west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

July 20, 2016

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-8101003, issued to EXCO RESOURCES (PA), LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: NEW BEAVER 26-C
Farm Name: BEAVER COAL COMPANY
API Well Number: 47-8101003
Permit Type: Plugging
Date Issued: 07/20/2016

Promoting a healthy environment.

8101003P

PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.

2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.

3. Well work activities shall not constitute a hazard to the safety of persons.

4. This well is under a consent order and must be plugged within two years of the date of issuance of this permit.

8101003P

WW-4B
20
Rev. 2/01

1) Date 5/1/2016,

2) Operator's
Well No. New Beaver 26-c
3) API Well No. 47- 81 - 01003

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil ____/ Gas X / Liquid injection ____/ Waste disposal ____/
(If "Gas, Production X or Underground storage ____) Deep ____/ Shallow____

5) Location: Elevation 2713 Watershed Maple Meadow Creek
District Trap Hill County Releigh Quadrangle Lester

6) Well Operator EXCO Resources (PA), LLC
Address PO Box 8.
Ravenswood, WV 26164

7) Designated Agent Diana Stampler/C.T.Corp.
Address 5400 D Big Tyler Road
Charleston, WV 25301

Oil and Gas Inspector to be notified
Name GARY KENNEDY
Address PO Box 268, Nimitz WV 25978
PHONE 304 382 8402

9) Plugging Contractor
Name R & R WELL SERVICE
Address 42 LYNCH RIDGE
WALTON, WV 25286

10) Work Order: The work order for the manner of plugging this well is as follows:

Remove all equipment used to produce well — Check for Rock Pressure

Run in tubing into TD @ +/-3431 — Free point 4"

Gel hole

Set cement plug +/- 3431 to 2700 across all potential formations — WOC 4 HRS & CHECK CEMENT TOP, ADD CEMENT IF NEEDED.

Gel +/- 2700 to 2500 — JNM

Set cement plug +/-2500 to 2050 into bottom of 7"csg — FREE POINT, CUT & REMOVE 4 1/2 ≈ 1900'.

Gel =/-2050 to 1270

Cement +/-1270 to 900

Gel to +/- 900 to 600

Cement +/-600 to 500 — OK JNM

Gel to +/-500 to 200,

Cement 200' to surface, erect monument with API

Gel between all plugs

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SIGNATURE Randall D Stutler DATE- 5/24/16

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WR-35

01-Jun-95
API # 47-81-01003

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

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OFFICE OF OIL AND GAS
OCT 11 1995
WV Division of
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Well Operator's Report of Well Work

Farm Name: BEAVER COAL COMPANY Operator's Well No.: #26-C

Location: Elevation: 2,713.00 Quadrangle: LESTER
District: TRAP HILL County: RALEIGH

Latitude: 7500 feet south of 37 Deg. 45 Min. 00 Sec.
Longitude: 11800 feet west of 81 Deg. 20 Min. 00 Sec.

Company: PEAKE ENERGY, INC.
P.O. BOX 8
RAVENSWOOD, WV 26164

Agent : Thomas S. Liberatore

Inspector: RODNEY DILLON
Permit Issued: 06/01/95
Well Work Commenced: 07/19/95
Well Work Completed: 07/23/95
Verbal Plugging
Permission granted:_____
Rotary: X Cable: ___ Rig
Total Depth (ft): 3431'
Fresh Water Depths: 62'

Salt Water Depths:_____

Is Coal being mined ? No
Coal Depths: see log on back

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fillup (sx)
12 3/4	15	15	2 Class A
7	2109	2109	300 Class A
4 1/2	3317	3317	110 Pozmix

OPEN FLOW DATA

Producing Formation Middle Maxon Sand Pay Zone Depth: 2862-2941
Gas: Initial open flow -- Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 70 Mcf/d Final open flow 0 Bbl/d
Time of open flow between inital and final tests 4 Hours
Static rock pressure 290 psig (surf. pressure) after 12 Hours

2nd Producing Form:_____ Pay Zone Depth:_____
Gas: Initial open flow_____Mcf/d Oil: Initial open flow_____Bbl/d
Final open flow_____Mcf/d Final open flow_____Bbl/d
Time of open flow between inital and final tests_____Hours
Static rock pressure_____psig (surf. pressure) after_____Hours

NOTE: Details of Fracturing, Perforating, & Well Log on Back.

For: PEAKE ENERGY, INC.

By: Thomas S. Liberatore, General Manager
Date: October 6, 1995

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RAL 1003

8101003P

0001170

FORM WR-35
(Reverse)

PERMIT #: 47-081-1003
CO. WELL #: 26-C
ELEVATION: 2713 GL, 2718 KB

DETAILS OF PERFORATIONS, FRACTURING, OR PHYSICAL CHANGE, ETC.

7/23/95: PERFORATED THE M. MAX. FROM 2871-2941 USING 64 HOLES
FOAM-FRAC'D M. MAX. USING 60,000# OF SAND, 255 BBL
OF WATER, AND 554,000 SCF OF NITROGEN.
8/14/95: PERFORATED THE MID. MAX. FROM 2877-2897 WITH 60 HOLES.
FOAM-FRAC'D THE MID. MAX. USING 41,500# SAND,
175 BBL OF WATER, 424,000 SCF OF NITROGEN.

WELL LOG (all depths taken from KB)

ROCK TYPE OR FORMATION	TOP	BOTTOM	REMARKS
SAND	0	50	
SHALE	50	136	WET @ 62'
SAND	136	456	
SHALE	456	590	
COAL	590	591	
SAND	591	700	
SHALE	700	958	
SAND	958	1060	
SHALE & SAND	1060	1530	
COAL	1530	1531	
SAND & SHALE	1531	2184	
PRINCETON SAND	2184	2250	
SHALE	2250	2376	
RAVENCLIFF SAND	2376	2412	
AVIS LIME	2412	2448	
SHALE	2448	2794	
MIDDLE MAXON STRAY	2794	2806	
SHALE	2806	2862	
MIDDLE MAXON SAND	2862	2942	S/GAS
SHALE	2942	2742	
SHALE & LIME	2742	3168	
LOWER MAXON SILTSTONE	3168	3275	
LITTLE LIME (REYNOLDS)	3275	3350	
SHALE (PENCIL CAVE)	3350	3378	
BIG LIME (GREENBRIER)	3378	3431*	
TOTAL DEPTH	3431		

*NOTE: Base of Big Lime not drilled.

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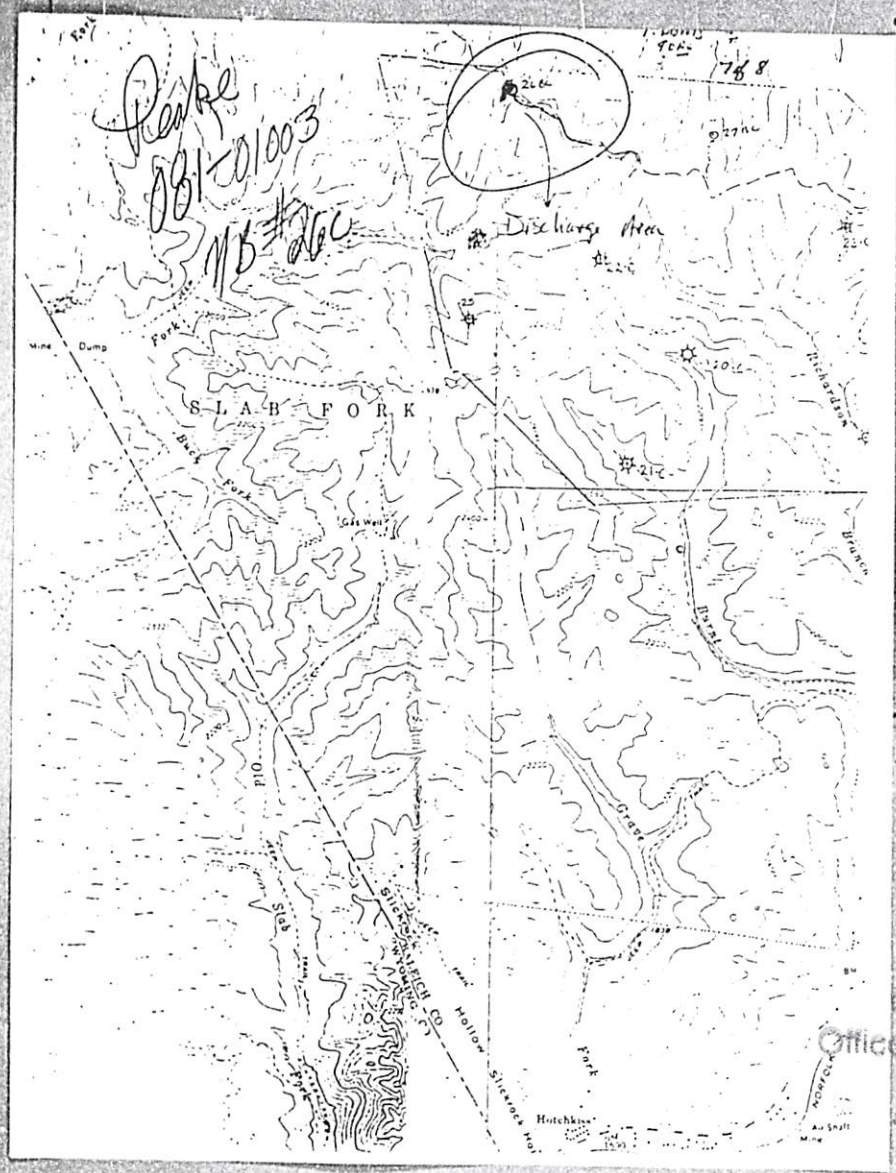
0 0 0 1 6 9



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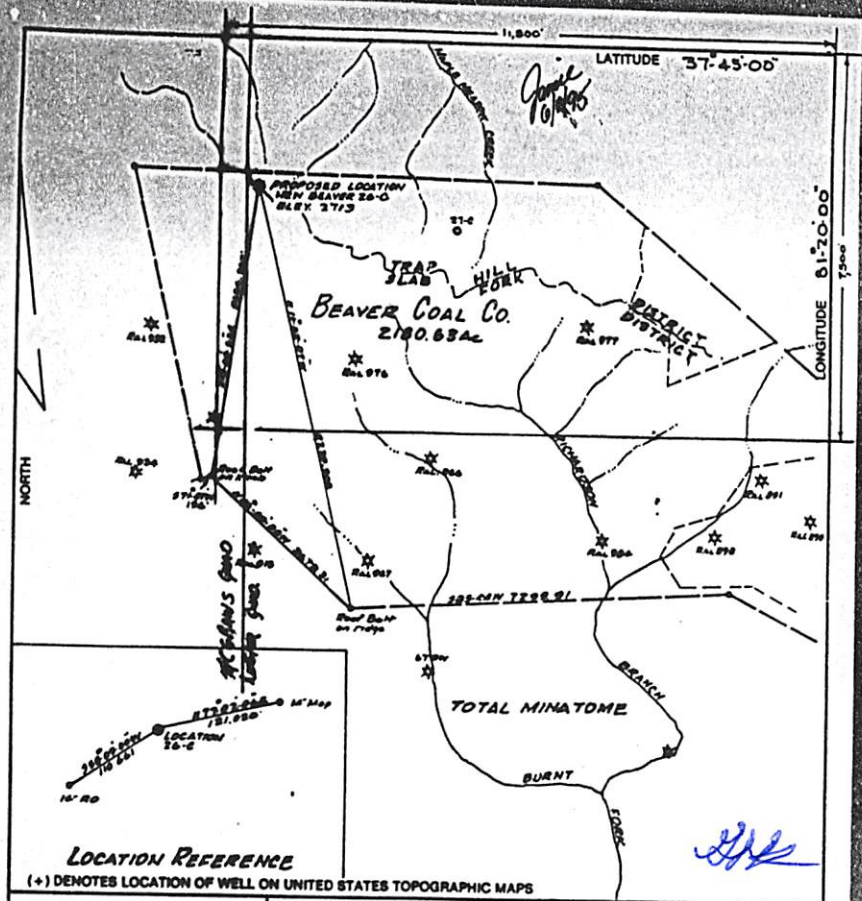

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 2000'
MINIMUM DEGREE OF ACCURACY 1 : 10000
PROVEN SOURCE OF ELEVATION PT ON KNOB ELEV. 2863

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 DEPARTMENT OF ENERGY.
(SIGNED) Frank H. Barker
R.P.E. _____ L.L.S. 289

FRANK H. BARKER LICENSED No. 289 STATE OF WEST VIRGINIA LANDS SURVEYOR
PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

DATE APR 26, 19 95
OPERATOR'S WELL NO. NEW BEAVER 26-C
API WELL NO.
47 - 081 - 01003
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 2713 WATER SHED MAPLE MEADOW CREEK
DISTRICT TRAP HILL COUNTY RALEIGH
QUADRANGLE LESTER
SURFACE OWNER BEAVER COAL CO. ACREAGE 2180.63
OIL & GAS ROYALTY OWNER BEAVER COAL CO. LEASE ACREAGE 2180.63
LEASE NO. _____
PROPOSED WORK: DRILL X 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 RAVENCLIFF & MAXTON ESTIMATED DEPTH 3300 FT
WELL OPERATOR PEAKE ENERGY INC. DESIGNATED AGENT TOM LIBERATORE
ADDRESS P.O. BOX 8 RAVENSWOOD, WV 26164 ADDRESS P.O. BOX 8 RAVENSWOOD, WV 26164

COUNTY NAME
PERMIT

FORM WW-6
HALLS INC.

REC
Office of
Jul
WV Department of
Environmental Protection

0001172

8101003P

WW-4A
Revised 6-07

1) Date: 5/1/2016
2) Operator's Well Number
New Beaver 26-C

3) API Well No.: 47 - 081-01003

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name Beaver Coal Co.
Address 115 1/2. Kanawha ST., Beckley 25801

(b) Name
Address

(c) Name
Address

Inspector G.
Addresss Gary Kennedy
P.O. Box 268
Nimitz, WV 25978
Telephone Ph. (304) 382 8402

5) (a) Coal Operator
Name Beaver Coal Co.
Address 115 1/2 Kanawha St., Beckley WV 25801

(b) Coal Owner(s) with Declaration
Name
Address

Address

Name
Address

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

(1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
(2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chie

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Well Operator EXCO RESOURCES (PA), LLC
By: Randall Sheets
Its: Supervisor
Address P O BOX 8
RAVENSWOOD, WV 26164
Telephone 304-273-5371

Subscribed and sworn before me this 24th day of May

Notary Public

My Commission Expires June 11, 2018

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
JERRY M. TEPHABOCK
RT. 1 BOX 191A
RIPLEY, WV 25271
My commission expires June 11, 2018

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information (such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyoffier@wv.gov.

8101003P

WW-9
(2/15)

API Number 47 - 081 - 01003
Operator's Well No. New Beaver 26C

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EXCO Resources (PA), LLC OP Code 307860

Watershed (HUC 10) Maple Meadow Creek Quadrangle Lester

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes _____ No ✓

Will a pit be used? Yes _____ No X

If so, please describe anticipated pit waste: _____

Will a synthetic liner be used in the pit? Yes _____ No ✓ If so, what ml.? _____

Proposed Disposal Method For Treated Pit Wastes:

_____ Land Application
_____ Underground Injection (UIC Permit Number _____)
_____ Reuse (at API Number _____)
_____ Off Site Disposal (Supply form WW-9 for disposal location)
X Other (Explain Any fluids will be collected in a tank and Hauled

Will closed loop system be used? If so, describe: _____

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. _____

-If oil based, what type? Synthetic, petroleum, etc. _____

Additives to be used in drilling medium? _____

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. _____

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) _____

-Landfill or offsite name/permit number? _____

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

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I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature Randall D. Sheets

Company Official (Typed Name) RANDALL SHEETS

Company Official Title Supervisor

Subscribed and sworn before me this 24th day of MAY, 2016

Jerry Tephabock Notary Public

My commission expires June 11, 2018

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
JERRY M. TEPHABOCK
RT. 1, BOX 101A
RIPLEY, WV 25271
My commission expires June 11, 2018

8101003P

Form WW-9

Operator's Well No.New Beaver #26c_____

Proposed Revegetation Treatment: Acres Disturbe 0.5 _____ Prevegetation pH 6.0

_____ Lime 2 Tons per Acre of correct to 6.5 _____

Fertilizer (10-20-20 or equivalent) _____500lbs/acre (500 lbs minimum)

Mulch_____2 Tons/acre

Seed Mixtures

Area I Seed Type	lbs/acre	Area II Seed Type	lbs/acre
KENTUCKY FESCUE	40	SAME AS #1	
~~ALSIKE CLOVER~~	~~5~~		
ANNUAL RYE	16		

Attach:
Drawing(s) of road, location,pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Jerry Kennedy

Comments: _____

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Title: Inspector Date:

Field Reviewed? (✓) Yes ( ) No 5/25/16

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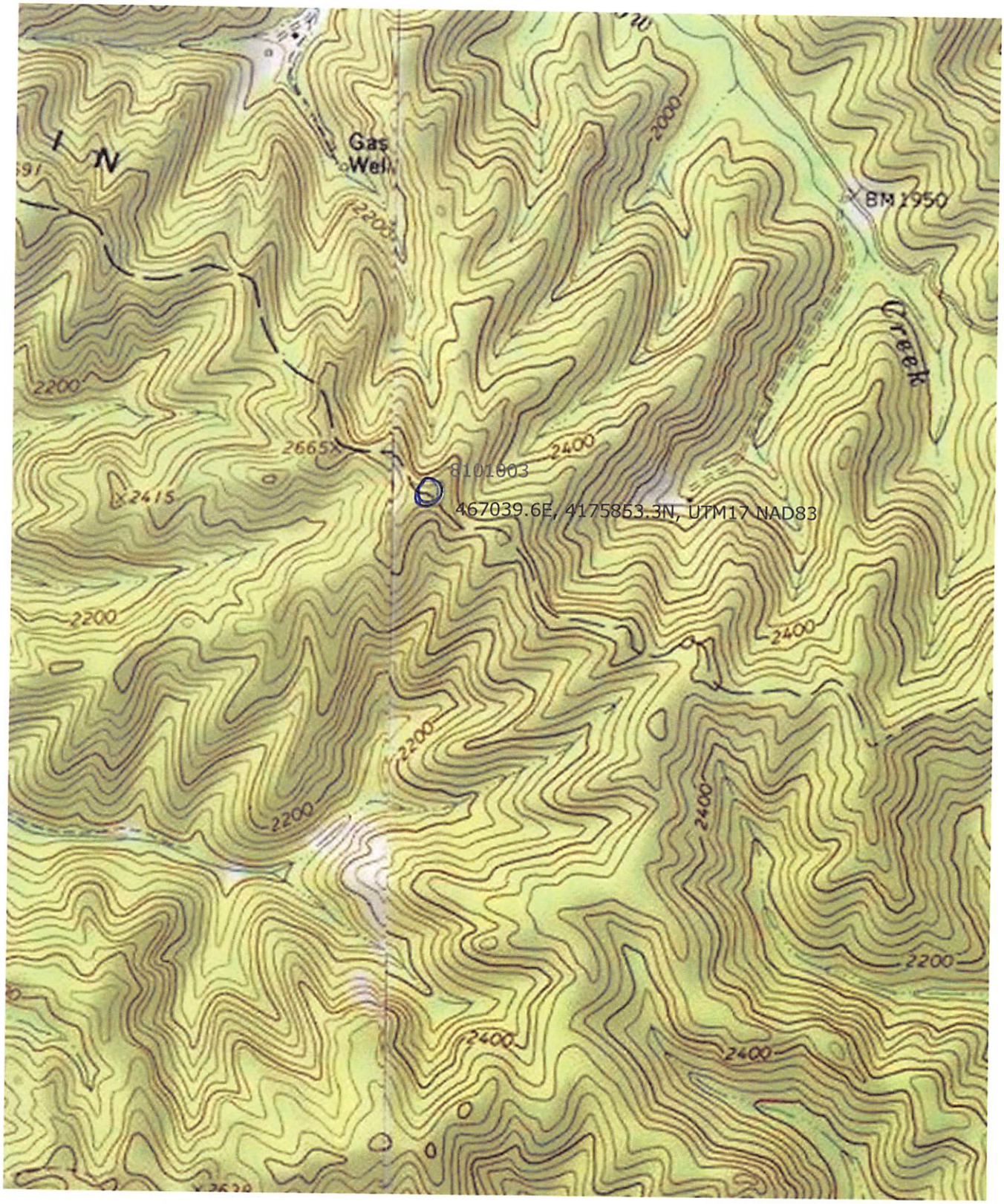
N
Gas
Well
2000
2200
BM 1950
Creek
2200
2665
2400
8101003
2415
467039.6E, 4175853.3N, UTM17 NAD83
2200
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8101003P

WW-7
8-30-06

West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47 081 01003 WELL NO.: Welchland 26C

FARM NAME: Beacer Coal

RESPONSIBLE PARTY NAME: EXCO Resources, (PA), LLC

COUNTY: Releigh DISTRICT: Trap Hill

QUADRANGLE: Lester

SURFACE OWNER: Beaver Coal Company

ROYALTY OWNER: Beaver Coal Company

UTM GPS NORTHING: ~~4196557.0~~ 4175853.3

UTM GPS EASTING: ~~457150.0~~ 467039.6 GPS ELEVATION: 2712

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS ____: Post Processed Differential _____

Real-Time Differential _____

Mapping Grade GPS X: Post Processed Differential _____

Real-Time Differential _____

4. **Letter size copy of the topography map showing the well location.**

I the undersigned, hereby certify this data 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 Office of Oil and Gas.

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Signature Supervisor Title 5/26/16 Date