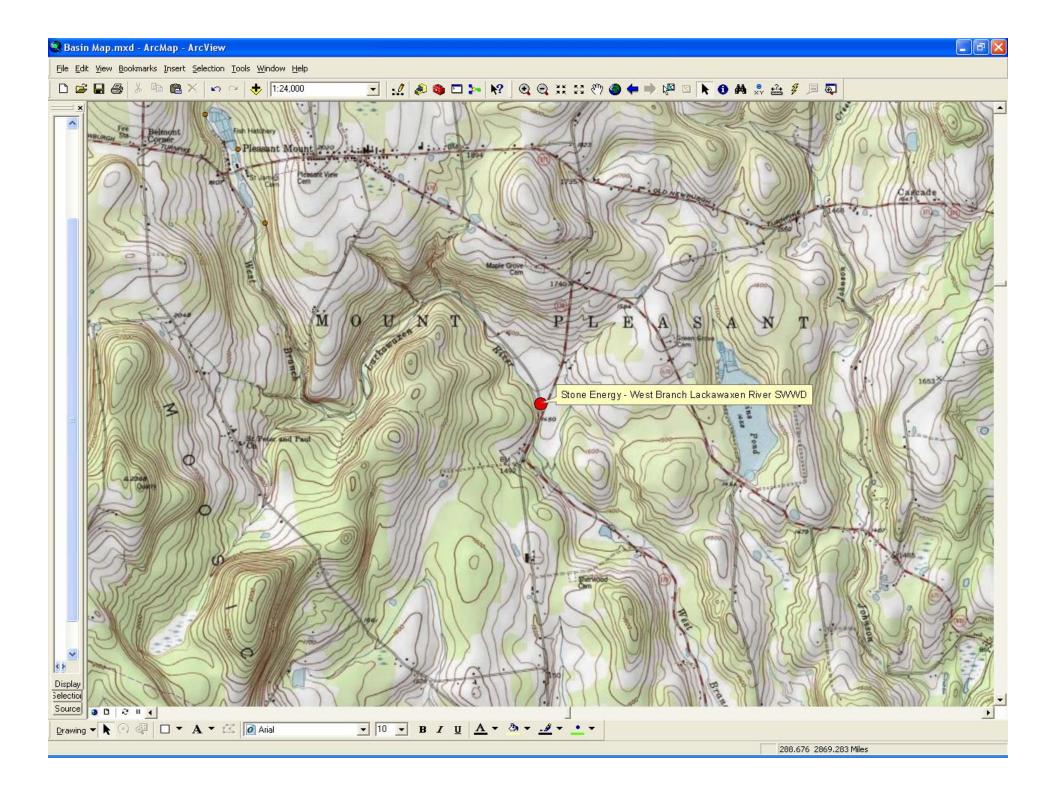
OTHER

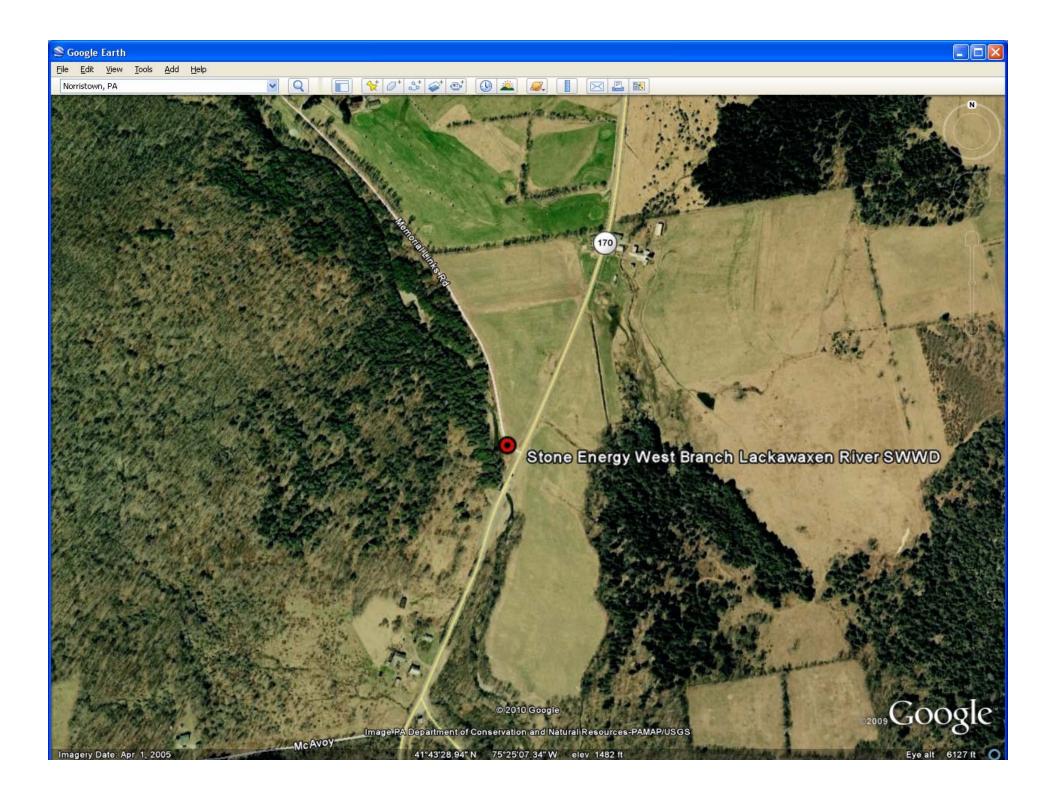
• The purpose of this project is for the approval of natural gas exploration and development activities at the Matoushek #1 well pad site (M1).

- Located in the Johnson Creek and the West Branch Lackawaxen River watersheds.
- Application submitted by Stone on February 13, 2009.









Area/Wells Served

Water use limited to natural gas development and extraction activities (CONDITION C.I.j):

- At all Stone well pads / lease holdings
- Within the Commonwealth of PA
- Within the Delaware River Basin
- Wells in Marcellus shale and other shale formations approved by DRBC and PA.

Natural gas development and extraction activities include:

- Natural gas well drilling activities
- Hydraulic fracturing well stimulation
- Mixing concrete for well construction
- Support vehicle tire washing/cleaning
- On-site dust control
- Access roads within Stone's lease holdings

Site facilities and activities will include:

- Submerged water withdrawal intake
- 1,040 GPM intake pump
- Up to 10 water storage tanks (21,000 gallons each)
- Metering facilities
- Restricted access
- Signage and withdrawal site supervisor

Water Use and Water Withdrawal

- Majority of withdrawn water will be used for hydraulic fracturing/well stimulation.
- Restricted to up to 0.7 mgd (CONDITION C.I.I)
- Day is defined as midnight to midnight (CONDITON C.I.l)
- Withdrawal not to result in the stream flow in the WBLR to be below 5.9 CFS and cannot resume withdrawals unless WBLR is flowing at least 8 CFS (CONDITION C.I.m)
- USGS gage at Aldenville and gage established at withdrawal point
 - Weekly checks when flows greater than 10 cfs and daily when less (CONDITION C.I.m)

What is to be Approved?

Withdrawal docket approves water withdrawal, **BUT DOES NOT APPROVE:**

- Any natural gas well development activities.
- All natural gas well development activities require separate application and Commission approval (CONDITION C.I.i).

Withdrawal docket considers where wastewater will be treated and disposed of, **BUT DOES NOT APPROVE** wastewater disposal sites.

- Wastewater disposal conditions are included in the well pad approvals.
- No disposal of water or wastewater except at approved sites (CONDITION C.I.o).

Operations Plan

An Operations Plan is required to be submitted to the Commission and approved by the Executive Director prior to any withdrawal activities (CONDITION C.I.q).

Operations Plan to include:

- Compliance with withdrawal requirements
 - Daily withdrawal allocation (CONDITION C.I.1)
 - Pass-by flow monitoring requirements (CONDITION C.I.m)

Metering and reporting requirements

- Automatic metering (CONDITIONS C.I.r and s)
- Report average and total daily flow monthly (CONDITION C.I.r)
- Violations reported to DRBC (CONDITION C.I.cc)
- Trucks metered and recorded (CONDITION C.I.s)

Other Docket Requirements

CONDITION C.I.h

- Non-Point Source Pollution Control Plan (NPSPCP) (SPW)
 - Withdrawal site specific NPSPCP required to be submitted
 - No construction activities or withdrawals to take place at the withdrawal site until the NPSPCP has been submitted to the Commission and approved by the Executive Director

CONDITIONS C.I.b & c

- Docket approval subject to all conditions imposed by PA unless less stringent than DRBC.
- Docket does not exempt applicant from obtaining all necessary approvals from other state, federal or local government agencies.

CONDITION C.I.d

• Construction plans and specifications to be approved by the E.D. prior to clearing, site preparation, construction, or water withdrawal.

CONDITION C.I.t

• Implementation of a program to monitor and control leakage at the well pad sites.

Other Docket Requirements (cont'd) CONDITION C.I.dd

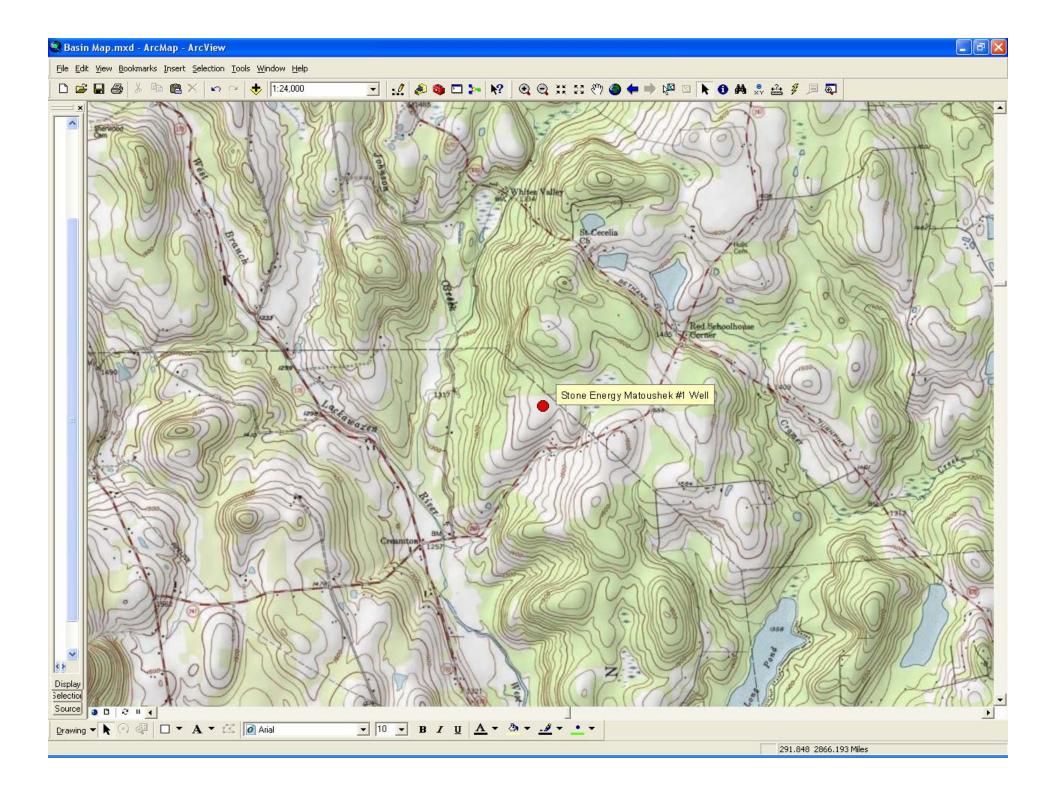
- Interference reporting and mitigation requirements
 - Notice to the E.D.
 - Notice to affected party regarding Condition requirements
 - Investigation required
 - Mitigation approved by E.D.
 - E.D. may modify or suspend docket

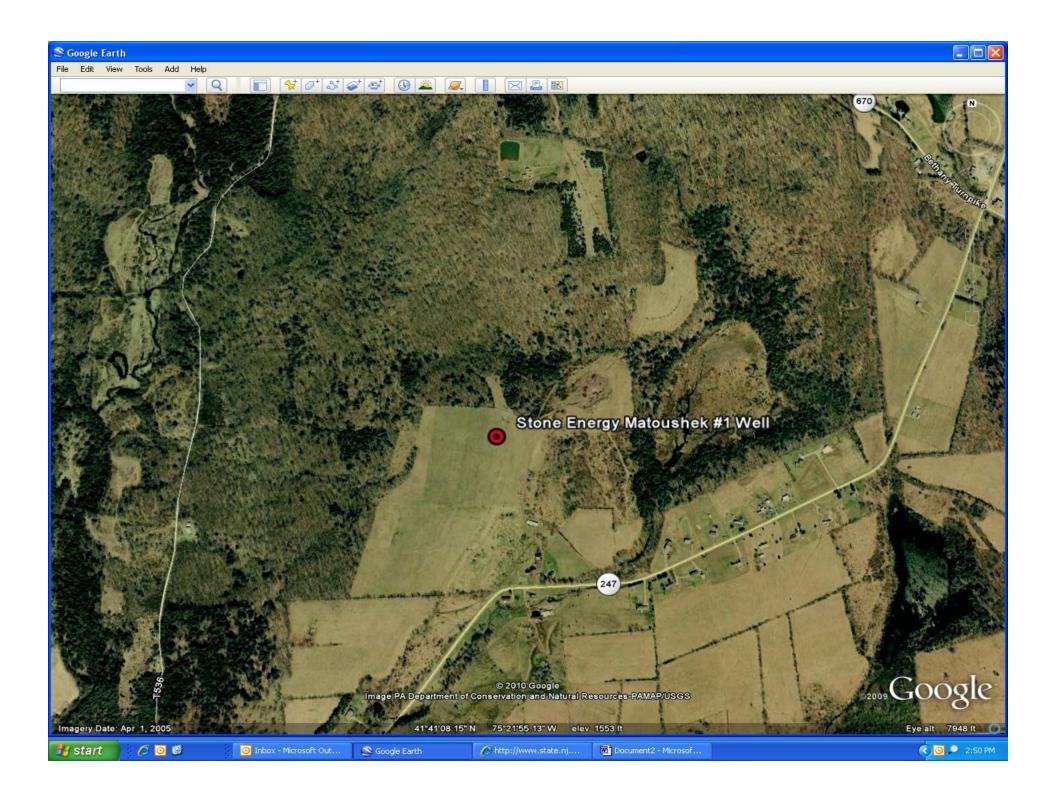
CONDITIONS C.I.x & y

- Drought plan and drought emergency requirements
 - Plan required within 90 days prior to any site clearing, construction, or withdrawal.
 - Water withdrawal subject to non-essential uses specified by:
 - PA GOVERNOR OR
 - DROUGHT COORDINATOR OR
 - EMERGENCY RESOLUTIONS OF COMMISSION

CONDITION C.I.z

• Review of reports subject to actual review costs incurred by the Commission.





Site facilities and activities include/will include:

- Matoushek #1 vertical well, 8,350' total depth.
- 1.7 acre well pad site.
- Freshwater storage impoundment.
- Restricted access.
- Hydraulic fracturing flowback tanks.
- Access road.
- Portable toilets.

Well Stimulation Activities:

- Well will be stimulated with approximately 1.0 million gallons of water with propping agents and additives.
- All water delivered to the site, stored at the site, used at the site and used in the hydraulic fracturing process must be measured and reported to the DRBC.
- Flowback wastewater volume shall be measured and captured in steel tanks. All wastewater stored at the site and removed from the site must be measured and reported to the DRBC.
- All non-domestic wastewaters generated shall be removed from site and treated at approved facilities outside of the DRB.

What is to be Approved?

Well pad docket approves Matoushek #1 Well, <u>BUT DOES</u>

<u>NOT APPROVE</u> any other natural gas well drilled at the site.

Any other gas well will require separate application and Commission approval.

Well Pad docket considers where wastewater will be treated and disposed of, **BUT DOES NOT APPROVE** wastewater disposal sites.

- Wastewater disposal sites must be specified in the Operations Plan.
- No disposal of water or wastewater except at approved sites (CONDITIONS C.II.f, g, u).

Operations Plan

An Operations Plan is required to be submitted to the Commission and approved by the Executive Director prior to any well pad site activities (CONDITION C.II.e).

Operations Plan to include:

- i. Pre-alteration groundwater quality survey plan.
- ii. Wastewater storage and handling details.
- iii. Wastewater disposal locations.
- iv. Measuring, Recording, and Records Maintenance System.
- v. Reporting system.
- vi. Preparedness, Prevention, and Contingency Plan

Other Docket Requirements

CONDITION C.II.c

- Non-Point Source Pollution Control Plan (NPSPCP) (SPW)
 - Well pad site specific NPSPCP required to be submitted.
 - No further construction or site clearing activities to take place at the withdrawal site until the NPSPCP has been submitted to the Commission and approved by the Executive Director.

CONDITIONS C.II.a & h

- Docket approval subject to all conditions imposed by PA unless less stringent than DRBC.
- Docket does not exempt applicant from obtaining all necessary approvals from other state, federal or local government agencies.

CONDITIONS C.II.k & 1

- Metering recording, and reporting of volume of all water used to stimulate well and flowback volume from the stimulated well.
- Measurement, recording, and reporting of all non-domestic wastewater removed from the site.

CONDITIONS C.II.m

• Implement program that encourages water conservation including reuse and recycling of flowback waters.

Other Docket Requirements (cont'd)

CONDITIONS C.II.n

• No use of non-domestic waste at any well, well pad site, or lease area without approval.

CONDITION C.II.r

- Interference reporting and mitigation requirements
 - Notice to the E.D.
 - Notice to affected party RE: Conditions requirements
 - Investigation required
 - Mitigation approved by E.D.
 - E.D. may modify or suspend docket

CONDITION C.II.s

• E.D. may modify or suspend approval to protect water resources

CONDITION C.II.u

• All non-domestic wastewater shall be temporarily stored on site in steel, water-tight tanks.

CONDITION C.II.v

• Review of reports subject to actual review costs incurred by the Commission.

Comments on Draft Stone Energy Dockets

Written comments will be accepted until 5:00 p.m. on March 12, 2010.

Written comments may be submitted today and may also be sent as follows:

- via email to <u>Paula.Schmitt@drbc.state.nj.us</u>
- to the attention of the Commission Secretary, DRBC,
 - by fax to (609) 883-9522;
 - by U.S. Mail to P.O. Box 7360, West Trenton, NJ 08628-0360;
 - by delivery service to 25 State Police Drive, West Trenton, NJ 08628-0360.

Regardless of the method of submission, comments should include the name, affiliation (if any) and address of the commenter and the subject line "Public Comment – Stone Energy Dockets."