



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

April 16, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4301862, issued to CHESAPEAKE APPALACHIA, L.L.C., 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: 2530

Farm Name: MADDOX, C. K.

API Well Number: 47-4301862

Permit Type: Plugging

Date Issued: 04/16/2015

Promoting a healthy environment.

04/17/2015

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 under the terms of that agreement.

1) Date: 2/25/2015
2) Operator's Well No. 802530 P&A
3) API Well No. 47-043-01862

INSPECTION SITE
43 01862P

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

CL: 5248240
100⁵⁰

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

- 4) Well Type: Oil _____ Gas X Liquid injection _____ Waste disposal _____
(Is Gas, Production X or Underground storage _____) Deep _____ Shallow X
- 5) Location: Elevation 690' Watershed Mud River
District Carroll County Lincoln Quadrangle Hamlin, WV 7.5'
- 6) Well Operator Chesapeake Appalachia, L.L.C. 7) Designated Agent Jessica Greathouse
Address P.O. Box 18496 Address P.O. Box 6070
Oklahoma City, OK 73154-0496 Charleston, WV 25362
- 8) Oil and Gas Inspector to be notified
Name Ralph Triplett
Address 5539 McClellan Highway
Branchland, WV 25506
- 9) Plugging Contractor
Name Chesapeake Appalachia, L.L.C.
Address P.O. Box 18496
Oklahoma City, OK 73154-0496
- 10) Work Order: The work order for the manner of plugging this well is as follows:

See Attached Sheet

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


Work Order approved by Inspector



Date

3-18-15

802530 P&A PROCEDURE

- 1) Prepare road and location, MIRU service rig
- 2) RIH with tools to check TD approximately at 2000' (NOTE: swab reports tight spot at 1830')
- 3) TIH with W.S. to 2000', spot gel
- 4) Spot 100' cement plug 2000'-1900', pull W.S.
- 5) Cut 3" at free-point (approximately 1780') and pull
- 6) Run W.S. to approximately 1780', spot gel
- 7) Spot 100' cement plug at tubing cut (approximately 1780'-1680'), pull W.S. to 1580'
- 8) Spot 100' cement plug 1580'-1480', pull W.S.
- 9) Rip or shoot holes in 6 5/8" approximately at 1400', 1380', 1220', & 1200'
- 10) Run W.S. to 1400', spot gel
- 11) Spot 100' cement plug 1400'-1300', pull W.S. to 1220'
- 12) Spot 100' cement plug 1220'-1120', pull W.S.
- 13) Cut 6 5/8" at free-point (approximately 740') and pull
- 14) Run W.S. to 740', spot gel
- 15) Spot 150' cement plug 740'-590', pull W.S. to 290'
- 16) Spot 100' cement plug 280'-~~180~~, pull W.S. to 125' 
- 17) Spot 125' cement plug 125'-surface
- 18) Pull W.S. and top off with cement
- 19) Erect monument and reclaim as prescribed by law

4301862P

UNITED FUEL GAS COMPANY
(INCORPORATED)

043-1862

SERIAL WELL NO. 2530

LEASE NO. 243-1

MAP SQUARE 24-57

RECORD OF WELL No. 2530

C. K. Maddox Farm of **100** Acres
in **Carroll** District
Lincoln County
Branchland Field, State of **W. Va.**

CASING AND TUBING

TEST BEFORE SHOT

SIZE	USED IN DRILLING	LEFT IN WELL	
			6 of Water In 2 Inch 10ths
10			of Merc. In _____ Inch 10ths
13			Volume 118,968 Cu. ft.
10	20	20	TEST AFTER SHOT
8 1-4	222	Pulled 11	of Water In 2 Inch 10ths
6 5-8	1516' 5	1516' 5"	of Merc. In _____ Inch 10ths
5 3-16			Volume 157,440 Cu. ft.
4 7-8			Rock Pressure 48 Hrs. 315
4			Date Shot Nov. 24, 1928
3	2065	2065	Size of Torpedo 30 lbs.
2			Oil Flowed _____ bbls. 1st 24 hrs.

Rig Commenced **Furnished by Contractor**
Rig Completed _____ 192
Drilling Commenced **October 18** 192**8**
Drilling Completed **November 24,** 192 **8**
Drilling to cost **\$1.85** per foot
Contractor is: **G. L. Meadox**
Address: **Huntington, W. Va.**

Drillers' Names
A. H. Spurlock
J. F. Dyer

SHUT IN

Date **Nov. 27, 1928**

3 in Tubing or ~~Case~~ Well abandoned and

Size of Packer **2 x 6-5/8"** Plugged _____ 10 _____

Kind of Packer **Heater**

1st Perf. Set **11' 5"** from **On Bottom**
Top 53' 1" Off Bottom

2nd Perf. Set _____ from _____

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Clay	0	10	10	
Sand & Slate	10	740	730	Fresh Water at 293- Two Bailers
Salt Sand	740	945	205	each Screw
Slate Slate	945	980	35	Show of gas in top of Salt Sand
Sand	980	1045	65	Little gas in Big Lime.
Slate	1045	1160	115	
Sand	1160	1170	10	
Slate	1170	1175	5	
Sand	1175	1185	10	
Slate	1185	1205	20	
Little Lime	1205	1225	20	3" x 6-5/8" Heater Tubing Anchor
Pencil Cave	1225	1230	5	Packer set at 1827 Ft.
Big Lime	1230	1400	170	
Big Injun	1400	1420	20	
Slate	1420	1425	5	
Sand	1425	1435	10	
Slate	1435	1445	10	
Sand	1445	1516	71	
Slate & Shells	1516	1963	447	
Brown Shale	1963	1975	12	
Berea	1975	1993	18	
Slate & Shells	1993	2043	50	
Total Depth			2043	

04/17/2015

[Handwritten Signature] 2530

WW4-A
Revised
2/01

1) Date: 2/25/2015
2) Operator's Well No. 802530 P&A
3) API Well No. 47-043-01862

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
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:
(a) Name Robert and Larry Swann
Address Patricia Napier ✓
1122 Meadows Branch
Hamlin, WV 25523
(b) Name Jason Woodall Ecrow
Address 1st American Way ✓
Westlake, TX 76262
(c) Name _____
Address _____
6) Inspector Ralph Triplett
Address 5539 McClellan Highway
Branchland, WV 25506
Telephone 304-389-0350

5) Coal Operator
(a) Name None
Address _____
Coal Owner(s) with Declaration
(b) Name See Attached List for Coal Owners
Address _____
Name _____
Address _____
Coal Lessee with Declaration
(c) Name None
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 the 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 the 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: Chesapeake Appalachia, L.L.C.
By: [Signature]
Its: Completion Superintendent
Address: P.O. Box 18496
Oklahoma City, OK 73154-0496
Telephone: 405-935-4073

Subscribed and sworn before me this 27th day of February the year of 2015
Phyllis A. Copley Notary Public
My Commission Expires September 16, 2018

Well 802530 P&A
API 47-043-01862

Coal Owners

Robert and Larry Swann ✓
Patricia Napier
1122 Meadows Branch
Hamlin, WV 25523

William H. Jenkins ✓
849 Lower Mud river Road
West Hamlin, WV 25571

Edna Moore ✓
663 Lower Mud River Road
West Hamlin, WV 25571

Harry and Nina Ruth Stratton (surv) ✓
924 Lower Mud River Road
West Hamlin, WV 25571

Herskel L. and Lucy Dailey ✓
Route 2 Box 181
Milton, WV 25541

Well # 802530
 API 47-043-01862

4301862P
 CK 5248240
 100

7014 2120 0003 6636 6146

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 WEST HAMLIN WV 25571

OFFICIAL USE

Postage	\$ 1.40	0523
Certified Fee	3.30	01
Return Receipt Fee (Endorsement Required)	2.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$7.40	03/02/2015

Sent To: **802530 P&A (surface)**
 Robert & Larry Swann
 Patricia Napier
 1122 Meadows Branch
 Hamlin, WV 25523

PS Form 38 See Reverse for Instructions

7014 2120 0003 6636 6122

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Certified Fee	3.30	01
Return Receipt Fee (Endorsement Required)	2.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$7.40	03/02/2015

Sent To: **802530 P&A (coal)**
 William H. Jenkins
 849 Lower Mud River Road
 West Hamlin, WV 25571

PS Form 38 See Reverse for Instructions

7014 2120 0003 6636 6115

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Return Receipt Fee (Endorsement Required)	2.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$7.40	03/02/2015

Sent To: **802530 P&A (coal)**
 Edna Moore
 663 Lower Mud River Road
 West Hamlin, WV 25571

PS Form 38 See Reverse for Instructions

7014 2120 0003 6636 6108

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Certified Fee	3.30	01
Return Receipt Fee (Endorsement Required)	2.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$7.40	03/02/2015

Sent To: **802530 P&A (coal)**
 Harry & Nina Ruth Stratton
 924 Lower Mud river Road
 West Hamlin, WV 25571

PS Form 38 See Reverse for Instructions

7014 2120 0003 6636 6092

**U.S. Postal Service™
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 MILTON WV 25541

OFFICIAL USE

Postage	\$ 1.40	0523
Certified Fee	3.30	01
Return Receipt Fee (Endorsement Required)	2.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$7.40	03/02/2015

Sent To: **802530 P&A (coal)**
 Herskel L. & Lucy Dailey
 Rt 2 Box 181
 Milton, WV 25541

PS Form 38 See Reverse for Instructions

7014 2120 0003 6636 6139

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 ROANOKE TX 76262

OFFICIAL USE

Postage	\$ 1.40	0523
Certified Fee	3.30	01
Return Receipt Fee (Endorsement Required)	2.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$7.40	03/02/2015

Sent To: **802530 P&A (surface)**
 Jason Woodall Ecrow
 1st American Way
 Westlake, TX 76262

PS Form 38 See Reverse for Instructions

04/17/2015

4301862 P

Form WW-9
Rev. 02/01

API Number 47-043-01862
Operator's Well No. 802530 P&A

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 Chesapeake Appalachia, L.L.C. OP Code 494477557

Watershed Mud River Quadrangle Hamlin, WV 7.5'

Elevation 690' County Lincoln District Carroll

Description of anticipated Pit Waste: Plugging Returns/Cement

Will a synthetic liner be used in the pit? Yes 20 mi

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 _____)

Proposed Work For Which Pit Will Be Used:

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

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on December 31, 1999, 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 R.E. Schindler

Company Official (Typed Name) Robert Schindler

Company Official Title Completion Superintendent

Subscribed and sworn before me this 27th day of February, 2015.

Phyllis A. Copley

Notary Public.

My Commission Expires September 16, 2018

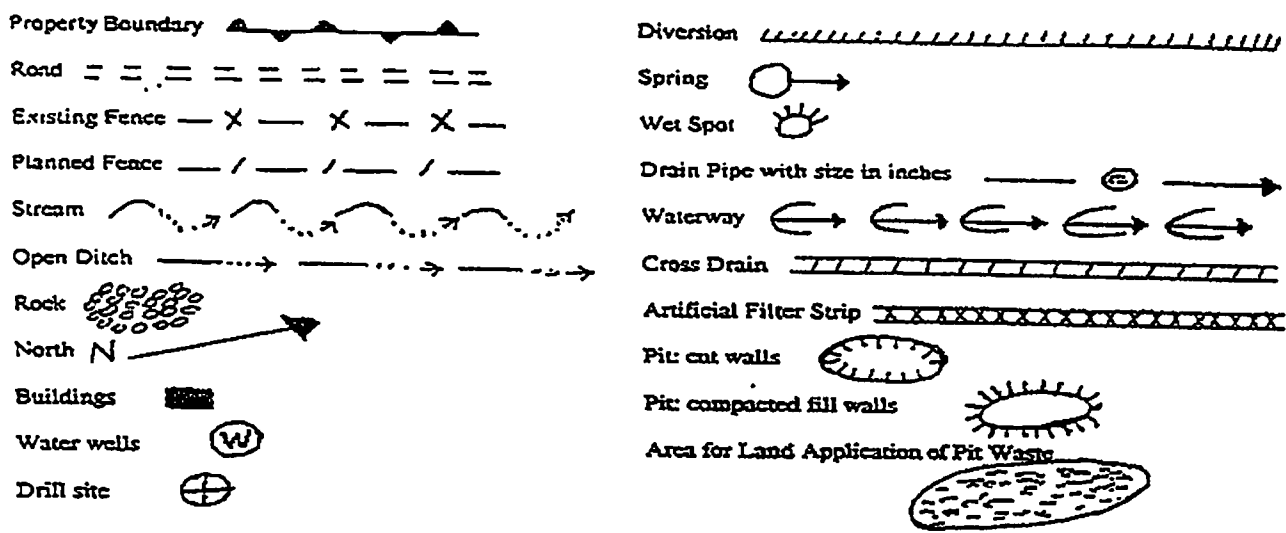


RECEIVED
Office of Oil and Gas

Attachment #1

API #: 47-043-01862
 Operator's Well No. 802530 P&A

LEGEND



Proposed Revegetation Treatment: Acres Disturbed 1.0 Prevegetation pH 6.1

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 1/3 TON lbs/acre (500 lbs minimum)

Mulch Hay 2 Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
CHESAPEAKE CONTRACTOR'S MIX	40	ORCHARD GRASS	15
ALSIKE CLOVER	5	ALSIKE CLOVER	5
ANNUAL RYE	15		

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:

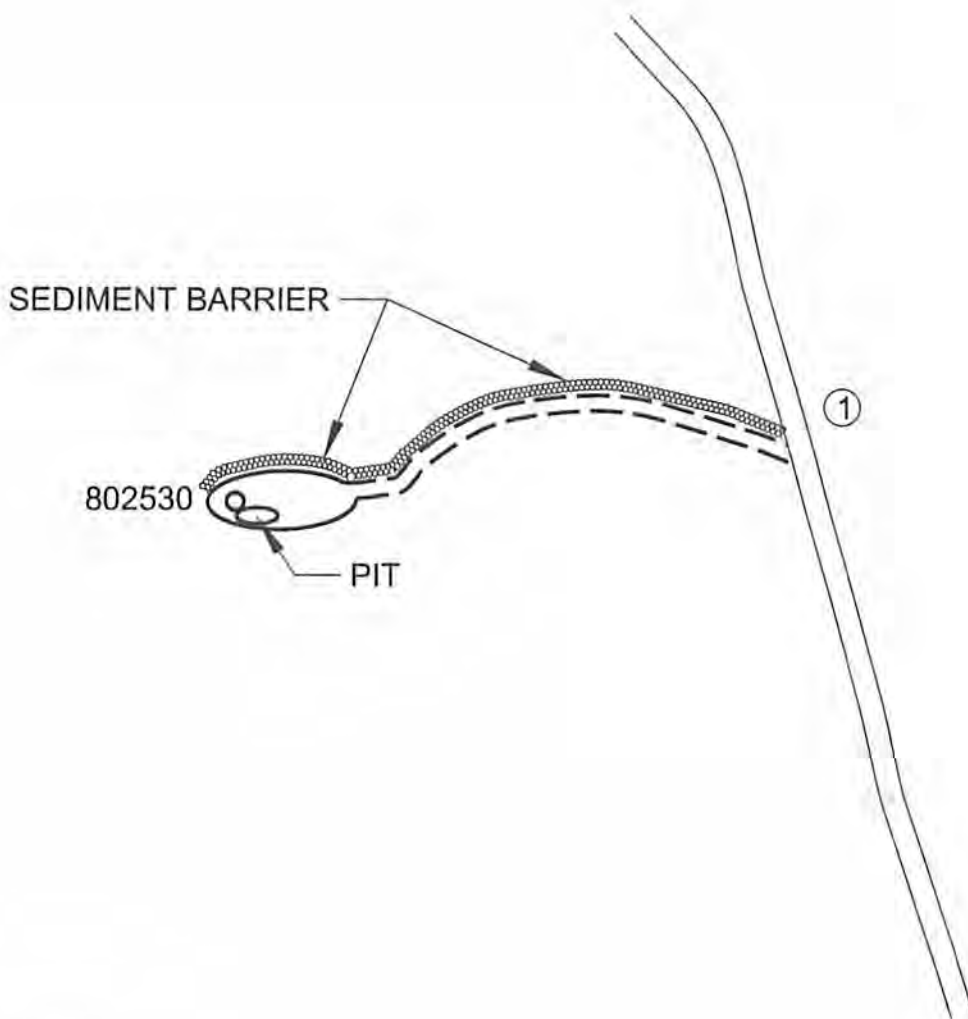
Title: inspector OGG

Date: 3-18-15

Field Reviewed? () Yes () No

RECLAMATION DIAGRAM
WELL LOCATION 802530

API 47-043-01862



GENERAL NOTES

This drawing is a schematic representation of the well site and access road. Proposed structures such as well site, drilling pit, roadways, culverts, sediment barriers, etc. are shown in approximate pre-planning configurations.

All culvert pipes will be a minimum of 15 inches in diameter. All culvert pipes installed will be accompanied by an entrance sump with dimensions no less than 3 feet (width) x 3 feet (length) x 4 feet (deep). Culverts will be installed at an angle to ensure proper flow. The out fall of culverts will be protected from erosion and sedimentation using large rocks or other sediment controls deemed necessary in the prevention of erosion and sedimentation. Storm water from the ditches to the culverts will be directed to stable natural vegetative areas. Where culverts are not practical, other structures will have other sediment control in place to minimize erosion sedimentation.

Cross drains, broad based dips, water bars, and diversion ditches, will be employed during the construction phase. These erosion and sediment control structures will be used to control erosion and sedimentation during the construction phase, where applicable, and in areas where permanent structures will be considered permanent and used as such.

Permanent seeding: See Attachment #1.

WV Department of
Environmental Protection

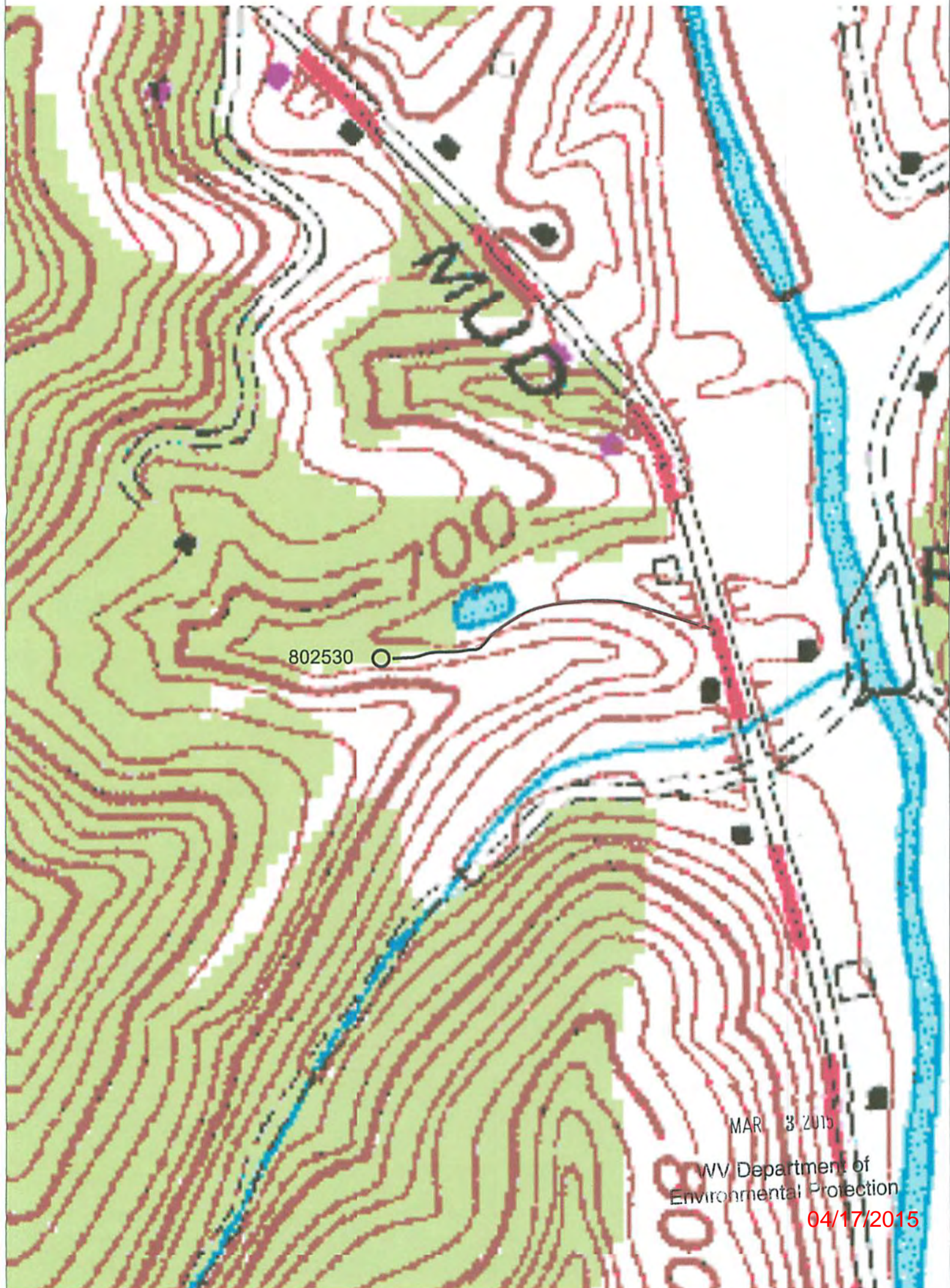
04/17/2015

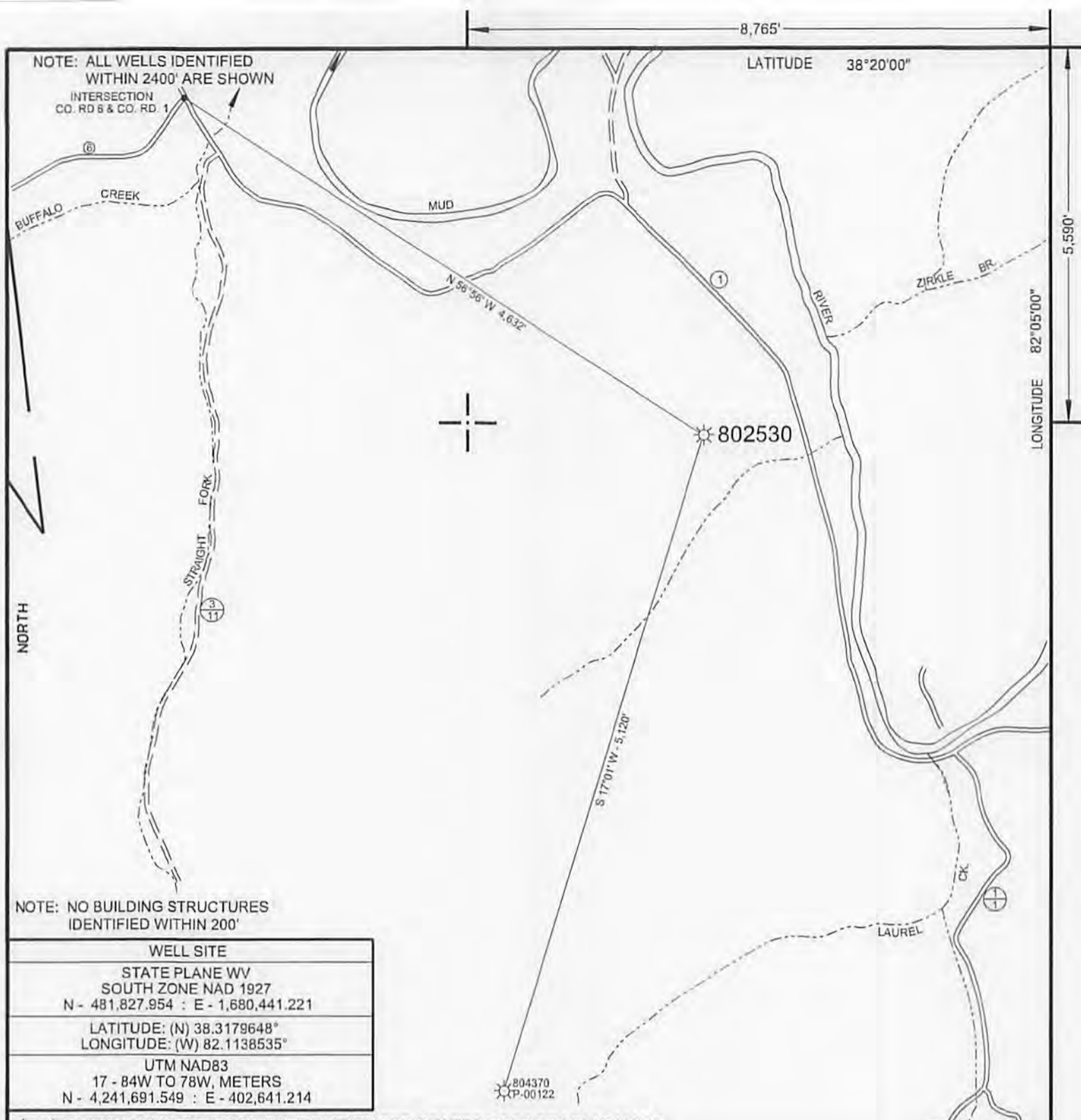
4301862 P

CHESAPEAKE APPALACHIA, L.L.C.

TOPOGRAPHICAL MAP OF ACCESS AND
WELL LOCATION 802530

API 47-043-01862





NOTE: ALL WELLS IDENTIFIED WITHIN 2400' ARE SHOWN
 INTERSECTION CO. RD 6 & CO. RD. 1

LATITUDE 38°20'00"

LONGITUDE 82°50'08"

NOTE: NO BUILDING STRUCTURES IDENTIFIED WITHIN 200'

WELL SITE	
STATE PLANE WV SOUTH ZONE NAD 1927	
N - 481,827.954	E - 1,680,441.221
LATITUDE: (N) 38.3179648°	
LONGITUDE: (W) 82.1138535°	
UTM NAD83	
17 - 84W TO 78W, METERS	
N - 4,241,691.549	E - 402,641.214

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

FILE NO.	802530 P&A.DGN
DRAWING NO.	802530 P&A
SCALE	1" = 1000'
MINIMUM DEGREE OF ACCURACY	1 : 200
PROVEN SOURCE OF ELEVATION	MAPPING 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) *Paul E. Miller*

R.P.E. _____ L.L.S. 647



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



DATE FEBRUARY 6, 20 15
 OPERATOR'S WELL NO. 802530
 API WELL NO.

47 STATE 043 COUNTY 01862 P PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 690' WATER SHED MUD RIVER
 DISTRICT CARROLL COUNTY LINCOLN
 QUADRANGLE HAMLIN, WV 7.5'
 SURFACE OWNER JASON WOODALL ACREAGE --
 OIL & GAS ROYALTY OWNER _____ LEASE ACREAGE 109
 LEASE NO. 1024321

COUNTY NAME
 PERMIT

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 X CLEAN OUT AND REPLUG ___
 TARGET FORMATION _____ ESTIMATED DEPTH _____
 WELL OPERATOR CHESAPEAKE APPALACHIA, L.L.C. DESIGNATED AGENT JESSICA GREATHOUSE
 ADDRESS P.O. BOX 18496, OKLAHOMA CITY, OK 73154-0496 ADDRESS CHESAPEAKE APPLACHIA, L.L.C. PO BOX 6070, CHARLESTON, WV 25362

FORM WW-6

04/17/2015