COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS MANAGEMENT

WELL COMPLETION REPORT FORM INSTRUCTIONS

Completion Report – Instructions for Operator.

Top Right – DEP Only box – do not fill anything in.

WELL INFORMATION

For recently issued permits the information in this block of the form should have been preprinted down to the first dark line of the Well Information block – down to Quad map field. If any error is noted in using a preprinted header form, provide the corrected information. If the preprinted form is not used or the information has changed, complete the information required below by entering it in a current version of the blank form.

Well Operator – Name of operator as it appears on the well permit and the bond.

DEP ID # – eFACTS Client Id. Assigned to each client/operator and used by all DEP Programs. It can be found on the DEP web site in eFACTS.

Address – Address of the operator's office submitting the Well Record and where follow-up communication can be directed. Include:

City, State ZIP + 4

Phone, FAX (including area code).

Email address of person responsible for signing Well Record as agent of the operator. Signature Authority /Power of Attorney should have been provided to all applicable regional offices.

API # – The API number assigned to the well and laterals approved to be drilled under a permit. If the permit provides for drilling multiple laterals (XX-XXX-XXXX-00-00 and 01-00), each lateral (00-00 and 01-00) should have a separate Well Record submitted identifying the information specific to each lateral.

Project Number – If the well was identified as part of a "project" as defined in the O&G Act, it would have been assigned a project number by DEP and identified on the permit.

Farm Name – Name given well by operator.

Well # – Alpha/Numeric identifier given to the well by operator. Typically ends in H when identifying a horizontal lateral.

Serial # – An identifier given to the well by some operators as a cross reference for their internal identifier.

Municipality – Name of the local governmental unit in which the surface hole location of the well is found.

County - County name in which the surface hole location of the well is found.

USGS 7.5 min. quadrangle map – Enter the name of 7 ½ min. quadrangle map name. This should be the same name as on the plat.

Check the appropriate submission – if this is the **Original** (first) Completion Report for this well, operation on this well, or sidetrack on this well or if it is a revision to an earlier Completion Report, i.e., an **Amended** Completion Report.

STIMULATION BASE FLUID

List Water Management Plan Approved Water Source(s) that were used – If water is the primary base fluid of the stimulation operation, enter the sources of water used, and, if stimulating an Unconventional Formation (see 25 PA Code § 78.1), enter the Water Management Plan Id number for the volume used in gallons on the corresponding row.

Volume (Gallons) – In the column for Volume (Gallons), for each source of water, enter the volume in gallons of the recycled portion from that water source and the total volume in gallons from a fresh water source.

Space to left of DEP Biologist review – do not enter anything in this space. This is reserved for a DEP biologist to sign and date after their review.

Enter the total of fresh water and recycled water of all the water sources brought to the site for the stimulation.

Other Base Fluid(s) Used – If fluids other than water, produced water, frac flowback are used as the primary fluid of the stimulation operation (ex: nitrogen, CO2, propane, list them in this section. Provide the type of fluid, quantity, and unit of measure (UOM) of the identified fluid.

Total Quantity All Fluid(s) Used – Enter the total of all applicable "other base fluid(s) used" to perform the stimulation operations for completion of this well/lateral.

STIMULATION/PRODUCTION INFORMATION (WELL)

Radioactive Tracers Used? – Checked to indicate Yes. If radioactive tracers were used to monitor the stimulation of the well, check the check box to the right. If none were used, leave the box unchecked.

24 Hr. Open Flow Production (MCF/Day) – Enter the Open Flow production of the well in MCF during a 24 hour period. If the date of obtaining the well test measurements is later than submission of the completion report based on the begin flow back date, the results of the testing are to be submitted as an amended completion report within 10 days of the date of the well testing.

24 Hr. Shut-In pressure – Enter the pressure in PSI on the well after it has been shut in for 24 hours. If the date of obtaining the well test measurements is later than submission of the completion report based on the begin flow back date, the results of the testing are to be submitted as an amended completion report within 10 days of the date of the well testing.

Begin Flowback/Prod Date – Enter the date the last plug was drilled out **OR** the date initial production began, WHICHEVER COMES FIRST. This date determines the Completion Date of the well and the start of the 30 days to submit this report to DEP as required by Sec. 601.212 (b) of the Oil and Gas Act and 25 Pa Code Chapter 78 § 78.122 (b) of the Rules and Regulation of the Department. If the well is not connected for production within 12 months of this completion date and you are applying for either Inactive Status for the well or submitting a Notice of Intent to Plug as required by the O&G Act, there must be a well record and a completion report on file with the Department prior to applying for either.

Well Products:

Gas – check the box if gas (methane/ethane) if gas is produced from the well in a gaseous state at STP. Enter the BTU value of the gas as produced from the wellhead if sampled/tested.

Oil – check the box if oil (hydrocarbon crude oil with an API gravity of less than 50) is produced from the well. Enter the API gravity of the oil as produced from the wellhead if sampled/tested.

Condensate – check the box if condensate (hydrocarbon with an API gravity between 50 and 120) is produced from the well in a liquid state. Enter the API gravity of the condensate as produced from the wellhead if sampled/tested.

Other – check the box if gaseous or liquid products other than the above are produced from the well and identify the product produced in the field provided.

GOR – Gas Oil Ratio – check the box if gas and liquid hydrocarbon or other liquid products are produced from the well. Enter the Gas to Oil ratio of the product produced from the well in the initial productivity testing of the well. Enter the ration of cubic feet of gaseous product per barrel of liquid hydrocarbon produced. Liquid hydrocarbon is to include oil and condensate but is not to include brine.

WELL SERVICE COMPANIES

Provide the name and contact information of the applicable companies performing completion services on the well. If additional companies are involved, attach additional sheets to provide the contact information in the same manner as requested on this form.

WELL OPERATOR'S SIGNATURE

This must be the signature of the operator or representative of the well operator authorized to sign on behalf of the operator. See form 5500-FM-OG0061 on the O&G Programs web site listing of bond forms as an example of what is sufficient for providing signatory authority for various entity types. Signature authority should have been provided to the applicable regional office(s).

Enter by printing or typing the Name and Title of the signatory. The date signed may be typed or hand written.

DEP USE ONLY

Lower Right – DEP Use Only box – do not fill anything in.

FOOTER

Page 1 of _____ – You must enter the total number of pages that comprise the submission of this completion report.

PERFORATION RECORD

Well API # 37-XXX-XXXXX-XX-XX – in header area. Enter the API number assigned to the well and to the operation or sidetrack sequence as applicable for this completion record.

Stage # – enter the stage number (#). If more than one stage is used to perf and frac the well, numbering of the stages is from the largest TMD (toe) of the wellbore to the lowest TMD (nearer surface) length of the wellbore applicable to this completion record.

Perforation date – enter the date this stage was perforated or the perforation holes opened if pre-perforated pipe used.

Enter the TMD (borehole length) in feet where perforation started for the applicable stage.

Enter the TMD (borehole length) in feet where perforation ended for the applicable stage.

Enter the number of perforations within this stage.

Enter the name of the formation(s) perforated by this stage. If vertical perforations of multiple formations, indicate the formations perforated that are to be stimulated at the same time and identify those combined as a single stage.

FOOTER

Page 2 of _____ – You must enter the total number of pages that comprise the submission of this completion report. This should be the second of the total number of pages.

STIMULATION FLUID ADDITIVES

Well API # 37-XXX-XXXXX-XX-XX – in header area. Enter the API number assigned to the well and to the operation or sidetrack sequence as applicable for this completion record.

Note – Note: additives or components of mixtures that are considered to be **Trade Secrets** or **Confidential Proprietary Information and requested to be held confidential by the Department** must be submitted on a separate copy of this form and <u>clearly marked</u> as such <u>at the top center of the form</u>. The form with the confidential information should be <u>attached as the first page</u> to the remainder of this report. A suggested form is available from the Department, a copy of which is the last page in this completion report form. If Confidential information is submitted, in the footer of the pages of the confidential information, begin numbering with page one and sequentially for each additional confidential page. For the remainder of the completion report pages, number the total number of pages in the footer to include the number of pages submitted as confidential in the report total.

Trade Name – Enter the trade or common name of the additive to the frac base fluid. This is to include the listing of all chemical additives in the Stimulation fluid as required by 25 Pa Code §78.122 (b)(6)(i).

Supplier – Enter the name of the supplier/manufacturer of the additive/mixture.

Purpose – Indicate the purpose the additive is added to the base fluid. What enhancement to the properties of the frac fluid is accomplished by the additive.

Ingredients – list all chemicals of the additive regardless of them being on the MSDS sheet or not. Use multiple lines in this column to list the various chemical components under one Trade Name product.

CAS No. of Chemical Component – Enter the Chemical Abstract Services (CAS) number for the chemical listed on the Material Safety Data Sheet (MSDS).

Maximum Component % by Mass in Additive – Enter the percent by mass of each chemicals concentration in the additive. This is to be listed for both the MSDS listed chemicals as well as any non-hazardous component of any other additive.

Chemical Component % Mass used in Total Base Fluid (Pg 1) - Enter the percent by mass of each chemicals concentration in the total mass of the fluid used in the stimulation process. This is to be listed for both the MSDS listed chemicals as well as any non-hazardous component of any other additive.

Comment – Add any comment regarding spillage of any base or additive fluids on the well site or notable characteristics of fluids or occurrences during the stimulation process.

Please insert additional copies of this page if additional rows/stages are needed. An example form is available from the department for use in submitting just the components that are to be held as confidential. See last page.

FOOTER

Page 3 of _____ – You must enter the sequential page number and then the total number of pages that comprise the submission of this completion report.

STIMULATION INFORMATION (STAGE)

Well API # 37-XXX-XXXXX-XX-XX – in header area. Enter the API number assigned to the well and to the operation or sidetrack sequence as applicable for this completion record.

Complete a separate record for each stimulation stage. Insert additional copies of this page for more than 40 stages.

Stage No. – Enter the stage number. These should be in the same order as indicated on the Perf record.

Stimulation Date – Enter the date (MM/DD/YYYY format) the stimulation of this stage is started.

Ave Pump Rate (BPM): Ave Bbls/min – Enter the average pumping rate for this stage in Barrels per minute.

Average Treatment Pressure (PSI) – Enter the Average Treatment Pressure for this stage in PSI taken at the well head.

Max Breakdown Pressure (PSI) – Enter the maximum pressure the well casing experienced during the stimulation process (the formation breakdown pressure) in PSI at the well head.

ISIP (PSI): ISIP - Enter the Instantaneous Shut-In Pressure reading in PSI taken at the well head.

Proppant Type - Enter the type of proppant used in this stage.

Proppant Mesh Size(s) - Enter the mesh or sieve size(s) of proppant used.

FOOTER

Page 4 of _____ – You must enter the sequential page number and then the total number of pages that comprise the submission of this completion report.