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**west virginia** department of environmental protection

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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

July 06, 2015

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-5100902, issued to EAGLE NATRIUM 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: 17 RELIEF  
Farm Name: PPG INDUSTRIES, INC.  
**API Well Number: 47-5100902**  
**Permit Type: Plugging**  
Date Issued: 07/06/2015

**Promoting a healthy environment.**

**07/10/2015**

## 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.

1) Date 3/09, 2015  
2) Operator's  
Well No. 17 Relief  
3) API Well No. 47-051 - 00902

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 \_\_\_ / Liquid injection Brine / Waste disposal \_\_\_ /  
(If "Gas, Production \_\_\_ or Underground storage \_\_\_) Deep \_\_\_ / Shallow \_\_\_

5) Location: Elevation 680 ft. Watershed Ohio River  
District Franklin County Marshall Quadrangle New Martinsville, WV

6) Well Operator Eagle Natrium, LLC 7) Designated Agent J. Thomas Horan  
Address P.O. Box 191 Address P.O. Box 191  
New Martinsville, WV 26155 New Martinsville, WV 26155(S)

8) Oil and Gas Inspector to be notified Name \_\_\_\_\_  
Address \_\_\_\_\_  
9) Plugging Contractor Name \_\_\_\_\_  
Address \_\_\_\_\_

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

*OK Jim MICHELSON  
BY PHONE gwm*

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

WV Department of  
Environmental Protection

Work order approved by inspector \_\_\_\_\_ Date \_\_\_\_\_

07/10/2015



Plugging Procedure

API Well #47-051-00902

Axiall No. 17 Relief Well

Drafted 3/09/15

**NOTE: No. 17 Brine Well was plugged in June 2003**

- 1) Set a Class A Cement Plug (latex) from approx. 3816 ft. to 3500 ft. (top of the mechanical plug). Wait 4 hours and tag the top of cement (TOC) to verify top of cement. Add cement to attain an approx. 3500 ft. depth.
- 2) Gel hole from the TOC to approx. 2000 ft.
- 3) Freepoint the 7 in. casing (liner). The casing should be loose at approx. 1000 ft. Cut the casing at the freepoint and remove the loose casing. In the event the casing cannot be removed, an alternate procedure will be utilized as follows. The casing will be perforated starting at 1000 ft. and at 250 ft. increments above this location. Class A Cement (latex) will be spotted (balanced) both inside and outside of the 7 in. casing to surface.

Assuming the 7 in. casing is removed:

- 4) Gel hole from approx. 2000 ft. to 1550 ft.
- 5) Set a Class A Cement Plug (latex) from approx. 1550 ft. to 1350 ft.
- 6) Gel hole from approx. 1350 ft. to 1150 ft.
- 7) Set a Class A Cement Plug (latex) from approx. 1150 ft. to 800 ft. (across coals).
- 8) Gel hole from ~~800~~<sup>650</sup> ft. to 325 ft.
- 9) Set a Class A Cement Plug (latex) from 325 ft. to surface.
- 10) Set a monument at the surface of well as per WV DEP standards.

SET 100' CLASS A PLUG (LATEX) 1352'-1752'

650'

800'

JAM

General Notes:

- A.) All plugs shall be Class A Cement Plugs using latex cement and no more than three (3) percent CaCl<sub>2</sub>, and no other additives.
- B.) Gel spacers shall be spotted between all cement plugs.
- C.) Gel is defined a fresh water with a minimum of six (6) percent Bentonite by weight, and no other additives.

Axiall Contact: Stephen Clark, P.E. ([Stephen.Clark@Axiall.com](mailto:Stephen.Clark@Axiall.com) & cell: 304-266-8264)

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# #17-R (RELIEF WELL 'B')

CONDUCTOR PIPE - 24"Øx.375 WALL, 93', CEMENTED TO SURFACE

FRESH WATER PIPE - 20"Øx.375 WALL, 98', CEMENTED TO SURFACE

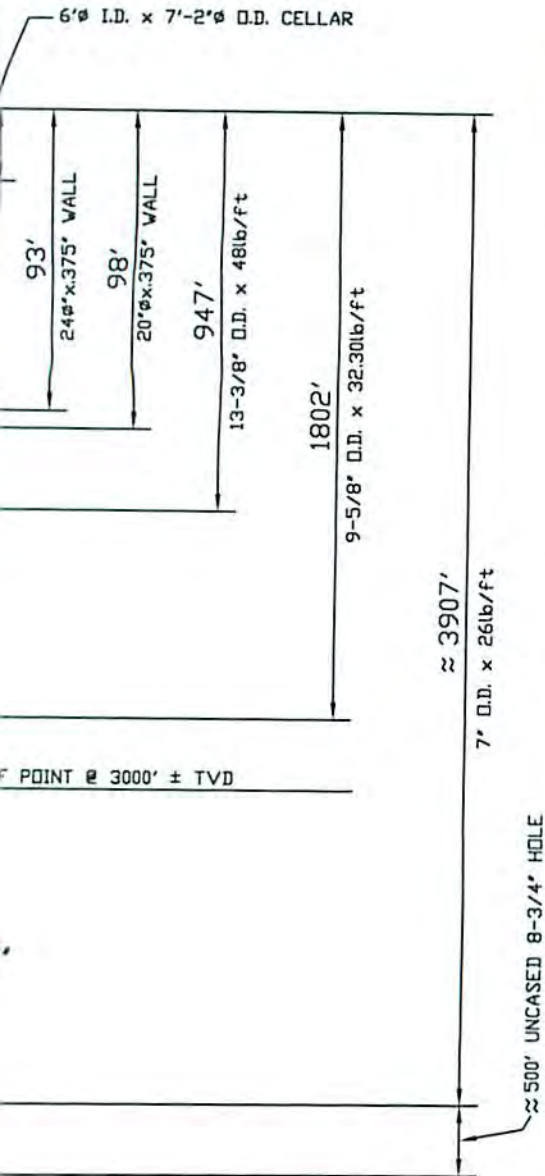
INTERMEDIATE - 13-3/8"Øx48 LB/FT, 947', ERW, H-40, RANGE 3,  
8' ROUND THRD & LONG COUPLED, CEMENTED TO SURFACE

PRODUCTION - 9-5/8"Øx32.30 LB/FT, 1802', ERW, H-40, RANGE 3  
8' ROUND THRD & LONG COUPLED, CEMENTED TO SURFACE

LINER - 7" x 26 LB/F, ERW, J-55, 3800' CEMENTED AS SHOWN  
8' ROUND THRD & LONG COUPLED, RANGE 3

VALVE - 8"xCL900, BARTON RF

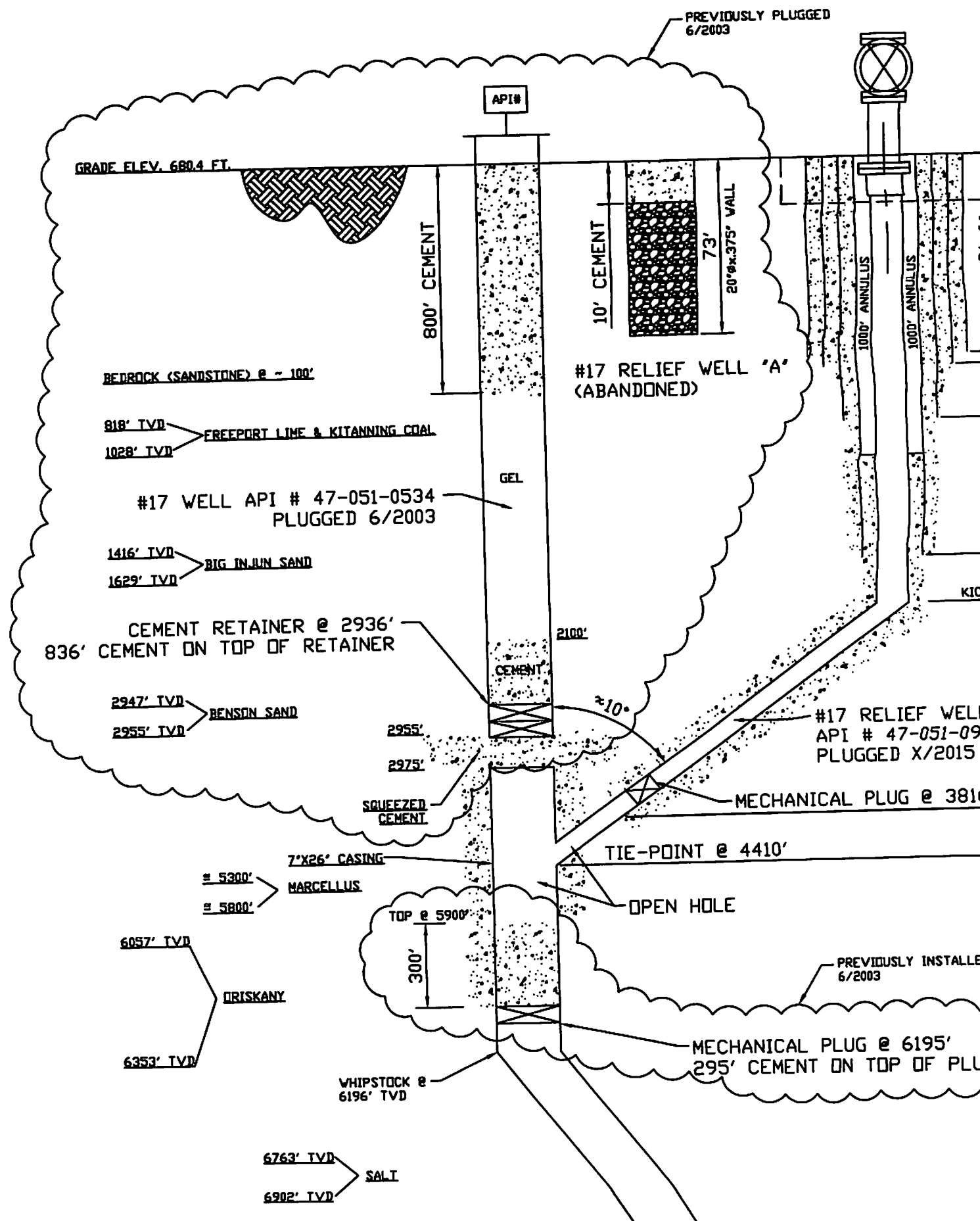
WELLHEAD - KVAERNER CASING HEAD # NSB-2, 11' - 3Mx9-5/8' LCSG  
& ACCESS. WITH 2 EA. 2' LPO'S (MANUAL SLIPS ONLY), DEM PART #  
W29996095R11. 2 EA. 2"Ø BAKER GATE VALVE, 3000#, THREADED, LP  
2 EA. 2"Ø XH NIPPLE, 4' LONG, THREADED  
2 EA. 2"Ø BULL PLUG, XH. XH.  
1 EA. KVAERNER SLIP ASS'Y, # CMENS, 11x7 CSG.  
2 EA. KVAERNER PKG SPRT PRIMARY B, # 10-2/3Mx7 CSG.  
1 EA. KVAERNER PKG PRIMARY B, 10 NOMINAL x 7 CSG NBR  
16 EA. 1-3/8"x9-1/2' LONG ALT B7 STUD BOLTS W/ 2-2H NUTS EA.  
1 EA. 8"ØxCL900 RAISED FACE WELDNECK FLANGE FOR  
7' D.D. x 26 LB/FT. CASING.



2 DWS	10/17/11	TEXT CORRECTIONS
1 DWS	12/18/14	PRESENT STATE
0 MGH	12/27/15	AS BUILT CHANGES
REV. BY	DATE	DESCRIPTION

DEPT: 70 - BRINE		
TITLE: # 17-R RELIEF WELL		
AS BUILT		
DRAWING TYPE: MECHANICAL & PROCESS EQUIPMENT		MPE
EQUIPMENT No: 7000-115-xxxx		
	DRAWN CWM	DATE 12/15/03
	CHECKED SMC	DATE
	APP' VD	DATE
	SCALE NONE	ACAD YES
	JOB No P-507-G	
	DWG 70-2571	REV 2

07/10/2015



GRADE ELEV. 680.4 FT.

PREVIOUSLY PLUGGED  
6/2003

API#

800' CEMENT

10' CEMENT

73'  
20" x .375" WALL

BEDROCK (SANDSTONE) @ ~ 100'

818' TVD } FREEPORT LIME & KITANNING COAL  
1028' TVD }

#17 WELL API # 47-051-0534  
PLUGGED 6/2003

1416' TVD } BIG INJUN SAND  
1629' TVD }

CEMENT RETAINER @ 2936'  
836' CEMENT ON TOP OF RETAINER

2947' TVD } BENSON SAND  
2955' TVD }

2955'  
2975'

SQUEEZED  
CEMENT

2100'

CEMENT

~10°

#17 RELIEF WELL  
API # 47-051-091  
PLUGGED X/2015

MECHANICAL PLUG @ 3816'

7" X 26" CASING  
≈ 5300' } MARCELLUS  
≈ 5800' }

TIE-POINT @ 4410'

OPEN HOLE

6057' TVD } ORISKANY  
6353' TVD }

TOP @ 5900'  
300'

PREVIOUSLY INSTALLED  
6/2003

MECHANICAL PLUG @ 6195'  
295' CEMENT ON TOP OF PLUG

WHIPSTOCK @  
6196' TVD

6763' TVD } SALT  
6902' TVD }



WR-35  
Rev (8-10)

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas  
Well Operator's Report of Well Work

DATE: January 3, 2013/ Rev. 5/01/15  
API #: 47-051-0802

*JB ✓*

Farm name: Axall Corporation/ Eagle Natrium, LLC Operator Well No.: #17 Relief Well

LOCATION: Elevation: 880.71 ft. Quadrangle: New Martinsville, WV

District: Franklin County: Marshall  
Latitude: 1880 Feet South of 39 Deg. 48 Min. 00 Sec.  
Longitude: 3826 Feet West of 60 Deg. 60 Min. 00 Sec.

Company:

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Axall Corp., N. St. Rt. 2, New Martinsville, WV 26155	24" C.S.	93 ft.	93 ft.	180
Agent: J. Thomas Horan	20" C.S.	98 ft.	98 ft.	100
Inspector:	13-3/8" H-40	947 ft.	947 ft.	650
Date Permit Issued: April 3, 2003	9-5/8" H-40	1802 ft.	1802 ft.	625
Date Well Work Commenced: April 3, 2003	7" J-55	3907 ft.	3907 ft.	400
Date Well Work Completed: Approx. 4/24/03				
Verbal Plugging: Not Applicable				
Date Permission granted on: Not Applicable				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 4410 ft.				
Total Measured Depth (ft): 4410 ft.				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s)				

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OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Not Applicable Pay zone depth (ft) \_\_\_\_\_  
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 pressure) after \_\_\_\_\_ Hours

Second producing formation Not Applicable Pay zone depth (ft) \_\_\_\_\_  
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 pressure) after \_\_\_\_\_ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments 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.

J. Thomas Horan  
Signature

5/1/15  
Date

Were core samples taken? Yes \_\_\_\_\_ No X

Were cuttings caught during drilling? Yes \_\_\_\_\_ No X

Were N/Y/N Electrical, N/Y/N Mechanical, N/Y/N or Geophysical logs recorded on this well?

**NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.**

Perforated Intervals, Fracturing, or Stimulating:

N/A

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Formations Encountered: Surface:	Top Depth	Bottom Depth
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#17 Relief Well (API #47-051-0902) was installed in April 2003 to intercept adjacent #17 Brine Well (API #47-051-0534) for the purpose of de-pressurizing (killing) #17 Brine Well. At the time #17 Brine Well was scheduled for plugging and abandonment. Faulty casing in the upper portion of #17 Brine Well prevented the well from being de-pressurized by normal methods. #17 Brine Well was subsequently plugged in April 2003.

Based on discussions with Ms. Kay Holtsclaw of the West Virginia DEP, Office of Oil and Gas, the 1967 lithology data for #17 Brine Well was summarized and provided as representative information for #17 Relief Well.



**RAWE DRILLING CO.**

Oil, Gas and Water Well Contractors

PHONE GL 5-3470

NEW MARTINSVILLE, W. VA.

May 27, 1967

Log of drive pipe for # 17 Brine well  
all measurements from ground elevation

Clay & rocks	0	-	24°
Clay & fine sand	24	-	47°
Sand & fine gravel (dark)	47	-	71°
Sand & fine gravel	71	-	92°
Shale	92	-	93°
Rock	93	-	97°
Shale	97	-	99°
Lime	99	-	101°- 9°

Sand & gravel shut off

Water was shut off when finished drilling

Casing bottom 99' from top of ground

Hole 101'-9" from top of ground

Casing left 5'-3" above ground

Hole dug around top of casing for cement collar, 5' deep,

4' diameter, filled with 3' of concrete.

Casing 12-1/2" I. D. - 13 7/8" O.D.

Total amount of casing used with threads off 100'-3"

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STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle New Martinsville, W.Va.-Ohio

WELL RECORD

Permit No. MARS-524

Oil or Gas Well Brine

Company <u>PPG Industries</u>	Casing and Tubing	Used in Drilling	Left in Well	Packer
Address <u>New Martinsville, West Virginia</u>	Size			Kind of Packer
Firm <u>Reconstruction Finance Corp.</u> Area <u>N/A</u>	14			
Location (water) <u>East Bank Ohio River - Natrium Ground 680</u>	13	<u>95'</u>	<u>95'</u>	
Well No. <u>17</u> Elev. R.T. <u>690</u>	<u>9-5/8"</u>	<u>1714'</u>	<u>1714'</u>	Size of
District <u>Franklin</u> County <u>Marshall</u>	8 1/4			Depth set
The surface of tract is owned in fee by <u>PPG Industries</u>	6 3/4			
Address <u>New Martinsville</u>	5 3/16			
Miscral rights are owned by <u>PPG Industries</u>	4 1/2			
Address <u>New Martinsville</u>	1			Perf. top
Drilling commenced <u>May 16, 1967</u>	<u>7"-26#</u>	<u>6729'</u>	<u>6729'</u>	Perf. bottom
Drilling completed <u>July 24, 1967</u>	Lines Used			Perf. top
Date Shut <u>N/A</u> From <u>--</u> To <u>--</u>				Perf. bottom
With	Attach copy of cementing record. <u>9-5/8" = 1714' - 6-15-67</u>			
Open Flow <u>--</u> /10ths Water in <u>--</u> Inch	<u>CASING CEMENTED 7" SIZE 6729 No. Ft. 7-14-67 Dam</u>			
<u>--</u> /10ths Merc. in <u>--</u> Inch	Amount of cement used (bags) <u>9-5/8" = 725 bags; 7" = 1300</u>			
Volumes <u>--</u> Co. Ft.	Name of Service Co. <u>Halliburton</u>			
Rock Pressure <u>No data</u> In <u>--</u> lbs.	<u>COAL WAS ENCOUNTERED AT 204 FEET 48 INCHES</u>			
Oil <u>--</u> Mch. 1st 24 hrs.	<u>400? FEET 60 INCHES 1025 FEET 36 INCHES</u>			
WELL ACIDIZED (DETAILS) <u>--</u>	<u>FEET INCHES FEET INCHES</u>			
WELL FRACTURED (DETAILS) <u>--</u>				

RESULT AFTER TREATMENT (Initial open Flow or bits) --

ROCK PRESSURE AFTER TREATMENT -- HOURS --

Fresh Water -- Feet -- Salt Water -- Feet --

Producing Sand -- Depth --

Formation	Color	Hard or Soft	Measured Top	Measured Bottom	T.V.D. Top	T.V.D. Bottom	Remarks
Monongahela			0	204			
Conemaugh			204	818			
Pittsburgh Coal			204	208			RECEIVED Office of Oil and Gas  MAY 04 2015
Lime & Shale			208	400			
Coal?			400	405			
Sand & Shale			405	524			
Saltsburg Sand			524	554			
Brush Creek Lime			691	697			
Allegheny			818	1068			
Upper Freeport Lime			818	828			WV Department of Environmental Protection
Lower Kitt. Coal			1025	1028			
Pottsville			1068	1242			
Homewood Sands			1068	1176			
Haxton Sand			1198	1230			
Mississippian			1242	2020			
Little Lina			1242	1258			
Pencil Cove Shale			1258	1268			
Greenbrier			1334	1402			
Big Injun Sand			1416	1629			
Weir Group			1790	1852			
Berea Sand			1985	2020			
Herkonian			2020	6510			

Formation	Color	Hard or Soft	Top	Bottom	T.V.D. Top	T.V.D. Bottom	Remarks
Catskill			2020	2225			
Top Chemung			2225	?			
Top Riley			2795	2950	2793	2947	
Benson Sand			2950	2958	2947	2955	
Marcellus Shale			5102	5880	5070	5835	
Onondaga Lime			5880	6105	5835	6057	
Oriskany (Ridgelay)			6105	6156	6057	6107	
Oriskany (Striver)			6156	6403	6107	6353	
Halderberg Lime			6403	6510	6353	6460	
Silurian System			6510	—	6460		
Keyser Lime			6510	6763	6460	6713	
Top Salina Group			6763	—	6713	—	
Salt			6763	6861	6713	6811	
Anhydrite w/innerbedded salt			6861	6865	6811	6815	
Salt			6865	6902	6815	6852	
Anhydrite & Dolomite			6902	6917	6852	6867	
Salt			6917	6919	6867	6869	
Anhydrite & Dolomite			6919	6973 (TD)	6869	6923 (TD)	
<p>NOTE: This well was directionally drilled, and both the measured depths and the true vertical depths are given above. All depths are from the surface of the ground; i.e., from an elevation of 680 feet above sea level.</p>							

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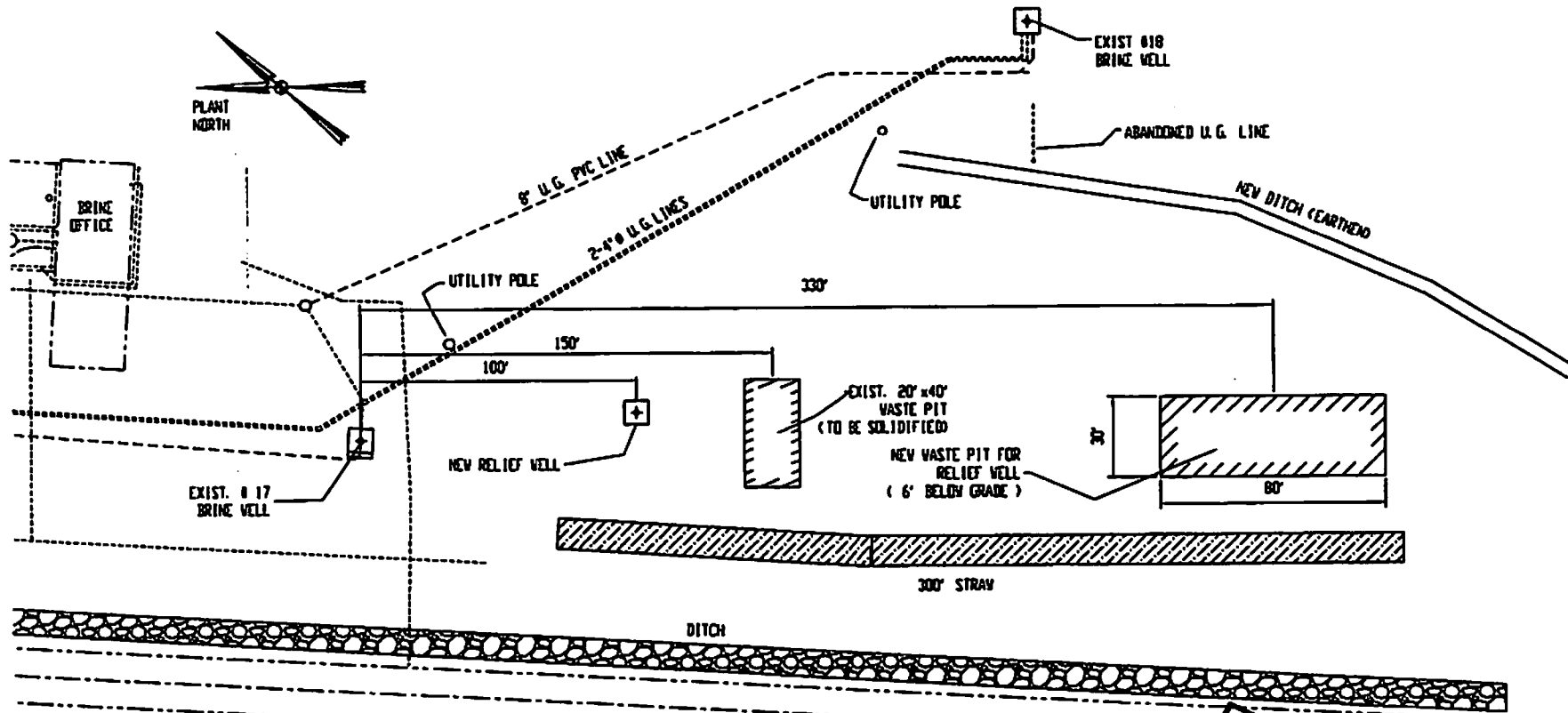
WV Department of  
Environmental Protection

Date \_\_\_\_\_ 18

APPROVED \_\_\_\_\_, Owner

By \_\_\_\_\_ (Title)





API# 47-051-0534  
 No. 17 BRINE WELL  
 MARCH 3, 2003  
 PPG INDUSTRIES, INC.



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 Office of Oil & Gas  
 MAR 20 2003  
 Environmental Protection  
 Department of

51-00902 P

WW-4A  
Revised 6-07

1) Date: 3/09/15  
2) Operator's Well Number  
No. 17 Relief

3) API Well No.: 47 - 051 - 00902

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

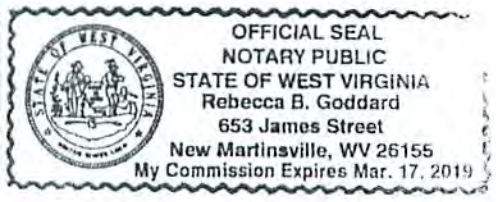
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Eagle Natrium, LLC/ Axiall Corporation</u>	Name <u>(Same)</u>
Address <u>P.O. Box 191</u>	Address _____
<u>New Martinsville, WV 26155</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector	(c) Coal Lessee with Declaration
Address _____	Name _____
_____	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 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 Eagle Natrium, LLC/ Axiall Corporation  
 By: [Signature]  
 Its: Agent  
 Address P.O. Box 191  
New Martinsville, WV 26155  
 Telephone 304-455-2200, ext. 3310

Subscribed and sworn before me this 9th day of March 2015  
Rebecca B. Goddard  
 My Commission Expires March 17, 2019  
 RECEIVED  
 Office of Oil and Gas  
 Notary Public  
 MAR 10 2015

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 to the public in the 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).



5100902A

**SURFACE OWNER WAIVER**

Operator's Well  
Number

No. 17 Relief

**INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A**

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.  
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

**Time Limits and methods for filing comments.** The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

**Comments must be in writing.** Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

**VOLUNTARY STATEMENT OF NO OBJECTION**

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON  
ETC.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Name  
By  
Its

Eagle Natrum, LLC/ Natrum Corp.  
J. Thomas Horan  
Agent

Signature

Date 3/9/15

Date 07/10/2015

RECEIVED  
Office of Oil and Gas  
MAR 10 2015



WW-4B

API No. 47-051-00902 P  
Farm Name Eagle Natrium, LLC/ Axiall  
Well No. 17 Relief

**INSTRUCTIONS TO COAL OPERATORS  
OWNERS AND LESSEE**

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

**WAIVER**

The undersigned coal operator \_\_\_\_\_ / owner X / lessee \_\_\_\_\_ / of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: 3/9/15

Eagle Natrium, LLC/ Axiall Corporation  
By: J. T. Horan  
Its Agent \_\_\_\_\_

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MAR 10 2015  
WV Department of  
Environmental Protection

07/10/2015

5100902P

WW-9  
Rev. 5/08

Page 1 of 6  
API Number 47 - 051 - 00902  
Operator's Well No. 17 Relief

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 Eagle Natrium, LLC OP Code \_\_\_\_\_

Watershed Ohio River Quadrangle New Martinsville, WV

Elevation 680 ft. County Marshall District Franklin

Description of anticipated Pit Waste: N/A

Will a synthetic liner be used in the pit? N/A

**NO PIT.**

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 All liquid waste will be reinjected into the salt cavity. All solid waste will be disposed in an approved landfill.)

Proposed Work For Which Pit Will Be Used:

- Drilling  Swabbing
- Workover  Plugging
- Other (Explain N/A)

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 J. Thomas Horan

Company Official (Typed Name) J. Thomas Horan

Company Official Title Manager, Environmental Control

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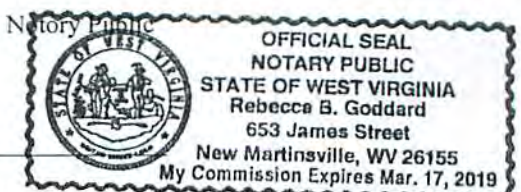
MAR 10 2015

Subscribed and sworn before me this 9th day of March, 2015

WV Department of  
Environmental Protection

Rebecca B. Goddard

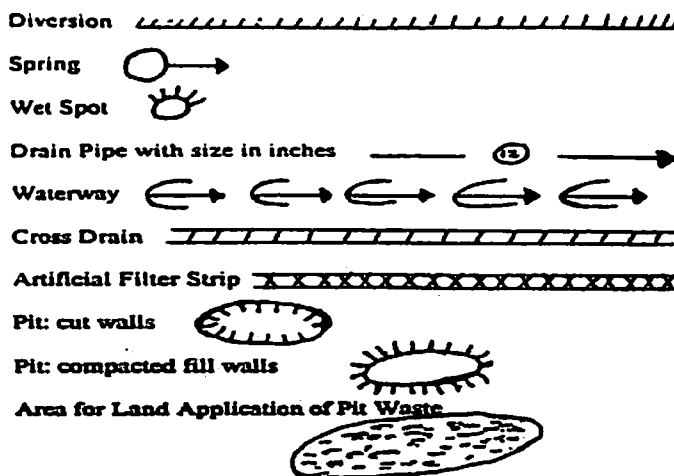
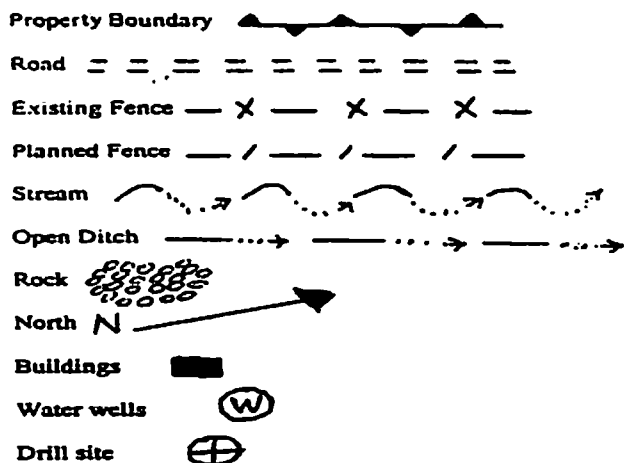
My commission expires March 17, 2019



07/10/2015



**LEGEND**



Proposed Revegetation Treatment: Acres Disturbed <1 acre Prevegetation pH \_\_\_\_\_

Lime \_\_\_\_\_ Tons/acre or to correct to pH \_\_\_\_\_

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

Mulch \_\_\_\_\_ Tons/acre

**Seed Mixtures**

Seed Type	Area I		Seed Type	Area II	
	lbs/acre	lbs/acre		lbs/acre	lbs/acre
N/A					

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

Photocopied section of involved 7.5' topographic sheet.

**(Attached)**

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Plan Approved by: \_\_\_\_\_

MAR 10 2015

Comments: \_\_\_\_\_

WV Department of  
Environmental Protection

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Field Reviewed? ( ) Yes ( ) No

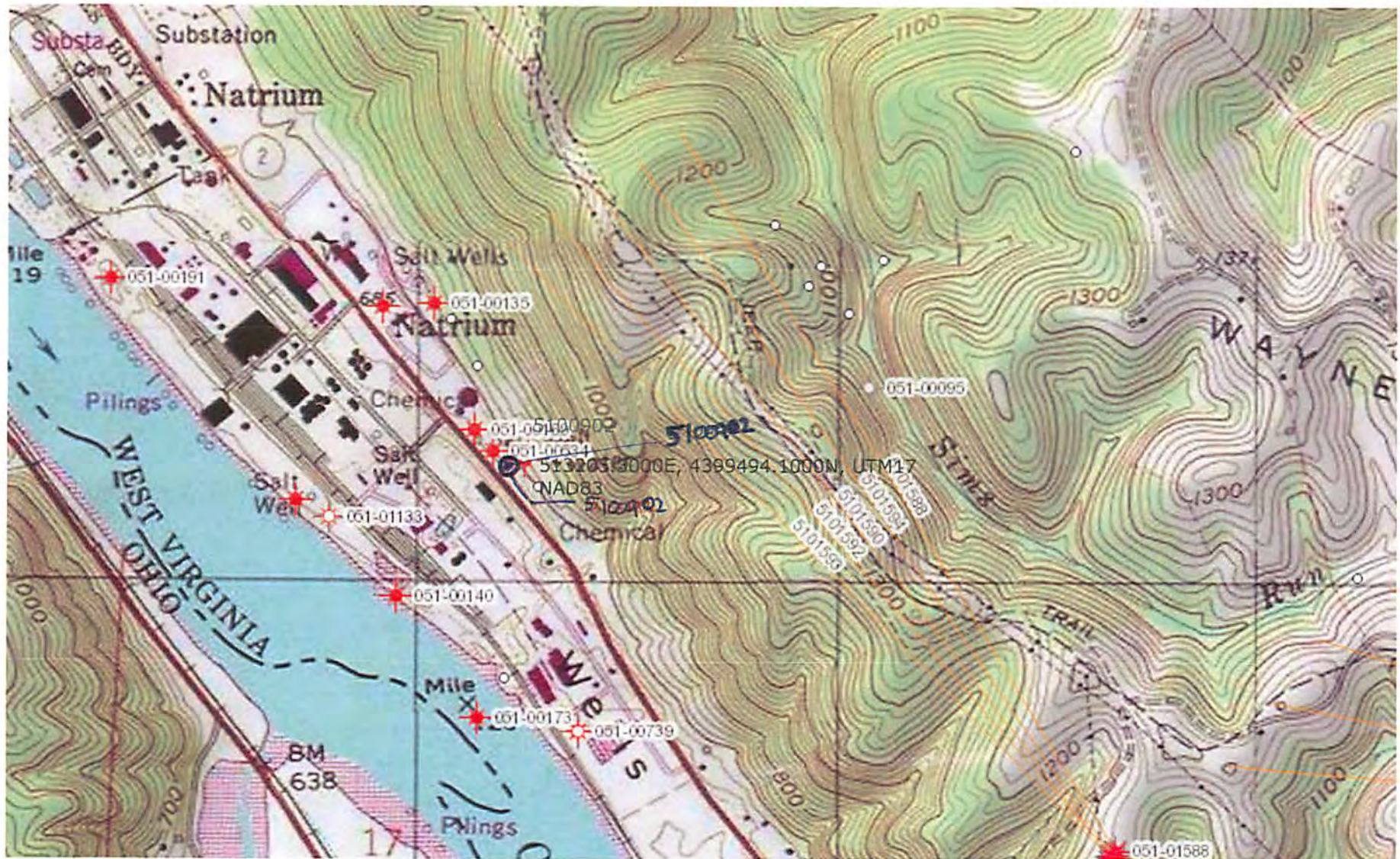




5100902  
 513205.3000E, 4399494.1000N, UTM17  
 NAD83



5100902 P





WW-7  
5-02



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

API: 47-051-00902 WELL NO.: 17 RELIEF WELL

FARM NAME: FLANT AREA OF PPG INDUSTRIES INC.

RESPONSIBLE PARTY NAME: PPG INDUSTRIES INC.

COUNTY: MARSHALL DISTRICT: FRANKLIN

QUADRANGLE: NEW MARTINSVILLE, W.VA. - OHIO

SURFACE OWNER: PPG INDUSTRIES INC.

ROYALTY OWNER: PPG INDUSTRIES INC.

UTM GPS NORTHING: 4,399,494.07755

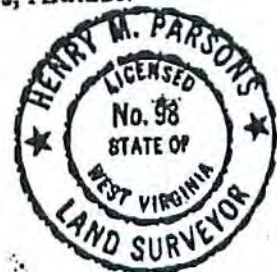
UTM GPS EASTING: 513205.28485 GPS ELEVATION: 207.48  
GROUND ELEV.

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit 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 \_\_\_\_\_



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.

Henry M. Parsons  
Signature  
MARCH 5, 2003  
Date

LAND SURVEYOR P.S. No. 98  
Title



WW-7  
5-02



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

API: 47-051-00902 WELL NO.: 17 RELIEF WELL

FARM NAME: FLANT AREA OF PPG INDUSTRIES INC.

RESPONSIBLE PARTY NAME: PPG INDUSTRIES INC.

COUNTY: MARSHALL DISTRICT: FRANKLIN

QUADRANGLE: NEW MARTINSVILLE, W.VA. - OHIO

SURFACE OWNER: PPG INDUSTRIES INC.

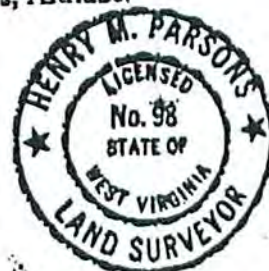
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UTM GPS EASTING: 513205.28485 GPS ELEVATION: 207.48  
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Henry M. Parsons

LAND SURVEYOR P.S. No. 98

Signature

Title

Date

MARCH 5, 2003