



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

Completion Report

(Unconventional Operators only)

DEP USE ONLY					
Site ID		Primary Facility ID			
Client ID		Sub Facility	Id		

Well Information									
Well Operator		DEP ID#	US Well No. (Well-Farm Name		Wel	l #
Address Latitude (DE Longitude (E		Latitude (DD)		NAC 83	I I		al#		
City	State	Zip Code	Municipality			County		-	
Phone F	-ax		Email			USGS 7.5 min. qu	adrangle ma)	Section
Well Development Impoundment:									
Check the appropriate submis		☐ Original C	Completion Re	port \square An	nended Co	empletion Report			
				BASE FLUI					
List Water Management Plan Source(s) Water Management Plan ID Volume (Gallons)									
1.									
2.									
3.									
4.									
5.									
6.									
			DEP Biolog Review/Da		ons of W	ater Used	Water	R	ecycled
		Other Base F	luid(s) Used				Quanti	ty and	/UOM
1.						1			
2.	2.								
Total Quantity all Fluid(s) /									
STIMULATION/PRODUCTION INFORMATION (WELL)									
Radioactive tracers used? Specify Tracer	24 1	Hr. Open-Flow ((MCF/Day) / Dat	e 2	24 Hr. Shut-	in Pressure:/ Date /	Con	npletion	Date:
Well Products: ☐ Gas Btu ☐ Oil API G ☐ Condensate API G ☐ Other					Other	□ GOR			
		WEL	L SERVIC	E COMPANIE	ES				
Perforation Company		Frac Co	mpany			Plug Drill Out/Flo	ow Back (Comp	any
Name		Name				Name			
Address		Address				Address			
City – State- Zip		City – State	e – Zip			City – State – Zip			
Phone		Phone				Phone			
I do hereby certify to the b									
tion Report is true and co	rrect. I am	aware that	there are s	ignificant per	nalties fo	or submitting fals	se inform	ation,	includ-
ing the possibility of fine a	and imprise	onment. Ir	n addition, i	do hereby c	ertify th	at the area of re	eview ma	nitori	ng plan
was conducted as outlined in the area of review summary report.									
Well Operator's Signatur	e					DEP USE ONL	Υ		
Reviewed by: Date:									
Printed Name / Title:			Date:	Comments:					

US Well No. (API No.) 37-___--__--__

	PERFORATION RECORD						
Stage	D (Stage Perforated From TMD Ft.	Stage Perforated To TMD Ft.				
No.	Perforation Date	TMD Ft.	TMD Ft.	# of Perforations/Stage	Formation(s)		
				7			
		Dioce incent a date	nol conice of this :-	o if additional name /-+-	a ora nacedod		
		Please insert addition	inal copies of this pag	e if additional rows/stages	o are needed.		

US Well No. (API No.) 37- - - -

STIMULATION INFORMATION / STAGE Complete a separate record for each stimulation stage. (Please insert additional lines for additional stages or additional pages as applicable). Stimulation Ave Pump Rate Ave Treatment Max Breakdown Proppant Mesh ISIP (PSI) Date (BPM) Pressure (PSI) Pressure (PSI) Proppant Type Size(s) <u>11</u> <u>13</u> <u>14</u> <u>15</u> <u>17</u> <u>18</u> 19 20 21 <u>23</u> 28 <u> 29</u> <u>30</u> <u>33</u> <u>35</u> 37 <u>38</u> <u>40</u>

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US Well No. (API No.) 37-___-__-

STIMULATION FLUID ADDITVES

Note: Information designated as Trade Secret or Confidential proprietary information must be clearly identified as such and should be submitted on the "Confidential Stimulation Fluid Additives" form.

Trade Name	Supplier	Purpose	Ingredients	CAS # of Chemical Component	Max. Compo- nent % Mass in Additive	Chemical Component % Mass used in Total Base Fluid (Pg 1)	Comment		
Trade Name	Сиррпсі	i dipose	ingicalcins	Сотронен	III Additive	Tidia (Fg 1)	Comment		
	Please insert additional copies of this page if additional rows are needed.								

______ Page _____ of _____

US Well No. (API No.) 37-___-

STIMULATION INFORMATION / STAGE Complete a separate record for each stimulation stage. (Please insert additional lines for additional stages or additional pages as applicable). Proppant Mesh Size(s) Ave Pump Rate Ave Treatment Max Breakdown # Date (BPM) Pressure (PSI) Pressure (PSI) ISIP (PSI) **Proppant Type** 10 11 12 13 14 15 16 17 18 19 20 21 23 25 26 27 28 30 31 32 35 36 37 38

CONFIDENTIAL - STIMULATION FLUID ADDITVES - CONFIDENTIAL

Note: Additives designated on the "Stimulation Fluid Additives" as Trade Secret or Confidential proprietary information must be clearly identified as such and should be submitted on this or similarly identified sheet as confidential to this report.

	identified sheet	entified sheet as confidential to this report.						
	Trade Name	Supplier	Purpose	Ingredients	CAS No. of Chemical Component	Maximum Component % by Mass in Additive	Chemical Component % Mass used in Total Base Fluid (Pg. 1)	Comment
	—							
ı		The Departmen	nt will prevent disclosu	re of the designated confider	ntial information to	the extent permitted under the Right	t-to-know Law (65 P.S.§67.101-67.3	103.

The Department will prevent disclosure of the designated confidential information to the extent permitted under the Right-to-know Law (65 P.S.§67.101-67.3103. Use additional pages as needed.

Contact information for person requesting confidentiality of above listed information:

Name/Title	
Address	
City — State – Zip	
Phone	Signature

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

WELL COMPLETION REPORT FORM INSTRUCTIONS

Pursuant to 58 Pa C.S. § 3222(b)(3) and 25 Pa Code § 78a.122(b), within 30 days after completion of a well, when the well is capable of production, the well operator shall submit a Completion Report to the Department. Completion operations include both initial activities and any subsequent activities (e.g., re-stimulation of a wellbore). A Completion Report must be submitted for all completion operations, both the original completion activities and any subsequent completion activities.

NOTE: For information related to the submission of Confidential Proprietary Information or Trade Secrets, please see "Stimulation Fluid Additives" on page 5 and "Registration of Confidential Proprietary Information/Trade Secret Stimulation Fluid Chemical Information", Doc. No. 8000-FM-OOGM0132 and instructions.

Completion Report - Instructions for Operator.

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

WELLINFORMATION

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 website 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.

US Well No. (API No.) – the US Well No.(API No.) number assigned to the wellbore section fo which completion operation information is being submitted. If the permit provides for drilling multiple laterals (XX-XXX-XXXXX-00-00 and 01-00), each lateral (00-00 and 01-00) should have a separate Completion Report submitted identifying the the completion operation information specific to each wellbore.

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-XXXXX-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 used in the Oil and Gas 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.

<u>Latitude</u> – Enter the actual "as drilled" latitude of the surface hole location of the well in decimal degrees. This should be in North American Datum of 1983 (NAD 83) and must meet the current DEP policy regarding locational accuracy.

Longitude – Enter, as a negative value, the actual "as drilled" longitude of the surface hole location of the well in decimal degrees. This should be in North American Datum of 1983 (NAD 83) and must meet the current DEP policy regarding

locational accuracy.

<u>Project Number – If the well was identified as part of a "project" as used in the Oil and Gas Act, it would have been assigned a project number by DEP and identified on the permit.</u>

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 the 7 $\frac{1}{2}$ min. quadrangle map. This should be the same map name used on the plat.

Section – Enter the section number (1-9). Section numbering begins at the top right section of the top row and then by section within the row proceeding to the next lower row and column to the lower left section of the quads 9 sections.

1	2	3
4	5	6
7	8	9

<u>Well Development Impoundment – If a well Development Impoundment was used in the development of the well, list the Well Development Name(s) and ID(s), once registered with the Department.</u>

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 Water Source(s) — If stimulating an Unconventional Formation (see 25 PA Code § 78.1) and water is the primary base fluid of the stimulation operation, e Enter as much detail as possible to uniquely and precisely identify each direct water source. For Water Management Plan ("WMP") sources, enter the source name and accompanying descriptors as noted on the WMP authorization letter, including the SRBC Docket Number if applicable. If purchased from another operator or third party purveyor, include the name of the company or individual responsible for the site.nter the water sources used, and, if applicable, the Water Management Plan identification number for each source, and the volume used (in gallons) on the corresponding row.

Volume (Gallons) – In the column(s) for Volume (Gallons), enter for each source of water, the volume in gallons from the water source.

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

Total Gallons of Water Used – Enter the total for water used and the total of recycled flowback or produced water used.

Other Base Fluid(s) Used – If fluids other than water, produced water, frac flowback, Mine water, etc. 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 fluid.

Total Quantity All Fluid(s) Used – Enter the total (within the same UOM) 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? – If radioactive tracers were used to monitor the stimulation of the well, check the check box to the right and specify the tracer used. If none were used, leave the box unchecked.

- **24 Hr. Open-Flow (MCF/Day)** Enter the Open-Flow value of the well in MCF for a 24 hour period. If the date of obtaining the well test measurements is later than the required submission date 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 date.
- **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 the required submission date 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 date.

Completion Date – Enter the date initial flowback began or the last frac plug was drilled out, i.e. flowback commenced OR for wells not fraced, the date initial formation flow 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 58 Pa C.S. § 3222(b)(3)Sec. 601.212 (b) of the Oil and Gas Act and 25 Pa. Code Chapter § 78a.122(b). If the well is not connected for production within 12 months of this completion date and you are applying for either lnactive Status for the well or submitting a Notice of Intent to Plug as required by the Oil and Gas 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 fluid, either combustible or noncombustible, is produced in a natural state from the well and maintains a gaseous or rarified state at standard temperature of 60 degrees Fahrenheit and pressure 14.7 PSIA, any manufactured gas, any byproduct gas or any mixture of gases. Enter the BTU value of the gas 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 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 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 (as above) 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 ratio 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

<u>US Well No. (API No.)</u> <u>—Well API # 37-XXX-XXXXX-XX-XX —</u> In the header area, enter the <u>_US Well No.(API No.)</u> <u>number API number</u> assigned to the well and to the <u>__</u>operation or sidetrack sequence as applicable for this completion <u>record</u>report.

Stage # – Enter the stage number (#). If more than one stage will be used to frac the well, number the perf stages in correspondence with the frac stages starting with the deepest TD/TMD (toe) of the wellbore and progressing to the shallowest TD/TMD (nearer surface)of the wellbore. For wells completed open-hole, notching or other mechanical changes of the wellbore is to be reported as perf stages. Identify the method and indicate the location of the notches/changes in the open wellbore. Multiple notches designated for treatment in one frac stage are considered one stage and must identify the formations and location of each notch within the stage.

Perforation date – Enter the date this stage was perforated or the perforation holes opened if sliding sleeve 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 - In header area, enter the API number assigned to the well and to the operation or sidetrack sequence as applicable for this completion record.

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 base fluid is accomplished by the additive?

Ingredients – For each additive, provide a list of the chemicals used in that additive, by name, that are in the Material Safety Data Sheets (MSDS), see 29 CFR 1910.1200. Use multiple lines in this column to list the various MSDS-listed chemical constituents under each Trade Name product.

CAS No. of Chemical Component – Enter the Chemical Abstract Services (CAS) number for each chemical listed on the Material Safety Data Sheet (MSDS). If requesting confidentiality, see note below.

Maximum Component % by Mass in Additive – Enter the percent by mass of each chemical's concentration in the additive in accordance with MSDS standards. This is to be listed for all MSDS chemicals listed under the Ingredients column.

Chemical Component % Mass used in Total Base Fluid (Pg 1) – Enter the percent by mass of each chemical's concentration in the total mass of the fluid used in the stimulation process. This is to be listed for all MSDS chemicals listed under the Ingredients column.

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

Please insert additional copies of this page if additional rows are needed. When requested, an example form is available from the department for use in submitting the "Confidential Stimulation Fluid Additives" form.

Note - If the above information contains a trade secret or confidential proprietary information, you may designate specific entries in the "Stimulation Fluid Additives" form as a trade secret or confidential proprietary information by

entering "trade secret" in the required field for the applicable entry. For each such designated entry, enter any omitted information designated "trade secret" in the "Stimulation Fluid Additives" form on the form titled "Confidential Stimulation Additives". See 25 Pa. Code § 78.122(c). If you require more than one page to complete the "Confidential Stimulation Additives" form, begin numbering each page starting with page one and sequentially number each additional page. The Department will prevent disclosure of the designated confidential information to the extent permitted under the Right-to-Know-Law (65 P.S. §§ 67.101–67.3103).

FOOTER

Page_____ 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)

<u>US Well No. (API No.)</u> – In the header area, enter the US Well No.(API No.) number assigned to the well and to the operation or sidetrack sequence as applicable for this completion report.

Well API # 37-XXX-XXXXXX-XX - In the 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 ___ of ___ - You must enter the sequential page number and then the total number of pages that comprise the submission of this completion report.

STIMULATION FLUID ADDITIVES

IMPORTANT: If you are designating chemical information as containing trade secret and/or confidential proprietary information (CPI) for submission in a Stimulation Record of a Completion Report, you must complete the "Registration of Confidential Proprietary Information/Trade Secret Stimulation Fluid Chemical Information", Doc. No. 8000-FM-OOGM0132. This is a separate process from the Completion Report, Doc. No. 8000-FM0OOGM004b, to designate CPI and/or trade secret chemical information. This separate process protects this designated information, to the extent permitted by the law, in the event of a Right-To-Know-Law (RTKL) request.

Completion Reports for stimulation operations that were conducted with chemicals registered with the Department as confidential proprietary information/trade secret must be submitted to the Department electronically using the Department's online application accessible via the DEP GreenPort (www.depgreenport.state.pa.us). The online submission application provides operators with the ability to enter the chemical code assigned by the well operator, well service provider, supplier/vendor, or chemical manufacturer that has designated the chemical information as confidential proprietary information / trade secret, rather than the CAS Number and chemical name. Any paper submissions identifying a chemical code rather the CAS Number and chemical name will be returned as deficient.

<u>US Well No. (API No.)</u> – In the header area, enter the <u>US Well No.(API No.)</u> number assigned to the well and to the operation or sidetrack sequence as applicable for this completion report.

<u>Trade Name</u> – 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 §78a.122 (b)(6)(i).

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

<u>Purpose</u> – Indicate the purpose the additive is added to the base fluid. What enhancement to the properties of the base fluid is accomplished by the additive?

<u>Ingredients</u> – For each additive, provide a list of the chemicals used in that additive, by name, that are in the <u>Material Safety Data Sheets (MSDS)</u>, see 29 CFR 1910.1200. Use multiple lines in this column to list the various MSDS-listed chemical constituents under each Trade Name product.

<u>CAS No. of Chemical Component</u> – Enter the Chemical Abstract Services (CAS) number for each chemical listed on the Material Safety Data Sheet (MSDS). If requesting confidentiality, see note below.

<u>Maximum Component % by Mass in Additive</u> – Enter the percent by mass of each chemical's concentration in the additive in accordance with MSDS standards. This is to be listed for all MSDS chemicals listed under the Ingredients column.

<u>Chemical Component % Mass used in Total Base Fluid (Pg 1) – Enter the percent by mass of each chemical's concentration in the total mass of the fluid used in the stimulation process. This is to be listed for all MSDS chemicals listed under the Ingredients column.</u>

<u>Comment</u> – Add any comment regarding spillage of any base or additive fluids on the well site or notable characteristics of fluids or non-standard occurrences during the stimulation process.

FOOTER

<u>Page of – You must enter the sequential page number and then the total number of pages that</u> comprise the submission of this completion report.

Submit the form through DEP's GreenPort located at www.greenport.pa.us

Instruction on specific Oil & Gas electronic applications can be accessed at http://www.dep.pa.gov/OG-submit