



**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: 47-8502695, 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 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: BERNARD 3  
Farm Name: FRESHOUR, ORPHA  
**API Well Number: 47-8502695**  
**Permit Type: Plugging**  
Date Issued: 01/16/2015

**Promoting a healthy environment.**

**01/16/2015**

## 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

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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.

8502695 P

WW-4A  
Revised 6-07

1) Date: October 28, 2014  
2) Operator's Well Number  
Freshour #3  
3) API Well No.: 47 - 085 - 02695

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>Dominion Transmission</u>	Name <u>John W. Freshour</u>
Address <u>PO Box 27026</u>	Address <u>1707 Newberne Rd.</u>
<u>Richmond, VA 23261</u>	<u>Coxs Mill, WV 26342</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
	Address _____
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>David Cowen</u>	(c) Coal Lessee with Declaration
Address <u>1597 Devil Hole Rd.</u>	Name _____
<u>Harrisville, WV 26362</u>	Address _____
Telephone _____	

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 reverse 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 Hayden & Hamer Energy KA, LLC  
 By: [Signature]  
 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

Office of Oil and Gas  
 NOV 20 2014

Subscribed and sworn before me this 3rd day of November, 2014  
[Signature] 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 [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

01/16/2015



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 <input checked="" type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee	
	B. Received by (Printed Name)	C. Date of Delivery
1. Article Addressed to:	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No <div style="text-align: center;">NOV 03 2014</div>	
2. Article Number (Transfer from service label)	3. Service Type	
	<input type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™ <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery	
PS Form 3811, July 2013	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
7014 0510 0001 8220 7673		
Domestic Return Receipt		

Dominion Transmissio  
 PO Box 27026  
 Richmond, VA 23261

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 <input checked="" type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee	
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2. Article Number (Transfer from service label)	3. Service Type	
	<input type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™ <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery	
PS Form 3811, July 2013	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
7014 0510 0001 8220 7734		
Domestic Return Receipt		

John Freshour  
 1707 Newberne Rd.  
 Coxs Mill, WV 26342

Received  
 Office of Oil & Gas

NOV 20 2014

1) Date October 28, 2014  
2) Operator's  
Well No. Freshour #3  
3) API Well No. 47-085 - 02695

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 904' Watershed Spruce Creek  
District Union County Ritchie Quadrangle Holbrook SC

6) Well Operator Hayden & Harper Energy KA, LLC 7) Designated Agent Eric Linn  
Address 1001 Moorehead Square Dr. Ste. 350 Address 1001 Moorehead Square Dr. Ste. 350  
Charlotte, NC 28203 Charlotte, NC 28203

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name David Cowan Name Patchwork Oil & Gas, LLC  
Address 1597 Devil Hole Road Address 8165 Elizabeth Pike  
Harrisville WV 26362-7543 Elizabeth, WV 26143

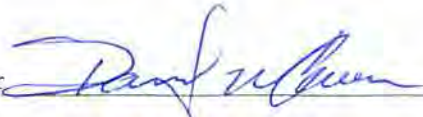
10) Work Order: The work order for the manner of plugging this well is as follows:

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  Date 11-12-14



**Freshour #3**

47-085-02695

**PROPOSED PLUGGING PROCEDURE**

1. Prepare plugging permit application.
2. Certify to surface and coal owners.
3. Certify to 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 2354'
10. Run tubing to TD. Set first plug with 7.5 sacks of Class A cement with no more than 3% CaCl<sub>2</sub> and no other additives from TD up to 2254'. This will cover bottom plug. Pull tubing back.
12. Wait 8 hours, run in and tag plug.
13. Based on records, 4 1/2 is cemented to surface so no free point. If one is found...plug as necessary.
14. Run 2sacks of 6% Bentonite gel from 2254' up to 1713'.
15. Pull tubing back to 1713', set second plug with 7.5 sacks of Class A cement with no more than 3% CaCl<sub>2</sub> and no other additives from 1713' up to 1613'. This will cover gas show.
16. Pull tubing back, wait 8 hours
17. Run back in and tag plug.
18. Run 2.5 sacks of 6% Bentonite gel from 1613' up to 954'.
19. Pull tubing back to 954' and run 7.5 sacks of Class A cement with no more than 3% CaCl<sub>2</sub> and no other additives from 954' to 854'.

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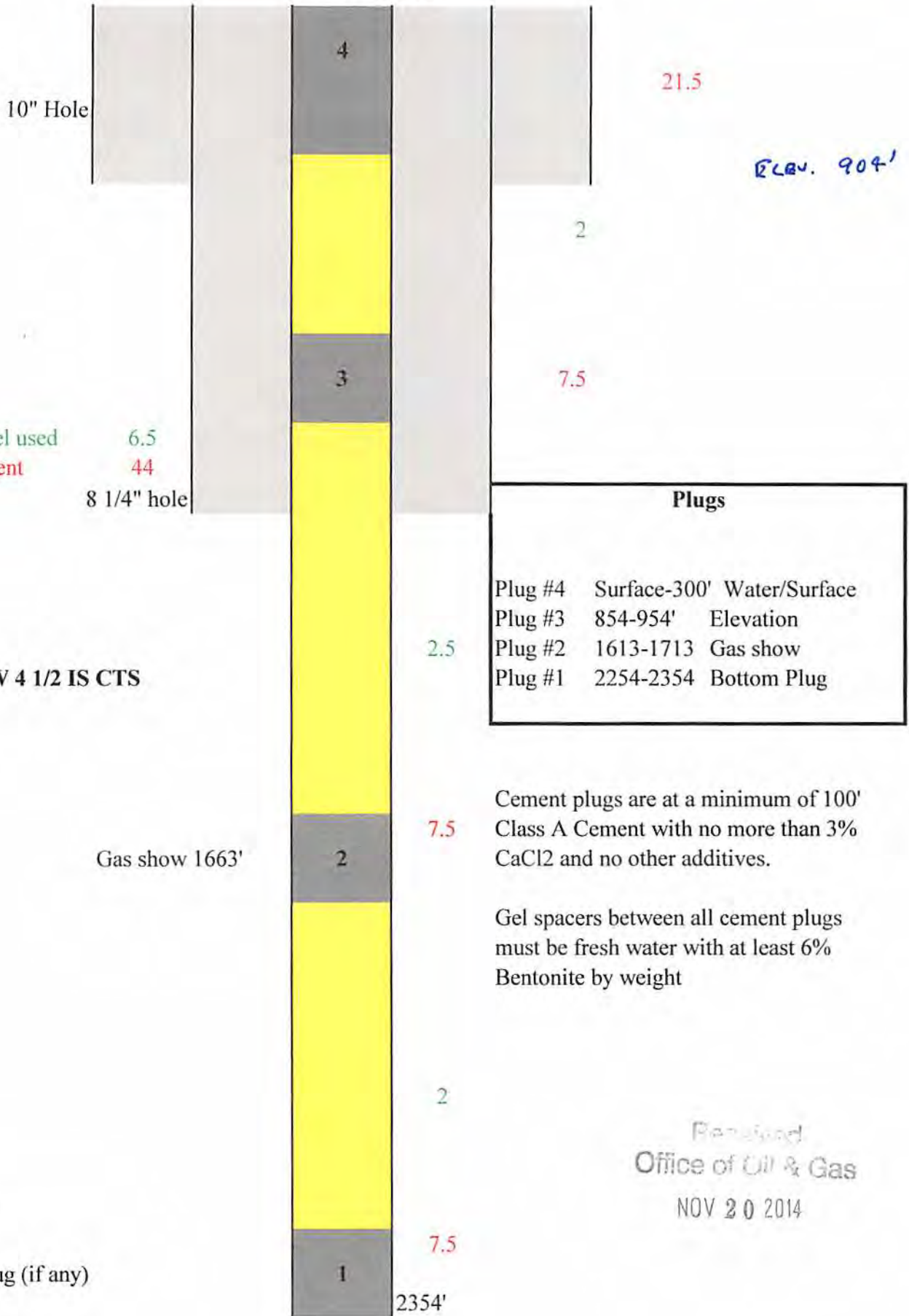
20. Pull tubing back, wait 8 hours
21. Run back in and tag plug.
22. Run 2 sacks of 6% Bentonite gel from 854' up to 300'.
23. Pull tubing back to 300' and run 21.5 sacks of Class A cement with no more than 3% CaCl<sub>2</sub> and no other additives from 300' to Surface.
22. Solidify pit with more cement and lime, then bury.
23. Set 6" x 4' steel pipe with concrete with 1/2" API identification.
24. Rig down, and move equipment out.
25. Prepare WR-34 & WR-38 for permit release.

*Paul*

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8502695P

Freshour #3  
47-085-02695






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

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 : Cement  
 : Gel  
 : Bridge Plug (if any)

01/16/2015





STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle Holbrook

Permit No. RIT-2695

WELL RECORD

Oil or Gas Well Gas & Oil  
(KIND)

Company Hardman Drilling Co.  
Address 4001 Jefferson St., Parkersburg, W. Va.  
Farm Orpha Freshour Acres 107  
Location (waters) Spruce Creek  
Well No. 3 Elev. 904' ✓  
District Union County Ritchie  
The surface of tract is owned in fee by Orpha Freshour  
Address Berea, W. Va.  
Mineral rights are owned by Orpha Freshour  
Address Berea, W. Va.  
Drilling commenced 4-8-63  
Drilling completed 5-9-63  
Date Shot From To  
With  
Open Flow /10ths Water in Show Inch  
/10ths Merc. in Inch  
Volume Cu. Ft.  
Rock Pressure None Taken lbs. hrs.  
Oil bbls., 1st 24 hrs.  
WELL ACIDIZED  
WELL FRACTURED 5-18-63 - 30,000 Sand and 500 Bbl. Water

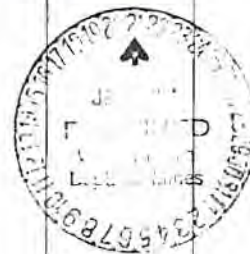
Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10	✓ 365		Size of
8 1/4	✓ 1025		Depth set
6 3/4			
5 3/16			
X 4 1/2"	2354	2354' ✓	Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED ✓ SIZE 4 1/2" No. Ft. 2354 Date 5-10-63 CTS  
COAL WAS ENCOUNTERED AT None FEET INCHES  
FEET INCHES FEET INCHES  
FEET INCHES FEET INCHES

RESULT AFTER TREATMENT Gas Test 1,040 MFC and Estimated 3 Bbls. Oil  
ROCK PRESSURE AFTER TREATMENT 650 lbs. in 8 Hrs.  
Fresh Water 290 Feet Salt Water 1735 Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Earth			0	12			
SM Sand			12	30			
Red Rock			30	40			
Slate			40	55			
Sand			55	77			
Red Rock			77	125			
Slate & Shells			125	175			
Red Rock			175	195			
Slate & Shells			195	227			
Red Rock			227	267			
Slate & Shells			267	285			
Sand			285	305	Water	290 ✓	
Slate & Shells			305	430			
Red Rock			430	455			
Slate & Shells			455	535			
Red Rock			535	595			
Slate & Shells			595	765			
Red Rock			765	805			
Slate & Shells			805	838			
White Slate			838	875			
Sand			875	935			
Slate			935	965			
Lime			965	980			
Slate & Shells			980	1055			
Lime			1055	1120			
Sand			1120	1178			
Slate			1178	1240			
Sand			1240	1255			
Slate & Shells			1255	1335			

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(over)

8502695P

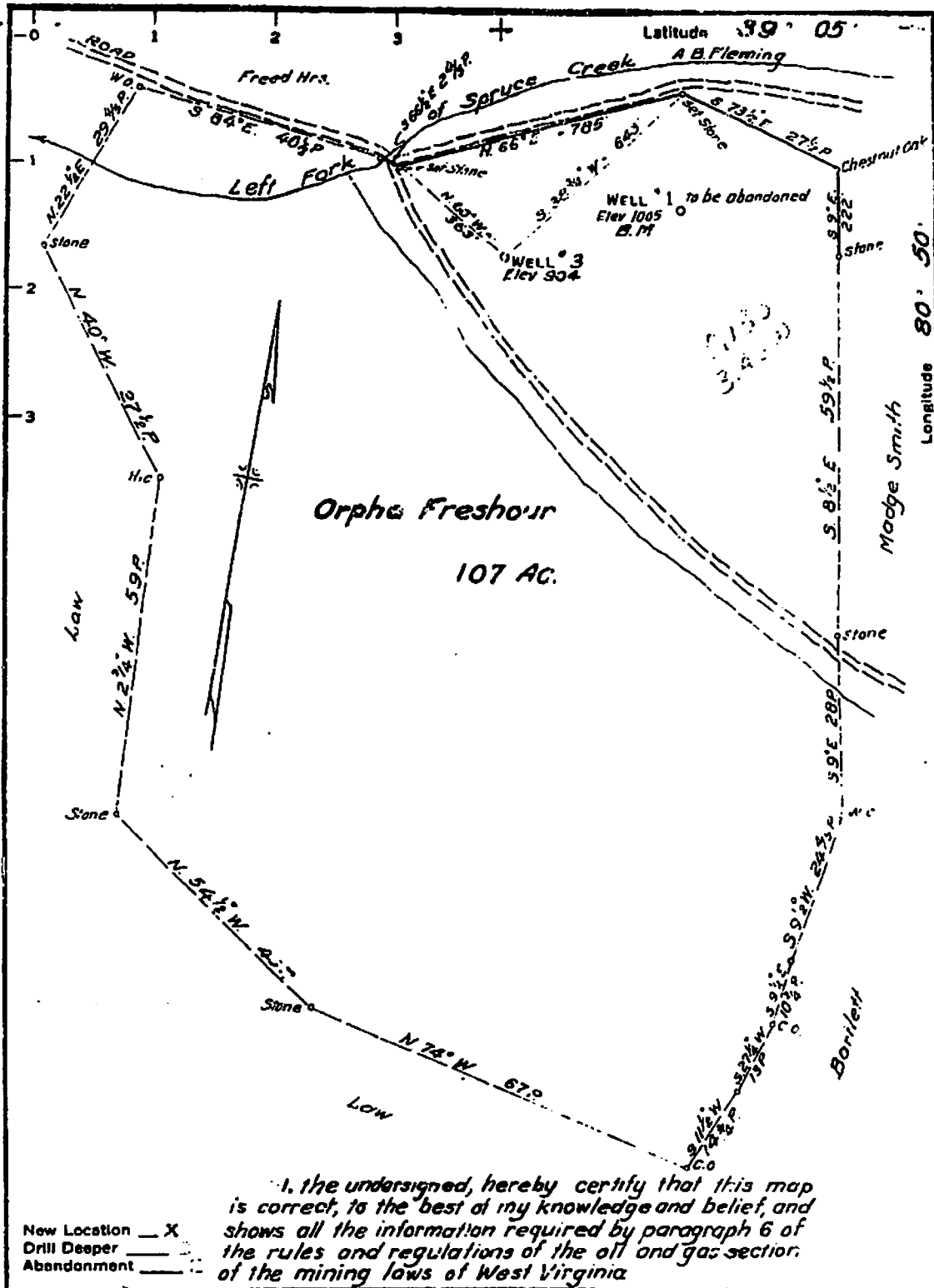
Formation	Color	Hard or Soft	Top 13	Bottom	Oil, Gas or Water	Depth Found	Remarks
Sand			1335	1378			
Black Slate			1378	1400			
Slate & Shells			1400	1565			
Sand			1565	1670	Gas	1663 ✓	
Black Slate			1670	1723			
Sand			1723	1745	Salt Water	1735	1 Bailor per Hour
Slate			1745	1769			
Lime			1769	1780			
Pencil Cave			1780	1798			
Big Lime			1798	1870			
Sand			1870	1900			
Slate			1900	1903			
Sand			1903	1943			
Slate & Shells			1943	2010			
Sand			2010	2038			
Lime-Gritty			2038	2205			
Shale			2205	2354			

*Elevation will work*

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Date August 2, 1963, 19\_\_\_\_  
 APPROVED Hardman Drilling Co., Owner  
 By Don W. Hardman, Partner  
 (Title)

01/16/2015



I, the undersigned, hereby certify that this map is correct, to the best of my knowledge and belief, and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia

New Location  X  
 Drill Deeper   
 Abandonment

Company Hardman Drilling Co., Don Hardman, Agt.  
 Address 4001 Jefferson St., Parkersburg, W.V.  
 Farm Orpha Freshour  
 Tract 1 Acres 107 Lease No. \_\_\_\_\_  
 Well (Farm) No. 3 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 904  
 Quadrangle Holbrook SC  
 County Ritchie District Union  
 Engineer Parson E. Patten  
 Engineer's Registration No. 485  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date Mar 8, 1963 Scale 1" = 20P.

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON  
**WELL LOCATION MAP**  
 FILE NO. RIT-2695

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.  
 Accurate to within 1 in 300  
 -- Denotes one inch spaces on border line of original tracing.

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CK 7212  
10000

85 02695A

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 Spruce Creek Quadrangle Holbrook SC

Elevation 904' County Ritchie District Union

Description of anticipated Pit Waste: Fluids associated with plugging

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

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
- 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) Eric Linn

Company Official Title Vice President

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

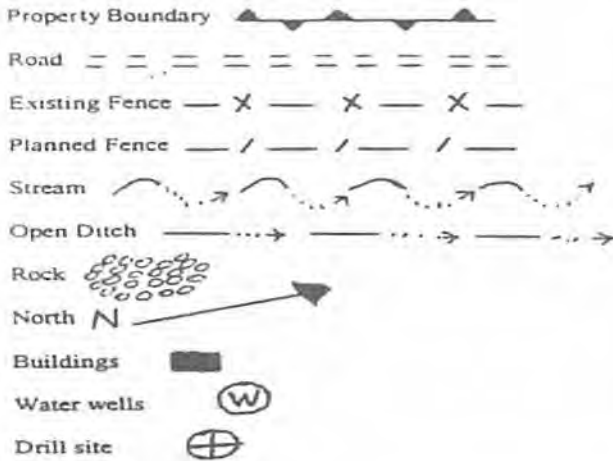
[Signature] Notary Public

My commission expires March 18, 2016

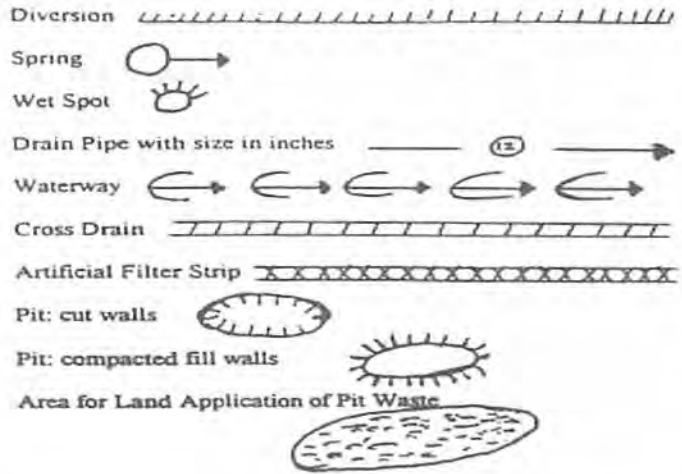
COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Lynne M. Coogle, Notary Public  
City of Pittsburgh, Allegheny County  
My Commission Expires March 18, 2016  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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LEGEND



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

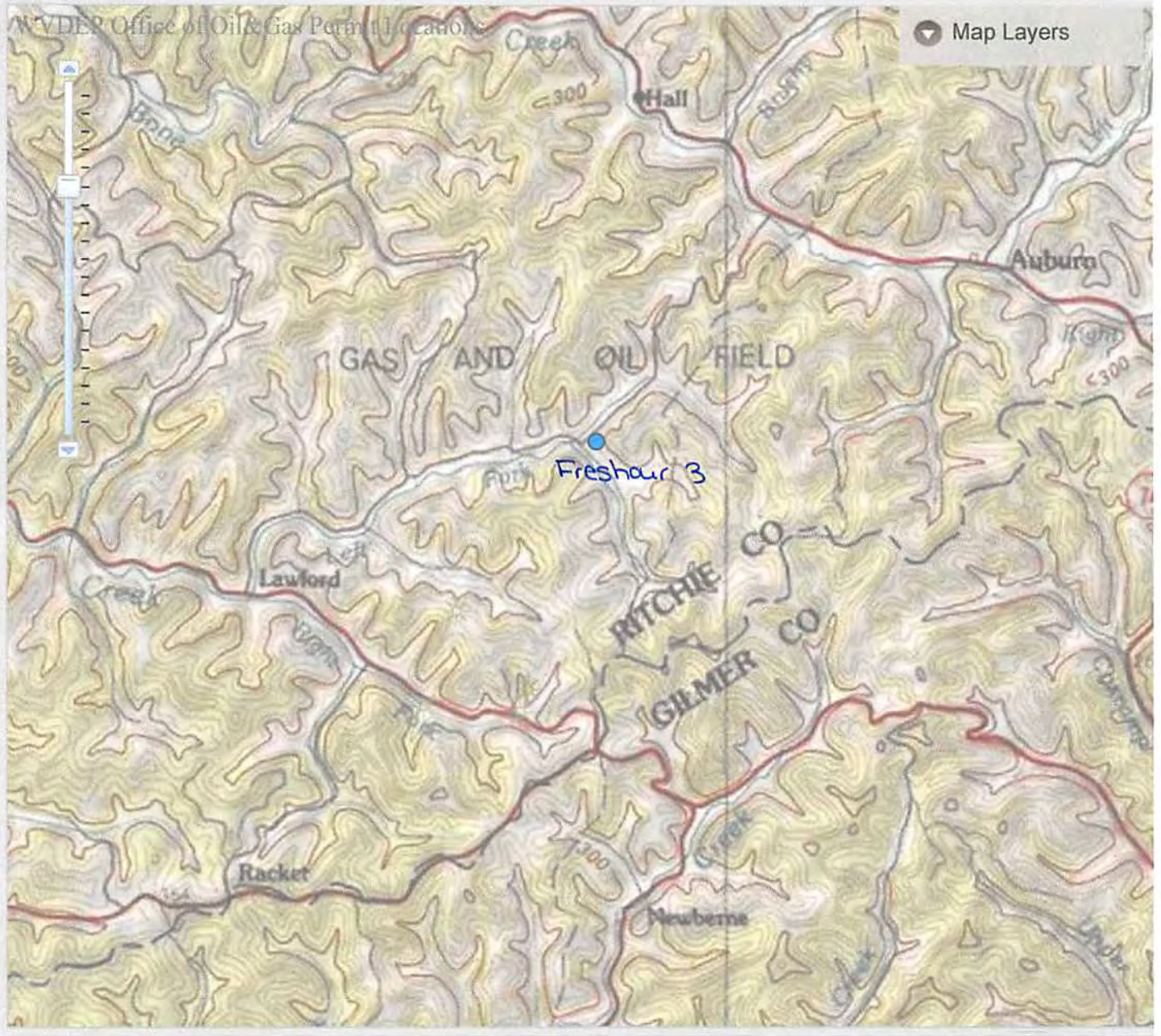
Attach:  
 Drawing(s) of road, location, pit and proposed area for land application.  
 Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *David W. Lane*  
 Comments: *reclaim & Reseed*

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Title: *oil & gas inspector* Date: *11-12-14*  
 Field Reviewed? (  ) Yes (  ) No





Freshour #3

47-085-02695

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 NOV 20 2014

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WW-7  
8-30-06



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

API: 47-085-02695 WELL NO.: #3  
 FARM NAME: Freshour  
 RESPONSIBLE PARTY NAME: Hayden & Harper Energy KA, LLC  
 COUNTY: Ritchie DISTRICT: Union 4  
 QUADRANGLE: Holbrook SC  
 SURFACE OWNER: Dominion Transmission  
 ROYALTY OWNER: Dominion Transmission  
 UTM GPS NORTHING: 4325733.8  
 UTM GPS EASTING: 508814.2 GPS ELEVATION: 904'

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.

  
Signature

Office Manager  
Title

October 28, 2014  
Date

Received  
Office of Oil & Gas

NOV 30 2014