

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

Office of Oil and Gas
WV Dept. of Environmental Protection

API 47-087-04778 County ROANE District SMITHFIELD
Quad LOONEYVILLE 7.5' Pad Name BAYS, P.A. Field/Pool Name CLOVER
Farm name FISHER, FREDDIE Well Number 208
Operator (as registered with the OOG) H.G. ENERGY LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,284,852 M Easting 474,980 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 1,064' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 4/24/15 Date drilling commenced 8/11/15 Date drilling ceased 8/13/15
Date completion activities began 8/31/15 Date completion activities ceased 9/3/15
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft None Open mine(s) (Y/N) depths None
Salt water depth(s) ft 1700' Void(s) encountered (Y/N) depths None
Coal depth(s) ft None Cavern(s) encountered (Y/N) depths None
Is coal being mined in area (Y/N) N

APPROVED
NAME: [Signature]
DATE: 5-25-17

Reviewed by:
06/02/2017

MAR 31 2017

APPROVED
NAME
DATE

06/02/2017

API 47-087 - 04778

Farm name FISHER, FREDDIE

Well number 208

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	12 1/4"	11 5/8"	30'	Used	LS		Sand In
Surface	8 3/4"	7"	507'	New	LS	64'	Y
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2278.3'	New	J-55		Y
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 50 sks to surface on 7" surface cement job. Circulated Est. 35 sks to surface on 4 1/2" cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor:							
Surface	Reg Neat	130	15.6	1.18	154	Surface	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production:	50:50 Pozmix	80/125	13.2/14.2	1.64/1.27	131/186	48'	8
Tubing							

Drillers TD (ft) 2300' Loggers TD (ft) 2304'
 Deepest formation penetrated Big Injun Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) _____

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
5 Centralizers every 85 from bottom on 4 1/2". Centralizer placed mid string on 7"

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

MAR 24 2013

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

06/02/2017

BIOS A S RAM

and has ID in
memory of hardware

06/02/2017

RAM & BIOS

WALTON ELECTRONICS
Office of the
Attorney General

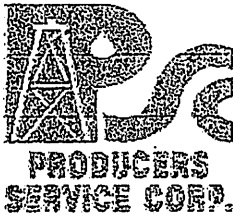
06/02/2017

Prepared for:

H G Energy

Dustin Hendershot

304-481-7342



Prepared by:

Producers Service Corp

Daniel L. Graham

109 S. Graham St.

Zanesville, OH 43702

740-454-6253

INVOICE #:	18890
WELL NAME:	P A Bays #208
COUNTY/STATE:	Roane/WV
TOWNSHIP/FIELD:	Clover Field
DATE of SERVICE:	9/3/2015
CUSTOMER PO#:	

Description	Notes	Amount	Units	Unit Cost	Total Cost
FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS			1 EA		
BLENDER CHARGE 0-10 BPM			1 EA		
MILEAGE CHARGE PER UNIT ONE WAY	2 Units @150Miles		MI		
IC ACID 15%		250	GAL		
PRO HIB II		0.5	GAL		
ACID DELIVERY		2	HR		
PRO CLA LOK (KCL SUBSTITUTE)		15	GAL		
PRO NE-21		5	GAL		
PRO GEL 4		150	LB		
BUFFER I		50	LB		
BUFFER II		50	LB		
BIO CLEAR 750		1	LB		
AP BREAKER		15	LB		
BXL-A		10	GAL		
BXL-10C		10	GAL		
SAND 20/40 OTTAWA		25	CWT		
SAND DELIVERY / TON MILES		100	TMILE		
DATA VAN		1	STAGE		

Customer Approval: _____

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API 47- 087 - 04778 Farm name FISHER, FREDDIE Well number 208

PRODUCING FORMATION(S)	DEPTHS	TVD	MD
Big Injun	2110'- 2128'		

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs
 OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY
 Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
Sand/Shale	0	1623	0		
Sand	1623	1766			
Shale	1766	1775			
Sand	1775	1828			
Shale	1828	1840			
Sand	1840	1910			
Little Lime	1910	1946			
Pencil Cave	1946	1958			
Big Lime	1958	2080			
Keener	2080	2110			
Big Injun	2110	2128			
Shale	2128	2300			
TD	2300				

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Please insert additional pages as applicable.

Drilling Contractor Decker Drilling
 Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International
 Address 11000 Performance PL City Youngstown State OH Zip 44502

Cementing Company Universal Services
 Address 14 Sewer Place Rd City Buckhannon State WV Zip 26201

Stimulating Company Producers Service Corp.
 Address 109 South Graham Street City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

Completed by Roger Heldman Telephone 304-420-1107
 Signature [Signature] Title Operations Manager Date 10/26/15

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

06/02/2017