

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

API 47-103-02783 County Wetzel District Grant
Quad Pine Grove Pad Name WVDNR Pad 6 Field/Pool Name Jacksonburg
Farm name West Virginia Conservation Commission Well Number WVDNR # 1209
Operator (as registered with the OOG) Triad Hunter, LLC
Address 777 Post Oak Blvd. Suite 910 City Houston State Texas Zip 77056

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4372895.3 Easting 529430.1
Landing Point of Curve Northing 4373201.2 Easting 529444.5
Bottom Hole Northing 4374160 Easting 528902

Elevation (ft) 1450' 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)
Synthetic Base Mud; HT Light Mineral Oil, Synvert TWA & LWA - thinner and wetting agents, Synvert L-1
primary emulsifier, and Cimbar - weighting and filler material

Date permit issued 8/29/2012 Date drilling commenced 7/11/2013 Date drilling ceased 10/2/2013
Date completion activities began 1/11/2014 Date completion activities ceased 3/14/2014
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft surface - 400' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1,750' - 2,750' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1,600' - 1,900' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

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Reviewed by:
JK 6/25/15
WS 7/01/15

API 47- 103 - 02783 Farm name West Virginia Conservation Commission Well number WVDNR # 1209

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	24"	20"	100'	New	A53B - 90 lb.	none	yes
Surface	17 1/2"	13 3/8"	1304'	New	J-55 54.5 lb.	1 - 4th jt.	yes - circ. 26 bbls.
Coal							
Intermediate 1	12 1/4"	9 5/8"	3,402'	New	J-55 36 lb.	1 - 11th jt.	not reported
Intermediate 2							
Intermediate 3							
Production	8 3/4"	5 1/2"	11,652'	New	P-110 20 lb.	none	yes - circ. 35 bbls.
Tubing							
Packer type and depth set							

Comment Details _____

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	Class A	125	15.6	1.18	148	surface	Days
Surface	Class A	1,013	15.6	1.21	1,226	surface	12
Coal							
Intermediate 1	50/50 PNE-1	1,120	15.6	1.19	1,333	surface	12
Intermediate 2							
Intermediate 3							
Production	50/50 PNE-1 & Class H	1,560 / 971	13.5 / 15.2	1.44 / 1.63	2,246 / 1,583	surface	Days
Tubing							

Drillers TD (ft) TMD = 11,676' TVD = 7,524' Loggers TD (ft) * No Open Hole Logs
 Deepest formation penetrated Marcellus Shale Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) @ 6,425'

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 _____

 13 3/8" (4) - 1 every 5th joint
 9 5/8" (9) - 1 every 10th joint
 5 1/2" (56) - 41 spiral centralizers from Toe to KOP (every 3rd jt.), and 15 bow centralizers from KOP to 250' (every 10th jt.)

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	SEE	SPREAD	SHEET		

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)
		SEE	SPREAD	SHEET				

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS		
Marcellus Shale	7,524'	TVD	11,676' MD

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GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2,800 psi Bottom Hole 6,772 psi DURATION OF TEST 360 hrs

OPEN FLOW Gas 5,000 mcfpd Oil 24 bpd NGL _____ bpd Water 240 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)
	0		0		** No Open Hole Logs **
					PILOT HOLE: Mills Wetzel # 31 H-1 (P # 47-103-02339)
WVDNR # 1209					
Tully	7,396'	7,482'	7,589'	7,813'	Limestone
Marcellus	7,482'	Not Drilled	7,813'	11,676'	Organic Shale Show Gas

Please insert additional pages as applicable.

Drilling Contractor Warren Drilling Company (Top Hole: U.S. Energy)
Address P.O. Box 103 City Dexter City State Oh. Zip 45727

Logging Company Horizontal Wireline Services
Address 381 Colonial Manor City Irwin State Pa. Zip 15642

Cementing Company Baker Hughes
Address 2228 Phillippi Pike City Clarksburg State WV Zip 26301

Stimulating Company Producers Service Corporation
Address 109 S. Graham Street City Zanesville State Oh. Zip 43701

Please insert additional pages as applicable.

Completed by Ben Smeltzer Telephone (740) 760-0570
Signature *Ben Smeltzer* Title Geologist Date 11/18/2014

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

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WVDNR # 1209 (P# 47-10302783) CHEMICAL SUMMARY

Stage #	LINEAR GEL (gals.)	FRICTION REDUCER (gals.)	BIOCIDE (gals.)	SCALE INHIBITOR (gals.)	SURFACTANT (gals.)	BREAKER (qts.)	7.50% HCL ACID (gals.)
1	0	177	55	22	179	0	2000
2	366	323	172	46	340	1.5	2000
3	557	363	165	40	365	2	2000
4	383	253	165	41	330	1.5	2000
5	420	270	175	42	350	2	2000
6	347	338	171	43	340	1.5	2000
7	444	365	175	40	340	1.5	2000
8	566	390	194	37	376	2	2000
9	417	370	180	47	348	2	2000
10	491	445	193	37	367	2	2000
11	427	355	165	48	366	1.5	2000
12	421	390	142	39	334	1.5	2000
13	420	374	140	42	352	1.5	2000
14	401	335	125	39	326	1.5	2000
15	360	352	140	37	382	2	2000
16	487	366	142	40	366	2	2000
17	398	347	120	37	340	1.5	2000
18	460	394	140	48	394	2	2000
19	416	365	127	43	372	2	2000
TOTAL:	7,781	6,572	2,886	768	6,567	31.5	38,000

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Completions Summary

WVDNR 1209

API	Total Depth (ft)	Landing Point MD (ft)	Landing Point Angle (Degrees)	Effective Lateral Length (ft)	TVD (ft)	Tubing Depth (ft)	Tubing Size (OD)	Tubing Angle (Degrees)	Casing Depth (ft)	Casing Size (OD)
47-103-02783	11,656	8,033	88	3,623	7,524				11,656	5 1/2

Stages	Perforation Intervals		Stage Intervals		Total Volume (bbl)	Average Rate (bpm)	Formation Break (PSI)	Average Pressure (PSI)	80/100 Mesh Pumped (Lb)	40/70 Mesh Pumped (Lb)	20/40 Mesh Pumped (Lb)	Total Sand Pumped (Lb)	ISIP (PSI)	Completed per design	Notes on Frac
	Actual Length	Footage	Actual Length	Footage											
Stage 1	11,540'-11,387'	153	11,560'-11,373'	187	N/A	N/A	5,235	N/A	N/A	N/A	N/A	N/A	4,885	No	Screened Out
Stage 2	11,348'-11,201'	147	11,373'-11,181'	192	8,754	74	5,862	7,122	45,100	320,400	100,000	465,500	3,683	Yes	
Stage 3	11,156'-11,012'	144	11,181'-10,989'	192	8,934	67	5,737	7,206	45,300	320,800	100,300	466,400	4,997	Yes	
Stage 4	10,966'-10,817'	149	10,989'-10,797'	192	8,102	68	5,660	7,489	45,700	320,400	100,400	466,500	3,929	Yes	
Stage 5	10,772'-10,625'	147	10,797'-10,797'	0	8,532	74	5,552	7,201	45,500	320,300	100,500	466,300	4,199	Yes	
Stage 6	10,772'-10,625'	147	10,797'-10,413'	384	8,622	73	5,725	7,011	45,100	320,800	100,800	466,700	4,325	Yes	
Stage 7	10,388'-10,241'	147	10,413'-10,221'	192	8,632	76	5,839	7,190	44,800	319,400	115,100	479,300	4,073	Yes	
Stage 8	10,196'-10,049'	147	10,221'-10,029'	192	8,784	72	5,587	7,816	45,800	319,500	73,200	438,500	N/A	Yes	
Stage 9	10,004'-9,857'	147	10,029'-9,837'	192	8,662	76	5,551	6,453	45,800	319,800	99,900	465,500	5,023	Yes	
Stage 10	9,812'-9,665'	147	9,837'-9,645'	192	10,757	76	5,981	7,254	44,500	319,300	43,500	407,300	5,809	Yes	
Stage 11	9,620'-9,473'	147	9,645'-9,645'	0	8,475	74	6,214	7,082	45,000	319,100	100,000	464,100	4,133	Yes	
Stage 12	9,620'-9,473'	147	9,645'-9,261'	384	8,993	79	6,226	6,952	44,800	320,000	99,700	464,500	4,515	Yes	
Stage 13	9,236'-9,089'	147	9,261'-9,069'	192	8,690	78	5,978	7,035	45,100	319,800	100,000	464,900	4,714	Yes	
Stage 14	9,044'-8,897'	147	9,069'-8,877'	192	8,688	76	5,722	7,072	44,900	320,100	99,900	464,900	5,176	Yes	
Stage 15	8,852'-8,705'	147	8,877'-8,685'	192	9,059	78	6,042	7,019	45,000	320,000	90,100	455,100	5,148	Yes	
Stage 16	8,665'-8,517'	148	8,685'-8,497'	188	9,073	76	5,808	7,194	45,000	320,300	100,100	465,400	4,942	Yes	
Stage 17	8,468'-8,328'	140	8,497'-8,301'	196	8,774	69	5,894	6,641	45,100	320,500	99,300	464,900	5,541	Yes	
Stage 18	8,276'-8,129'	147	8,301'-8,105'	196	9,542	68	6,252	6,376	44,900	320,100	100,200	465,200	4,820	Yes	
Stage 19	8,084'-7,933'	151	8,105'-7,837'	268	8,997	68	5,623	6,198	45,000	324,500	111,400	480,900	4,699	Yes	

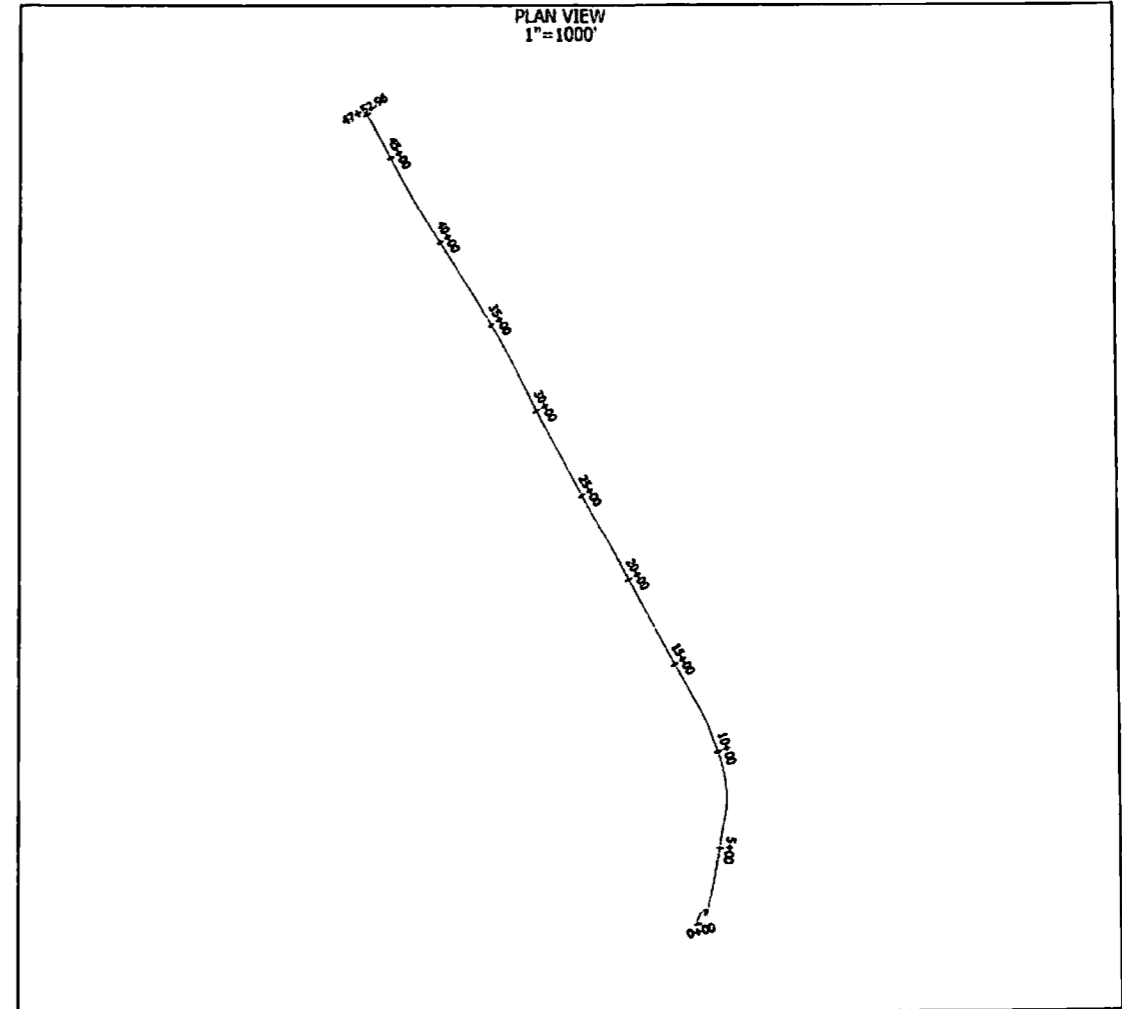
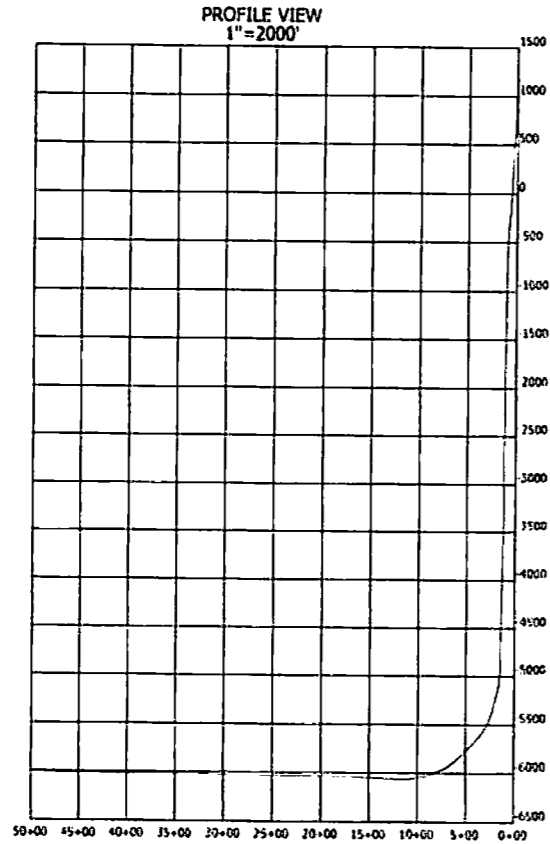
Total	19		2,796		3,723	160,070	1,322	110,488	126,311	812,400	5,765,100	1,734,400	8,311,900	84,611	
Average			147		196	8,893	73	5,815	7,017	45,133	320,283	96,356	461,772	4,701	

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PLAN AND PROFILE VIEW FOR WVDNR #1209 API #47-103-02783



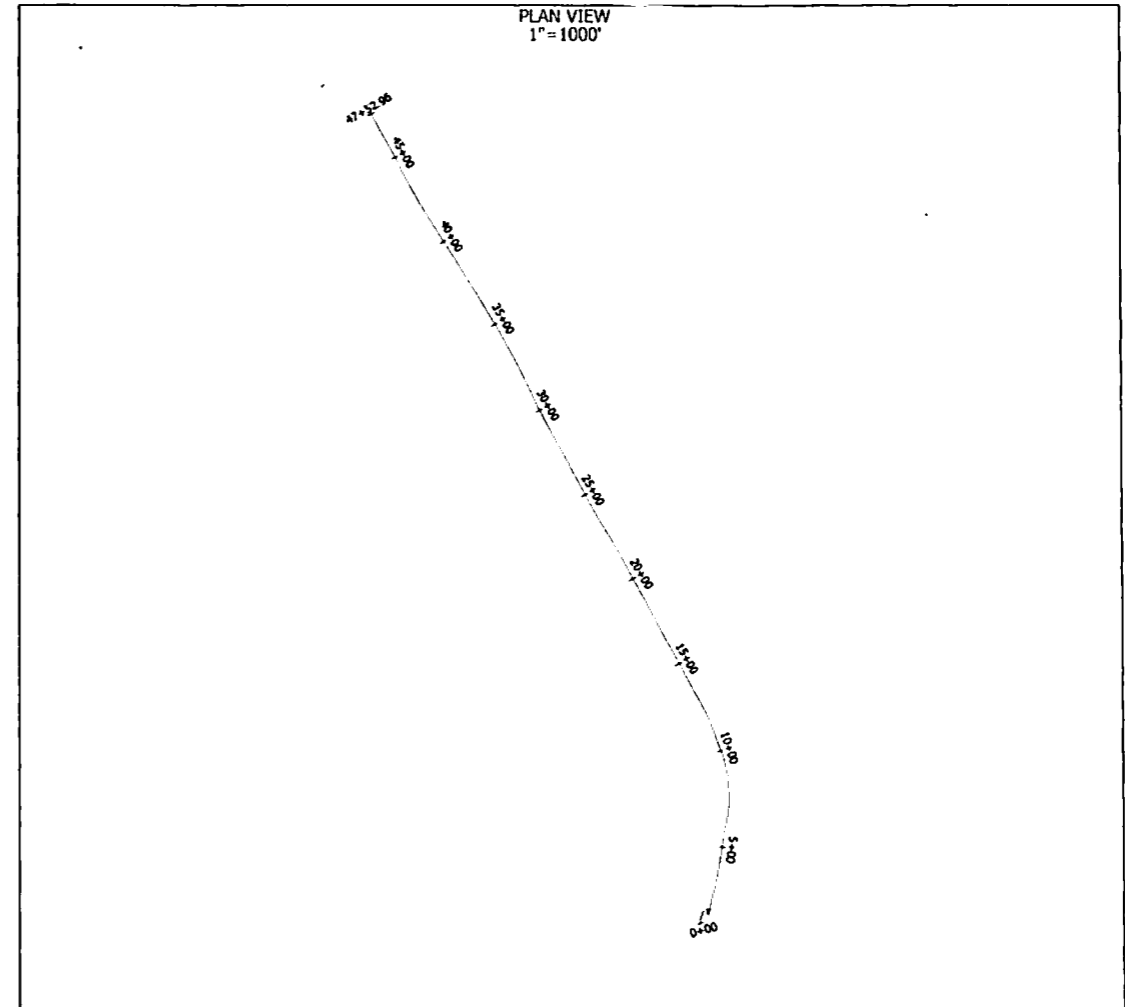
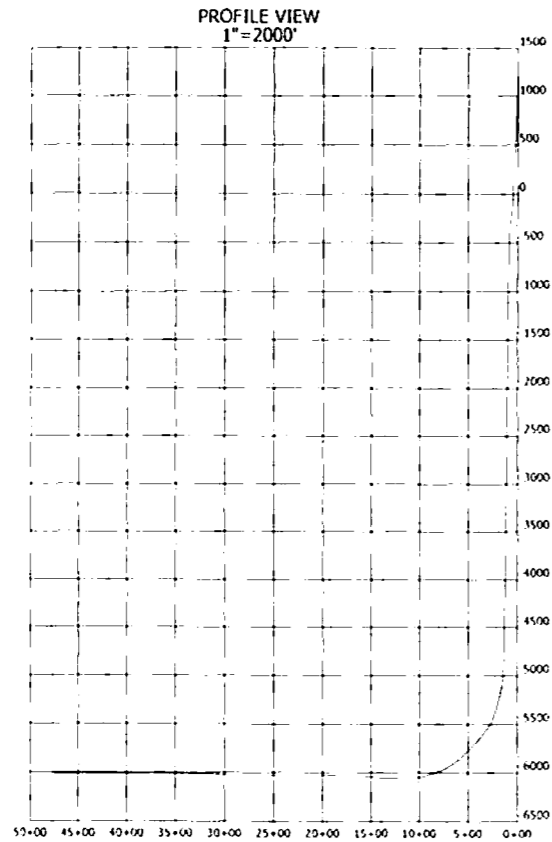
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