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

API <u>47</u> - 087 . 04783	County ROAN	District SMITHFIELD				
Quad LOONEYVILLE 7.5'	Pad Name BAY	Field/Pool Name CLOVER				
Farm name FISHER, FREDDIE			Well Numb			-
Operator (as registered with the OO	G) H.G. ENERGY LL	.c				
Address 5260 DuPONT ROAD		RKERSBURG	State \	W	Zip <u></u>	26101
As Drilled location NAD 83/UTN Top hole Landing Point of Curve Bottom Hole	Northing 4,285,045 M Northing	E	asting 474,997	М		
Bottoiti Hole	Northing	E	asting			
Elevation (ft) 1,097' GL	Type of Well	BNew □ Existing	Туре о	f Report	⊃Interim	āFinal
Permit Type Deviated Deviated Deviated Deviated Deviated Deviated Deviated Deviated Deviated Deviated Deviated Deviated Deviate	Horizontal Horizon	ntal 6A 🛮 a Vertical	Depth	Туре	⊏ Deep	A Shallow
Type of Operation Convert	Deepen 🖺 Drill o	⊃ Plug Back □ Red	drilling 🗆 R	Rework	□ Stimula	te
Well Type □ Brine Disposal □ CF	BM □ Gas A Oil □ Se	condary Recovery	Solution Mini	ng 🗆 Stor	age 🗆 O	ther
Type of Completion Single Described with Cable Rotary Drilling Media Surface hole A A Production hole A Air Described Mud	Air □ Mud BFresh Wa	uced 🗆 Brine 🗆 🗆 Ga nter Intermediat			OtherOther	ET) and Gas Vater Brine
Mud Type(s) and Additive(s) N/A					VOO 2	artment of half Protection
				N	J Don	nial Plot
Date permit issued6/5/15	Date drilling com	menced7/8/15	Date	ENVI drilling ce	ased	7/10/15
Date completion activities began	7/14/15	_ Date completion a	ctivities ceased	i	7/16/15	
Verbal plugging (Y/N) N	Date permission grante	d	Granted	by		
				<u> </u>	-	
Please note: Operator is required to	submit a plugging applic	eation within 5 days o	f verbal permis	ssion to plu	g	
Freshwater depth(s) ft	None	Open mine(s) (Y/N) depths		None	
Salt water depth(s) ft	1720'	Void(s) encountered (Y/N) depths None			e	
	Vone	Cavern(s) encountered (Y/N) depths			Nor	ne
Is coal being mined in area (Y/N)	N		•			

CASING STRINGS	Uele	Cocina		31.				
	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)		nent circulate (Y/ N) de details below
Conductor	12 1/4"	11 5/8"	30'	Used	LS			Sand In
Surface	8 3/4"	7"	507'	New	LS	64'		Υ
Coal								
Intermediate 1								
Intermediate 2								
Production Production	0.4449				·			
Tubing	6 1/4"	4 1/2"	2314.8'	New	J-55			Υ
Packer type and d	enth set						l_	
Comment Details	Circulated Est. 50	sks to surface on 7" surface	ce cement job. Circul	aled Est. 25 sks	lo surface on 4 1/2° ce	ment job.		
CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg		ield Vol. 3/sks) (ft	•	ment (MD)	WOC (hrs)
Conductor Surface					_			
Coal	Reg Neat	130	15.6	1	.18 1	53 Su	rface	8
Intermediate 1								
Intermediate 2								
Intermediate 3								
Production	50:50 Pozm	ix 85/125	13.2/14	2 16	1/1.27 139	/186	44'	8
Tubing	00.001 0211	00/120	13.2/14	.2 1.04	139.	100	7-7	0
Drillers TD (ft	tion penetrated	Big Injun		Loggers Ti Plug back				
Plug back pro	cedure N/A							
Plug back pro Kick off depth	cedure N/A (ft) N/A	ß caliper ß neutron	☐ density ☐ resistivity	A deviate	d/directional ray	☐ induction ☐ temperature	□sonic	;
Plug back pro	(ft) N/A	•	☐ resistivity	🛮 gamma	ray	• temperature	■ Yes □	ı No
Plug back pro Kick off depth Check all wire Well cored a	(ft) N/A line logs run Yes A No	□ neutron	☐ resistivity al Sidew	a gamma	ray Were cutt	• temperature	■ Yes □	ı No
Plug back pro Kick off depth Check all wire Well cored a	(ft) N/A line logs run Yes A No	© neutron Convention JZER PLACEMEN	☐ resistivity al Sidew	a gamma	ray Were cutt	• temperature	PEC	EIVED Gas
Plug back pro Kick off depth Check all wire Well cored DESCRIBE T 8 Controllers overy 83 fr	(ft) N/A (ft) N/A line logs run Yes A No HE CENTRAL combottom on 4 1/2°, Contra	© neutron Convention JZER PLACEMEN	☐ resistivity Ital Sidew NT USED FOR	□ gamma rall REACH CA	ray Were cutt	• temperature	PEC	EIVED Gas
Plug back pro Kick off depth Check all wire Well cored DESCRIBE T 8 Controllers overy 88 fr	(ft) N/A (ft) N/A line logs run Yes No HE CENTRAL om bottom on 4 1/2°, Contra	Convention IZER PLACEMEN Strar placed mid string on 7 AS SHOT HOLE	☐ resistivity Ital Sidew NT USED FOR	₽ gamma rall R EACH CA	Were cutt	• temperature	PEC	ı No

WR-35 Rev. 8/23/13

API 47- 087 - 04783

Farm name FISHER, FREDDIE

_Well number_204

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	7/14/15	2166'	2172'	24	Big Injun
			<u> </u>	†	
		1		 	
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L				<u>.l</u>	<u> </u>

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	7/16/15	5	290	706	259	2,500	145	
		_						
			_					
		<u> </u>						
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								(ED
						 	OFCE!	(ED gas
						-	010	1 aug
						0	Hice	0 7015
							1116	
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		_	 .			 	100	partment of partment of ental Protection
						1	-1210	euro,
Please insert additional pages as applicable.						•	EUNIOIII.	

		Farm	name	1,112001	-	Well numb	er_ 204
PRODUCING	FORMATION	<u>(S)</u>	<u>DEPTHS</u>				
Big Injun			2158'- 2175'	TVD) (D)	
		 -		_ ''\' .		мD	
							
·							
Please insert a	dditional pages a	as applicable		- -			
GAS TEST			n Onen Eleve	,	NI TEAT	791 -	
	•						
SHUT-IN PRE	ESSURE Surf	face	psi Botto	om Hole	psi	DURATION	OF TEST hrs
OPEN FLOW		Oil	NGL			GAS MEAS	
	mcf	fpd	bpd	_ bpd _	bpd	□ Estimated	
LITHOLOGY/	TOP		TOP	воттом			
FORMATION	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT	DEPTH IN F	T DESCRIBE	ROCK TYPE ANI	O RECORD QUANTITY AND
Condiction	NAME TVD	TVD	MD	MD			TER, BRINE, OIL, GAS, H2S, ETC)
Sand/Shale	0	1665	0				
Sand	1665	1806			<u> </u>		
Shale	1806	1818					
Sand Shale	1818	1860	<u> </u>				
	1860	1870					
Sand	1870	1960	 				
Little Lime	1960	1994					
Pencil Cave	1994	2003					
Big Lime	2003	2128					
Keener	2128	2158					
Big Injun	2158	2175			<u> </u>		
Shale	2175	2370					
TD	2370				-		
lease insert ad	l ditional pages as	s annlicable	<u> </u>				
Orilling Contra	ctor Decker Drill	ing					
Address 11565	State Route 676		City	Vincent		_ State OH	Zip <u>45784</u>
ogging Comp	any Weatherford	International					
Address 777 No.	nh River Avenue	THE THE TOTAL OF THE T	Cita	Weston		o \M/	~: 26452
rudi ess			City	Treston		_State _WV	Zip <u>26452</u>
Cementing Con	npany Universal	Services					
Address Hall Rd			City	Buckhannon		State WV	Zin 262011FD
			·				GECEN and Gas
timulating Cor	mpany Produce	ers Service Cor	p				Prof Oil ar.
	uth Graham Street		City	Zanesville		_State OH	off 12 fp 43701 2015
lease insert add	ditional pages as	s applicable.				`.	Zip 26201/ED RECENTION and Gas Office Particle Protection of Protection
Completed by	Roger Heldman				Telephone	304-420-1107	nartmer in ection
ignature	Ler- Mu	de-	Title <u>O</u>	perations Mana	iger	Date 8	3/14/15/1V DEPONIAL PROTE

Prepared for: Prepared by: H G Energy Producers Service Corp Daniel L Graham **Dustin Hendershot** 109 S. Graham St. 304-481-7342 Zanesville, OH 43702 740-454-6253 INVOICE #: 18851 WELL NAME: Bays #204 COUNTY/STATE: Roane/WV TOWNSHIP/FIELD: Clover Field DATE of SERVICE: 7/16/2015 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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Office of Oil and Gas

AUG 20 2015

WV Department of

Environmental Protection