



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

October 21, 2014

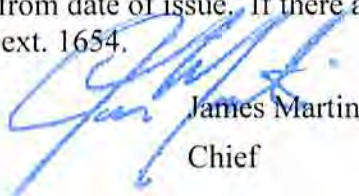
WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-1703350, 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: A-1428
Farm Name: MOSS, DAVID KENT
API Well Number: 47-1703350
Permit Type: Plugging
Date Issued: 10/21/2014

Promoting a healthy environment.

10/24/2014

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.

1703350P

WW-4B
Rev. 2/01

1) Date August 1, 2014
2) Operator's Well No. 911428
3) API Well No. 47-017 - 03350

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 1328' Watershed Dry Fork
District Greenbrier County Doddridge Quadrangle Big Isaac

6) Well Operator Chesapeake Appalachia, LLC 7) Designated Agent Eric B. Gillespie
Address P.O. Box 1300 Address P.O. Box 6070
Jane Lew, WV 26378 Charleston, WV 25301

8) Oil and Gas Inspector to be notified Name Douglas Newlon
Address 4060 Dutchman Road Macfarlan, WV 26148
9) Plugging Contractor Name R & J Well Service
Address P.O. Box 37 Hueysville, KY 41640

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

*Don
9-3-2014*

MIRU service rig (Blow Down Well). TOOH w/ 2 3/8" tbg to surface. TIH w/ 2 3/8" tbg to 5300' +/- . Circulate hole w/ 87 bbl of 6% gel. Circulate hole w/ 87 bbl of 6% gel.
TOOH w/ 2 3/8" tbg to 5084'. Pump 8 sks of Class A cement flush w/ 19.3 bbl 6% gel (103' Plug 4981' - 5084'). TOOH w/ 2 3/8" tbg to 4981', reverse circulate until clean, pump bottoms up with 6% gel. TOOH w/ 2 3/8" tubing to 4881', let plug set. TIH w/ 2 3/8" and tag plug, TOOH w/ 2 3/8" tbg to 3942' +/- . Pump 8 sks of Class A cement flush w/ 13.2 bbl 6% gel (103' Plug 3419' - 3522'). TOOH w/ 2 3/8" tbg to 3419', reverse circulate until clean, pump bottoms up with 6% gel. TOOH w/ 2 3/8" tubing, let plug set. MIRU wireline unit, tag plug. Shoot off 4 1/2" csg off @ 1600' +/- and retrieve csg. RDMO wireline unit. TIH w/ 2 3/8" tbg to 1650' +/- . Pump 18 sks of Class A cement flush w/ 6.0 bbl 6% gel (100' Plug 1550'-1650'). TOOH w/ 2 3/8" tbg to 1550', reverse circulate until clean, pump bottoms up with 6% gel. TOOH w/ 2 3/8" tbg to 1450', let plug set. TIH w/ 2 3/8" and tag plug, TOOH w/ 2 3/8" to 1378'. Pump 74 sks of Class A cement, flush w/ 4.3 bbl of 6% gel (254' Plug 1124'-1378'). TOOH w/ 2 3/8" tbg to 1124', reverse circulate until clean, pump bottoms up with 6% gel. TOOH w/ 2 3/8" tbg to 1024', let plug set. TIH w/ 2 3/8" and tag plug, TOOH w/ 2 3/8" tbg to 200' +/- . Pump 62 sks of Class A cement, or CTS. TOOH w/ 2 3/8" tbg to surface. Erect 36" Monument 33 RDMO. Reclaim Location.

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Office of Oil and Gas

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

SEP 05 2014

Work order approved by inspector _____

WV Department of Environmental Protection
Date _____

10/24/2014



Friday 12/21/2012

Well ID 911428 Proposed Plugging Procedure

- 1 **Safety is the highest priority.** Hold well site safety meetings prior to each significant operation.
- 2 Review critical parameters as well as emergency action plans.
- 3 MIRU construction equipment to BR&L and Earth Pit (remove any tanks, seperators, well lines, meter runs, exc.)
- 4 MIRU service rig (Blow Down Well)
- 5 TOO H w 2 3/8" tbg to surface
- 6 TIH w/ 2 3/8" tbg to 5300' +/-
- 7 Circulate hole w/ 87 bbl of 6% gel
- 8 TOO H w 2 3/8" tbg to 5084'
- 9 Pump 8 sks of Class A cement flush w/ 19.3 bbl 6% gel (103' Plug 4981' - 5084')
- 10 TOO H w/ 2 3/8" tbg to 4981', reverse circulate until clean, pump bottoms up with 6% gel
- 11 TOO H w/ 2 3/8" tubing to 4881', let plug set
- 12 TIH w/ 2 3/8" and tag plug, TOO H w/ 2 3/8" tbg to 3942' +/-
- 13 Pump 21 sks of Class A cement flush w/ 15.2 bbl 6% gel (262' Plug 3680' - 3942')
- 14 TOO H w/ 2 3/8" tbg to 3680', reverse circulate until clean, pump bottoms up with 6% gel
- 15 TOO H w/ 2 3/8" tubing to 3580', let plug set
- 16 TIH w/ 2 3/8" and tag plug, TOO H w/ 2 3/8" tbg to 3522' +/-
- 17 Pump 8 sks of Class A cement flush w/ 13.2 bbl 6% gel (103' Plug 3419' - 3522')
- 18 TOO H w/ 2 3/8" tbg to 3419', reverse circulate until clean, pump bottoms up with 6% gel
- 19 TOO H w/ 2 3/8" tubing, let plug set
- 20 MIRU wireline unit, tag plug
- 21 Shoot off 4 1/2" csg off @ 1600' +/- and retrieve csg, RDMO wireline unit
- 22 TIH w/ 2 3/8" tbg to 1650' +/-
- 23 Pump 18 sks of Class A cement flush w/ 6.0 bbl 6% gel (100' Plug 1550'-1650')
- 24 TOO H w/ 2 3/8" tbg to 1550', reverse circulate until clean, pump bottoms up with 6% gel
- 25 TOO H w/ 2 3/8" tbg to 1450', let plug set
- 26 TIH w/ 2 3/8" and tag plug, TOO H w/ 2 3/8" to 1378'
- 27 Pump 74 sks of Class A cement, flush w/ 4.3 bbl of 6% gel (254' Plug 1124'-1378')
- 28 TOO H w/ 2 3/8" tbg to 1124', reverse circulate until clean, pump bottoms up with 6% gel
- 29 TOO H w/ 2 3/8" tbg to 1024', let plug set
- 30 TIH w/ 2 3/8" and tag plug, TOO H w/ 2 3/8" tbg to 200' +/-
- 31 Pump 62 sks of Class A cement, or CTS
- 32 TOO H w/ 2 3/8" tbg to surface
- 33 Erect 36" Monument
- RDMO, Reclaim Location

OK gmm

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Office of Oil and Gas
SEP 05 2014
WV Department of
Environmental Protection

10/24/2014

Well Data	
Location (Surface)	Lat 39.1804 Long. -80.5737
TD	5350'

Casing and Tubular Data				
String	Size	Weight/Grade	Depth	TOC
Surface	8 5/8"	20#	1174	
Production	4 1/2"	10.5#	5156	1792

Capacities				
Size	Weight	(Gal/ft)	(Bbl/ft)	(Cu ft/ft)
8 5/8"	20#	2.7374	0.0652	0.3659
7 7/8" Open Hole	N/A	2.529	0.0601	0.338
4 1/2"	10.5#	0.669	0.0159	0.0895
2 3/8"	4.7#	0.162	0.00387	0.0217

Driving Directions to Nutter 2 (911428)
<p>From Jane Lew:</p> <ol style="list-style-type: none"> 1. Head northwest on Co Rd 7/Hackers Creek Rd toward Co Rd 14/Lifes Run Rd (0.9 mi) 2. Turn right onto US-19 N/Main St - Continue to follow US-19 N (3.9 mi) 3. Turn left onto Co Route 3/5/Kincheloe Run Rd - Continue to follow Kincheloe Run Rd (1.6 mi) 4. Turn right onto Co Route 35/Kincheloe Run Rd (2.2 mi) 5. Continue onto Co Route 35/11 (0.4 mi) 6. Continue onto Co Route 35/Kincheloe Run Rd - Continue to follow Co Route 35 (1.3 mi) 7. Continue onto Co Rd 35/Kincheloe Rd - Continue to follow Kincheloe Rd (2.4 mi) 8. Turn right onto Co Route 35/Kincheloe Rd (0.9 mi) 9. Turn left toward Co Route 25/13 (0.7 mi) 10. Turn left onto Co Route 25/13 (0.4 mi) 11. Turn left onto Co Route 27/Dry Fork (0.4 mi) 12. Lease Road will be on left

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Office of Oil and Gas

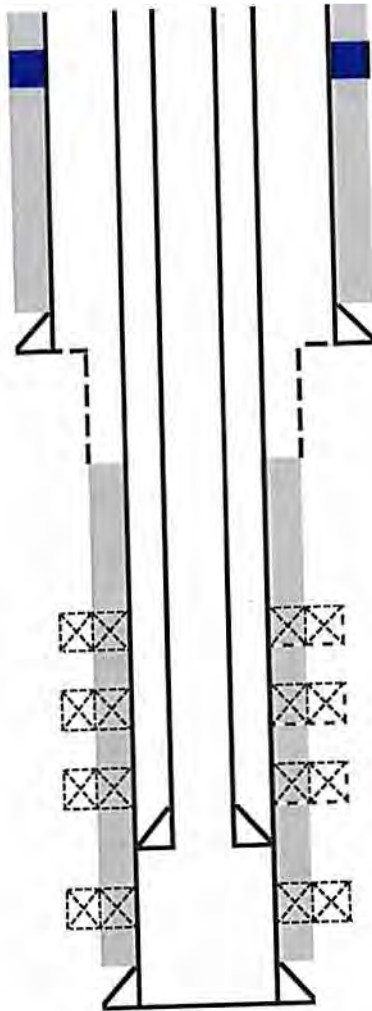
SEP 05 2014

WV Department of
Environmental Protection






10/24/2014

Well ID 911428

Friday 12/21/2012

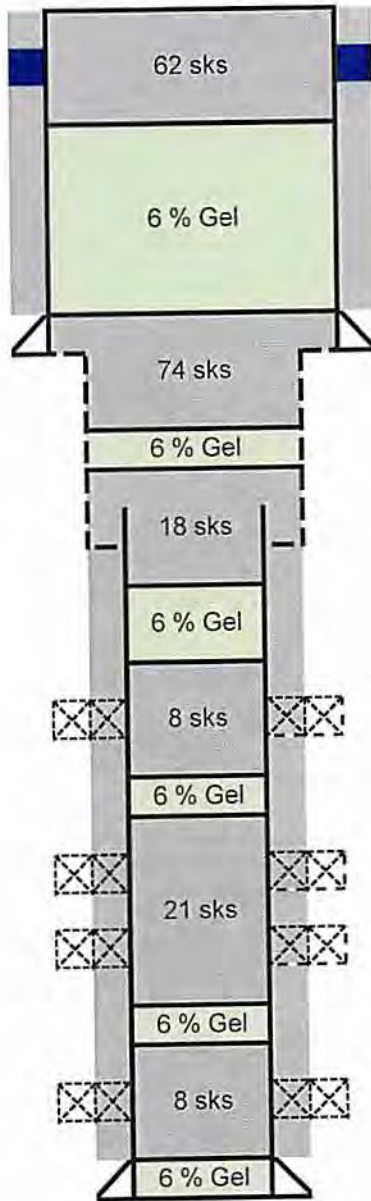


H2O @	139	
8 5/8" 20# csg set @	1174	
Elevation	1328	
TOC	1792	
Speechley Perf	3469	3472
Speechley Perf	3730	3740
Balltown Perf	3884	3892
2 3/8" tbg @	5026	
Benson Perf	5031	5034
4 1/2" 10.5#csg set @	5156	
TD 7 7/8" hole @	5350	

-  Cement
-  Perforated Zone
-  Cast Iron Bridge Plug
-  Coal
-  H2O

Well ID 911428

Friday 12/21/2012



H2O @	139	
Surface Plug	0	200
8 5/8" 20# csg set @	1174	
Elevation & 8 5/8 Plug	1124	1378
4 1/2 Casing Plug	1550	1650
TOC	1792	
Perf	3469	3472
Perf Plug	3419	3522
Perf	3730	3740
Perf Plug	3680	3942
Perf	3884	3892
2 3/8" tbg @	5026	
Perf	5031	5034
Perf Plug	4981	5084
4 1/2" 10.5#csg set @	5156	
TD 7 7/8" hole @	5350	

IV-35
(Rev 8-81)

RECEIVED
OCT 9 1984



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Date October 3, 1984
Operator's
Well No. A-1428
Farm Nutter
API No. 47 - 017 - 3350

OIL & GAS DIVISION
DEPT. OF MINES

OIL and GAS DIVISION

RECEIVED
AUG 5 - 1985

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

WELL TYPE: OIL X / GAS X / LIQUID INJECTION / WASTE DISPOSAL /
(If "Gas", Production / Underground Storage / Deep / Shallow XX /)

LOCATION: Elevation: 1328' Watershed Dry Fork
District: Greenbrier County: Doddridge Quadrangle: Big Isaac 7.5'

COMPANY ALAMCO, INC
200 West Main Street
ADDRESS Clarksburg, West Virginia 26301
DESIGNATED AGENT ALAMCO, INC
200 West Main Street
ADDRESS Clarksburg, West Virginia 26301
SURFACE OWNER David Kent Moss
ADDRESS Rt. 2, Box 201, Buckhannon, WV 26201
MINERAL RIGHTS OWNER Don H. Nutter et al
ADDRESS 147 Vallen St., Salem, WV 26246
OIL AND GAS INSPECTOR FOR THIS WORK Mike
Underwood ADDRESS Rt. 2, Salem, WV 26246
PERMIT ISSUED August 23, 1984
DRILLING COMMENCED August 31, 1984
DRILLING COMPLETED September 10, 1984

Casing & Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. Ft.
20-16 Cond.			
11-3/4"			
9 5/8"			
8 5/8"	1174'	1174'	to surface
7"			
5 1/2"			
4 1/2"	5156'	5156'	w/570 sks 1900'
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Benson DEPTH 5200 FEET

Depth of completed well 5350 feet Rotary x / Cable Tools
Water Strata depth: Fresh 1600 feet Salt feet
Coal seam depth: None listed Is coal being mined in this area? No

OPEN FLOW DATA

Producing formation Benson, Balltown, Speechley-Warren Pay zone depth See Back feet
Gas: Initial open flow No Show Mcf/d (Oil) Initial open flow No Show Bbl/d
Final open flow 1400 Mcf/d Final open flow 50 Bbl/d
Time of open flow between initial and final tests 2 hours
Static rock pressure 950 psig (surface measurement after 18 hours shut-in
(If applicable due to multiple completion--)
Second producing formation Pay zone depth feet
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 measurement) after hours shut-in
(continue on reverse side)

Dodd 3350

170350P

B2

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE ETC.

Well was fractured September 20, 1984
 Perforations: 3469 - 3472
 3730 - 3734
 3737 - 3740 Speechley-Warren
 3884 - 3892 Balltown
 5031 - 5034 Benson

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Fill	0	15	1-1/2" stream water @ 1600'
Sand & Shale	15	150	Gas check @ 2251' No show
Shale & Red Rock	150	325	Gas check @ 2559' No show
Sand & Shale	325	340	Gas check @ 2835' No show
Shale & Red Rock	340	770	Gas check @ 3238' No show
Sand & Shale	770	2104	Gas check @ 3545' No show
Little Lime	2104	2140	Gas check @ 3854' No show
Sand & Shale	2140	2156	Gas check @ 4101' No show
Big Lime	2156	2243	Gas check @ 4530' No show
Big Injun	2243	2296	Gas check @ 4864' No show
Sand & Shale	2296	5350 T.D.	Gas check @ 5168' No show

GAMMA RAY LOG TOPS

Pocono 2322'
 Weir 2362'
 Gantz 2530'
 Gordon Stray 2738'
 Gordon 2846'
 5th Sand 2958'
 Bayard 3086'
 Warren 3391'
 Upper Speechley 3591'
 Speechley 3727'
 Balltown 3884'
 Bradford 4499'
 Riley 4804'
 Benson 5030'

(Attach separate sheets as necessary)

ALAMCO, INC.

Well Operator
 By: *Bruce G. Padden*

Date: October 3, 1984

Note: Regulation 2.02 (i) provides as follows
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."

WW-4A
Revised 6-07

1) Date: August 1, 2014
2) Operator's Well Number
911428
3) API Well No.: 47 - 017 - 03350

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>Lowell P. Bee & Sharon D. Bee</u>	Name _____
Address <u>Rt. 3 Box 62</u>	Address _____
<u>Salem, WV 26426</u>	
(b) Name <u>Glen R. Houck & Michael S. Houck</u>	(b) Coal Owner(s) with Declaration
Address <u>6667 Division Highway</u>	Name <u>Eastern Associated Coal Corp. % Patriot Coal Corp.</u>
<u>Narvon, PA 17555</u>	Address <u>500 Lee Street Ease, Suite 900</u>
	<u>Charleston, WV 25301</u>
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Doug Newlon</u>	(c) Coal Lessee with Declaration
Address <u>4060 Dutchman Road</u>	Name _____
<u>Macfarlan, WV 26148</u>	Address _____
Telephone <u>304-932-8049</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 Chesapeake Appalachia, LLC
 By: [Signature]
 Its: Regulatory Analyst II
 Address P.O. Box 1300
Jane Lew, WV 26378
 Telephone 304-517-1416 EXT. 86024



Subscribed and sworn before me this 1st day of August, 2014
LeAnn Butcher Notary Public
 My Commission Expires February 7, 2021

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.

SEP 05 2014
WV Department of Environmental Protection

1703350P

7014 0510 0000 4539 9583

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Eastern Associated Coal Corp.
 c/o Patriot Coal Company ✓
 500 Lee Street East, Suite 900
 Charleston, WV 25301

7014 0510 0000 4539 9569

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Glen R. Houck & Michael S. Houck ✓
 6667 Division Highway
 Narvon, PA 17555

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Restricted Delivery Fee (Endorsement Required)	



Lowell P. Bee & Sharon D. Bee ✓
 Rt. 3 Box 62
 Salem, WV 26426

CK
5189314
10000

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, LLC OP Code 494477557

Watershed Dry Fork Quadrangle Big Isaac

Elevation 1328' County Doddridge District Greenbrier

Description of anticipated Pit Waste: Water from plugging process

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number 2D0072539/2D0413175/2D0610306/2D0610317)
- Reuse (at API Number at next anticipated well, API# will be included on the WR34/&or permit addendum)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain flowback will be put in steel tanks and reused or taken to permitted disposal facility)

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 [Signature]
Company Official (Typed Name) Dee Southall
Company Official Title Regulatory Analyst II

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Office of Oil and Gas
SEP 05 2014
WV Department of Environmental Protection

Subscribed and sworn before me this 2nd day of September, 2014

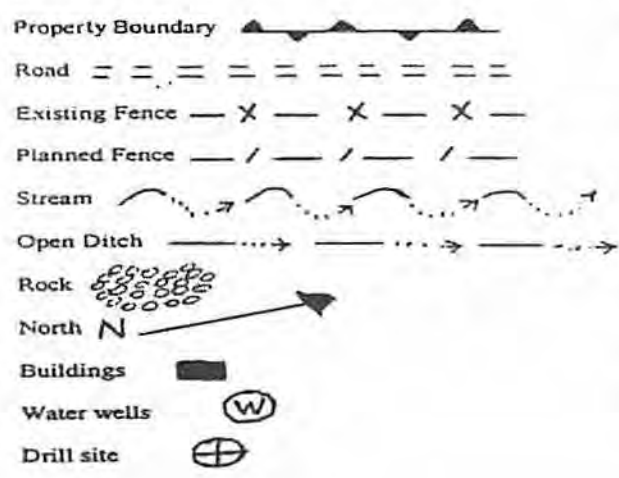
Brittany R Woody

Notary Public

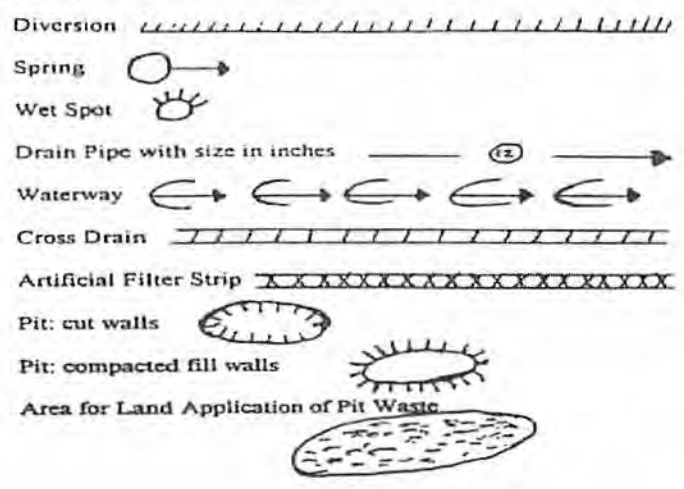
My commission expires 11/27/13



10/24/2014



LEGEND



Proposed Revegetation Treatment: Acres Disturbed _____ Prevegetation pH _____

Lime ^{as determined by pH test min. 2} _____ Tons/acre or to correct to pH 6.5

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

Mulch ^{Hay/Straw} _____ Tons/acre

Seed Mixtures

Seed Type	Area I	lbs/acre
Orchard Grass	20	
Red Top	15	
White Clover	15	

Seed Type	Area II	lbs/acre
Orchard Grass	20	
Red Top	15	
White Clover	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: Douglas Newlon

Comments: _____

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Office of Oil and Gas

SEP 05 2014

Title: _____ Oil and Gas Inspector

Date: 9-3-2014

WV Department of
Environmental Protection

Field Reviewed? () Yes (/) No

CHESAPEAKE APPALACHIA, L.L.C.

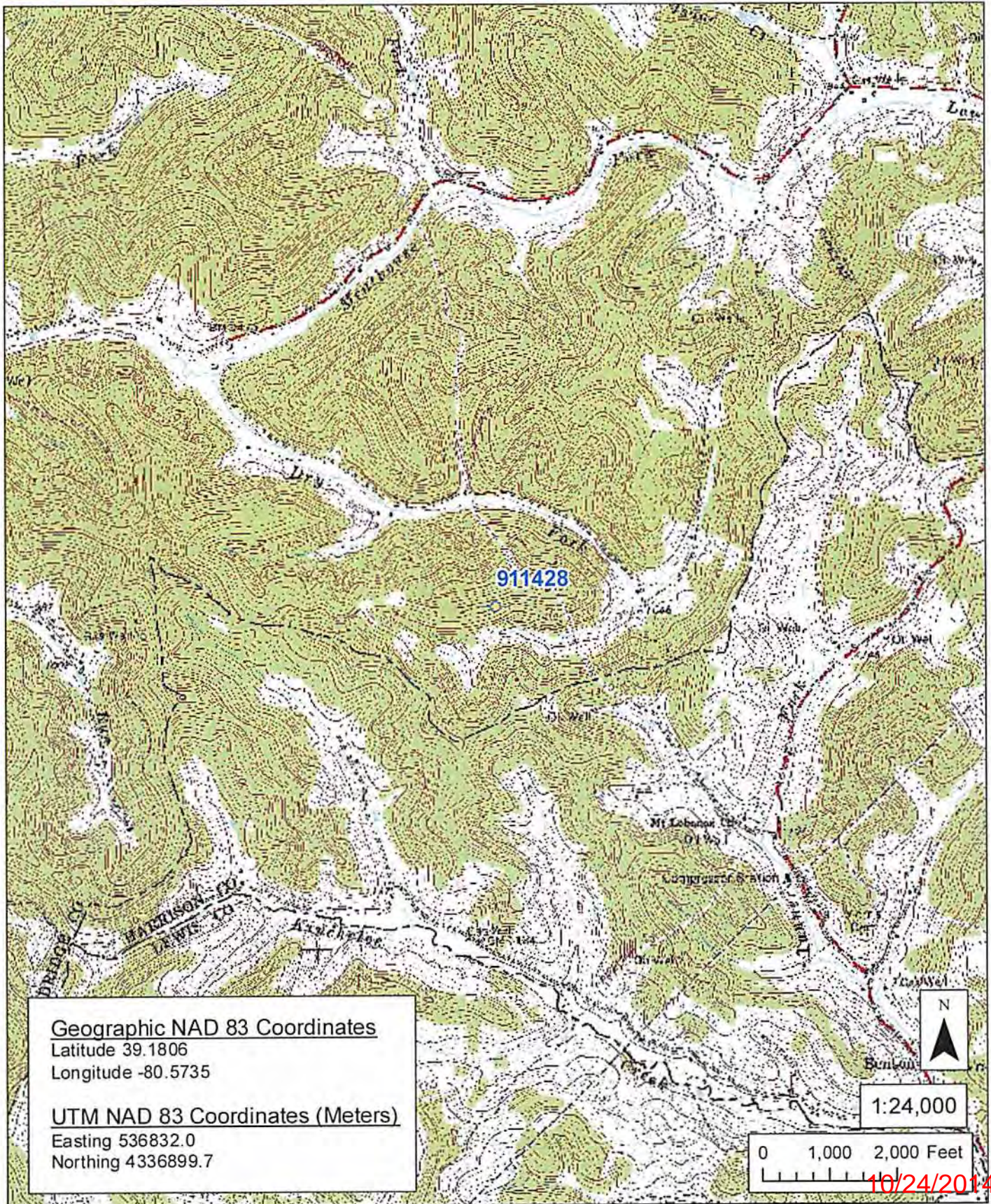
Topographical Map of Well 911428 (Nutter 2)

API = 47-17-3350

Field Office - Jane Lew

County - Harrison

1703350P



Geographic NAD 83 Coordinates

Latitude 39.1806

Longitude -80.5735

UTM NAD 83 Coordinates (Meters)

Easting 536832.0

Northing 4336899.7

1:24,000

0 1,000 2,000 Feet

10/24/2014

1703350P

WW-7

8-30-06



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

API:47-017-03350

WELL NO.: 911428

FARM NAME:

RESPONSIBLE PARTY NAME: Chesapeake Appalachia, LLC

COUNTY: Doddridge DISTRICT: Greenbrier

QUADRANGLE: Big Isaac

SURFACE OWNER: Lowell & Sharon Bee

ROYALTY OWNER: Mary Riddell, Bradford Simons, Morris Chapel Cemetery, Leatrice Gallien, Margaret Carroll, Dora Gum, Offa Robinson, Kristie Carroll, Joanne Carroll, Jonathon Carroll, Joshua Carroll, Charles Nutter, Jeffrey Allen Merritt, Diane Swiger, Francis Golden, Deborah Stahl, Mary Osbourne, Richard Hughes, Linda Weeks, Kellie Lewis, Lee Ann Williams, Robert Morris, Judith Ballard, Ray Carroll, Alma Jo Cook, Goldie Gregory, Robert Gum, Mona Harpold, Harriett Harless, Carolyn Jones, Donald Reynolds

UTM GPS NORTHING: 4,336,899.7

UTM GPS EASTING: 536,832.0

GPS ELEVATION: 1328'

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

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:
Survey grade GPS ____: Post Processed Differential ____
Real-Time Differential ____
Mapping Grade GPS ____: Post Processed Differential ____
Real-Time Differential ____
4. Letter size copy of the topography map showing the well location.

RECEIVED
Office of Oil and Gas
SEP 05 2014
WV Department of
Environmental Protection

10/24/2014

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

Signature _____
Date 8/1/14

Reg. Analyst II
Title _____