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

January 16, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-8100085, issued to HARPER, HAYDEN ENERGY KA, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities 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: 9116
Farm Name: CHAMBERS, J.
API Well Number: 47-8100085
Permit Type: Plugging
Date Issued: 01/16/2015

Promoting a healthy environment.

8100085-P

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.

8100085P

WW-4B
Rev. 2/01

1) Date October 28, 2014
2) Operator's Well No. Chambers #9116
3) API Well No. 47- 081 - 00085

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 X or Underground storage ____) Deep ____/ Shallow ____

5) Location: Elevation 1876 Watershed n/a based on records
District Clear Fork County Raliegh Quadrangle Eccles

6) Well Operator Hayden & Harper Energy KA, LLC
Address 1001 Moorehead Square Dr. Ste. 350
Charlotte, NC 28203

7) Designated Agent Eric Linn
Address 1001 Moorehead Square Dr. Ste. 350
Charlotte, NC 28203

8) Oil and Gas Inspector to be notified
Name Gary Kennedy
Address P.O. Box 268
Nimitz WV 25978

9) Plugging Contractor
Name Patchwork Oil & Gas, LLC
Address 8165 Elizabeth Pike
Elizabeth, WV 26143

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

Detailed plugging schematic to follow

Detailed step by step plugging procedure to follow schematic

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

Work order approved by inspector Gary Kennedy Date 11/13/14

8100085 P

Chambers #9116

47-081-00085

PROPOSED PLUGGING PROCEDURE

1. Prepare plugging permit application.

2. Certify to surface and coal owners.

3. Certify to designated State inspector for signature.

4. Once all signatures are obtained, copy for our records and certify to Jeff at the State Office for approval.

5. Receive plugging permit good for 2 years.

6. Notify the designated State inspector 24 hours prior to commencing operations.

7. Take equipment to location and begin prepping for plug.

8. Rig up

9. Verify total depth of 1669"

10. Run tubing to TD run gel, pull back to 1443'. Set first plug with 26 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 1443' up to 1300, begin attempting to rip casing at 1300, run 29 more sacks of Class A cement with no more than 3% CaCl2 and no other additives from 1300-1200'. (Bottom, Rip)

11. Pull tubing back, wait 8 hours

12. Run in and tag plug.

13. Run 5 sacks of 6% Bentonite gel from 1200' up to 780'.

14. Pull tubing to 780'. Set second plug with 29sacks of Class A cement with no more than 3% CaCl2 and no other additives from 780' up to 677'. (Coal seam)

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NOV 20 2014

15. Pull tubing back, wait 8 hours

16. Run in and tag plug.

17. Run 13 sack of 6% Bentonite gel from 677' up to 200'

18. Pull tubing back to 200' and run 100 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 200' up to surface (surface/coal)

* PULL 13", IF POSSIBLE.
* PULL 10", IF POSSIBLE

JLK

81000858

19. Solidify pit if necessary with more cement and lime, then bury.

20. Set 6" x 12.5" steel pipe with concrete with 1/2" API identification.

21. Rig down, and move equipment out.

22. Reclaim location

23. Prepare WR-34 & WR-38 for permit release.

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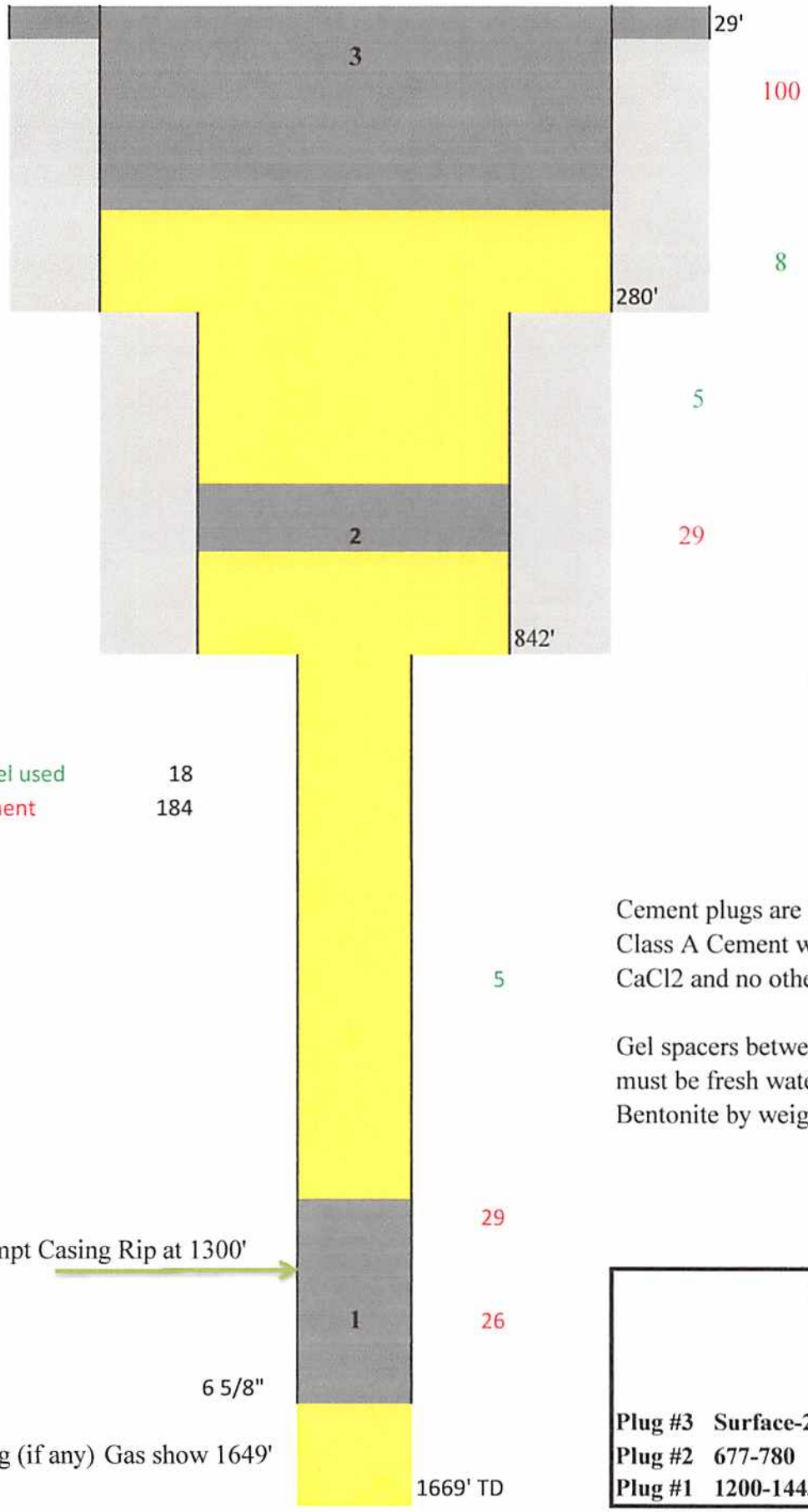
ELEV. 1876'



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50lb sacks of 6% gel used 18
100lb sacks of cement 184

Cement plugs are at a minimum of 100' Class A Cement with no more than 3% CaCl2 and no other additives.

Gel spacers between all cement plugs must be fresh water with at least 6% Bentonite by weight

: Cement 6 5/8"
: Gel
:Bridge Plug (if any) Gas show 1649'

Plugs		
Plug #3	**Surface-200'**	**Coal/water/surface**
Plug #2	**677-780**	**Coal seam**
Plug #1	**1200-1443**	**Bottom & Rip**

8100085P

OG-10

Eccles

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. RAL 85

~~Oil~~ Gas Well (KIND)

Company Hope Natural Gas Company.
Address 445 West Main St.C;arksburg,W.Va.
Farm Joseph Chambers Acres 631.1
Location (waters)
Well No. 9116 Elev. 1876
District Clear Fork County Raleigh.
The surface of tract is owned in fee by
Address
Mineral rights are owned by
Address
Drilling commenced March 14, 1947
Drilling completed May 10, 1947
Date Shot From To
With
Open Flow /10ths Water in Inch
12 /10ths Merc. in 3" O F Inch
Volume 1,212.000 Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.
Fresh water 27 60 115 feet feet
Salt water feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13	29	29	
10	280	280	Size of
8¼	842	842	
6⅝	1443	1443	Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date
8" jelled to surface- 7" set in 10 bags cement & jelled to surface. 6 5/8 not mentioned
COAL WAS ENCOUNTERED AT 105 FEET 24 INCHES
727 FEET 36 INCHES FEET INCHES
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Soil			0	30	water	27	
Slate			30	65	water	60	
Lime			65	80			
Sand			80	105			
Coal			105	107			
Sand			107	119	water	115	
Slate			119	191			
Lime			191	229			
Slate			229	245			
Lime			245	260			
Sand			260	277			
Lime shell			277	468			
Sand			468	491			
Slate shell			491	544			
Sand			544	616			
Slate			616	626			
Slate			626	701			
Sand			701	722			
Slate			722	727			
Coal			727	730			
Sand			730	870			
Slate			870	878			
Sand			878	955			
Slate			955	966			
Sand			966	1089			
Lime			1089	1095			
Sand			1095	1105			
Slate			1105	1130			
Sand			1130	1190			
Slate			1190	1227			
Lime shell			1227	1239			
Sand			1239	1253			
Red rock			1253	1278			
Slate			1278	1290			
Sand			1290	1335			
Red rock			1335	1390			
Lime hard			1390	1415			
Slate shell			1415	1435			
PRINCETON sand			1435	1446			

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NOV 20 2014

MAY 1947

(Over)

S100085P

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime			1446	k483			
Slate			1483	1614			
Line shell			1614	1630			
RAVENCLIFF			1630	1668	gas	1649-53-57-64	Bottom
Total depth				1669			

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Date May 21, 1947, 19

APPROVED Hope Natural Gas Company., Owner

By General Superintendent.

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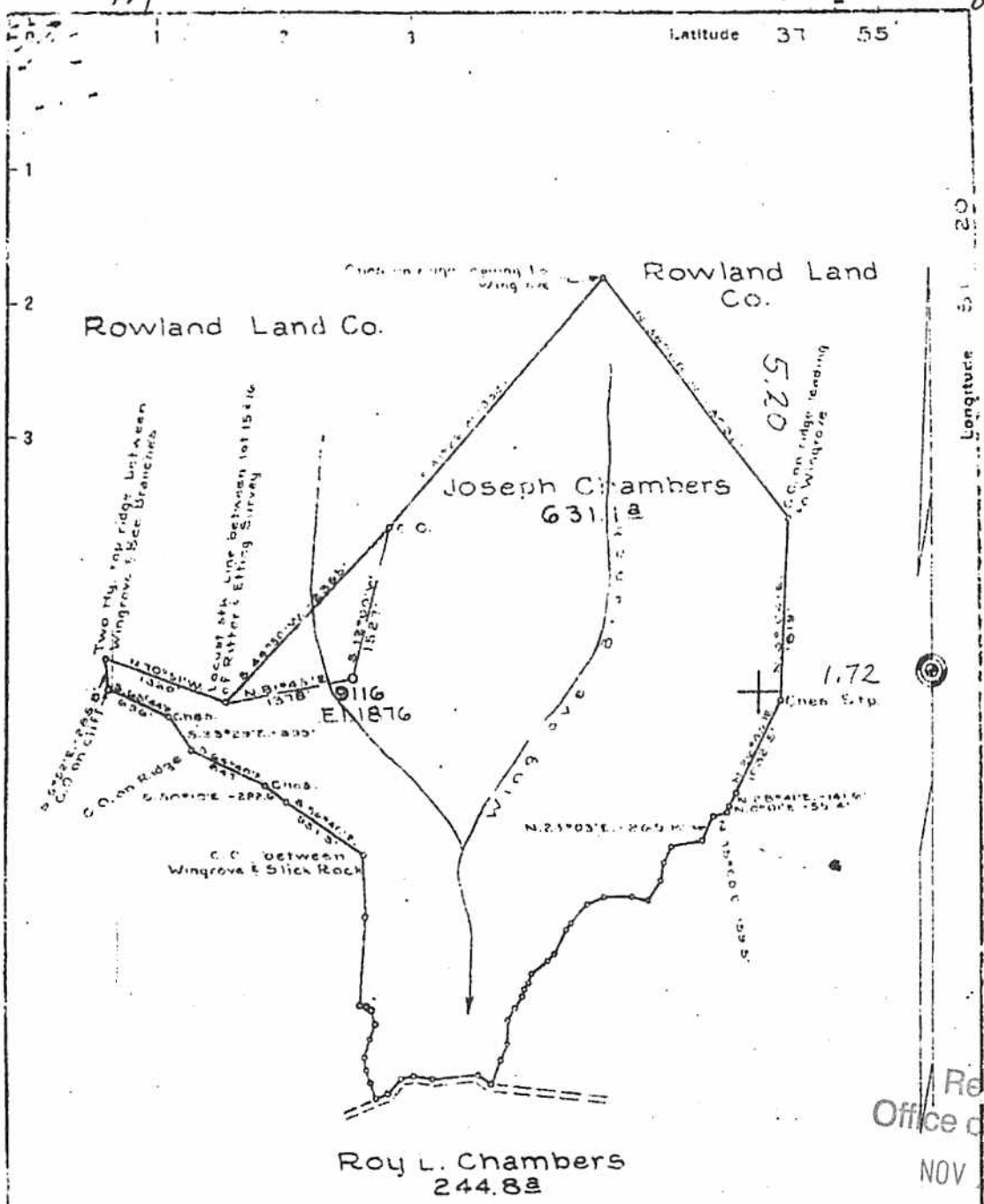

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New Location X
Drill Deeper
Abandonment

FB 842 Pg 5,16 Approx. Sq. S.110 W.45

Company Hope Natural Gas Co.
Address Clarksburg, W.Va.
Farm Joseph Chambers
Tract ____ Acres 631.1 Lease No. 54738
Well (Farm) No. ____ Serial No. 9116
Elevation (Spirit Level) 1876'
Quadrangle Eccles
County Raleigh District Clear Fork
Engineer W.M. Beuer
Engineer's Registration No. 900
File No. ____ Drawing No. ____
Date ____ Scale 1" = 80 Poles

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON

WELL LOCATION MAP

FILE NO RAL-85

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

— Denotes one inch spaces on border line of original tracing.

2690

8100085P

WW-4A
Revised 6-07

1) Date: October 28, 2014
2) Operator's Well Number
Chambers #9116

3) API Well No.: 47 - 081 - 00085

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name: Clear Fork Coal Company
Address: PO Box 2071
Julian, WV 25529
(b) Name
Address
(c) Name
Address

5) (a) Coal Operator
Name: Clear Fork Coal Company
Address: PO Box 2071
Julian, WV 25529
(b) Coal Owner(s) with Declaration
Name
Address
Name
Address
(c) Coal Lessee with Declaration
Name
Address

6) Inspector: Gary Kennedy
Address: P.O. Box 268
Nimitz WV 25978
Telephone: 304-382-8402

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.

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NOV 20 2014

Well Operator: Hayden & Harper Energy KA, LLC
By: EH
Its: Vice President
Address: 1001 Moorehead Square Dr. Ste. 350
Charlotte, NC 28203
Telephone: 412-812-2501

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Lynne M. Coogle, Notary Public
City of Pittsburgh, Allegheny County
My Commission Expires March 18, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Subscribed and sworn before me this 3rd day of November, 2014
Lynne M Coogle Notary Public
My Commission Expires March 18, 2016

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 depprivacyoffier@wv.gov.

8100085P

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Clear Fork Coal
PO Box 2071
Julian, WV 25529

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X R Hager

☐ Agent
☐ Addressee

B. Received by (Printed Name)

R Hager

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

JULIAN WV 25529
NOV 10 2014
USPS

3. Service Type

☐ Certified Mail®
☐ Registered
☐ Insured Mail
☐ Priority Mail Express™
☐ Return Receipt for Merchandise
☐ Collect on Delivery

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7014 0510 0001 8220 7758

PS Form 3811, July 2013 Domestic Return Receipt

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NOV 20 2014

CK 7212
100.00

WW-9
Rev. 5/08

Page 1 of 1
API Number 47 - 081 - 00085
Operator's Well No. Chambers #9116

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 Hayden & Harper Energy KA, LLC OP Code 494495359

Watershed n/a based on records Quadrangle Eccles

Elevation 1876 County Raliegh District Clear Fork

Description of anticipated Pit Waste: Fluids associated with plugging

Will a synthetic liner be used in the pit? Yes 20 mil. JNK

Proposed Disposal Method For Treated Pit Wastes:

- xx Land Application
- ____ Underground Injection (UIC Permit Number ____)
- ____ Reuse (at API Number ____)
- ____ Off Site Dispposal (Supply form WW-9 for disposal location)
- ____ Other (Explain ____

Proposed Work For Which Pit Will Be Used:

- ____ Drilling
- ____ Workover
- ____ Other (Explain ____
- ____ Swabbing
- xx 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 ____

Company Official (Typed Name) Eric Linn

Company Official Title Vice President

Subscribed and sworn before me this 3rd day of November, 20 14

Lynne M Coogle Notory Public

My commission expires March 18, 2016

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Lynne M. Coogle, Notary Public
City of Pittsburgh, Allegheny County
My Commission Expires March 18, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

8100085 P

Form WW-9

Operator's Well No. Chambers #9116

LEGEND

Property Boundary
Road
Existing Fence
Planned Fence
Stream
Open Ditch
Rock
North N
Buildings
Water wells W
Drill site

Diversion
Spring
Wet Spot
Drain Pipe with size in inches 12
Waterway
Cross Drain
Artificial Filter Strip
Pit: cut walls
Pit: compacted fill walls
Area for Land Application of Pit Waste

Proposed Revegetation Treatment: Acres Disturbed 3.2 Prevegetation pH 4.9

Lime 2 Tons/acre or to correct to pH 6.5

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

Mulch Straw Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

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

Photocopied section of involved 7.5' topographic sheet.

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Plan Approved by: Greg Kennedy

Comments:

Title: Inspector Date: 11/13/14

Field Reviewed? (_____) Yes (_____) No

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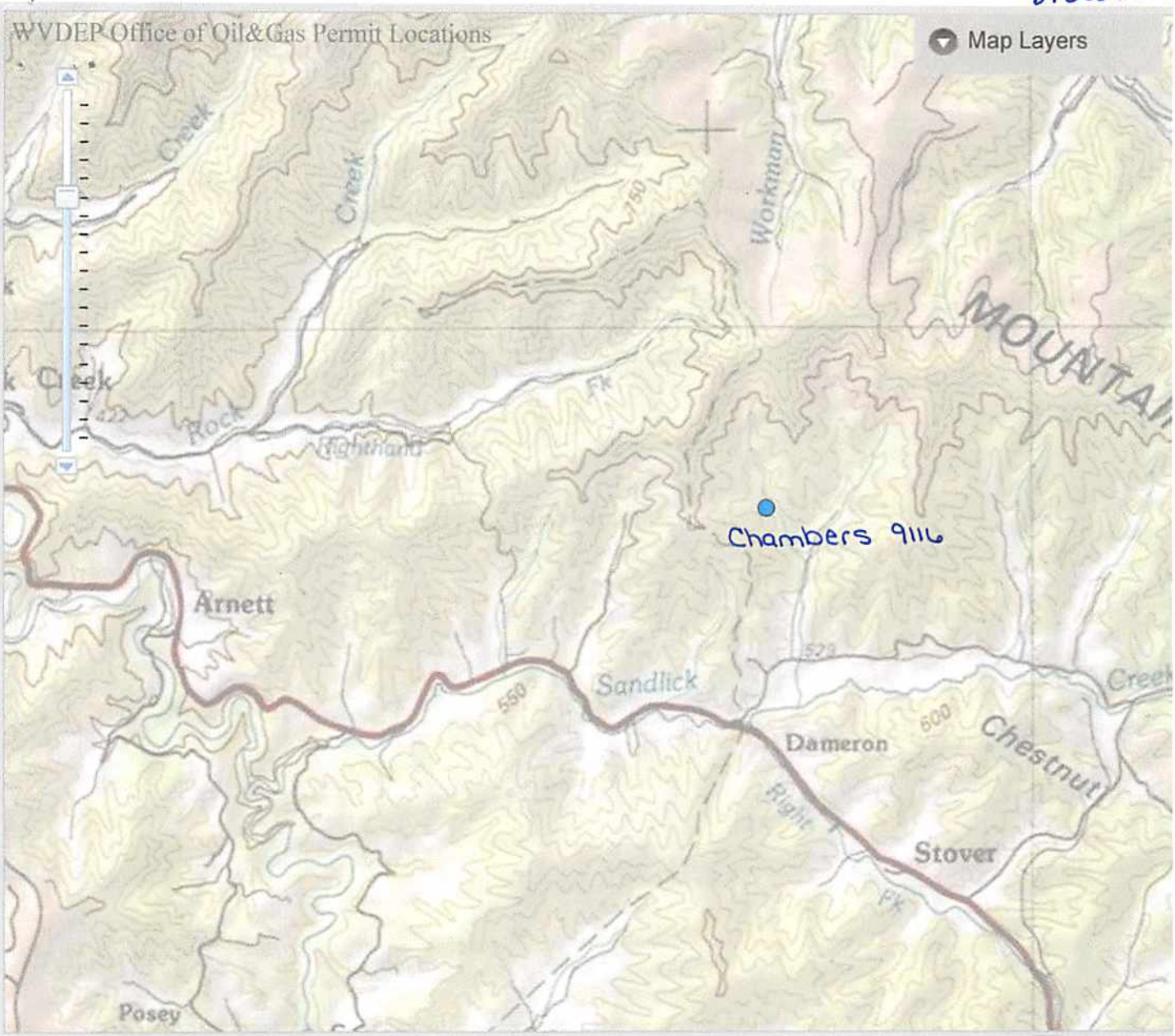

Attribute Search | Results | Legend | Location Search | About

Chambers #9116

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8100085 P

WW-7
8-30-06

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

API: 47-081-00085 WELL NO.: #9116

FARM NAME: Chambers

RESPONSIBLE PARTY NAME: Hayden & Harper Energy KA, LLC

COUNTY: Raliegh DISTRICT: Clear Fork 1

QUADRANGLE: Eccles 331

SURFACE OWNER: Clear Fork Coal Company

ROYALTY OWNER: Clear Fork Coal Company

UTM GPS NORTHING: 4188560.1

UTM GPS EASTING: 467647.2 GPS ELEVATION: 1876'

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 xx : 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.**

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.

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Office of Oil & Gas
NOV 20 2014

Signature	Title	Date
	Office Manager	October 28, 2014