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

12-WORK

Quad WOLF SUMMIT 7.5'	94/3964 County HAR	ILLIAMS, J.T.	District TEN M	WOLF SUMMIT
Farm name FLETCHER, FR		ILLII IIVIO, O.T.		
Operator (as registered with the		TLC	_ Well Number _	
Address 5260 DuPONT RO	OAD City_	PARKERSBURG	State WV	Zip 26101
As Drilled location NAD 83/ Top hole		lrilled plat, profile view, an	nd deviation surve	y
Landing Point of Curv		Eas		
Bottom Hol	e Northing	Eas	sting	
Elevation (ft) 1,454'	GL Type of We	ell □New	Type of Rep	oort □Interim ■Final
Permit Type Deviated	□ Horizontal □ Hor	izontal 6A 📱 Vertical	Depth Type	e □ Deep ■ Shallow
Type of Operation □ Convert	□ Deepen □ Drill	□ Plug Back □ Red	rilling • Rewor	rk Stimulate
Well Type □ Brine Disposal	□ CBM □ Gas □ Oil ■	Secondary Recovery	Solution Mining	Storage Other
Type of Completion Single	□ Multiple Fluids Pr	oduced □ Brine □Gas	□ NGL ■ O	il 🗆 Other
Drilled with Cable Ro		22		
			hole ■ Air □ N	Mud ■ Fresh Water □ Brine
Orilling Media Surface hole Production hole Air DM Mud Type(s) and Additive(s) N/A			hole ■ Air □ N	Mud ■ Fresh Water □ Brine
roduction hole Air Mud Type(s) and Additive(s)	fud ■ Fresh Water □ E	Brine		Mud ■ Fresh Water □ Brine
Production hole Air DM Mud Type(s) and Additive(s) N/A Date permit issued 10/29	old ■ Fresh Water □ E	Brine	Date drilli	ing ceased
Production hole Air DM Mud Type(s) and Additive(s) N/A	old ■ Fresh Water □ E Old ■ Fresh Water □ E Old ■ Date drilling of 11/6/14	ommenced	Date drilli	ing ceased
Production hole Air Mud Type(s) and Additive(s) N/A Date permit issued 10/29 Date completion activities began Verbal plugging (Y/N)	o/14 Date drilling of 11/6/14 Date permission gra	ommenced Date completion ac	Date drillitivities ceased Granted by	ing ceased 11/12/14 to plug
Production hole Air Mud Type(s) and Additive(s) N/A Date permit issued 10/29 Date completion activities began Verbal plugging (Y/N) N Please note: Operator is require	o/14 Date drilling of 11/6/14 Date permission gra	ommenced Date completion actinted plication within 5 days of	Date drilli tivities ceased Granted by verbal permission	ing ceased
roduction hole Air Mud Type(s) and Additive(s) N/A Date permit issued 10/29 Date completion activities beganderbal plugging (Y/N) N Please note: Operator is required freshwater depth(s) ft	Date drilling of 11/6/14 Date permission graded to submit a plugging ap	ommenced Date completion actinted plication within 5 days of Open mine(s) (Y/N)	Date drillitivities ceased Granted by verbal permission	to plug RECEIVED Office of Oil and Ga
Production hole Air Mud Type(s) and Additive(s) N/A Date permit issued 10/29 Date completion activities began Verbal plugging (Y/N) N Please note: Operator is require Freshwater depth(s) ft alt water depth(s) ft	ol/14 Date drilling of 11/6/14 Date permission graded to submit a plugging ap	ommenced Date completion actinted plication within 5 days of	Date drilli ivities ceased Granted by verbal permission depths (Y/N) depths	ing ceased
Production hole Air Mud Type(s) and Additive(s) N/A Date permit issued 10/29 Date completion activities bega	Date drilling of 11/6/14 Date permission graded to submit a plugging ap None None	ommenced Date completion act anted plication within 5 days of Open mine(s) (Y/N) Void(s) encountered	Date drilli tivities ceased Granted by verbal permission depths (Y/N) depths ed (Y/N) depths	to plug RECEIVED Office of Oil and Ga

033	7077-0-4	20146							
API 47-000	- -0308# ()	776 / WFarm n	ame_FLETCHEF	R, FREDER	RICK, ET.	ALWell	number 12		
ASING TRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)	Did cement circulate (* Provide details be	
onductor									
rface	11"	8 5/8*	701'	New	LS	3	64'	Existi	ng
al									
ermediate t									
ermediate 2									
ermediate 3					'				
oduction	7 7/8"	4 1/2"	3083'	New	J-5	5	<u> </u>	Existir	g
bing									
cker type and de	pth set								
mment Details									
CEMENT	Class/Type	Numbe	r Slurry	v	ield	Volume	Ceme	ent \	VOC
DATA	of Cement	of Sack			³/sks)	(R ¹)	Top (N		hrs)
onductor									
rface	Reg Neat	255	15.6	1	.18	301	Existi	ing	8
al									
termediate 1									
termediate 2									
termediate 3									
oduction	50:50 Pozm	ix 425	14.2	1	.27	540	Exist	ing	8
bing									
rillers TD (ft) eepest format		Fifth Sand		Loggers Ti Plug back					
-	_	That Gard							
lug back prod	edure N/A	That Cana							
lug back prod	eedure N/A (ft)	a caliper	density resistivity		d/direction		duction emperature	□sonic	
lug back prod	eedure N/A (ft)	≜ caliper	≜ density	🖪 gamma	d/direction ray	≜ te	emperature	□sonic Yes □ No	
lug back prodick off depth heck all wirel	(ft)ine logs run Yes No	≜ caliper ≜ neutron Convention	≜ density	B gamma	d/direction ray Wer	≜ te	emperature collected	Yes 🗆 No	
ick off depth heck all wirel	(ft)ine logs run Yes No	≜ caliper ≜ neutron Convention	density resistivity sidewa	B gamma	d/direction ray Wer	≜ te	emperature collected	Yes 🗆 No	
ick off depth heck all wirel /ell cored ESCRIBE TH	ine logs run Yes No	■ caliper ■ neutron Convention IZER PLACEMI	density resistivity onal Sidewa	B gamma	d/direction ray Wer	≜ te	emperature collected	Yes 🗆 No	
ick off depth heck all wirel /ell cored ESCRIBE TH	ine logs run Yes No	■ caliper ■ neutron Convention IZER PLACEMI	density resistivity sidewa	B gamma	d/direction ray Wer	e cuttings	collected	Yes 🗆 No	
ick off depth heck all wirel /ell cored ESCRIBE TH	ine logs run Yes No IE CENTRAL	■ caliper ■ neutron Convention IZER PLACEMI	density resistivity a resistivity onal Sidewa ENT USED FOR	B gamma	d/direction ray Wer SING STF	e cuttings	collected Collected	Yes D No	
ick off depth heck all wirel /ell cored ESCRIBE TH	ine logs run Yes No HE CENTRAL OMPLETED	■ caliper ■ neutron Convention IZER PLACEMI AS SHOT HOLE	density resistivity a resistivity onal Sidewa ENT USED FOR	B gamma	d/direction ray Wer SING STE	e cuttings	collected Collected DAN 2.5	Yes D No	

API 47- 033 - 03694 03964 Farm name FLETCHER, FREDERICK, ET. AL. Well number 12

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	6/20/94	2970'	2973'	12	Fifth Sand
<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	11/12/14	10	1965	2005	2001	15,000	245 bbis	
							REC	WED
						C	ffice of C	₩ED It stild Cas
						1		
			· · · · · · · · · · · · · · · · · · ·				JAN 2	5 2016

Please insert additional pages as applicable.

WN Department of Environmental Protection 07/08/2016

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

WV Departman 07/08/2016

Prepared for:

H G Energy



Prepared by: Producers Service Corp

Jason Stanbery

109 S. Graham St.

Zanesville, OH 43702

740-454-6253

33.03964W

INVOICE #:

17186

WELL NAME:

JT Williams #12

STATE & COUNTY: WV/ Harrison

TOWNSHIP/FIELD: Wolf Summit

DATE of SERVICE: 11/12/2014

CUSTOMER PO#

Customer Approval: _

Description	Notes	Amount	Units	Unit Cost	Total Cos
FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS		1	EA	L STORY	
BLENDER CHARGE 0-10 BPM		1	EA	69	
MILEAGE CHARGE PER UNIT ONE WAY	2 Units @ 70 Miles	0	MI		
IC ACID 15%		500	GAL		
PRO HIB II		0.5	GAL	10	
ACID DELIVERY		2	HR	10	
PRO CLA LOK (KCL SUBSTITUTE)		20	GAL		
PRO NE-21		10	GAL		
PRO GEL 4		250	LB		
BUFFERI		50	LB		
BUFFER II		50	LB		
BIO CLEAR 750		1	LB		
AP BREAKER		22	LB	2	
BXL-A		15	GAL		
BXL-10C		15	GAL		
SAND 20/40 OTTAWA		150	CWT		
SAND DELIVERY / TON MILES		525			
DATA VAN		1	STAGE		
			100000		

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Vist Constmor@7/08/2016 Environmental Sign