

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 4-23-2014
API #: 47-069-00088

FINAL

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Farm name: Benjamin Honecker OHI 5H Operator Well No.: 833466

LOCATION: Elevation: 1110' Quadrangle: Bethany

District: Liberty County: Ohio
Latitude: 7800' Feet South of 40 Deg. 10 Min. 00 Sec.
Longitude 4330' Feet West of 80 Deg. 35 Min. 00 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 18496 Oklahoma City, OK 73154-0496	20"	101'	101'	115 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	323'	323'	252 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	1756'	1756'	825 Cu. Ft.
Date Permit Issued: 8-17-2011	5 1/2"	12754'	12754'	3368 Cu. Ft.
Date Well Work Commenced: 1-12-2012				
Date Well Work Completed: 6-22-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 5918'(cement plug @ 4979'-5767')				
Total Measured Depth (ft): 12756'				
Fresh Water Depth (ft.): 50', 80', 300'				
Salt Water Depth (ft.): 955'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 267'				
Void(s) encountered (N/Y) Depth(s) Y 267'				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,459'-12,623'
Gas: Initial open flow 1,852* MCF/d Oil: Initial open flow 395 Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 3,847* psig (surface pressure) after 48 Hours *Calculated

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marko Williams
Signature

4-23-2014
Date

05/23/2014

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PERFORATION RECORD ATTACHMENT

Well Number and Name: 833466 Benjamin Honecker OHI 5H

PERFORATION RECORD			STIMULATION RECORD							
Date	Interval Perforated		Date	Interval	Treated	Fluid		Propping Agent		Average Injection
	From	To				Type	Amount	Type	Amount	
5/25/2012	12,054	12,623	6/15/2012	12,054	12,623	Slk wtr	13,155	Sand	676,720	85
6/16/2012	11,460	11,997	6/16/2012	11,460	11,997	Slk wtr	15,218	Sand	678,540	80
6/16/2012	10,833	11,371	6/17/2012	10,833	11,371	Slk wtr	13,116	Sand	679,180	85
6/17/2012	10,207	10,745	6/17/2012	10,207	10,745	Slk wtr	13,800	Sand	678,480	84
6/17/2012	9,581	10,119	6/20/2012	9,581	10,119	Slk wtr	13,183	Sand	678,760	85
6/20/2012	8,961	9,492	6/20/2012	8,961	9,492	Slk wtr	14,177	Sand	679,460	86
6/20/2012	8,329	8,866	6/21/2012	8,329	8,866	Slk wtr	13,018	Sand	678,720	85
6/21/2012	7,702	8,240	6/21/2012	7,702	8,240	Slk wtr	13,895	Sand	679,480	86
6/21/2012	7,076	7,614	6/22/2012	7,076	7,614	Slk wtr	12,958	Sand	678,740	85
6/22/2012	6,459	6,987	6/22/2012	6,459	6,987	Slk wtr	12,573	Sand	679,220	81

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LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)**Maximum TVD of wellbore: 5918 ft TVD @ 7418 ft MD**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS	0	0	267	267
PITTSBURG COAL VOID	267	267	272	272
SS/SH	272	272	380	380
SS	380	380	490	490
SS/LS	490	490	1210	1210
BIG LIME (LS)	1210	1210	1310	1310
BIG INJUN (SS)	1310	1310	1590	1590
SHALE	1590	1590	5865	5718
GENESEO (SH)	5865	5718	5900	5743
TULLY (LS)	5900	5743	5990	5798
HAMILTON (SH)	5990	5798	6346	5889
MARCELLUS (SH)	6346	5889		
TD OF LATERAL			12756	5877

05/23/2014

Hydraulic Fracturing Fluid Product Component Information Disclosure

64-00088	Fracture Date:	6/15/2012
	State:	WEST VIRGINIA
	County:	OHIO
	API Number:	4706900088
	Operator Name:	CHESAPEAKE APPALACHIA LLC
	Well Name and Number:	BENJAMIN HONECKER OHI 5H
	Longitude:	-80.611461
	Latitude:	40.154705
	Long/Lat Projection:	NAD27
	Production Type:	GAS
True Vertical Depth (TVD):	5,962	
Total Water Volume (gal)*:	5,792,052	

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Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by Mass)**	Maximum Ingredient Concentration in HF Fluid (% by Mass)**	Comments
Fresh Water		Carrier/Base Fluid				80.41135%	
Recycled Produced Water		Carrier/Base Fluid				6.84312%	
Ottawa Sand		Proppant	Crystalline Silica (Quartz Sand, Silicon Dioxide)	014808-60-7	100.00%	7.90687%	
100 Mesh Sand		Proppant	Crystalline Silica (Quartz Sand, Silicon Dioxide)	014808-60-7	100.00%	4.25293%	
ACID, HYDROCHLORIC,	WEATHERF ORD	Acid	Water	007732-18-5	85.00%	0.39721%	
			Hydrochloric Acid	007647-01-0	15.00%	0.07010%	
WIC-641L	WEATHERF ORD	Iron Control Agent	Citric Acid	000077-92-9	70.00%	0.00427%	
WAI-251LC	WEATHERF ORD	Corrosion Inhibitor	Ethylene Glycol	000107-21-1	60.00%	0.00064%	
			Dimethyl Formamide	000068-12-2	40.00%	0.00043%	
			Tar bases, quinoline derivs, benzyl chloride-gauternized	072480-70-7	13.00%	0.00014%	
			Branched-Ethoxylated Nonyl Phenol (Branched-Nonyl Phenol Ethoxylate)	068412-54-4	10.00%	0.00011%	

88000-59			Cinnamaldehyde	000104-55-2	10.00%	0.00011%	
			2-Butoxyethanol (Ethylene Glycol Monobutyl Ether)	000111-76-2	7.00%	0.00007%	
			Isopropanol (Isopropyl Alcohol, Propan-2-ol)	000067-63-0	7.00%	0.00007%	
			Triethyl Phosphate	000078-40-0	7.00%	0.00007%	
EC6110A	NALCO	Anti-Bacterial Agent	Glutaraldehyde	000111-30-8	60.00%	0.01338%	
			Quaternary Ammonium Compounds	N/A	10.00%	0.00223%	
			Ethanol	000064-17-5	5.00%	0.00111%	
EC6629A	NALCO	Scale Inhibitor	No Hazardous Components	NONE		0.00000%	
WFR-61LA	WEATHERFORD	Friction Reducer	Petroleum Distillate Hydrotreated Light	064742-47-8	40.00%	0.03126%	
			Sodium Chloride	007647-14-5	10.00%	0.00781%	
			Alcohols ethoxylated C12-16	068551-12-2	7.00%	0.00547%	
			Quaternary Ammonium Chloride (Ammonium Chloride)	012125-02-9	7.00%	0.00547%	
WGA-15L	WEATHERFORD	Gelling Agent	Petroleum Distillate Hydrotreated Light	064742-47-8	70.00%	0.00445%	
WBK-133 OXIDIZER	WEATHERFORD	Breaker	Ammonium Persulfate	007727-54-0	100.00%	0.00016%	

Additional Ingredients Not Listed on MSDS

EC6110A, EC6629A	NALCO	Anti-Bacterial Agent, Scale Inhibitor	Methanol (Methyl Alcohol)	000067-56-1			
			Proprietary Acrylate Polymer	TRADE SECRET			
			Proprietary Quaternary Ammonium Salt	TRADE SECRET			
			Water	007732-18-5			
WAI-251LC, WFR-61LA, WGA-15L, WIC-641L	WEATHERFORD	Corrosion Inhibitor, Friction Reducer, Gelling Agent, Iron Control Agent	Alcohols ethoxylated C12-16	068551-12-2			
			Guar Gum	009000-30-0			
			Proprietary Alcohol	TRADE SECRET			
			Proprietary Ethoxylated Nonylphenol	TRADE SECRET			
			Proprietary Friction Reducer Additive (WFR-61LA)	TRADE SECRET			
			Sorbitan	008007-43-0			
Water	007732-18-5						

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

"Additional Ingredients Not Listed on MSDS" component information were obtained directly from the supplier. As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of this information should be directed to the supplier who provided it.