



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

DEP USE ONLY	
Site ID	Primary Fac ID
Client	Subfacility Id

# Completion Report

Well Information					
If you are submitting this Completion Report attached to the Well Record, you only need to enter the well API # in this section.					
Well Operator Range Resources-Appalachia, LLC	DEP ID# 141142	Well API # (Permit / Reg) 37-125-23899-00	Project Number	Acres 607.8373	
Address 380 Southpointe Blvd, Suite 300		Well Farm Name Godwin	Well # 3H	Serial #	
City Canonsburg	State PA	Zip Code 15317	County Washington	Municipality Canton	
Phone 724-743-6700	Fax 724-743-6490	Email	USGS 7.5 min. quadrangle map Washington West		
Check the appropriate submission: <input checked="" type="checkbox"/> Original Completion Report <input type="checkbox"/> Amended Completion Report					

STIMULATION BASE FLUID		
List Water Management Plan Approved Water Source(s) that were used	Water Management Plan ID No.	Volume (Gallons)
1. PA American Water Co/Chapman Lane Meter Vault	Source 15	1,632,204
2.		
3.		
4.		
5.		
6.		
<b>Recycled Water Used</b>		<b>2,197,524</b>
<b>Other Base Fluid(s)/Components Used</b>		
1.		
2.		
<b>Total Base Fluid(s)/Components Used</b>		<b>3,829,728 gallons</b>

PERFORATION RECORD					
Stage No.	Perforation Date	Stage Perforated From	Stage Perforated To	Perf. Orientation (Vertical, Horizontal, Radial)	Formation
1	5/12/11	10,792'MD	10,513'MD	Horizontal	Marcellus Shale
2	5/20/11	10,420'MD	10,234'MD	Horizontal	Marcellus Shale
3	5/20/11	10,048'MD	9,768'MD	Horizontal	Marcellus Shale
4	5/21/11	9,676'MD	9,397'MD	Horizontal	Marcellus Shale
5	5/23/11	9,304'MD	9,025'MD	Horizontal	Marcellus Shale
6	5/24/11	8,932'MD	8,653'MD	Horizontal	Marcellus Shale
7	5/24/11	8,467'MD	8,281'MD	Horizontal	Marcellus Shale
8	5/24/11	8,188'MD	7,909'MD	Horizontal	Marcellus Shale
9	5/25/11	7,816'MD	7,537'MD	Horizontal	Marcellus Shale
10	5/25/11	7,444'MD	7,165'MD	Horizontal	Marcellus Shale
11	5/26/11	7,072'MD	6,793'MD	Horizontal	Marcellus Shale
12				Horizontal	Marcellus Shale





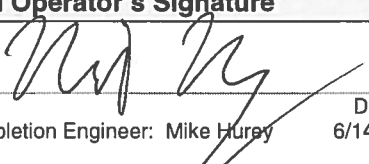
<b>STIMULATION INFORMATION (WELL)</b>			
Open Flow Production: Omcf/d @ 24hrs pos treatment	24 Hr. Open Flow Production: Omcf/d @ 24hrs pos treatment	24 Hr. Shut-in Pressure: N/A @ 24hrs post treatment	Flow Back Date:
<b>STIMULATION INFORMATION (STAGE)</b>			
Complete a separate record for each stimulation stage. (Please insert additional copies of this page for additional stages).			
<b>Stage No.:</b> 1	Stimulation Date: 5/19/11	Pump Rate: 69.4	
Pressure (psi): 6069	Shut-in Surface Pressure: 3427	5 Minute Shut-in Surface Pressure: N/A	
Propping Agent Type: Sand	Propping Agent Amount: 406,202	Propping Agent Size: 100 Mesh 30/50 Mesh	
<b>Stage No.:</b> 2	Stimulation Date: 5/20/11	Pump Rate: 69.9	
Pressure (psi): 6020	Shut-in Surface Pressure: 3586	5 Minute Shut-in Surface Pressure: N/A	
Propping Agent Type: Sand	Propping Agent Amount: 405,758	Propping Agent Size: 100 Mesh 30/50 Mesh	
<b>Stage No.:</b> 3	Stimulation Date: 5/21/11	Pump Rate: 70.7	
Pressure (psi): 6137	Shut-in Surface Pressure: 3828	5 Minute Shut-in Surface Pressure: N/A	
Propping Agent Type: Sand	Propping Agent Amount: 410,710	Propping Agent Size: 100 Mesh 30/50 Mesh	
<b>Stage No.:</b> 4	Stimulation Date: 5/23/11	Pump Rate: 68.7	
Pressure (psi): 5982	Shut-in Surface Pressure: 3816	5 Minute Shut-in Surface Pressure: N/A	
Propping Agent Type: Sand	Propping Agent Amount: 408,671	Propping Agent Size: 100 Mesh 30/50 Mesh	
<b>Stage No.:</b> 5	Stimulation Date: 5/23/11	Pump Rate: 69.8	
Pressure (psi): 6668	Shut-in Surface Pressure: 3694	5 Minute Shut-in Surface Pressure: N/A	
Propping Agent Type: Sand	Propping Agent Amount: 408,231	Propping Agent Size: 100 Mesh 30/50 Mesh	
<b>Stage No.:</b> 6	Stimulation Date: 5/24/11	Pump Rate: 66.9	
Pressure (psi): 6761	Shut-in Surface Pressure: 3741	5 Minute Shut-in Surface Pressure: N/A	
Propping Agent Type: Sand	Propping Agent Amount: 406,630	Propping Agent Size: 100 Mesh 30/50 Mesh	
<b>Stage No.:</b> 7	Stimulation Date: 5/24/11	Pump Rate: 70.2	
Pressure (psi): 6657	Shut-in Surface Pressure: 3811	5 Minute Shut-in Surface Pressure: N/A	
Propping Agent Type: Sand	Propping Agent Amount: 406,902	Propping Agent Size: 100 Mesh 30/50 Mesh	
<b>WELL SERVICE COMPANIES (Provide the name, address, and telephone number of all well service companies involved.)</b>			
<b>Name</b> Frac Tech	<b>Name</b> Multi-Chem	<b>Name</b> Titan Wireline Services	
Address 16858 IH20	Address 200 Detroit Street	Address P.O. Box 286	
City - State - Zip Cisco, TX 76437	City - State - Zip Washington, PA	City - State - Zip Elderton, PA 15736	
Phone 817-850-1008	Phone 325-486-7489	Phone 724-354-4400	

**STIMULATION INFORMATION (STAGE- Continued)**

Complete a separate record for each stimulation stage. (Please insert additional copies of this page for additional stages).

<b>Stage No.:</b> 8	Stimulation Date: 5/25/11	Pump Rate: 68.9
Pressure (psi): 6586	Shut-in Surface Pressure: 3870	5 Minute Shut-in Surface Pressure: N/A
Propping Agent Type: Sand	Propping Agent Amount: 408,076	Propping Agent Size: 100 Mesh 30/50 Mesh
<b>Stage No.:</b> 9	Stimulation Date: 5/25/11	Pump Rate: 69.9
Pressure (psi): 6145	Shut-in Surface Pressure: 3788	5 Minute Shut-in Surface Pressure: N/A
Propping Agent Type: Sand	Propping Agent Amount: 405,378	Propping Agent Size: 100 Mesh 30/50 Mesh
<b>Stage No.:</b> 10	Stimulation Date: 5/26/11	Pump Rate: 70.2
Pressure (psi): 5995	Shut-in Surface Pressure: 3941	5 Minute Shut-in Surface Pressure: N/A
Propping Agent Type: Sand	Propping Agent Amount: 410,048	Propping Agent Size: 100 Mesh 30/50 Mesh
<b>Stage No.:</b> 11	Stimulation Date: 5/26/11	Pump Rate: 68.0
Pressure (psi): 5622	Shut-in Surface Pressure: 3794	5 Minute Shut-in Surface Pressure: N/A
Propping Agent Type: Sand	Propping Agent Amount: 417,722	Propping Agent Size: 100 Mesh 30/50 Mesh

*I do hereby certify to the best of my knowledge, information and belief that the information contained on this Completion Report is true and correct. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

<b>Well Operator's Signature</b>		<b>DEP USE ONLY</b>	
 Title: Completion Engineer: Mike Hurey Date: 6/14/11	Reviewed by:	Date:	
	Comments:		



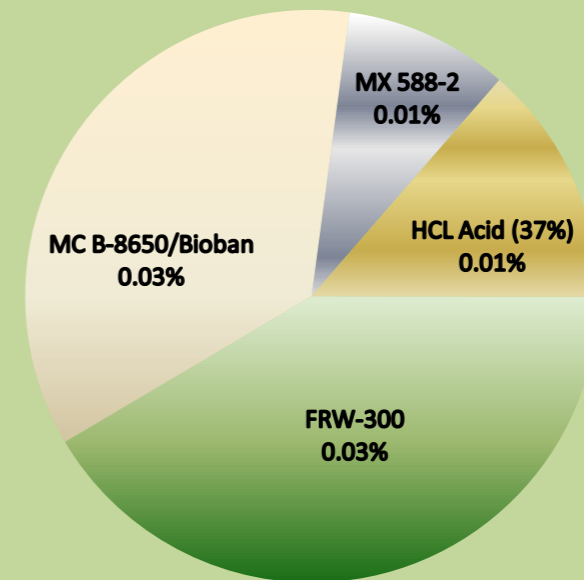
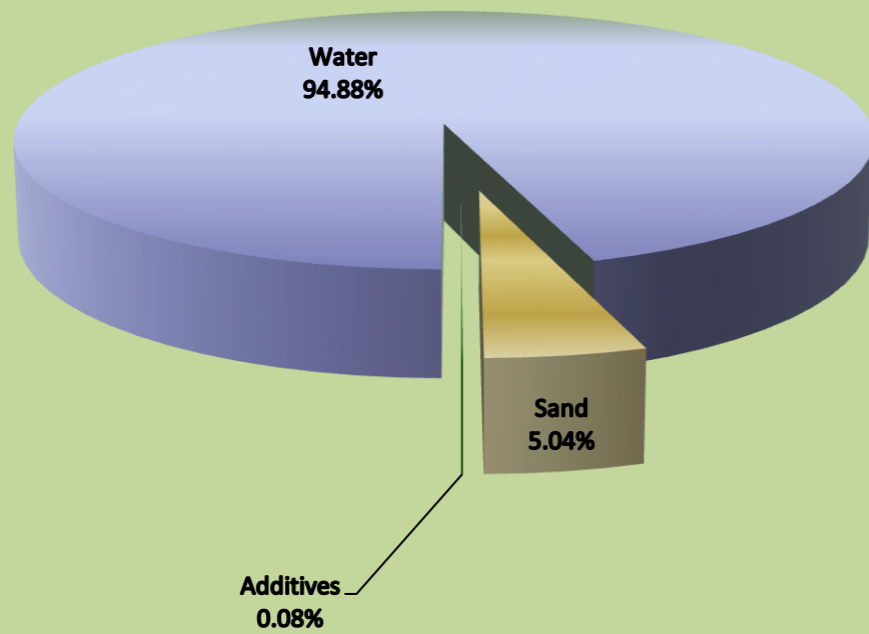
RANGE RESOURCES

Godwin Unit #3H  
Well API: 37-125-23899

Completion Date: May 16 - 26, 2011  
Township: Somerset

% Composition of Hydraulic Fracture Fluid (by volume)						
Product Name	Additive	Purpose	Use and Dillution	Volume	Overall %	Common Uses
Water	Carrier Fluid	Creates fracture network in shale and carry proppant to the formation	Primary constituent	3,827,763 gal	94.89%	Water is the most abundant molecule on the Earth's surface
Sand	Sand	Allows fractures to remain open so gas can escape	Second most common constituent, making up almost 6% of the fluid	203,144 gal	5.04%	Drinking water filtration, play sand
FRW-300	Friction Reducer	Reduces friction between fluid and pipe	Diluted at one-half gallon per 1,000 gallons of water	1,259 gal	0.03%	Water treatment; soil conditioner; some children's toys
MC B-8650/Bioban	Antimicrobial Agent	Eliminates bacteria in the water that produce corrosive byproducts	Diluted at one-half gallon per 1,000 gallons of water	1,081 gal	0.03%	Water treatment, disinfectant; sterilize medical and dental equipment and surfaces
MX 588-2	Scale Inhibitor	Prevents scaling in pipe	Diluted at one-tenth gallon per 1,000 gallons of water	0,281 gal	0.01%	Water treatment, household cleaners, de-icing agent
HCL Acid (37%)	Perf Clean-Up	Dissolves cement and minerals to help initiate fractures	177 gallons per stage if required (non-diluted chemicals)	0,415 gal	0.01%	Swimming pool and household cleaner

Composition of Hydraulic Fracture Fluid (by volume)





## Composition of Components in Marcellus Shale Hydraulic Fracturing Fluid

**RANGE RESOURCES**

Common Name & Supplier	Supplier Chemical Name	Common Description	Hazardous Component listed on MSDS	Hazardous Component CAS No.	Purpose	MSDS Component Weight % of Chemical	Gallons MSDS Component in Well	Maximum Concentration of MSDS Component of Total Stage Fluid		
								% Vol	% Weight	
7.5% HCl Mixture (FracTech)	37% HCL	concentrated HCl Acid	HCL	7647-01-0	Cleans perforation	37.0%	414.73	0.0103%	0.0042%	
	CI-100	Corrosion Inhibitor	Methanol	67-56-1	Protects casing	95.0%	4.13	0.0001%	0.0001%	
			Propargyl Alcohol	107-19-7	Protects casing	5.0%	0.18	0.0000%	0.0000%	
	NE100	Non- Emulsifer	No hazardous ingredients	N/A	Prevents emulsions	0.0%	N/A	N/A	N/A	
FE100L	Iron Chelator	No hazardous ingredients	N/A	Prevents precipitation	0.0%	N/A	N/A	N/A		
							<b>TOTAL</b>	<b>0.0104%</b>	<b>0.0042%</b>	
Friction Reducer (FracTech)	FRW-300	Friction Reducer	No hazardous ingredients	N/A	Reduce friction down casing	0.0%	N/A	N/A	N/A	
Scale Inhibitor (Multichem)	MX 588-2	Scale Inhibitor	No hazardous ingredients	N/A	prevents scale deposits	0.0%	N/A	N/A	N/A	
Antibacterial Agent (Multichem)	Bioban	Antibacterial Agent	4,4-Dimethyloxazolidine	51200-87-4	eliminates bacteria in water	78.0%	593.93	0.0147%	0.0136%	
			3,4,4-Trimethyloxazolodine	75673-43-7		5.0%	38.88	0.0010%	0.0009%	
			2-Amino-2-methyl-1-propanol	124-68-5		1.0%	8.15	0.0002%	0.0002%	
			Formaldehyde Amine	56652-26-7		0.5%	3.55	0.0001%	0.0001%	
	BMC B-8650	Antibacterial Agent	Glutaraldehyde	111-30-8	eliminates bacteria in water	50.0%	111.52	0.0028%	0.0038%	
			Methanol	67-56-1		0.5%	1.12	0.0000%	0.0000%	
							<b>TOTAL</b>	<b>0.0188%</b>	<b>0.0187%</b>	
								<b>SUMMARY</b>	<b>by vol %</b>	<b>by weight %</b>
								<b>0.029%</b>	<b>0.023%</b>	