



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 02, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-8101096, 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 penalties 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: BEAVER 131
Farm Name: BEAVER COAL COMPANY LTD.
API Well Number: 47-8101096
Permit Type: Plugging
Date Issued: 07/02/2014

Promoting a healthy environment.

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.

81010968 CK # 242573 \$100⁰⁰

WW-4B
Rev. 2/01

1) Date February 4, 2014
2) Operator's
Well No. Beaver Coal 131
3) API Well No. 47-081 - 01099

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 ___ or Underground storage ___) Deep ___ / Shallow x

5) Location: Elevation 2584' Watershed Whitestick Creek
District Shady Spring County Raleigh Quadrangle Crab Orchard

6) Well Operator EXCO Resources (PA), LLC 7) Designated Agent Diana Stamper/C.T. Corp Systems
Address PO Box 8 Address 5400 D Big Tyler Road
Ravenswood, WV 26164 Charleston, WV 25301

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Gary Kennedy Name _____
Address PO Box 268 Address _____
Nimitz, WV 25978

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

- 1.) RIH check TD @ +/- 2100', RIH tbg to 2300', RIH tbg to 2300' load hole with 6% gelled water - rig up and pump 25 sks Class A cement 2300'-2000' pooh tbg
- 2.) RIH and cut 4 1/2" casing @ 1075', estimated TOC, pooh 4 1/2" casing
- 3.) RIH tubing to 1100', rig up and pump 35 sks class A cement 1100' - 930'
- 4.) Pooh tubing to 150' - rig up and pump 35 sks class A cement 150' - surface. Erect monument with API#

Received

APR 17 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector Gary Kennedy Date 2/25/14

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

Well Operator's Report of Well Work

Farm name: BEAVER COAL COMPANY LTD. Operator Well No.: BEAVER 131

LOCATION: Elevation: 2,584.00 Quadrangle: CRAB ORCHARD

District: SHADY SPRING County: RALEIGH
Latitude: 7130 Feet South of 37 Deg. 42Min. 30 Sec.
Longitude 7210 Feet West of 81 Deg. 10 Min. 0 Sec.

Company: ENERGY SEARCH, INC.
280 FT.SANDERS,W.BLVD.,STE.200
KNOXVILLE, TN 37922-0000

Agent: CARRY S. RANSON

Inspector: RODNEY DILLON
Permit Issued: 07/30/97
Well work Commenced: 10/13/97
Well work Completed: 11/05/97
Verbal Plugging
Permission granted on: N/A
Rotary XX Cable Rig
Total Depth (feet) 3868'
Fresh water depths (ft) none
Salt water depths (ft) none

Is coal being mined in area (Y/N)? N
Coal Depths (ft): no record

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
12 3/4'	20'	20'	
7"	970'	970'	378
4 1/2"	2407'	2407'	228
2 3/8"			

OPEN FLOW DATA

Producing formation L & U MAXTON Pay zone depth (ft) see back
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure 370 psig (surface pressure) after 24 Hours

Second producing formation Pay zone depth (ft)
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 initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Received

APR 17 2014

For: ENERGY SEARCH, INC. *Mike Mooney*
By: *Chief Operating Officer*
Date:

L. Maxton

Perfs: 222' - -25' (7)

Breakdown @ 2064 psi & Ballout.

55Q Foam Frac - 9 BPM; 218 bbl total fluid: 15,000# 20/40

sand: 102,000 SCF N2, ATP 1330 psi; Max TP 1530 psi;

ISIP 1130 psi; 10 mi. SIP 778 psi.

L. Maxton:

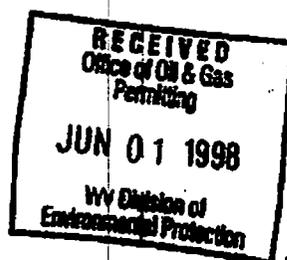
Perf: 2102' - 04' (3), 2166' - 69' (4)

Breakdown @ 2737 psi & ballout

75Q Foam Frac - 12 BPM; 25,000# 20/40 sand; 223 bbl total fluid;

220,000 SCF N2; ATP 1245psi; Max TP 1355 psi;

ISIP 1190 psi; 10 min. SIP 1080 psi.



81 01096P

WW-4A
Revised 6-07

1) Date: February 4, 2014
2) Operator's Well Number
Beaver Coal 131

3) API Well No.: 47 - 081 - 01096

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

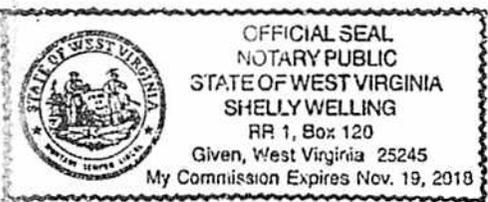
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Beaver Coal LTD</u> ✓	Name _____
Address <u>115 1/2 South Kanawha Street</u>	Address _____
<u>Beckley, WV 25801</u>	
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Pocahontas Land Corp</u> ✓
	Address <u>PO Box 1517</u>
	<u>Bluefield, WV 25701</u>
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Gary Kennedy</u>	(c) Coal Lessee with Declaration
Address <u>PO Box 268</u>	Name _____
<u>Nimitz, WV 25978</u>	Address _____
Telephone <u>304-382-8402</u>	

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 Chief.



Well Operator EXCO Resources (PA) LLC
 By: Rick Green *Rick Green*
 Its: Construction Specialist I
 Address PO Box 8
Ravenswood, WV 26164
 Telephone 304-273-5371

Received
APR 21 2014

Subscribed and sworn before me this 19 day of Feb 2014
Shelly Welling Notary Public
 My Commission Expires 11/19/18

Office of Oil and Gas
WV Dept. of Environmental Protection

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 depprivacyofficer@wv.gov.

81 01096P
BC 131

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>POCAHONTAS LAND COMPANY PO BOX 1517 BLUEFIELD WV 25701</p> </div>	<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>
<p>2. Article Number (Transfer from service label)</p> <p>7006 2760 0005 3354 3205</p>	<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

U.S. Postal Service TM
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$.90	
Certified Fee		3.30	
Return Receipt Fee (Endorsement Required)		2.70	
Restricted Delivery Fee (Endorsement Required)			
Total Postage & Fees	\$	6.90	

Sent To: POCAHONTAS LAND COMPANY
 PO BOX 1517
 BLUEFIELD WV 25701 ✓

PS Form 3800, August 2006 See Reverse for Instructions

Received

APR 17 2014

Office of Oil and Gas
 WV Dept. of Environmental Protection

SURFACE OWNER WAIVER

Operator's Well
Number

Beaver Coal 131

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

Received

APR 17 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON
ETC.

FOR EXECUTION BY A CORPORATION,

_____	Date _____	Name <u>Beaver Coal Inc Co., LTD</u>	
Signature		By <u>R. Woodrow Daba</u>	
		Its <u>General Manager</u>	Date <u>2/27/14</u>
		Signature <u>R. Woodrow Daba</u>	Date _____

WW-4B

API No.	<u>47-081-01096</u>
Farm Name	<u>Beaver Coal</u>
Well No.	<u>131</u>

**INSTRUCTIONS TO COAL OPERATORS
OWNERS AND LESSEE**

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

WAIVER

The undersigned coal operator ____ / owner / lessee ____ / of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: 2/27/14

BEAVER COAL Co., LTD.
 By: R. Woodrow DUBA
 Its: GENERAL MANAGER
R. Woodrow DUBA

Received

APR 17 2014

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

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

Watershed Whitestick Creek Quadrangle Crab Orchard

Elevation 2584' County Raleigh District Shady Springs

Description of anticipated Pit Waste: cement, water, gel

Will a synthetic liner be used in the pit? yes 20 MIL. JJK

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)
- Other (Explain pit to be solidified with cement)

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain _____)
- Swabbing
- Plugging

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 *Rick Green*

Company Official (Typed Name) Rick Green

Company Official Title Construction Specialist I

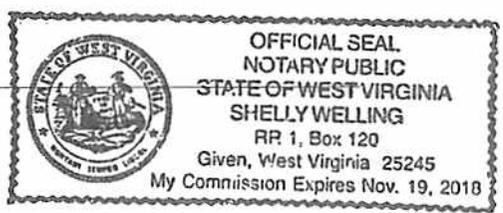
Received

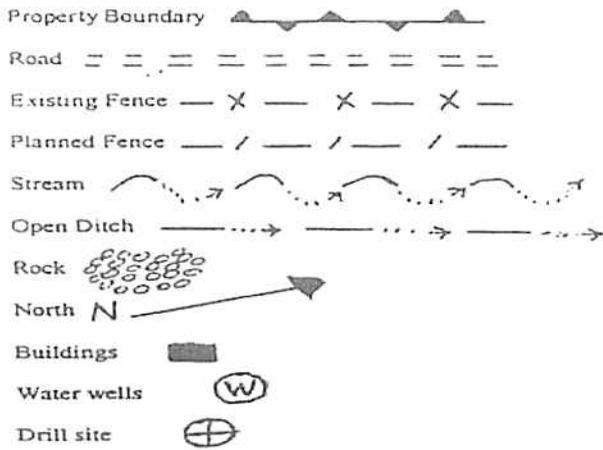
APR 17 2014

Office of Oil and Gas
WV Dept. of Environmental Protection
Subscribed and sworn before me this 19th day of Feb, 2014

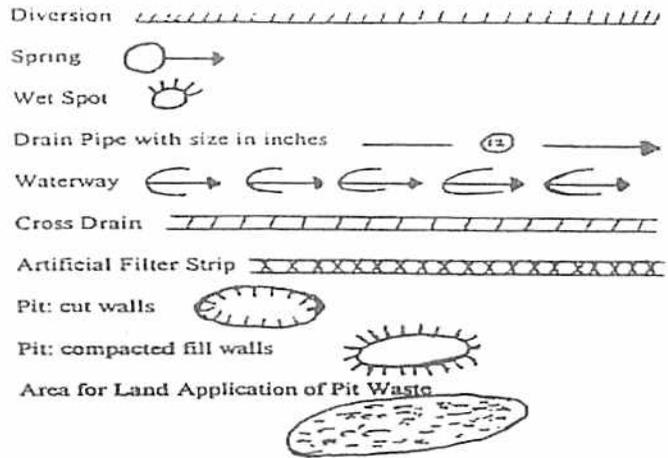
Shelly Welling Notary Public

My commission expires 11/19/18





LEGEND



Proposed Revegetation Treatment: Acres Disturbed >1 Prevegetation pH _____

Lime 2 Tons/acre or to correct to pH 6.5

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

Mulch 2 Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre	Area II lbs/acre
KY 31 Fescue	40	same as Area I
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.

Received

APR 17 2014

Plan Approved by: [Signature]

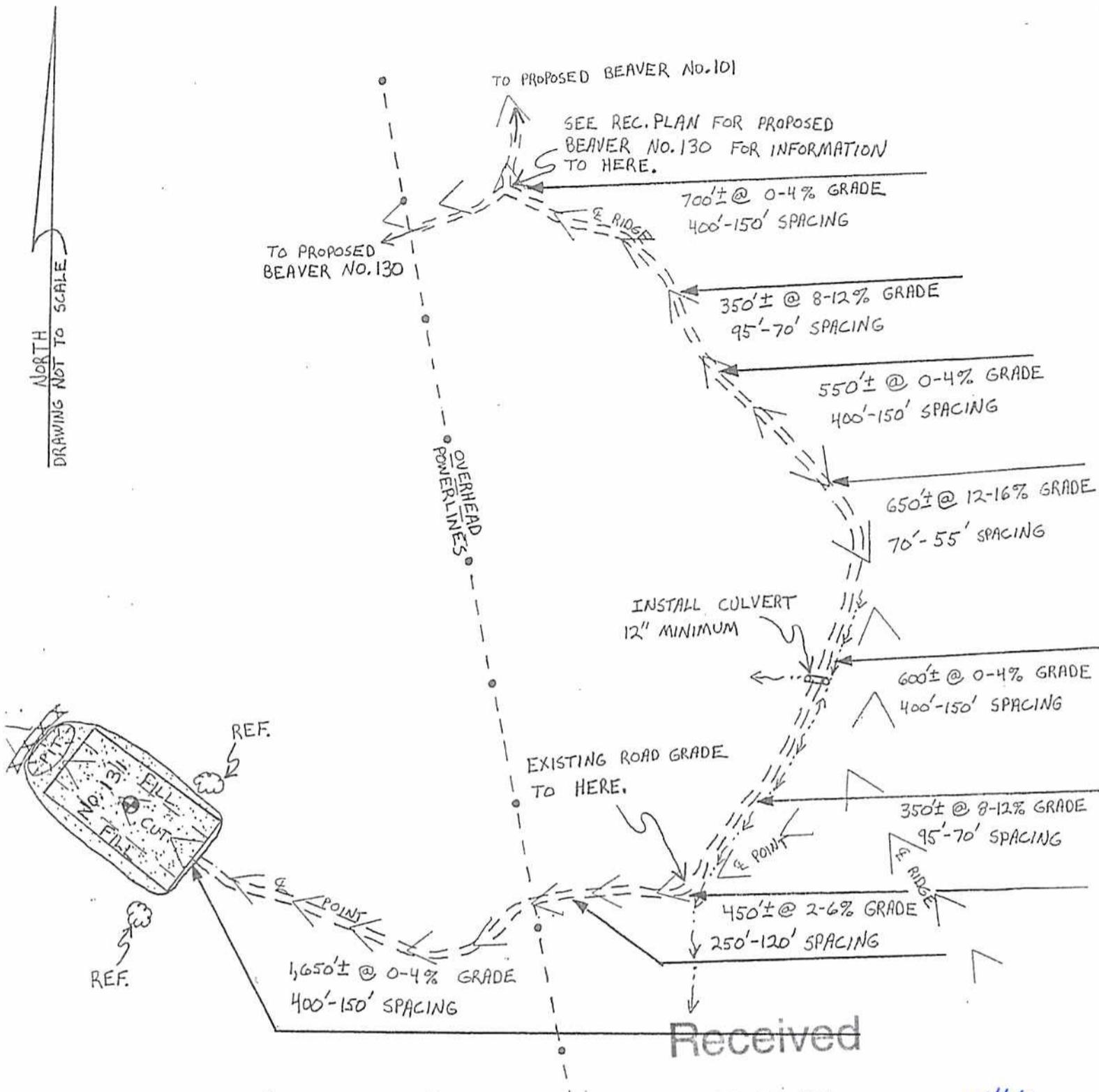
Office of Oil and Gas
WV Dept. of Environmental Protection

Comments: _____

Title: Inspector Date: 2/25/14

Field Reviewed? () Yes () No

NORTH
DRAWING NOT TO SCALE



47-081-01096

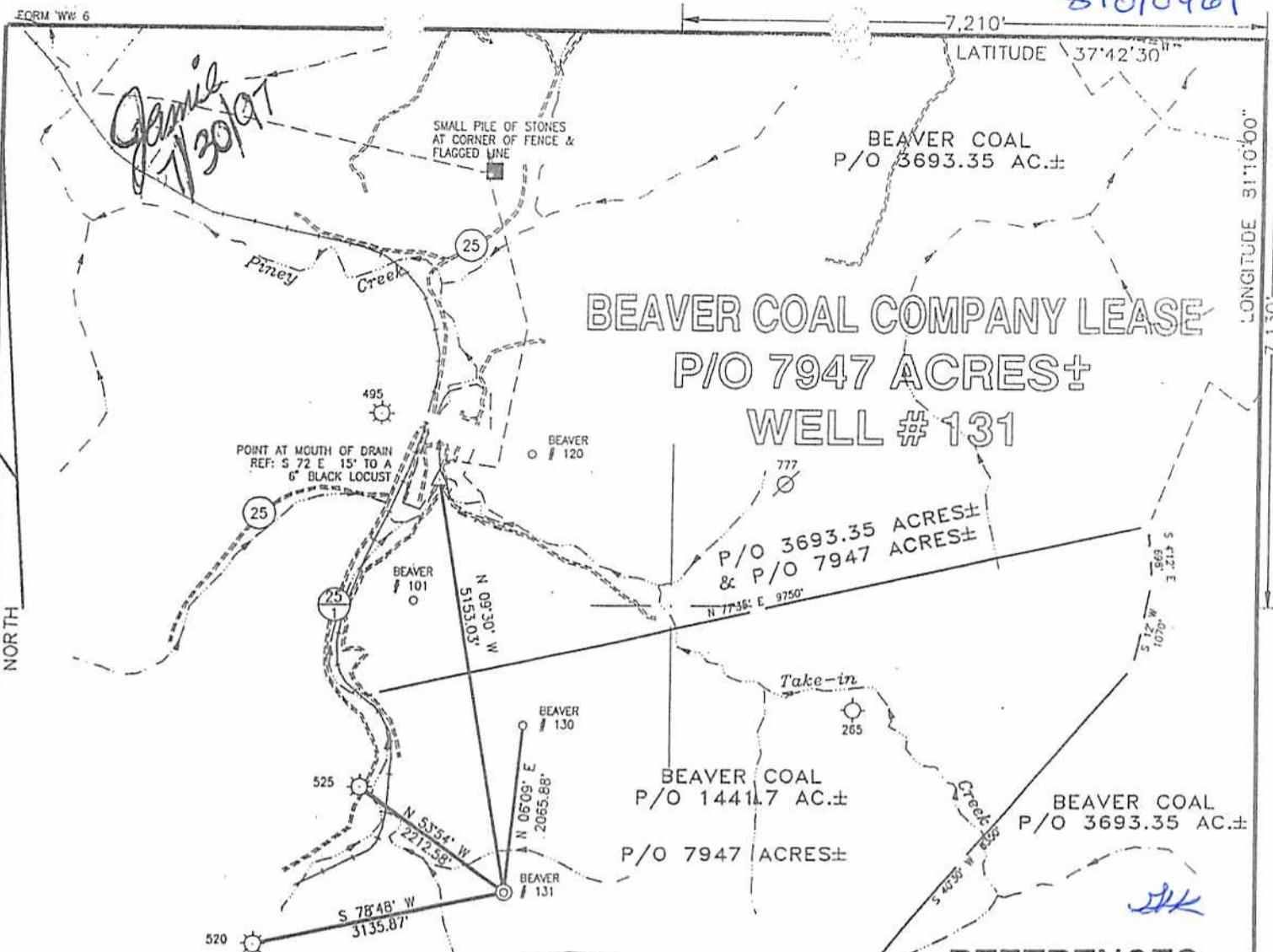
APR 17 2014

[Handwritten signature]

Office of Oil and Gas
WV Dept. of Environmental Protection

<p>P.O. BOX 150, GLENVILLE, WV 26351</p>	Phone (304) 462-5656 or 462-5634
	DRAWN BY N.C.T. DATE 7/21/97 FILE NO. 3639

8101096P



NOTE:
 THE 1441.7 ACRES± TRACT IS PART OF TRACT 30b WHICH CONTAINS A TOTAL OF 7947 ACRES± AND HAS A NET AREA OF 6880.1 ACRES±.

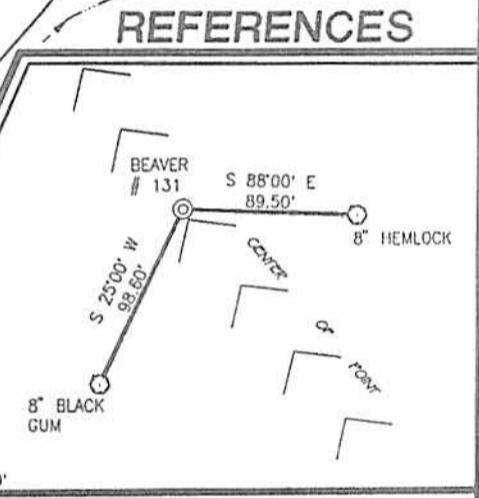
Received

APR 17 2014



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.

P.S. 677 Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JULY 25, 19 97
 OPERATORS WELL NO. BEAVER # 131
 API WELL NO. 47-081-01096
 STATE COUNTY PERMIT

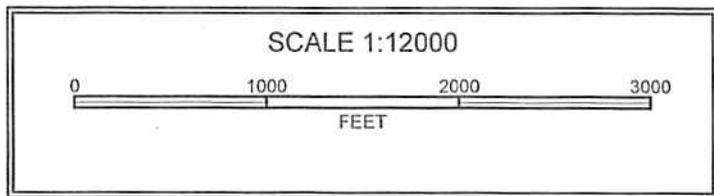
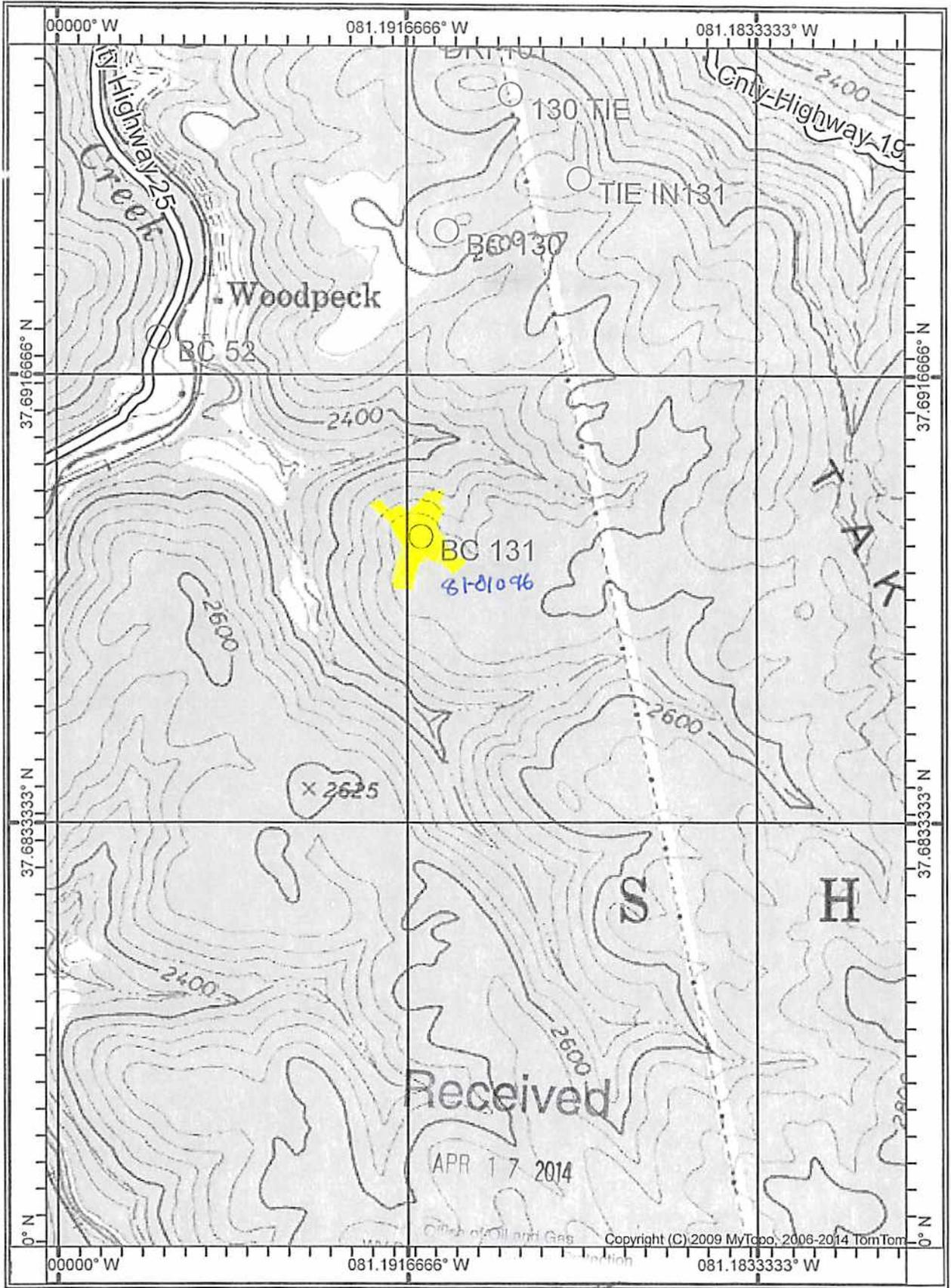
MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 3639P131 (63-23)
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 2271' SCALE 1" = 2000'

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

WELL TYPE : OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW
 LOCATION :
 ELEVATION 2584' WATERSHED TRIBUTARY OF PINEY CREEK
 DISTRICT SHADY SPRING COUNTY RALEIGH QUADRANGLE CRAB ORCHARD 7.5'
 SURFACE OWNER BEAVER COAL COMPANY LIMITED ACREAGE 1441.7
 ROYALTY OWNER BEAVER COAL COMPANY LIMITED LEASE ACREAGE 1441.7 OF 7947
 PROPOSED WORK :
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION BIG LIME & WEIR
 ESTIMATED DEPTH 5000' / 1500'

WELL OPERATOR ENERGY SEARCH, Inc. DESIGNATED AGENT CARRY S. RANSON
 ADDRESS 280 SANDERS W. Blvd. SUITE 200 KNOXVILLE, TENNESSEE 37922 ADDRESS 900 CORE RD. PARKERSBURG, WV 26101

8101096P



SK

