



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

November 25, 2014


WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-8702118, 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: 1885
Farm Name: SAMS, A. L.
API Well Number: 47-8702118
Permit Type: Plugging
Date Issued: 11/25/2014

Promoting a healthy environment.

11/28/2014

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.

8702118P

FORM WW-4 (B)
Observe
File Copy
(Rev. 2/01)

1) Date: 10/15/2014
2) Operator's Well No. 801885 P&A
3) API Well No. 47-087-02118

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

CK 5202854
\$100⁰⁰

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 999' Watershed Right Fork of Sandy Creek
 District Geary County Roane Quadrangle Newton, 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 9) Plugging Contractor
 Name Ed Gainer Name Chesapeake Appalachia, L.L.C.
 Address P.O. Box 821 Address P.O. Box 18496
Spencer, WV 25276 Oklahoma City, OK 73154-0496

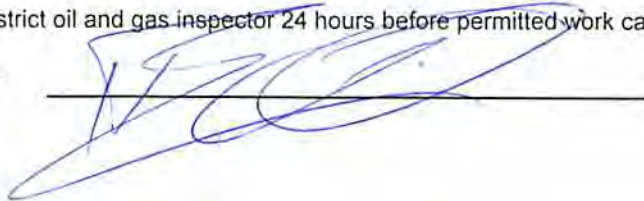
10) Work Order: The work order for the manner of plugging this well is as follows:

See Attached Sheet

See Attachment

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

Work Order approved by Inspector



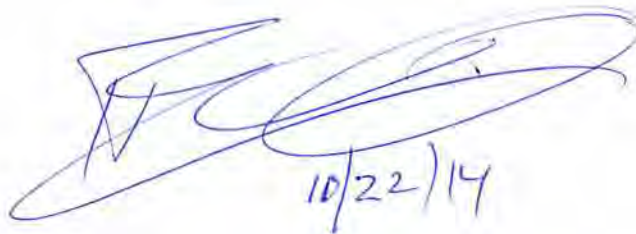
Date

10/22/14

11/28/2014

801885 P&A PROCEDURE

- 1) Prepare road and location, MIRU service rig
- 2) Run in hole with tools and check TD at approximately 1835'
- 3) Attempt to pull 3 1/2" and packer
 - A) If successful:
 - a) Run W.S. to 1775', load hole with gel
 - b) Spot 150' cement plug 1775'-1625', pull W.S.
 - c) Proceed to step #4
 - B) If unsuccessful:
 - a) Cut 3 1/2" at free-point (approximately 1730') and pull
 - b) Run W.S. to 1730', load hole with gel
 - c) Spot 125' cement plug 1730'-1605', pull W.S.
 - d) Proceed to step #4
- 4) Run in hole with tools to check TOC (If top of plug is below 1670', then re-set plug)
- 5) Cut 6 5/8" casing at free-point (approximately 1150') and pull
- 6) Run W.S. to 1150', load hole with gel
- 7) Spot 100' cement plug 1150'-1050', pull W.S. to 700'
- 8) Spot 100' cement plug 700'-600', pull W.S. to 500' Coal
- 9) Spot 100' cement plug 500'-400', pull W.S. to 130'
- 10) Spot 130' cement plug 130' – surface
- 11) Pull W.S. and top off with cement
- 12) Erect monument and reclaim as prescribed by law



10/22/14

11/28/2014
Received
Office of Oil & Gas
OCT 22 2014

UNITED FUEL GAS COMPANY
(INCORPORATED)

Serial Well No. 1885 Lease No. 16465 Map Square 36-75

REASON FOR DRILLING Oil

RECORD OF WELL No. 1885 on the
A. D. Sams Farm of 59 1/2 Acres
in Geary District
Roane County
Clendenin Field, State of W. Va.

Rig Commenced 1928
Rig Completed 1928
Drilling Commenced February 28 1928
Drilling Completed March 31st 1928
Drilling to cost per foot
Contractor is: U F G Co Engr. Dept
Address: Charleston, W. Va.

Driller's Names C M Goodwill
L C Graham
D Patrick

CASING AND TUBING

TEST BEFORE SHOT

Size	Used in Drilling	Left in Well	100ths of Water in _____ inch
18			<u>2</u>
13			_____ of Merc. in _____ inch
10			10ths Volume <u>476,160</u> Cu. ft.
8 1/4	<u>540'</u>		TEST AFTER SHOT
6 5/8	<u>1688' 10"</u>	<u>1688' 10"</u>	_____ of Water in _____ inch
5 3/16			_____ of Merc. in _____ inch
4 7/8			10ths Volume _____ Cu. ft.
4			Rock pressure <u>500</u>
3	<u>1855' 11"</u>	<u>1855' 11"</u>	Date shot _____
2			Size of Torpedo _____
SHUT IN			Oil Flowed _____ bbls. 1st 24 hrs.
Date <u>3-31-28</u>			Oil Pumped _____ bbls. 1st 24 hrs.
3" Tubing or _____			Well abandoned and
Size of Packer <u>3x5 3/16x16</u>			Plugged _____ 10 _____
Kind of Packer <u>Anchor</u>			set at <u>1755</u>
1st Perf. Set <u>At</u> from <u>1834</u>			
2nd Perf. Set <u>At</u> from <u>1780</u>			

DRILLER'S RECORD

Formation	Top	Bottom	Thickness	Remarks
Slate & Lime shells	0	65	65	Water 450
Sand	65	100	35	Hole Full water 1240
Slate	100	110	10	
Red Rock	110	125	15	
Slate & Lime	125	160	35	Gas 1702 Not enough to test
Sand	160	180	20	" 1716 40/10 W 1"
Slate	180	245	65	
Sand Shells	245	365	120	Hole Reduced 1740 SL
Slate	365	400	35	
Sand & Lime	400	450	50	Gas 1768-1773 86/10 W 2"
Slate	450	500	50	" 1778-1780 120/10 W 2"
Sand	500	670	170	
Coal	670	673	3	
Slate	673	700	27	Steel line measurement on 6 5/8"
Sand	700	775	75	casing 1675, casing run on 6
Slate	775	900	125	6 5/8x8 1/2x10 B H Packer.
Sand	900	1000	100	
Slate & Shells	1000	1140	140	
Salt Sand	1140	1380	240	
Slate	1380	1410	30	
Sand	1410	1540	130	
Slate	1540	1560	20	
Pink Rock	1560	1570	10	APPROVED _____
Slate	1570	1580	10	
Maxon Sand	1580	1600	20	
Little Lime	1600	1635	35	
Slate	1635	1640	5	
Sand Shell	1640	1655	15	
Pencil Cave	1655	1662	7	
Big Lime	1662	1765 SL	103	
Injun	1765	1811 sl	46	
Slate & Shells	1811	1842	31	
Total Depth		1842 SL		

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Office of Oil & Gas
11/28/2014
OCT 22 2014

WW4-A
Revised
2/01

1) Date: 10/15/2014
2) Operator's Well No. 801885 P&A
3) API Well No. 47-087-02118

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 Linda Lee Atwood ✓
Address 12773 Clay Road
Newton, WV 25266

(b) Name Lana C. Rogers ✓
Address 110 Hill street
Spencer, WV 25276

(c) Name _____
Address _____

6) Inspector Ed Gainer
Address P.O. Box 821
Spencer, WV 25276

Telephone 304-389-7582

5) Coal Operator
(a) Name None
Address _____

Coal Owner(s) with Declaration
(b) Name See attached sheet
Address _____

Name _____
Address _____

Coal Lessee with Declaration
(c) Name None
Address _____

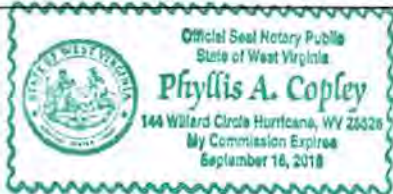
Name _____
Address _____

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 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: R.E. Schaefer
Its: Completion Superintendent
Address: P.O. Box 18496
Oklahoma City, OK 73154-0496
Telephone: 405-935-4073

Subscribed and sworn before me this 15th day of October the year of 2014
Phyllis A. Copley Notary Public
My Commission Expires September 16, 2018

Received

OCT 16 2014

8702118P

Well #: 801885 P&A
API # 47-087-02118

COAL OWNERS

Martha Miller ✓
103 Stoffel Road
Elkview, WV 25071

Charles A. Smith ✓
94 Dogwood Trail
Naiper, WV 26631

James E. Smith ✓
306 Woodbriar Drive
Johnson City, TN 37604

Received

OCT 16 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

11/28/2014

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NAIPER, WV 26631

OFFICIAL USE

Postage	\$ 11.40	0522
Certified Fee	13.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	10.00	
Total Postage & Fees	\$ 47.40	10/15/2014

Sent To: **801885 P&A (Coal Owner)**
 Charles A. Smith
 94 Dogwood Trail
 Naiper, WV 26631

PS Form 3800, August 2006

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NEWTON, WV 25266

OFFICIAL USE

Postage	\$ 11.40	0522
Certified Fee	13.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	10.00	
Total Postage & Fees	\$ 47.40	10/15/2014

Sent To: **801885 P&A (surface)**
 Linda Lee Atwood
 12773 Clay Road
 Newton, WV 25266

PS Form 3800, August 2006

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ELKVIEW, WV 25071

OFFICIAL USE

Postage	\$ 11.40	0522
Certified Fee	13.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	10.00	
Total Postage & Fees	\$ 47.40	10/15/2014

Sent To: **801885 P&A (Coal Owner)**
 Martha K. Miller
 103 Stoffel Road
 Elkview, WV 25071

PS Form 3800, August 2006

Received

OCT 16 2014

Office of Oil and Gas
 WV Dept. of Environmental Protection

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SPENCER, WV 25226

OFFICIAL USE

Postage	\$ 11.40	0522
Certified Fee	13.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	10.00	
Total Postage & Fees	\$ 47.40	10/15/2014

Sent To: **801885 P&A (surface along access route)**
 Lana C. Rogers
 110 Hill Street
 Spencer, WV 25276

PS Form 3800, August 2006

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

JOHNSON CITY, TN 37604

OFFICIAL USE

Postage	\$ 11.40	0522
Certified Fee	13.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	10.00	
Total Postage & Fees	\$ 47.40	10/15/2014

Sent To: **801885 P&A (Coal Owner)**
 James E. Smith
 306 Woodbriar Drive
 Johnson City, TN 37604

PS Form 3800, August 2006

11/28/2014

8702118P

Form WW-9
Rev. 02/01

API Number 47-087-02118
Operator's Well No. 801885 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 Right Fork of Sandy Creek Quadrangle Newton, WV 7.5'
Elevation 999' County Lincoln District Geary

Description of anticipated Pit Waste: Plugging Returns/Cement

Will a synthetic liner be used in the pit? Yes 20 mil (min)

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 _____)

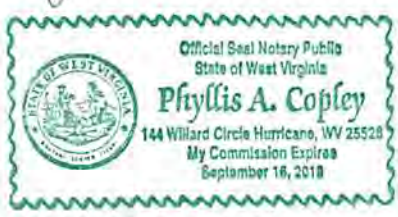
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on December 31, 1999, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations 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 *Robert Schindler*
Company Official (Typed Name) Robert Schindler
Company Official Title Completions Superintendent

Subscribed and sworn before me this 15th day of October, 2014
Phyllis A. Copley Notary Public.

My Commission Expires September 16, 2018

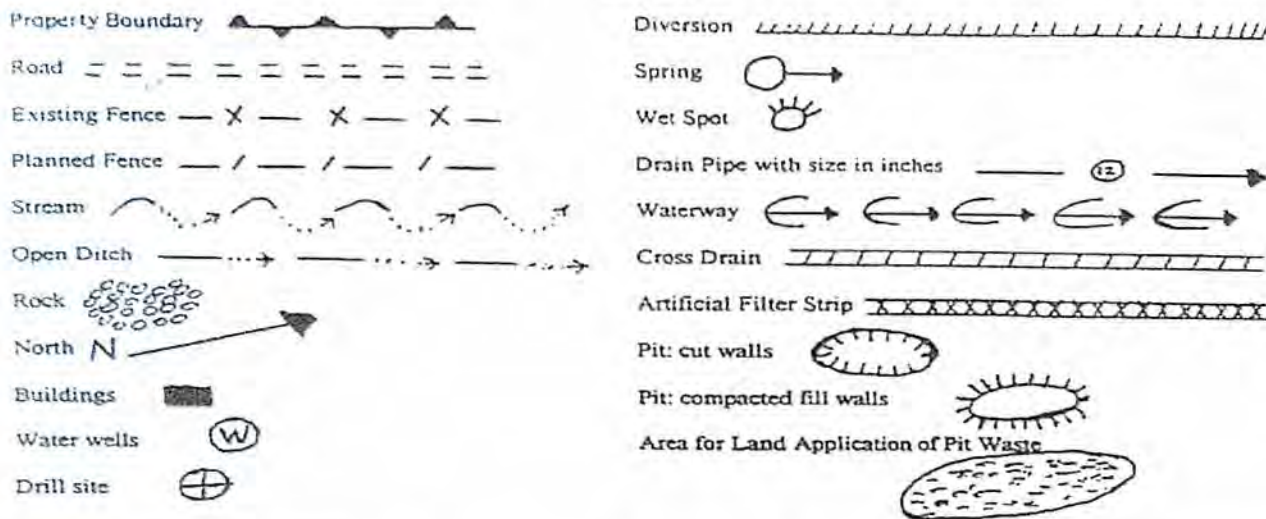


11/28/2014
Office of Oil & Gas
OCT 22 2014

Attachment #1

API #: 47-087-02118
 Operator's Well No. 801885 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
KY-31	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: [Signature]

Title: Inspector

Date: 10/22/14

Field Reviewed? () Yes (X) No

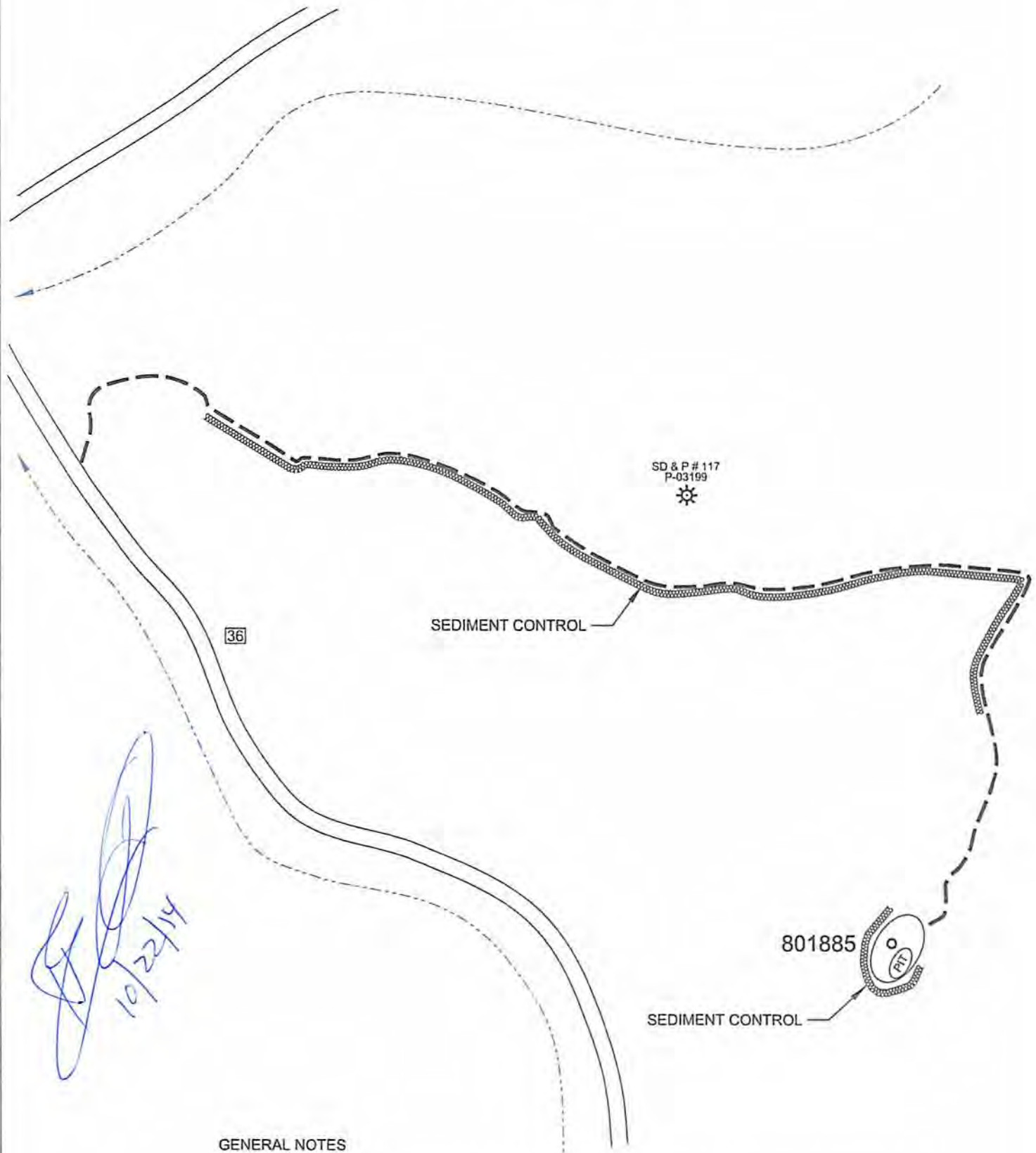
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 OCT 22 2014

CHESAPEAKE APPALACHIA, L.L.C.

8702118P

RECLAMATION DIAGRAM
WELL LOCATION 801885

API 47-043-02118



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, operator 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 that will allow. These structures will be considered permanent and used as such.

Permanent seeding: See Attachment #1.

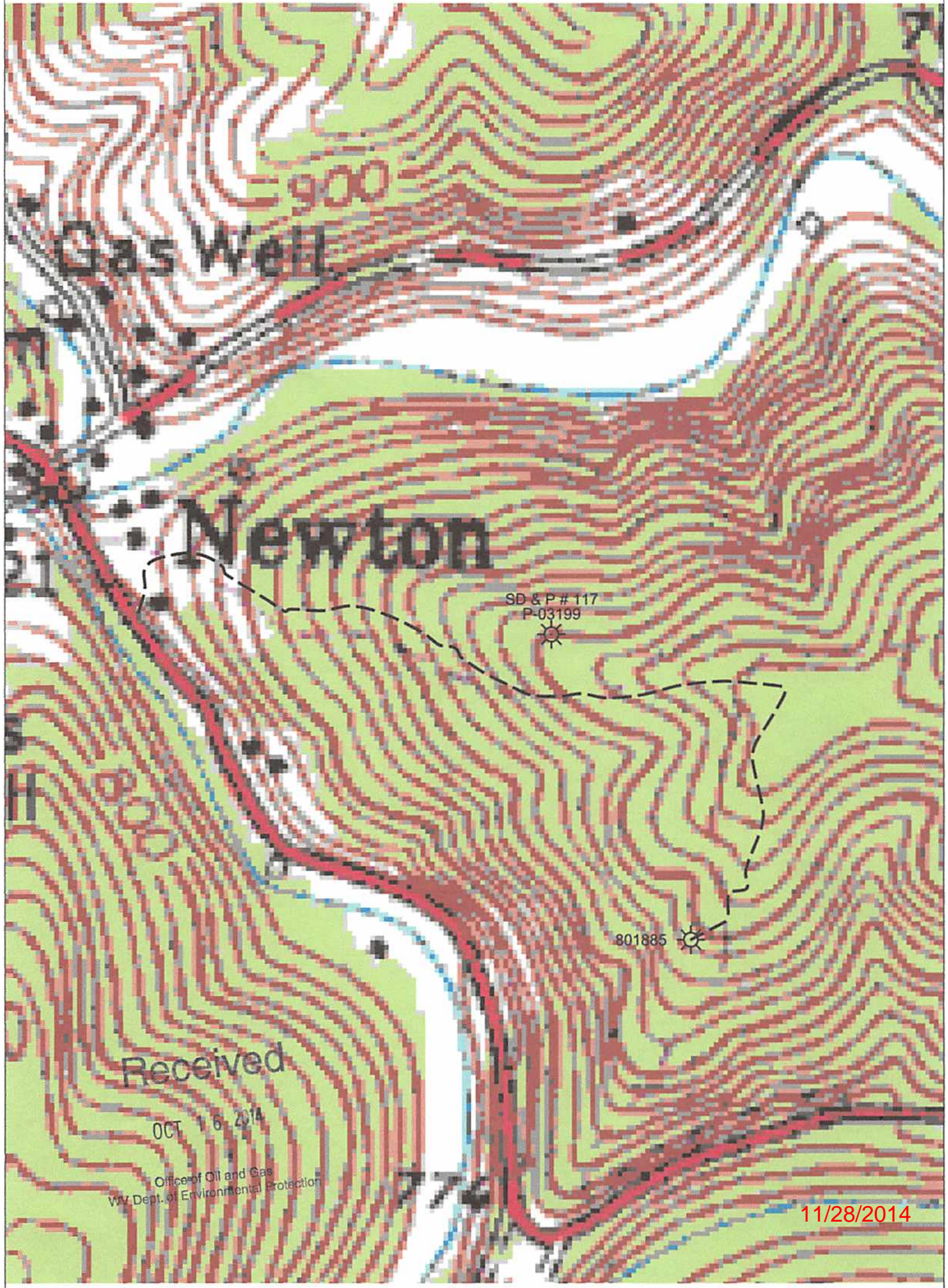
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OCT 22 2014

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CHESAPEAKE APPALACHIA, L.L.C.

TOPOGRAPHICAL MAP OF ACCESS AND
WELL LOCATION 801885

API 47-087-02118



Received

OCT 16 2014

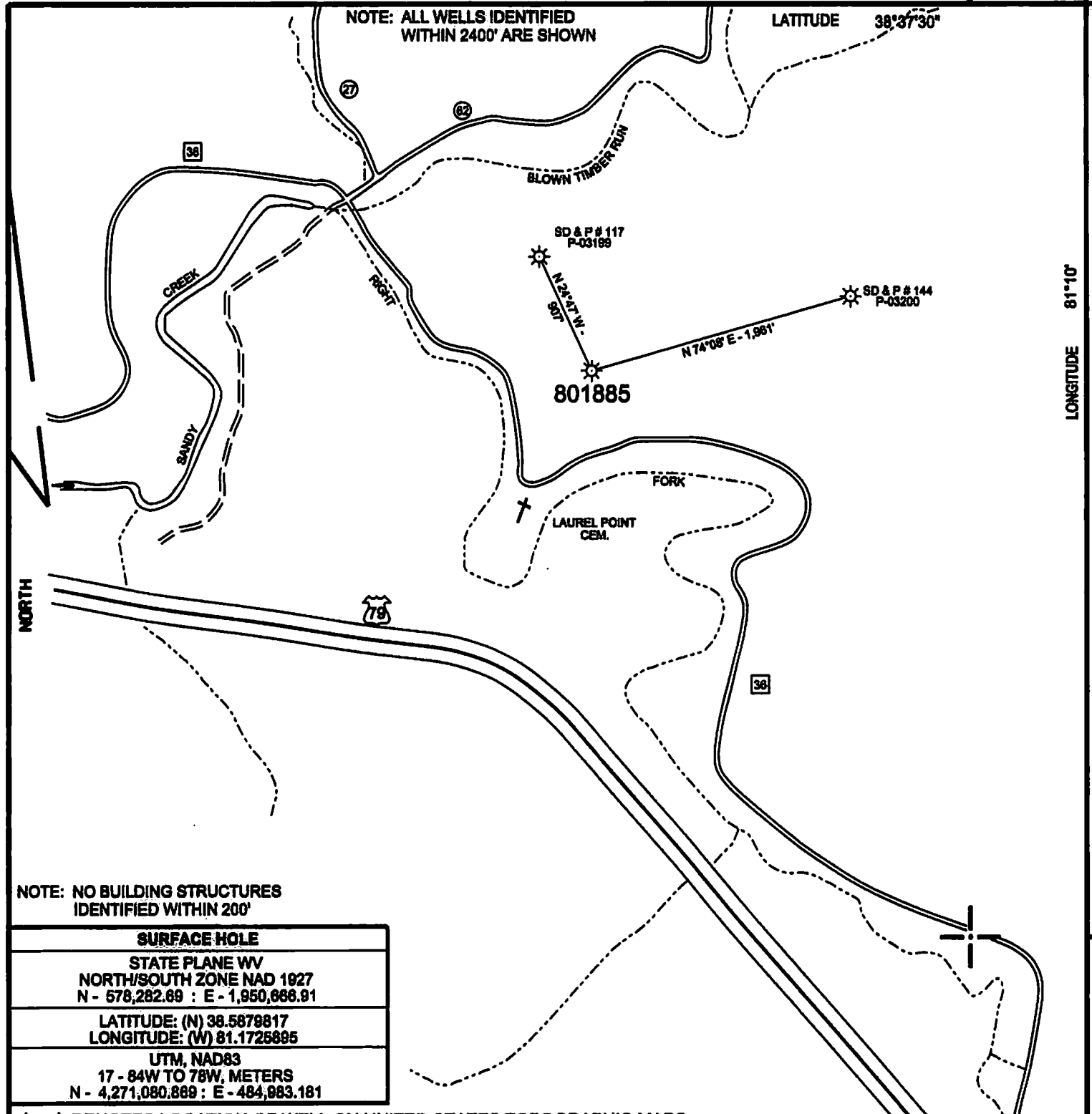
Office of Oil and Gas
WV Dept. of Environmental Protection

11/28/2014

1,693'

NOTE: ALL WELLS IDENTIFIED WITHIN 2400' ARE SHOWN

LATITUDE 38°37'30"



LONGITUDE 81°10'

13,464'

NOTE: NO BUILDING STRUCTURES IDENTIFIED WITHIN 200'

SURFACE HOLE	
STATE PLANE WV NORTH/SOUTH ZONE NAD 1927 N - 578,282.69 : E - 1,950,866.91	
LATITUDE: (N) 38.5879817 LONGITUDE: (W) 81.1725895	
UTM, NAD83 17 - 84W TO 78W, METERS N - 4,271,080.889 : E - 484,883.181	

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

FILE NO.	801885P&A.DGN
DRAWING NO.	801885P&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



FORM WW-6

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



DATE OCTOBER 6, 2014
OPERATOR'S WELL NO. 801885
API WELL NO. _____

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 888' WATER SHED RIGHT FORK OF SANDY CREEK
DISTRICT GEARY COUNTY ROANE

SURFACE OWNER LINDA LEE ATWOOD ACREAGE -
OIL & GAS ROYALTY OWNER _____ LEASE ACREAGE _____
LEASE NO. _____

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 CHEASAPEAKE APPALACHIA, L.L.C. DESIGNATED AGENT JESSICA GREATHOUSE
ADDRESS PO BOX 18488 OKLAHOMA CITY, OKLAHOMA 73154-0488 ADDRESS PO BOX 6070 CHARLESTON, WV 25362

COUNTY NAME

PERMIT

11/28/2014