

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

API 47 - 013 - 3142 County Calhoun District Center
Quad Grantsville Pad Name Depue Field/Pool Name Yellow Creek
Farm name Depue Well Number 6
Operator (as registered with the OOG) Buckeye Oil Producing Co.
Address P.O. Box 129 City Wooster State OH Zip 44691

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

Elevation (ft) 894 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)
Did not use any mud

Date permit issued 9/13/17 Date drilling commenced 6/5/18 Date drilling ceased 6/29/18
Date completion activities began 7/10/18 Date completion activities ceased 8/1/18
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

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

Freshwater depth(s) ft 180' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 880' Void(s) encountered (Y/N) depths N
Coal depth(s) ft N Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) No

Reviewed by: 

Reviewed

WR-35
Rev. 8/23/13

API 47-013 - 3142 Farm name Depue Well number 6

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							
Surface							
Coal							
Intermediate 1	7-1/4	6-5/8	1872	New		N/A	No
Intermediate 2							
Intermediate 3							
Production	6-1/4	4-1/2	2200	New			No
Tubing							
Packer type and depth set		Formation Packer set @ 2200'					

Comment Details Set formation packer @ 2200'. Cemented with 80 sks cement. Drilled out inside of packer then fraced the old shot hole.

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							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	Class "A"	80	15.6	1.18	94.4	1275	72
Tubing							

Drillers TD (ft) 2320 Loggers TD (ft) N/A

Deepest formation penetrated Berea Plug back to (ft) _____

Plug back procedure _____

Kick off depth (ft) _____

Check all wireline logs run caliper density deviated/directional induction
 NONE 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 _____

4-1/2 x 6-1/4: 1 @ 2170; 1 @ 2135; 1 @ 2103

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

Packer set above Beresa Sand and cemented. Drilled out cement. Cleaned out to TD and fraced well.

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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)
1	Open hole	2298	2316	Open	Berea

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	7-10-18	21	983	1081	620	20,000	699	N/A

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Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS	
Berea	2298	TVD 2316 MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 58 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 2 mcfpd Oil 1 bpd NGL -0- bpd Water 1/2 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
Berea	0 2298		0 2316		oil and gas

Please insert additional pages as applicable.

Drilling Contractor company tools
Address _____ City _____ State _____ Zip _____

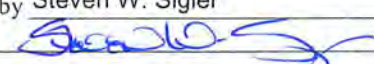
Logging Company N/A
Address _____ City _____ State _____ Zip _____

Cementing Company Petroset Cementing
Address PO Box 1076 City Wooster State OH Zip 44691

Stimulating Company Producers Services
Address PO Box 2277 City Zanesville State OH Zip 43702

Please insert additional pages as applicable.

Completed by Steven W. Sigler Telephone 330-264-8847

Signature  Title President Date 9/25/18

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/10/2018
Job End Date:	7/10/2018
State:	West Virginia
County:	Calhoun
API Number:	47-013-31420-00-00
Operator Name:	Buckeye Oil Producing Company
Well Name and Number:	Depew #6
Latitude:	38.97900000
Longitude:	-81.10300000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	2,316
Total Base Water Volume (gal):	29,371
Total Base Non Water Volume:	0



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
Water	Company 1	Carrier/Base Fluid	Water	7732-18-5	100.00000	91.06817	None
Sand (Proppant)	Producers Service Corp	Proppant	Crystalline silica	14808-60-7	100.00000	7.43107	None
PRO SPERSE	Producers Service Corp	Paraffin Control	Toluene	108-88-3	70.00000	0.10744	None
			Xylenes	1330-20-7	60.00000	0.09209	None
			Ethylbenzene	100-41-4	40.00000	0.06139	None
			Ethoxylated Nonylphenol	68412-54-4	30.00000	0.04604	None
IC Acid (20%)	Producers Service Corp	Acidizing	Hydrochloric Acid	7647-01-0	20.00000	0.19906	None
PRO NE-1	Producers Service Corp	Non Emulsifier	Glycol Ethers	111-76-2	60.00000	0.05414	None
			Dimethylcocoamine, bis (chloroethyl)ether, diquaternary ammonium salt	68607-28-3	60.00000	0.05414	None
			Methanol	67-56-1	30.00000	0.02707	None

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			Isopropyl Alcohol	67-63-0	10.00000	0.00902	None
PRO FLO II	Producers Service Corp	Demulsifier					
			Alcohols, C12-16, Ethoxylated	68551-12-2	70.00000	0.06316	None
			2-Butoxyethanol	111-76-2	40.00000	0.03609	None
			Methanol	67-56-1	30.00000	0.02707	None
FLC	Producers Service Corp	Fluid Loss Control					
			Silica, Crystalline Quartz	14808-60-7	100.00000	0.11147	None
PARA CLEAR D-500	Producers Service Corp	Paraffin Dispersant					
			Toluene	108-88-3	60.00000	0.03423	None
			Xylene Solution	1330-20-7	60.00000	0.03423	None
			Dodecylbenzenesulfonic Acid	26836-07-7	10.00000	0.00571	None
			Methanol	67-56-1	10.00000	0.00571	None
			Ethylbenzene	100-41-4	10.00000	0.00571	None
			Glycol Ethers	111-76-2	10.00000	0.00571	None
			2-Ethylhexanol	104-76-7	7.00000	0.00399	None
			Isopropyl Alcohol	67-63-0	7.00000	0.00399	None
PROHIB II	Producers Service Corp	Inhibitor					
			Dimethylcocoamine, bis (chloroethyl)ether, diquatary ammonium salt	68607-28-3	60.00000	0.00180	None
			Glycol Ethers	111-76-2	40.00000	0.00120	None
			Ethylene Glycol	107-21-1	40.00000	0.00120	None
			Methanol	67-56-1	30.00000	0.00090	None
			Propargyl Alcohol	107-19-7	30.00000	0.00090	None
			Ethoxylated Nonylphenol	68412-54-4	10.00000	0.00030	None
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
Other Chemical(s)	Listed Above	See Trade Name(s) List					
			Toluene	108-88-3	70.00000	0.10744	
			Xylenes	1330-20-7	60.00000	0.09209	
			Ethylbenzene	100-41-4	40.00000	0.06139	
			Glycol Ethers	111-76-2	60.00000	0.05414	
			Dimethylcocoamine, bis (chloroethyl)ether, diquatary ammonium salt	68607-28-3	60.00000	0.05414	
			2-Butoxyethanol	111-76-2	40.00000	0.03609	
			Toluene	108-88-3	60.00000	0.03423	
			Xylene Solution	1330-20-7	60.00000	0.03423	
			Methanol	67-56-1	30.00000	0.02707	
			Isopropyl Alcohol	67-63-0	10.00000	0.00902	
			Glycol Ethers	111-76-2	10.00000	0.00571	
			Ethylbenzene	100-41-4	10.00000	0.00571	
			Dodecylbenzenesulfonic Acid	26836-07-7	10.00000	0.00571	
			2-Ethylhexanol	104-76-7	7.00000	0.00399	

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		Isopropyl Alcohol	67-63-0	7.00000	0.00399
		Dimethylcocoamine, bis (chloroethyl)ether, diquaternary ammonium salt	68607-28-3	60.00000	0.00180
		Ethylene Glycol	107-21-1	40.00000	0.00120
		Glycol Ethers	111-76-2	40.00000	0.00120
		Methanol	67-56-1	30.00000	0.00090
		Propargyl Alcohol	107-19-7	30.00000	0.00090

* 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%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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FORM IV-35
(Obverse)

Operator's
Well No. E. M. DePue #6

[08-78]

WELL OPERATOR'S REPORT
OF

API Well No. 47 - 013 - 03142
State County Perm

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

TYPE: Oil / Gas / Liquid Injection / Waste Disposal
(If "Gas", Production / Underground storage / Deep / Shallow
Elevation: 740' Watershed: YELLOW CREEK
District: CENTER County: CALHOUN Quadrangle: ARNOLDSBURG

02/15/2019

OPERATOR OKMAR OIL COMPANY DESIGNATED AGENT FRANCIS J. HARMAN
Address P. O. BOX 548 Address P. O. BOX 148
MARIETTA, OHIO 45750 PARKERSBURG, W.VA. 26101

WORK: Drill / Convert / Drill deeper / Redrill / Fracture or stimulate
Plug off old formation / Perforate new formation
Other physical change in well (specify) _____

ISSUED ON *NONE, 19____ *Well drilled prior to 1929.
OIL & GAS INSPECTOR FOR THIS WORK:
Name RICHARD MORRIS
Address P. O. BOX 372
GRANTSVILLE, W.VA. 26147

GEOLOGICAL TARGET FORMATION: Berea Sandstone Depth 2298-2316' feet
Depth of completed well, 2316' feet Rotary / Cable Tools
Water strata depth: Fresh, _____ feet; salt, _____ feet.
Coal seam depths: NONE Is coal being mined in the area? NO
Work was commenced Dec., 1903, and completed Feb. 3, 1904

LOGGING AND TUBING PROGRAM

LOG OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Storage								Kinds
Water								
mediate								Sizes
tion	6 5/8						1872'	Deaths set
	2"						2312'	
								Perforations:
								Top Bottom

WELL DATA

Producing formation Berea Sandstone Pay zone depth 2298-2316' feet
Gas: Initial open flow, Show Mcf/d Oil: Initial open flow, N/A 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 measurement) after _____ hours shut in.
If applicable due to multiple completion--]
Second producing formation _____ Pay zone depth _____ feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Final open flow, _____ Mcf/d Final open flow, _____ Bbl/d

S OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

"Shot" 60 qts. February 6, 1904

02/15/2019

"Shot" 150 qts. July 11, 1905

.06

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all free and salt water, coal, oil and
Berea Sand.	Brown	Soft	2298	2316	

(Attach separate sheets as complete as necessary.)

OKMAR OIL COMPANY

Well Operator

By *Adolph Beren*

ADOLPH BEREN, CO-PARTNER

Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic, detailed geological record of all formations, including coal, encountered in the drilling of a well."