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**west virginia** department of environmental protection

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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

June 12, 2014

**WELL WORK PERMIT**  
**Rework-Brine Disposal**

This permit, API Well Number: 47-3902327, 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

James Martin  
Chief

Operator's Well No: W. C. BOOKER 1  
Farm Name: PRITT, CALVIN E. & PATRICIA  
**API Well Number: 47-3902327**  
**Permit Type: Rework-Brine Disposal**  
Date Issued: 06/12/2014

**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

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1. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR § 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR § 4-19.1.c, if the operator is unable to sample and analyze any water well or spring within one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. 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.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours.
7. Well work activities shall not constitute a hazard to the safety of persons.



WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION  
SECTION OF OIL AND GAS  
UNDERGROUND INJECTION CONTROL PROGRAM

UIC ROUTINE INSPECTION FORM

Operator: EXCO RESOURCES (WW), INC.  
Farm Name: PRITT, CALVIN E.  
Well Number: W. C. BOOKER 1

WELL DATA

County: Kanawha Latitude: 38° 30 min 0 sec 14000 feet  
District: Elk Longitude: -81° 27 min 30 sec 8100 feet  
Quad Number: 258 Quad Name: BLUE CREEK  
Well Status: Active Well Well Status: Active  
Well Use Type: Waste Disposal Date of Last Inspection: Jun 29, 2011  
Fluid Type: Salt Water/Brine  
Comments: Injecting at 270psi / No Flow or Pressure on annulus

Elevation: 715 feet  
Fresh water Casing: 8 5/8 in. @ 246 ft./Cement to Surface  
Injection Casing: 2 3/8 in. @ 1140 ft./ 0 (sks)  
Injection Formations:  
#1 - 3rd Salt Sand - Top @ 1210 ft./Bottom @ 1340 ft.  
MIT Test Type: Annulus pressure passed  
MIT Test Date: Jun 17, 2008

WELL OPERATION

Surface Injection Pressure: 350 Psi Gauged: ~~500~~  
Injection Rate: 100 Barrels/Hr. Observed: \_\_\_\_\_  
Annulus Monitoring: Size: 2 3/8 Size: ~~2 5/8~~  
Flow or Pressure: No Flow No Pressure

COMMENTS:  
MIT conducted / Pressured 2 3/2 x 1 5/8  
to 525 psi for 20 minutes  
- Passed

Signed: James Peterson  
District Oil and Gas Inspector  
Date: 5/3/13

WW-2A  
(Rev. 6-07)

1.) Date: April 2, 2014  
2.) Operator's Well Number W.C. Booker #1  
State 47- County 039 Permit 02327  
3.) API Well No.:

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:  
(a) Name Calvin & Patricia Pritt  
Address 649 Equine Drive  
Elkview, WV 25071  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Terry Urban  
Address P.O. Box 1207  
Clendenin, WV 25045  
Telephone 304-549-5915  
5) (a) Coal Operator  
Name N/A  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name N/A  
Address \_\_\_\_\_  
(c) Coal Lessee with Declaration  
Name N/A  
Address \_\_\_\_\_

**TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:**

OR Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas  
x Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through \_\_\_ on the above named parties by:

- \_\_\_\_\_ Personal Service (Affidavit attached)
- x \_\_\_\_\_ Certified Mail (Postmarked postal receipt attached)
- \_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

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, 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 and imprisonment.

COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Rebecca Shrum, Notary Public  
Marshall Twp., Allegheny County  
My Commission Expires March 9, 2016  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Well Operator EXCO Resources (PA), LLC  
By: Brian E. Rushe, P.E.  
Its: Designated Agent  
Address 260 Executive Drive, Suite 100  
Cranberry Township, PA 16066  
Telephone 724-720-2590

Subscribed and sworn before me this 3<sup>RD</sup> day of April, 2014

Rebecca Shrum  
My Commission Expires March 9, 2016

Notary Public  
RECEIVED  
Office of Oil and Gas

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](mailto:depprivacyofficer@wv.gov)

APR 04 2014  
Environmental Protection

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	A. Signature <span style="float: right;"><input type="checkbox"/> Agent <input type="checkbox"/> Addressee</span> <b>X</b>
1. Article Addressed to:  Calvin & Patricia Prith 649 Equine Drive Elkview, WV 25071	B. Received by ( <i>Printed Name</i> ) <span style="float: right;">C. Date of Delivery</span>
2. Article Number (Transfer from service label)	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
PS Form 3811, February 2004	3. Service Type <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.
Domestic Return Receipt	4. Restricted Delivery? ( <i>Extra Fee</i> ) <input type="checkbox"/> Yes
7012 2210 0001 9317 3621	7012 2210 0001 9317 3621
W.C. Booker #1	102595-02-M-1540

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE.



7012 2210 0001 9317 3621

U.S. Postal Service™ <b>CERTIFIED MAIL™ RECEIPT</b> (Domestic Mail Only; No Insurance Coverage Provided)													
For delivery information visit our website at <a href="http://www.usps.com">www.usps.com</a>													
<b>OFFICIAL USE</b>													
<table border="1"> <tr> <td>Postage</td> <td>\$</td> </tr> <tr> <td>Certified Fee</td> <td></td> </tr> <tr> <td>Return Receipt Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Restricted Delivery Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td><b>Total Postage &amp; Fees</b></td> <td><b>\$</b></td> </tr> </table>	Postage	\$	Certified Fee		Return Receipt Fee (Endorsement Required)		Restricted Delivery Fee (Endorsement Required)		<b>Total Postage &amp; Fees</b>	<b>\$</b>	W.C. Booker #1  Postmark Here		
Postage	\$												
Certified Fee													
Return Receipt Fee (Endorsement Required)													
Restricted Delivery Fee (Endorsement Required)													
<b>Total Postage &amp; Fees</b>	<b>\$</b>												
<table border="1"> <tr> <td colspan="2">Sent To</td> </tr> <tr> <td colspan="2">Calvin &amp; Patricia Prith</td> </tr> <tr> <td colspan="2">Street, Apt. No.; or PO Box No.</td> </tr> <tr> <td colspan="2">649 Equine Drive</td> </tr> <tr> <td colspan="2">City, State, ZIP+4</td> </tr> <tr> <td colspan="2">Elkview WV 25071</td> </tr> </table>		Sent To		Calvin & Patricia Prith		Street, Apt. No.; or PO Box No.		649 Equine Drive		City, State, ZIP+4		Elkview WV 25071	
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Street, Apt. No.; or PO Box No.													
649 Equine Drive													
City, State, ZIP+4													
Elkview WV 25071													
PS Form 3800, August 2006 <span style="float: right;">See Reverse for Instructions</span>													

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
Chapter 22, Article 6, Section 8(d)  
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
See Attached Land Owner Agreements			

**Acknowledgement of Possible Permitting/Approval  
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

RECEIVED  
Office of Oil and Gas  
APR 04 2011

Well Operator:  
By: Its:

EXCO Resources (PA), LLC  
 Brian E. Rushe, P.E.  
 260 Executive Drive, Suite 100 Cranberry Township, PA 16066

WV Department of  
Environmental Protection

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 Wills Creek Quadrangle Blue Creek

Elevation 716' County Kanawha District Elk

Description of anticipated Pit Waste: No Pit will be used. TU 6-4-13

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

Will a synthetic liner be used in the pit? N/A. If so, what mil.? N/A

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 \_\_\_\_\_)

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. NO

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

Additives to be used? N/A

Will closed loop system be used? NO

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A

-If left in pit and plan to solidify what medium will be used? Cement, lime, sawdust \_\_\_\_\_

-Landfill or offsite name/permit number? \_\_\_\_\_

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 Brian E. Rushe

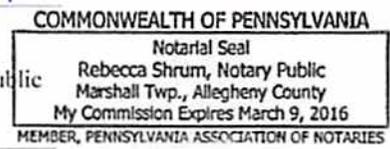
Company Official (Typed Name) Brian E. Rushe, P.E.

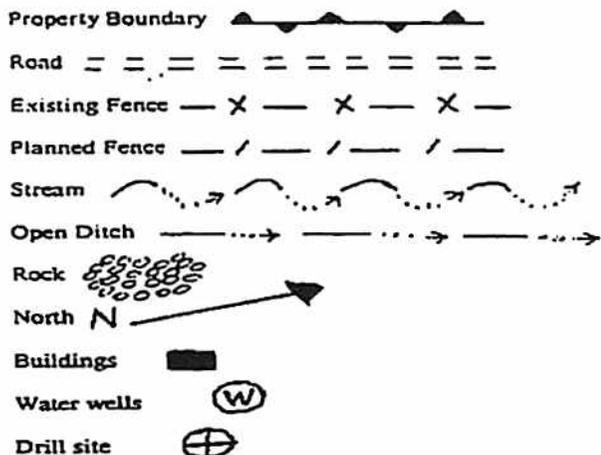
Company Official Title Construction & Regulatory Manager

Subscribed and sworn before me this 3RD day of APRIL, 2014

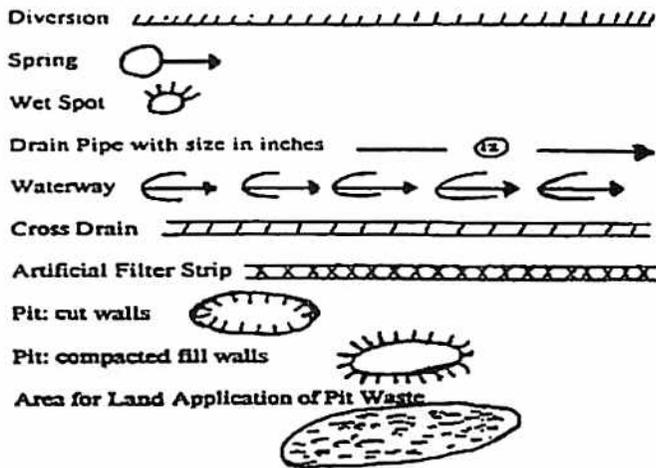
Rebecca Shrum Notary Public

My commission expires March 9, 2016





LEGEND



Proposed Revegetation Treatment: Acres Disturbed 0.0 Prevegetation pH N/A

Lime N/A Tons/acre or to correct to pH N/A

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

Mulch N/A Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre	Seed Type	Area II lbs/acre
<u>N/A</u>		<u>N/A</u>	

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

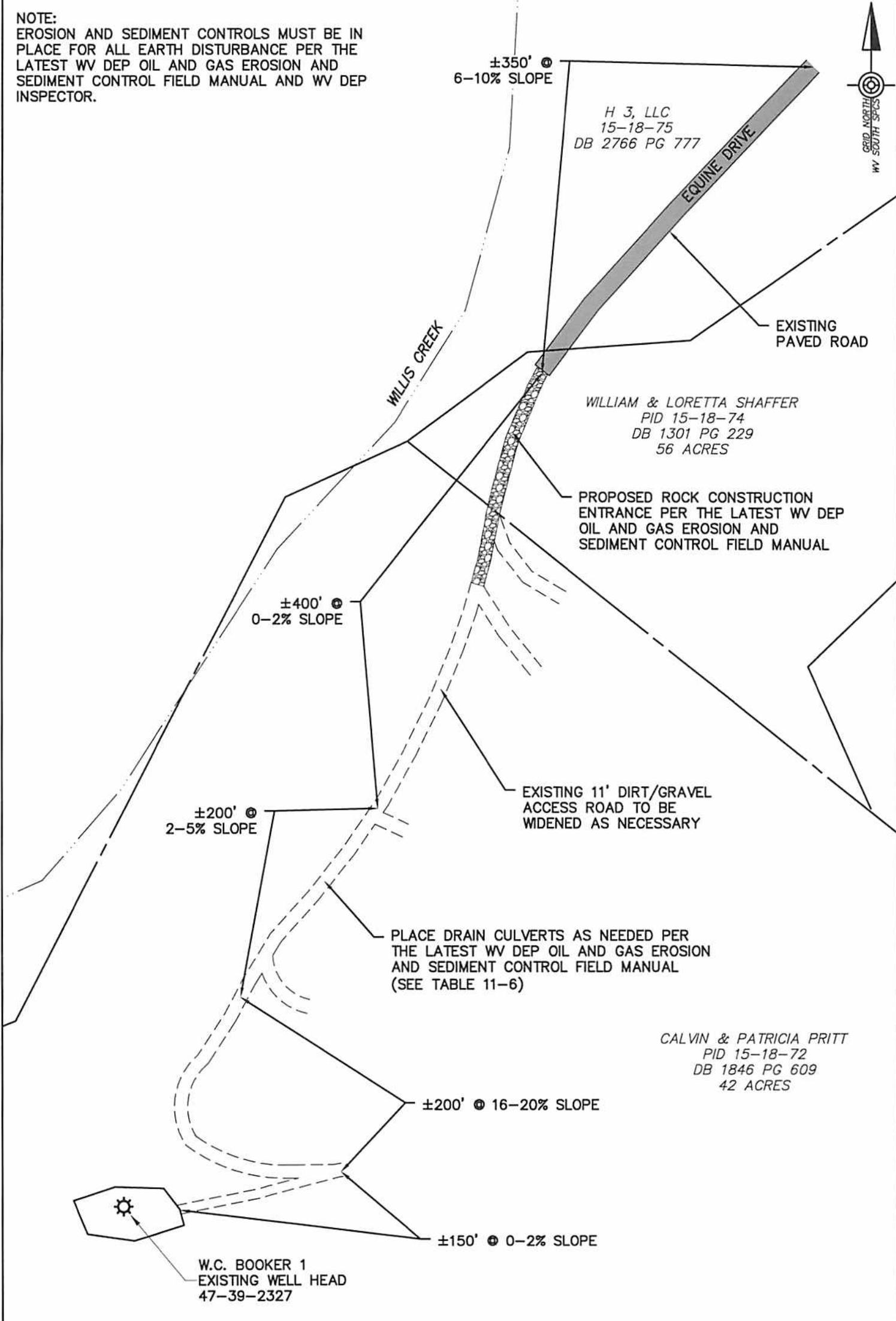
Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]  
Comments: \_\_\_\_\_

Title: Inspect Del & Co Date: 6-4-14

Field Reviewed?  Yes  No

NOTE:  
EROSION AND SEDIMENT CONTROLS MUST BE IN PLACE FOR ALL EARTH DISTURBANCE PER THE LATEST WV DEP OIL AND GAS EROSION AND SEDIMENT CONTROL FIELD MANUAL AND WV DEP INSPECTOR.



±350' Ⓞ  
6-10% SLOPE

H 3, LLC  
15-18-75  
DB 2766 PG 777

EQUINE DRIVE

EXISTING  
PAVED ROAD

WILLIAM & LORETTA SHAFFER  
PID 15-18-74  
DB 1301 PG 229  
56 ACRES

PROPOSED ROCK CONSTRUCTION  
ENTRANCE PER THE LATEST WV DEP  
OIL AND GAS EROSION AND  
SEDIMENT CONTROL FIELD MANUAL

WILLIS CREEK

±400' Ⓞ  
0-2% SLOPE

±200' Ⓞ  
2-5% SLOPE

EXISTING 11' DIRT/GRAVEL  
ACCESS ROAD TO BE  
WIDENED AS NECESSARY

PLACE DRAIN CULVERTS AS NEEDED PER  
THE LATEST WV DEP OIL AND GAS EROSION  
AND SEDIMENT CONTROL FIELD MANUAL  
(SEE TABLE 11-6)

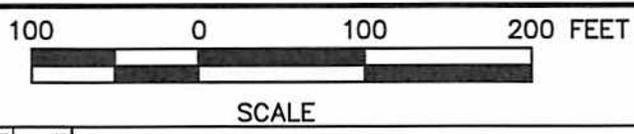
CALVIN & PATRICIA PRITT  
PID 15-18-72  
DB 1846 PG 609  
42 ACRES

±200' Ⓞ 16-20% SLOPE



W.C. BOOKER 1  
EXISTING WELL HEAD  
47-39-2327

±150' Ⓞ 0-2% SLOPE



It is a violation of the law for any person, unless acting under the direction of a licensed Architect, Engineer or Land Surveyor, to alter an item in any way. Plans, maps, specifications, studies, and reports not containing a red ink seal imprint on the cover sheet accompanied by an original signature by the licensed professional may have been fraudulently altered and shall not be considered an original copy. Copyright Protected 2013, Larson Design Group.

### RECLAMATION PLAN W.C. Booker 1

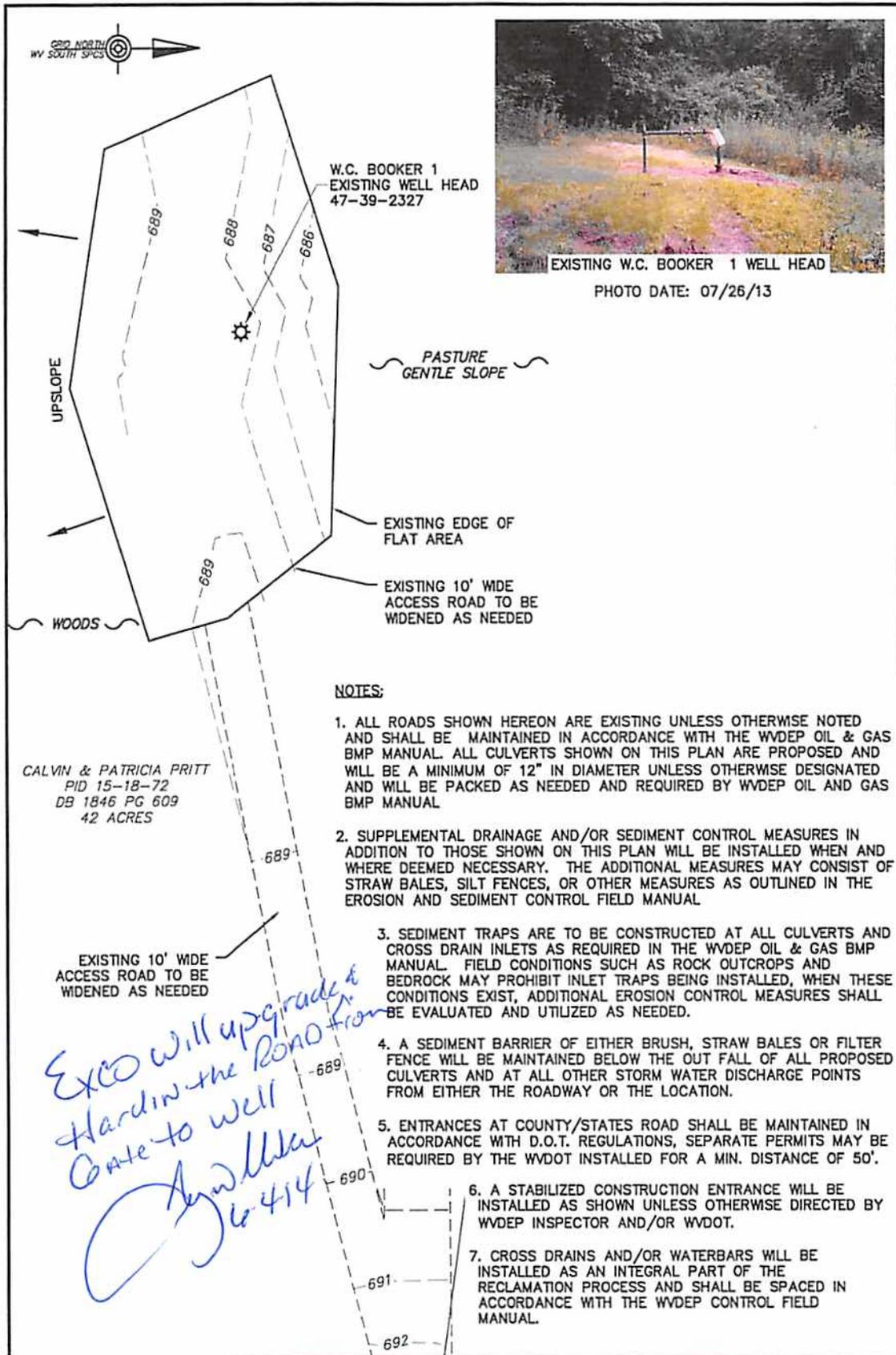
ELK DISTRICT, KANAWHA COUNTY, WEST VIRGINIA

EXCO RESOURCES, INC  
P.O. BOX 8  
RAVENSWOOD, WV 26164  
PHONE (304) 273-5371  
DATE: 8/9/13 DRAWN BY: CAB CHECKED BY: THK

Larson Design Group • Architects Engineers Surveyors  
2502 Cranberry Square  
Morgantown, WV 26508  
PHONE 877.323.6603  
FAX 570.323.9902 • www.larsondesigngroup.com



PROJECT NO.: 8013-008  
SHEET NO.: 1 of 2

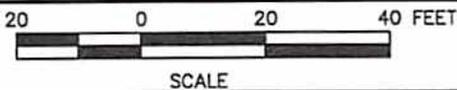


**NOTES:**

1. ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH THE WVDEP OIL & GAS BMP MANUAL. ALL CULVERTS SHOWN ON THIS PLAN ARE PROPOSED AND WILL BE A MINIMUM OF 12" IN DIAMETER UNLESS OTHERWISE DESIGNATED AND WILL BE PACKED AS NEEDED AND REQUIRED BY WVDEP OIL AND GAS BMP MANUAL.
2. SUPPLEMENTAL DRAINAGE AND/OR SEDIMENT CONTROL MEASURES IN ADDITION TO THOSE SHOWN ON THIS PLAN WILL BE INSTALLED WHEN AND WHERE DEEMED NECESSARY. THE ADDITIONAL MEASURES MAY CONSIST OF STRAW BALES, SILT FENCES, OR OTHER MEASURES AS OUTLINED IN THE EROSION AND SEDIMENT CONTROL FIELD MANUAL.
3. SEDIMENT TRAPS ARE TO BE CONSTRUCTED AT ALL CULVERTS AND CROSS DRAIN INLETS AS REQUIRED IN THE WVDEP OIL & GAS BMP MANUAL. FIELD CONDITIONS SUCH AS ROCK OUTCROPS AND BEDROCK MAY PROHIBIT INLET TRAPS BEING INSTALLED, WHEN THESE CONDITIONS EXIST, ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.
4. A SEDIMENT BARRIER OF EITHER BRUSH, STRAW BALES OR FILTER FENCE WILL BE MAINTAINED BELOW THE OUT FALL OF ALL PROPOSED CULVERTS AND AT ALL OTHER STORM WATER DISCHARGE POINTS FROM EITHER THE ROADWAY OR THE LOCATION.
5. ENTRANCES AT COUNTY/STATES ROAD SHALL BE MAINTAINED IN ACCORDANCE WITH D.O.T. REGULATIONS, SEPARATE PERMITS MAY BE REQUIRED BY THE WVDOT INSTALLED FOR A MIN. DISTANCE OF 50'.
6. A STABILIZED CONSTRUCTION ENTRANCE WILL BE INSTALLED AS SHOWN UNLESS OTHERWISE DIRECTED BY WVDEP INSPECTOR AND/OR WVDOT.
7. CROSS DRAINS AND/OR WATERBARS WILL BE INSTALLED AS AN INTEGRAL PART OF THE RECLAMATION PROCESS AND SHALL BE SPACED IN ACCORDANCE WITH THE WVDEP CONTROL FIELD MANUAL.

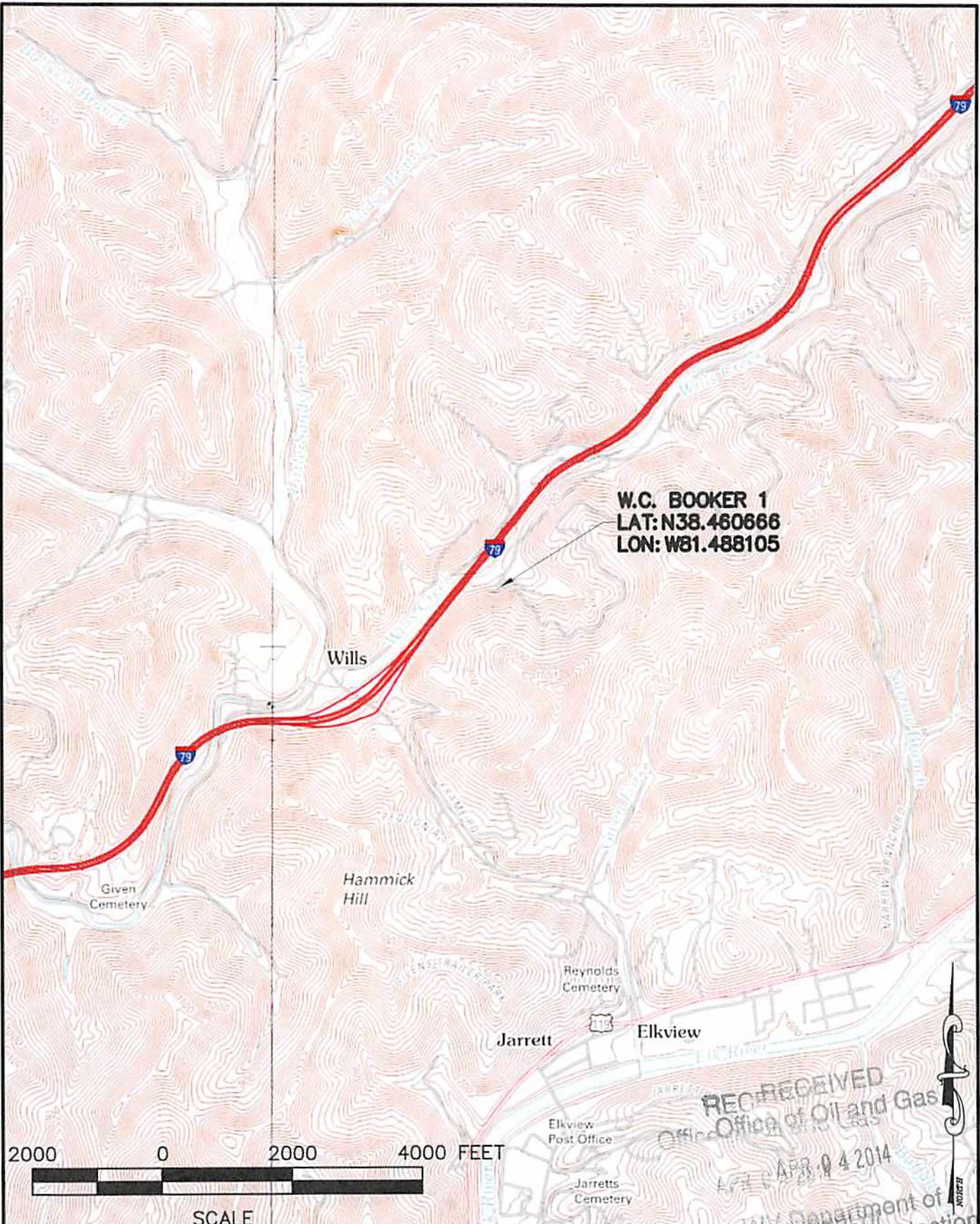
CALVIN & PATRICIA PRITT  
PID 15-18-72  
DB 1846 PG 609  
42 ACRES

*EXCO will upgrade & harden the road from gate to well*  
*Ag will take to 414*

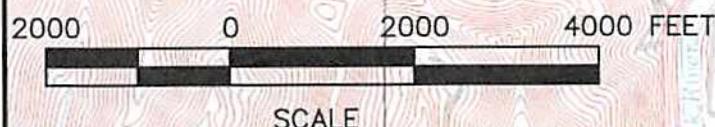


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<p>PROJECT NO.: 8013-008 SHEET NO.: 2 of 2</p>	<p><b>RECLAMATION PLAN</b> <b>W.C. Booker 1</b> ELK DISTRICT, KANAWHA COUNTY, WEST VIRGINIA</p>	 <p>Larson Design Group</p>
<p>EXCO RESOURCES, INC P.O. BOX 8 RAVENSWOOD, WV 26164 PHONE (304) 273-5371 DATE: 8/9/13 DRAWN BY: CAB CHECKED BY: THK</p>	<p>Larson Design Group • Architects Engineers Surveyors 2502 Cranberry Square Morgantown, WV 26508 PHONE 877.323.6603 FAX 570.323.9902 • www.larsondesigngroup.com</p>	



**W.C. BOOKER 1**  
**LAT: N38.460666**  
**LON: W81.488105**

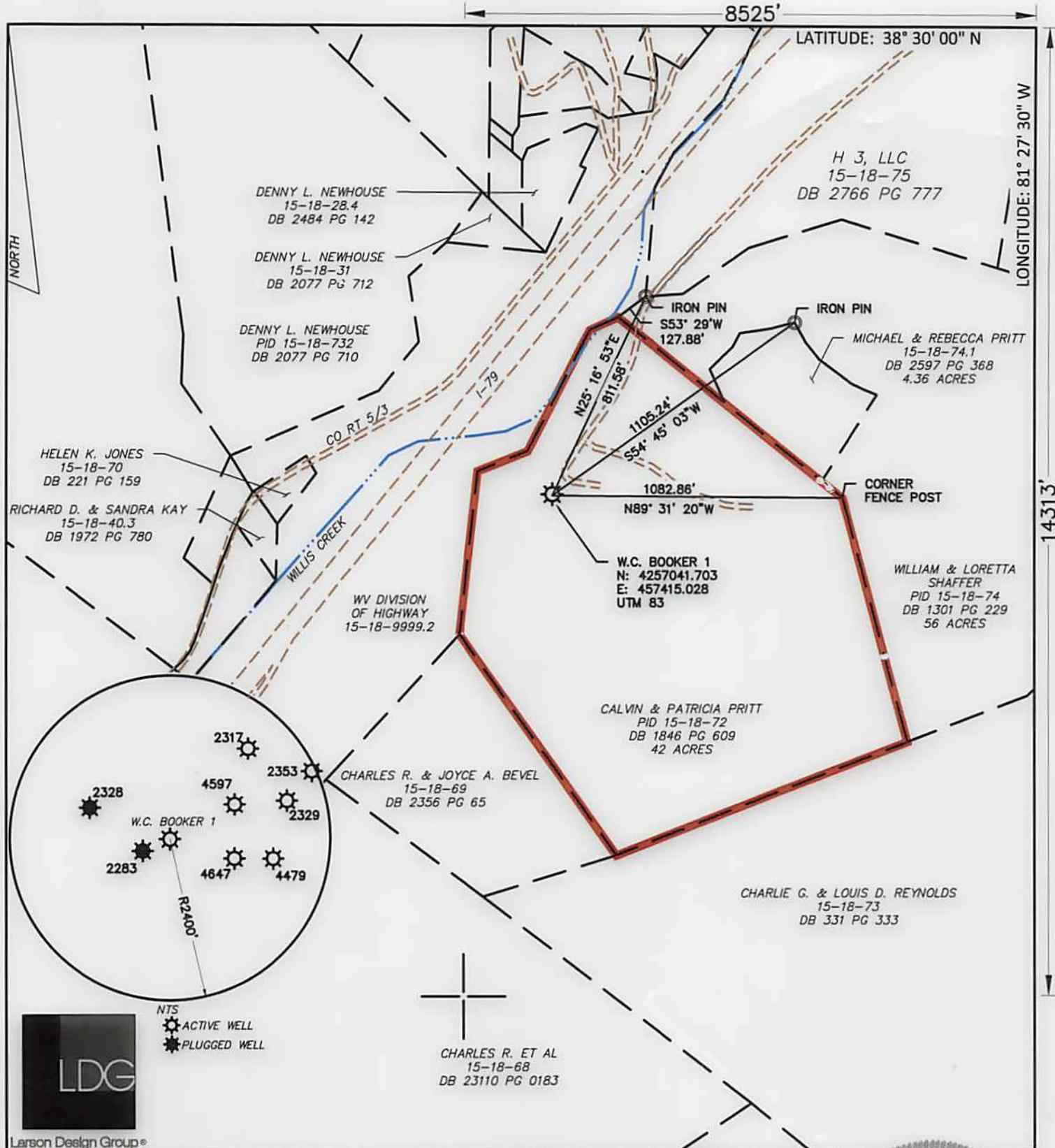


RECEIVED  
 Office of Oil and Gas  
 APR 04 2014  
 Department of Environmental Protection

**LDG**  
 Architects Engineers Surveyors  
 1000 Commerce Park Drive • Suite 201  
 Williamsport, PA 17701  
 PHONE 570.323.6603  
 TOLL FREE 877.323.6603  
 FAX 570.323.9902  
 www.larsondesigngroup.com

**SITE LOCATION MAP**  
**BLUE CREEK QUADRANGLE**  
**ELK DISTRICT, KANAWHA COUNTY, WV**  
**W.C. BOOKER 1 SWD**  
**FOR**  
**EXCO RESOURCES (PA), LLC**

DATE: 04/01/2014  
 SHEET NO.:  
**LOC**  
 PROJECT NO.:  
 8013-008  
 SCALE:  
 1:2000



FILE NO. 8013-008  
 DRAWING NO. 1  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 in 2500'  
 PROVEN SOURCE OF ELEVATION SURVEY GRADE GPS

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 ENVIRONMENTAL PROTECTION.  
 (SIGNED) [Signature]  
 R.P.E. \_\_\_\_\_ L.L.S. 1969



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

DATE OCTOBER 20 13  
 OPERATOR'S WELL NO. W.C. BOOKER 1  
 API WELL NO. 47 039 02327 W  
 STATE 47 COUNTY 039 PERMIT 02327 W

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 688 WATERSHED WILLS CREEK  
 DISTRICT ELK COUNTY KANAWHA  
 QUADRANGLE BLUE CREEK  
 SURFACE OWNER CALVIN & PATRICIA PRITT ACREAGE 42 AC  
 OIL & GAS ROYALTY OWNER N/A LEASE ACREAGE N/A  
 LEASE NO. N/A

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  (WORK IS TO LOCATE AND REPAIR A LEAK IN PRODUCTION CASING)  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION BIG INJUN/SALT SANDS ESTIMATED DEPTH 1815'  
 WELLOPERATOR EXCO Resources (PA), LLC DESIGNED AGENT MIKE CHURCH-EXCO RESOURCES  
 ADDRESS 3000 ERICSSON DRIVE, SUITE 200 WARRENDALE, PA 15086 ADDRESS P.O. BOX 8 RAVENSWOOD, WV 26164

L:\Williamsport\Energy\Exco-8013\8013-008 Booker 1 SWD\CAD\W.C. Booker 1 Plat.dwg, 4/7/2014 11:56:58 AM, DWG To PDF.pc3

COUNTY NAME  
PERMIT



# EXCO Resources (PA), LLC

260 Executive Drive • Suite 100 • Cranberry Township, PA 16066  
Phone (724) 720-2500 • Fax: (724) 720-2505

*Certified Mail Number: 7012 2210 0001 9317 3621*

April 2, 2014

Calvin & Patricia Pritt  
649 Equine Drive  
Elkview, WV 25071

**RE: West Virginia Department of Environmental Protection  
Notice of Submittal for a Well Work Permit  
W.C. Booker #1  
Kanawha County, WV**

Dear Mr. & Mrs. Pritt,

This letter is to notify you that EXCO Resources (PA), LLC (EXCO) is submitting a Well Work Permit application to the West Virginia Department of Environmental Protection for the above-mentioned injection well located in Kanawha County, WV. EXCO is proposing to perform an acid treatment job on the W.C. Booker #1 injection well to increase the efficiency.

EXCO is required by the WV DEP to notify you that a Well Work permit on the above mentioned property has been submitted.

Please review the enclosed documents and sign, date and return form WW-2A Surface Owner Waiver in the enclosed postage paid envelope.

If you have any questions, please contact Brian Rushe at (724) 720-2590 or [brushe@excoresources.com](mailto:brushe@excoresources.com).

Sincerely,

Rebecca Shrum  
Regulatory Analyst

Attachments