

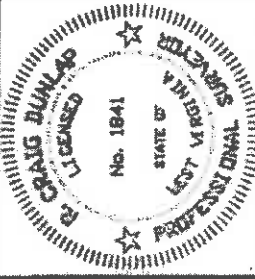
2) TOPO QUADRANGLE IS FORK MOUNTAIN

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC

FILE NO. W10-280-1813  
 DRAWING NO. W10-280-480  
 SCALE 1"=1000'  
 MINIMUM DEGREE OF           
 ACCURACY 1:2500  
 PROVEN SOURCE OF           
 ELEVATION          GPS  
 GLOBAL POSITIONING SYSTEM         

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

(SIGNED) R. S. [Signature]  
 PROFESSIONAL SURVEYOR No. 1841



WVDEP  
 OFFICE OF OIL AND GAS  
 1366 HANSFORD ST.  
 CHARLESTON, WV 25301

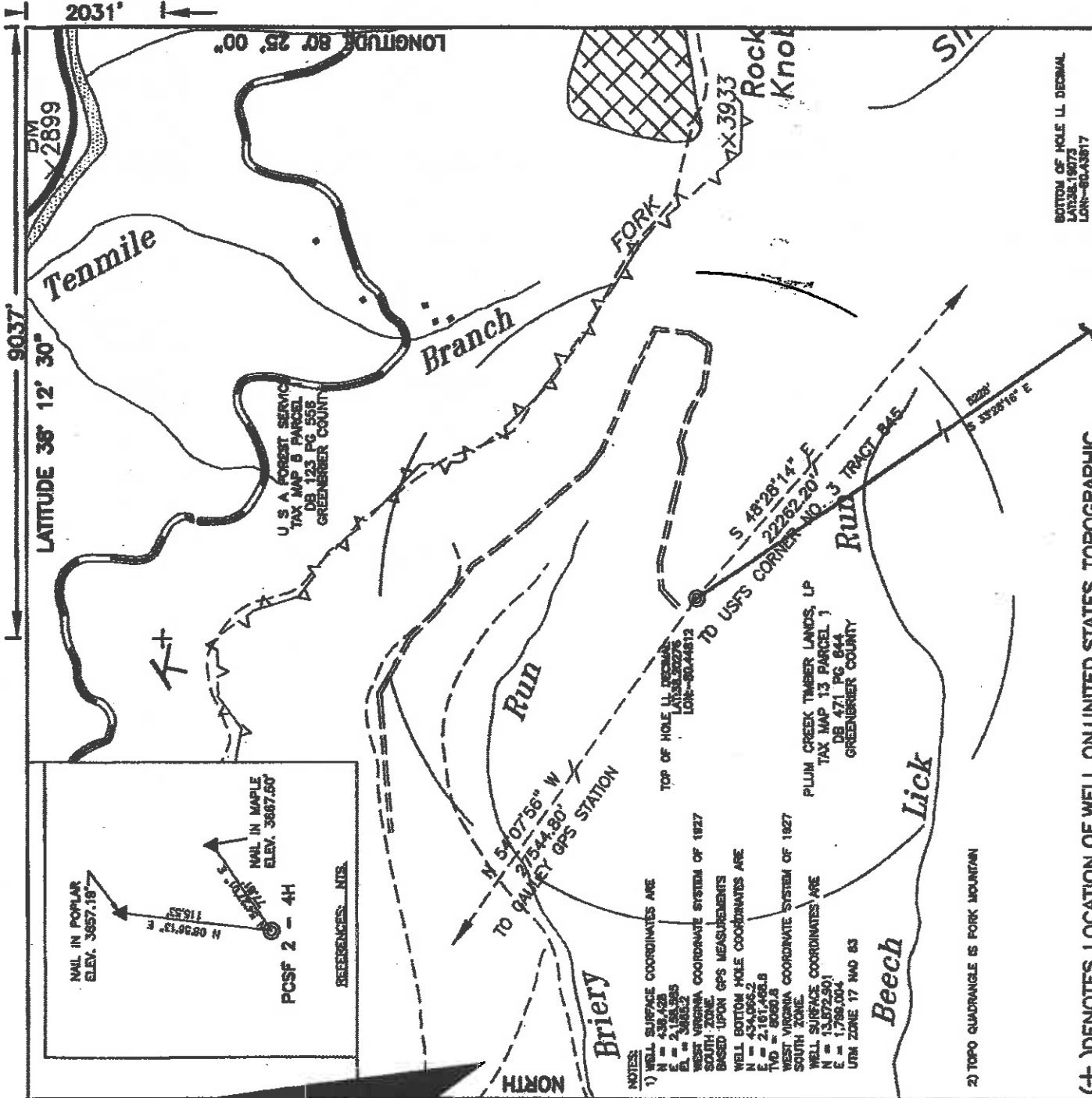


DATE OCTOBER 2013  
 OPERATOR'S WELL NO. POSF 2 - 4H  
 API WELL NO. 47-025-00036HP

WELL TYPE: OIL  GAS  CBM  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 3654 ± WATERSHED SOUTH FORK OF CHERRY RIVER  
 DISTRICT FALLING SPRINGS COUNTY GREENBRIER  
 QUADRANGLE FORK MOUNTAIN ACREAGE 21527  
 SURFACE OWNER PLUM CREEK TIMBERLANDS, LP LEASE ACREAGE 21527

OIL & GAS ROYALTY OWNER HIGHLAND RESOURCES INC. & ERC APPALACHIAN MINERALS I, LLC, & OXY USA, INC.  
 PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE   
 IN WELL (SPECIFY) CONDUCTOR PIPE INSTALLED 130 FEET DEEP  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION Drilling Operations Curtailed  
 ESTIMATED DEPTH TVD = 130'

WELL OPERATOR BRC OPERATING COMPANY, LLC DESIGNATED AGENT MARC MONTELEONE  
 ADDRESS 200 CRESCENT COURT, SUITE 200 ADDRESS 600 QUARRIER STREET  
DALLAS, TX 75201 CHARLESTON, WV 25325  
11/08/2013



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC

FILE NO. W10-290-1B13  
DRAWING NO. W10-290-A4  
SCALE 1"=1000'  
MINIMUM DEGREE OF  
ACCURACY 1:2500  
PROVEN SOURCE OF  
ELEVATION GPS  
GLOBAL POSITIONING SYSTEM

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

(SIGNED) *[Signature]*

PROFESSIONAL SURVEYOR No. 1841



BOTTOM OF HOLE LL. DECIMAL  
LARGE LETTERS  
LONG-60-4817

WVDEP  
OFFICE OF OIL AND GAS  
1356 HANSFORD ST.  
CHARLESTON, WV 25301



DATE NOVEMBER 2010  
OPERATOR'S WELL NO. PCSF 2 - 4H  
API WELL NO. 47 025 000306H

WELL TYPE: OIL  GAS  CBM  LIQUID INJECTION  WASTE DISPOSAL   
(IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
LOCATION: ELEVATION 3700± WATERSHED SOUTH FORK OF CHERRY RIVER  
DISTRICT FALLING SPRINGS COUNTY GREENBERG  
QUADRANGLE FORK MOUNTAIN ACREAGE 21527  
SURFACE OWNER PLUM CREEK TIMBERLANDS, LP LEASE ACREAGE 21527  
OIL & GAS ROYALTY OWNER HIGHLAND RESOURCES, INC., & BRC APPALACHIAN MINERALS I, L.L.C., & OXY USA, INC.

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE   
IN WELL (SPECIFY) \_\_\_\_\_  
PLUG AND ABANDON  CLEAN OUT AND REPLUG \_\_\_\_\_  
TARGET FORMATION Marcellus Shale  
ESTIMATED DEPTH TVD = 8146' MD = 13555'

WELL OPERATOR BRC OPERATING COMPANY, LLC DESIGNATED AGENT MARC MONTELEONE  
ADDRESS 200 CRESCENT COURT, SUITE 200 ADDRESS 600 QUARRIER STREET  
DALLAS, TX 75201 CHARLESTON, WV 25325



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

API 47-25-00036 County Greenbrier District Falling Springs  
Quad Fork Mountain Paul Name PCSF Field/Pool Name  
Farm name Plum Creek South Fork Well Number PCSF 2-4H  
Operator (as registered with the OOG) BRC Operating Company, LLC  
Address 200 Crescent Court, Suite 200 City Dallas State TX Zip 75201

As Drilled location NAD 83/UTM Attach an as-drilled plot, profile view, and deviation survey  
Top hole Northing 38 12' 10.54" Easting -80 26' 52.76"  
Landing Point of Curve Northing N/A Easting N/A  
Bottom Hole Northing N/A Easting N/A

Elevation (ft) 3,654 ft. 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)

Date permit issued 01/10/2011 Date drilling commenced 8/6/2011 Date drilling ceased 8/13/2011  
Date completion activities began N/A Date completion activities ceased 6/11/2013  
Verbal plugging (Y/N) Y Date permission granted 6/9/2013 Granted by Gary Kennedy

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

Freshwater depth(s) ft N/A, Not reached Open mine(s) (Y/N) depths N/A  
Salt water depth(s) ft N/A Void(s) encountered (Y/N) depths N/A  
Coal depth(s) ft N/A, Not reached Cavern(s) encountered (Y/N) depths N/A  
Is coal being mined in area (Y/N) N Reviewed by:

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Office of Oil & Gas

OCT 30 2013

WV Department of  
Environmental Protection

11/01/2013

Unnamed (0) 6-6

W/R-35  
Rev 8/23/13

API 47-25 00036 Farm name Plum Creek South Fork Well number PCSF 2-4H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/H	Block: Depth(s)	UDL cement circulate (Y/N) * Provide detail below*
Conductor	24"	20	130'	New	X-35		Y
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Footer type and depth set							

Completed Details Drilling operation suspended following conductor penetration. BJ Surf line surface cement used, cement to surface

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (lb/sk)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (M/D)	WOC (hrs)
Conductor	BJ Surf/lie				207	130	
Surface	Fixed to string w/Class B Cement				283	130	
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 130

Loggers TD (ft) Records not made

Deepest formation penetrated Pennsylvanian Geological System

Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) N/A

Check all wireline logs run

- caliper
- density
- deviated/directional
- induction
- neutron
- resistivity
- gamma ray
- temperature
- sonic

Well cased  Yes  No

Conventional  Sidewall

Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING N/A

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WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS

OCT 30 2013

WERE TRACERS USED  Yes  No TYPE OF TRACERS USED Environmental Protection

WV Department of

11/01/2013

25-00036

API 47-25-00036      Farm name Plum Creek South Fork      Well number PCSF 2-4H

### PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formulation(s)
	N/A				

Please insert additional pages as applicable.

### STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulation Date	Ave Pump Rate (DPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
	N/A							

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OCT-30-2013  
  
WV Department of  
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Please insert additional pages as applicable.

25-00036

WR-35

Rev. 8/23/13

API 47- 25 - 00036

Firm name Plum Creek South Fork

Well number PCSF 2-4H

PRODUCING FORMATIONS(S)

DEPTHS

N/A

TVD

MD

Please insert additional pages as applicable.

GAS TEST  Build up

Drawdown

Open Flow

OIL TEST  Flow

Pump

SHUT-IN PRESSURE

Surface N/A

psi

Bottom Hole

psi

DURATION OF TEST

hrs

OPEN FLOW

Gas

Oil

ngl

Water

GAS MEASURED BY

Estimated

Orifice

Pitot

LITHOLOGY/  
FORMATION

DEPTH IN FT  
NAME TVD

DEPTH IN FT  
TVD

DEPTH IN FT  
MD

DEPTH IN FT  
MD

DEPTH IN FT  
MD

DEPTH IN FT  
MD

DESCRIBE ROCK TYPE AND RECORD QUANTITY AND  
TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H<sub>2</sub>S, ETC)

Sand and Shale

0

0

0

0

0

0

0

Not recorded  
Shale

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Office of Oil & Gas

Oct 30 2013

WV Department of  
Environmental Protection

Please insert additional pages as applicable.

Drilling Contractor Baker Hughes

Address 837 Phillip Pike

City Clarksville

State WV

Zip 26301

Logging Company N/A

Address

City

State

Zip

Cementing Company Baker Hughes

Address 837 Phillip Pike

City Clarksville

State WV

Zip 26301

Stimulating Company N/A

Address

City

State

Zip

Please insert additional pages as applicable.

Completed by Chad Touchel

Signature

Title Vice President

Telephone 469-398-2200

Date 10/24/13

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

11/01/2013

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Department, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: Plum Creek Timberlands, LP Operator Well No.: PCSF 2-4H

LOCATION: Elevation: 3,664' Quadrangle: Fork Mountain  
District: Falling Springs County: Greenbrier  
Latitude: 38° 20' 00" N Feet South of 38 Deg. 12 Min. 30 Sec.  
Longitude: 80° 25' 00" W Feet West of 80 Deg. 25 Min. 00 Sec.

Well Type: OIL GAS X   

Company BRC Operating Co., LLC Coal Operator Plum Creek Timberlands, LP (Surface Owner)  
200 Crescent Court, Suite 200 or Owner P.O. Box 1109  
Dallas, TX 75201 Lewisburg, WV 24901-4110 **RECEIVED**  
Agent Marc A. Monteleone Coal Operator Office of Oil & Gas  
Permit Issued Date 01/10/2011

JUL 10 2013

WV Department of  
Environmental Protection

AFFIDAVIT

STATE OF WEST VIRGINIA,  
County of GREENBRIER ss:

JAKE BENTON and KB WELLBORE SOLUTIONS being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well say that said work was commenced on the 11 day of JUNE, 2013, and the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
20" X-35	Surface	130'	NONE	130'
CEMENT	SURFACE	130'	NONE	130'
			(FILLED WITH CEMENT)	

Description of monument: CEMENT TO SURFACE and that the work of plugging and filling said well was completed on the 11 day of JUNE, 2013.

And further deponents saith not.

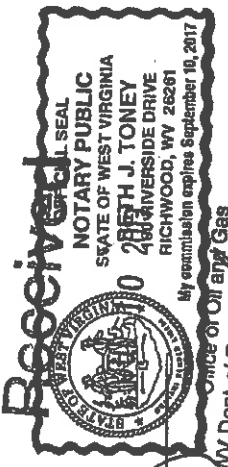
Jake Benton 6/17/13

Sworn and subscribe before me this 17<sup>TH</sup> day of JUNE, 2013

My commission expires: SEP 10 2017

[Signature]  
Notary Public

Affidavit reviewed by the Office of Oil and Gas: [Signature]



WV Dept. of Environmental Protection  
Title: [Signature] 11/15/2013



