



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

DEP USE ONLY	
Site Id	Primary Facility Id
Client Id	Sub-facility Id

WELL RECORD AND COMPLETION REPORT

Well Operator Range Resources – Appalachia, LLC		DEP ID# 141142	Well API # (Permit / Reg) 37-081-20151	Project Number	Acres 870
Address 380 Southpointe Blvd. Suite 300			Well Farm Name Gentner Unit	Well # 6H	Serial #
City Canonsburg	State PA	Zip Code 15317	County Lycoming	Municipality Cummings	
Phone 724-743-6700	Fax 724-743-6790	USGS 7.5 min. quadrangle map Waterville			
Check all that apply: <input checked="" type="checkbox"/> Original Well Record <input checked="" type="checkbox"/> Original Completion Report <input type="checkbox"/> Amended Well Record <input type="checkbox"/> Amended Completion Report					

WELL RECORD Also complete Log of Formations on back (page 2)

Well Type	<input checked="" type="checkbox"/> Gas <input type="checkbox"/> Oil <input type="checkbox"/> Combination Oil & Gas <input type="checkbox"/> Injection <input type="checkbox"/> Storage <input type="checkbox"/> Disposal								
Drilling Method	<input type="checkbox"/> Rotary – Air <input checked="" type="checkbox"/> Rotary – Mud <input type="checkbox"/> Cable Tool								
Date Drilling Started 3/27/10	Date Drilling Completed 9/9/10	Surface Elevation 1760 ft.	Total Depth – Driller 12264 ft	Total Depth - Logger 12664 ft					
Casing and Tubing			Cement returned on surface casing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cement returned on coal protective casing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A						
Hole Size	Pipe Size	Wt.	Thread / Weld	Amount in Well (ft)	Material Behind Pipe Type and Amount	Packer / Hardware / Centralizers Type	Size	Depth	Date Run
30"	26"	106#	Thread	56'	Driven	---	26	56'	3/27/10
17-1/2"	13-3/8"	54.50#	Thread	721'	Gas Block, 520 sx	GS	13-3/8"	721'	5/3/10
12-1/4"	9-5/8"	36#	Thread	1800'	Gas Block, 635 sx	GS	9-5/8"	1800'	5/7/10
8-3/4"	5-1/2"	20#	Thread	12254'	Varicem, 2400 sx	FS	5-1/2"	12254'	9/8/10
					Fraccem, 340 sx				

COMPLETION REPORT

Perforation Record			Stimulation Record						
Date	Interval Perforated From To		Date	Interval Treated	Fluid Type Amount		Propping Agent Type Amount		Average Injection
11-1-10	12,114 MD	8,859 MD	11-17-10	Marcellus Shale	Slick H2O	99,075 bbl	Sand	4,818 Kib	64.0 bpm
Natural Open Flow Too small to measure			Natural Rock Pressure Too small to measure						
After Treatment Open Flow Omc/d @ 24hrs pos treatment			After Treatment Rock Pressure N/A @ 24hrs post treatment		Hours		Days		

Well Service Companies -- Provide the name, address, and phone number of all well service companies involved.


Name Patterson UTI	Name Universal Well Services	Name Frac Tech
Address 4501 Lamesa Highway	Address 730 Braddock View Dr	Address 16858 IH20
City - State - Zip Snyder, TX 79549	City - State - Zip Mt. Braddock, PA 15465	City - State - Zip Cisco, TX 76437
Phone 325-574-6300	Phone 724-430-6201	Phone 817-850-1008

LOG OF FORMATIONS

Well API#: 37-081-20151

Formation Name or Type	Top (feet)	Bottom (feet)	Gas at (feet)	Oil at (feet)	Water at (fresh / brine; ft.)	Source of Data
Fill	0'	39'				Geophysical Log
Sandy Shale	39'	90'				Geophysical Log
Sand	90'	515'				Geophysical Log
Sandy Shale	515'	670'				Geophysical Log
Sand	670'	945'				Geophysical Log
Shale	945'	1040'				Geophysical Log
Sandy Shale	1040'	2440'				Geophysical Log
Sand	2440'	2490'				Geophysical Log
Sandy Shale	2490'	3620'				Geophysical Log
Sand	3620'	4000'				Geophysical Log
Sandy Shale	4000'	4250'				Geophysical Log
Limestone	4250'	4300'				Geophysical Log
Sand	4300'	4700'				Geophysical Log
Sandy Shale	4700'	5340'				Geophysical Log
Sand	5340'	5455'				Geophysical Log
Sandy Shale	5455'	7400'				Geophysical Log
Shale	7400'	7450'				Geophysical Log
Limestone	7450'	7680'				Geophysical Log
Horizontal						
Shale	7700'	8750'				Geophysical Log
Limestone	8750'	8800'				Geophysical Log
Shale	8800'					Geophysical Log
Drillers Total Depth		12264'				Geophysical Log

Please delete empty rows if necessary to make all of page 2 fit on one page.

Well Operator's Signature:	DEP USE ONLY
	Reviewed by: _____ Date: _____
Title: Completions Engineer: Rodney Archibeque Date: 12-12-10	Comments: _____



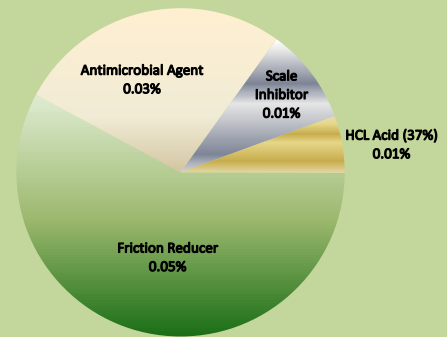
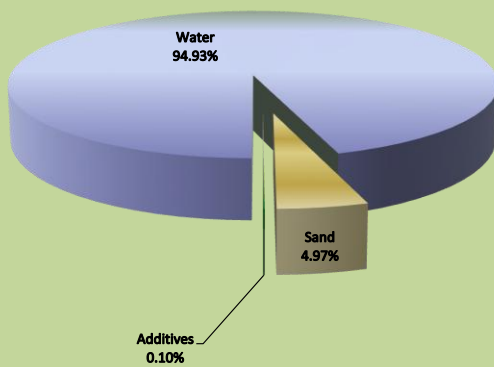
RANGE RESOURCES

Gentner Unit #6H
Well API: 37-081-20151

Completion Date: November 1 - 17, 2010
Township: Cummings

% 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	4,157,035 gal	94.93%	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	217,791 gal	4.97%	Drinking water filtration, play sand
FRW-200	Friction Reducer	Reduces friction between fluid and pipe	Diluted at one-half gallon per 1,000 gallons of water	2,403 gal	0.05%	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	1,094 gal	0.02%	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	382 gal	0.01%	Water treatment, household cleaners, de-icing agent
HCL Acid	Perf Clean-Up	Dissolves cement and minerals to help initiate fractures	139 gallons per stage (non-diluted chemicals)	234 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	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	Cleans perforation	37.0%	234.21	0.0053%	0.0022%
	CI-100	Corrosion Inhibitor	Methanol	Protects casing	95.0%	7.22	0.0002%	0.0001%
			Propargyl Alcohol	Protects casing	5.0%	0.31	0.0000%	0.0000%
	NE100	Non- Emulsifer	No hazardous ingredients	Prevents emulsions	0.0%	N/A	N/A	N/A
FE100L	Iron Chelator	No hazardous ingredients	Prevents precipitation	0.0%	N/A	N/A	N/A	N/A
TOTAL							0.0055%	0.0023%

Friction Reducer (FracTech)	FRW-200	Friction Reducer	No hazardous ingredients	Reduce friction down casing	0.0%	N/A	N/A	N/A
------------------------------------	---------	------------------	--------------------------	-----------------------------	------	-----	-----	-----

Scale Inhibitor (Multichem)	MX 588-2	Scale Inhibitor	No hazardous ingredients	prevents scale deposits	0.0%	N/A	N/A	N/A
------------------------------------	----------	-----------------	--------------------------	-------------------------	------	-----	-----	-----

Antibacterial Agent (Multichem)	Bioban	Antibacterial Agent	4,4-Dimethyloxazolidine	eliminates bacteria in water	78.0%	601.08	0.0137%	0.0127%
			3,4,4-Trimethyloxazolodine		5.0%	39.35	0.0009%	0.0008%
			2-Amino-2-methyl-1-propanol		1.0%	8.25	0.0002%	0.0002%
			Formaldehyde Amine		0.5%	3.59	0.0001%	0.0001%
	BMC B-8650	Antibacterial Agent	Glutaraldehyde	eliminates bacteria in water	50.0%	112.86	0.0026%	0.0036%
			Methanol		0.5%	1.13	0.0000%	0.0000%
TOTAL							0.0175%	0.0174%

SUMMARY	by vol %	by weight %
	0.023%	0.020%