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

March 20, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-10700766, issued to SABIC INNOVATIVE PLASTICS US 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: 3
Farm Name: BORG WARNER CORP.
API Well Number: 47- 10700766
Permit Type: Plugging
Date Issued: 03/20/2015

Promoting a healthy environment.

10700766P

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.
4. This well is under a consent order and must be plugged under the terms of that agreement.

1070076GP

WW-4B
Rev. 2/01

1) Date January 21, 2015
2) Operator's Well No. 3
3) API Well No. 47-107-0766

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 X / Shallow ____

5) Location: Elevation 603.25 Watershed Ohio River
District Lubeck County Wood Quadrangle Little Hocking 7.5'

6) Well Operator SABIC Innovative Plastics
Address 9226 Dupont Road
Washington WV 26181

7) Designated Agent ____
Address ____

8) Oil and Gas Inspector to be notified
Name James Stevens
Address 105 Kentuck Road Kenna WV 25248
James.S.Stevens@wv.gov

9) Plugging Contractor
Name Meadows Well Service, LLC.
Address 45 Meadows Drive Ravenswood, WV 26164
meadowswellservice1@frontier.com

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

Set 100' Class A cement plug over Berea perforations and try to squeeze away; Tag plug and spot cement to achieve 50' above perforations; Run in with wire line and set mechanical plug above Berea perforations; * SET A 200' CLASS A CEMENT PLUG ON TOP OF THE MECHANICAL PLUG. GEL 8 5/8" FROM TOP OF CEMENT TO 800'. SET 200' CLASS A CEMENT PLUG FROM 800' - 600'. GEL HOLE TO 300' AND SET A 300' CLASS A PLUG TO SURFACE. ERECT A PROPER MONUMENT.

9NM

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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 James Stevens Date 1/23/2015

10-700766 P

IV-35
(Rev 8-81)

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JAN 12 1988
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

State of West Virginia
Department of Mines
Oil and Gas Division

Date January 8, 1988
Operator's
Well No. 3
Farm Borg-Warner
API No. 47 - 107 - 0766-F

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

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production ___ / Underground Storage ___ / Deep ___ / Shallow ___ /)

LOCATION: Elevation: 603.25 Watershed Ohio River
District: Lubeck County Wood Quadrangle Little Hocking

COMPANY Borg-Warner Chemicals, Inc.
ADDRESS P. O. Box 1868 Parkersburg, West Virginia 26102
DESIGNATED AGENT Arthur T. Sandy
ADDRESS P. O. Box 1868, Parkersburg, WV 26102
SURFACE OWNER Borg-Warner Chemicals, Inc.
ADDRESS P. O. Box 1868, Parkersburg, WV 26102
MINERAL RIGHTS OWNER Same as above.
ADDRESS
OIL AND GAS INSPECTOR FOR THIS WORK Glen P. Robinson ADDRESS Rt. #1, Mt. Pleasant Est. Mineral Wells, WV 26150
PERMIT ISSUED December 5, 1986
DRILLING COMMENCED Recompletion work started 12/8/86
DRILLING COMPLETED Recompletion work completed 12/23/86
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
11 3/4	110'	110'	Circulated to surface
9 5/8			
8 5/8	1,929'	1,929'	Circulated to surface
7	Note: Perm. bridge plug set at 1,875' in 8-5/8" casing.		
5 1/2	4,061'	2,146'	Cement top est. @ 1,871'
4 1/2	Note; Perm. plug set at 4,004' in 5-1/2" casing.		
3			
2	4,068'	1,804.5'	
Liners used			

GEOLOGICAL TARGET FORMATION Berea Sandstone Depth 1809-1812 feet
Depth of completed well 1,872 feet Rotary ___ / Cable Tools Service rig
Water strata depth: Fresh 15-90 feet; Salt ___ feet
Coal seam depths: ___ Is coal being mined in the area? ___

OPEN FLOW DATA
Producing formation Berea Sandstone Pay zone depth 1809-1812 feet
Gas: Initial open flow Sl. Show Mcf/d Oil: Initial open flow ___ Bbl/d
Final open flow 23 Mcf - on the 1st month Mcf/d Final open flow ___ Bbl/d
Time of open flow between initial and final tests 24 hours
Static rock pressure ___ psig (surface measurement) after ___ 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 Oil: 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)

JAN 19 1989

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10700766P

FORM IV-35
(REVERSE)

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

A permanent bridge plug was set 4,004' in the 5-1/2" casing with one bag calseal on top of plug. Cut 5-1/2" casing at 1,915' with young wireline casing cutter. Pulled 1,915' of 5-1/2" casing from hole. Set permanent bridge plug at 1,875' in 8-5/8" casing with two bags calseal on top of plug. Perforate 8-5/8" casing at 1,810'-1,812' with 16 holes. Nowsco foam fraced Berea. Formation broke down at 2,000 psig and treated at 1,650 psig. Treatment consisted of 75% quality foam, 30,000 lbs. 20/40 sand, and a total of 456,720 scf nitrogen. Total water used 220- bbl. Total bbls. of foam treatment was 862 bbls. ISIP 1500 psig 5 min. sip 1430 psig.

Well averaged 23 MCF/day through first month of production. Surface shut-in pressure 600 psig.

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sandstone and Gravel	0	100	
Sand, Shale	100	240	
Sand	240	300	
Shale	300	390	
Sand	390	500	
Sand, Shale	500	810	
Sand	810	870	
Shale	870	900	
Sand	900	995	
Shale	995	1020	
Sand	1020	1100	
Shale	1100	1140	
Sand	1140	1245	
Shale	1245	1300	
Sand	1300	1430	Salt water
Shale	1430	1815	
Sand	1815	1818	Sl Show Gas
Shale-Siltstone	1818	4003	
Limestone On	4003	4092	
Sandstone or	4092	4100	
Sandy Limestone Held	4100	4116	Total Depth

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DEPARTMENT OF ENERGY

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(Attach separate sheets as necessary)

Borg-Warner Chemicals, Inc.
Well Operator

By: Arthur T. Sandy
Arthur T. Sandy
Date: January 8, 1988

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."

•107 00766P

CG-10
Rev. - 9-71

NOV 1

GAS

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Rotary X Oil ___
Cable ___ Gas X
Recycling ___ Comb. ___
Water Flood ___ Storage ___
Disposal ___ ___ (Kind)

Quadrangle Little Hocking 7-1/2

Permit No. WOO-766 REV

47-107

Company Borg-Warner Corp.
Address P.O.Box 1868, Parkersburg, W.Va. 26101
Farm Borg-Warner Corp. Acres 190.79
Location (waters) Ohio River
Well No. Three Elev. 619
District Lubeck County Wood
The surface of tract is owned in fee by Borg-Warner Corp.
Address As above
Mineral rights are owned by Borg-Warner Corp.
Address As above
Drilling Commenced 9-13-77
Drilling Completed 9-22-77
Initial open flow Sl Sh gas cu. ft. ___ bbls.
Final production 500,000 cu. ft. per day xx bbls.
Well open 2 hrs. before test 1400 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16 Cond.			
13-10" 11-3/4"	110	110	Circulated to surface
9 5/8			
8 5/8	1929	1929	Circulated to surface
7			
5 1/2	4061	4061	Est. cem. top 3900
4 1/2			
3			
2	4068	4068	
Liners Used			

Attach copy of cementing record.

Well treatment details:
Halliburton 10-3-77: 1000 bbl water - 28,000# 20/40 mesh sand - 500 gal HcL Acid

Coal was encountered at None Feet ___ Inches
Fresh water ___ Feet 15'-90' Salt Water ___ Feet 1300-1430
Producing Sand Oriskany Depth 4092

Formation Color Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water * Remarks
Sandstone and Gravel	0	100	
Sand, Shale	100	240	
Sand	240	300	
Shale	300	390	
Sand	390	500	
Sand-Shale	500	810	
Sand	810	870	
Shale	870	900	
Sand	900	995	
Shale	995	1020	
Sand	1020	1100	
Shale	1100	1140	
Sand	1140	1245	
Shale	1245	1300	~~Saltwater~~
Sand	1300	1430	Salt water
Shale	1430	1815	
Sand Berea	1815	1818	Sl Show Gas
Shale-Siltstone	1818	4003	
Limestone	4003	4092	
Sandstone	4092	4100	
Sandy Limestone Helderberg	4100	4116	Total Depth

(over)

* Indicates Electric Log tops in the remarks section.

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WV Department of Environmental Protection

DEC 20 1978

Production Report

API	Operator	County	Well Status Well Type	Production Year	Total Gas	Total Oil
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1985	863	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1986	460	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1988	4807	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1989	3548	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1990	4191	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1991	3740	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1992	4181	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1993	4352	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1995	811	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1996	2939	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	1998	3423	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	2004	2789	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	2005	2847	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	2010	0	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	2011	0	0
10700766	GENERAL ELECTRIC CO. D/B/A GE PLASTICS	Wood	Abandoned Well Gas Well	2012	0	0

ORISKANY

BEREA

10700766

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WW-4A
Revised 6-07

1) Date: January 21, 2015
2) Operator's Well Number
3

3) API Well No.: 47 - 107 - 0766

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: Appalachian Shale Cracker Enterprise, LLC
Address: 1735 Market Street, Floor 28 ✓
Philadelphia PA 19103-7501
(b) Name
Address
(c) Name
Address

5) (a) Coal Operator
Name: None
Address
(b) Coal Owner(s) with Declaration
Name: Appalachian Shale Cracker Enterprise, LLC
Address: 1735 Market Street, Floor 28
Philadelphia PA 19103-7501
Name
Address
(c) Coal Lessee with Declaration
Name: None
Address

6) Inspector: James Stevens
Address: 105 Kentuck Road Kenna WV 25248
James.S.Stevens@wv.gov
Telephone: 304-206-7775

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.

OFFICIAL SEAL
Notary Public, State of West Virginia
HARRIET R. COLLINS
Parkersburg & Wood Co. Public Library
3100 Emerson Ave.
Parkersburg, WV 26104
My commission expires May 3, 2024

Well Operator: SABIC Innovative Plastics
By: Scott Dansey — Scott Dansey
Its: Site Manager
Address: 9226 Dupont Road
Washington WV 26181
Telephone: 304-863-7793

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WV Department of Environmental Protection

Subscribed and sworn before me this 22nd day of January 2015
Harriet R Collins — Notary Public
My Commission Expires May 3, 2024

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.

10700766P

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:

Appalachian Shale Cracker Enterprise, LLC
1735 Market St, Floor 28
Philadelphia, PA 19103-7501

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☒ Addressee

B. Received by *(Printed Name)* James Fain
C. Date of Delivery 2-11-15

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

3. Service Type
☒ Certified Mail® ☐ Priority Mail Express™
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ Collect on Delivery

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7013 1090 0001 4317 4777

PS Form 3811, July 2013 Domestic Return Receipt

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10700766P

WW-9
Rev. 5/08

API Number 47 - 107 - 0766
Operator's Well No. 3

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 SABIC Innovative Plastics OP Code _____

Watershed Ohio River Quadrangle Little Hocking 7.5'

Elevation 603.25 County Wood District Lubeck

Description of anticipated Pit Waste: Fluids encountered while plugging subject well

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

Proposed Disposal Method For Treated Pit Wastes:

_____ Land Application
X Underground Injection (UIC Permit Number 34-105-2-13619-00-00)
_____ 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 _____ Swabbing
_____ Workover X Plugging
_____ Other (Explain _____

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 Scott Dansey

Company Official (Typed Name) Scott Dansey

Company Official Title Site Manager

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WV Department of
Environmental Protection

Subscribed and sworn before me this 22nd day of January, 20 15

Harriet R Collins Notary Public

My commission expires May 3, 2024

OFFICIAL SEAL
Notary Public, State of West Virginia
HARRIET R. COLLINS
Parkersburg & Wood Co. Public Library
3100 Emerson Ave.
Parkersburg, WV 26104
My commission expires May 3, 2024

10700766P

Form WW-9

Operator's Well No. 3

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
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 0.5 Acres Prevegetation pH 6.15

Lime 2 Tons/acre or to correct to pH 6.50

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

Mulch Straw; 2 Tons/acre

Seed Mixtures

Area I Seed Type	lbs/acre	Area II Seed Type	lbs/acre
Tall Fescue	40		
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: _____

Comments: _____

Title: _____ Date: _____

Field Reviewed? (_____) Yes (_____) No

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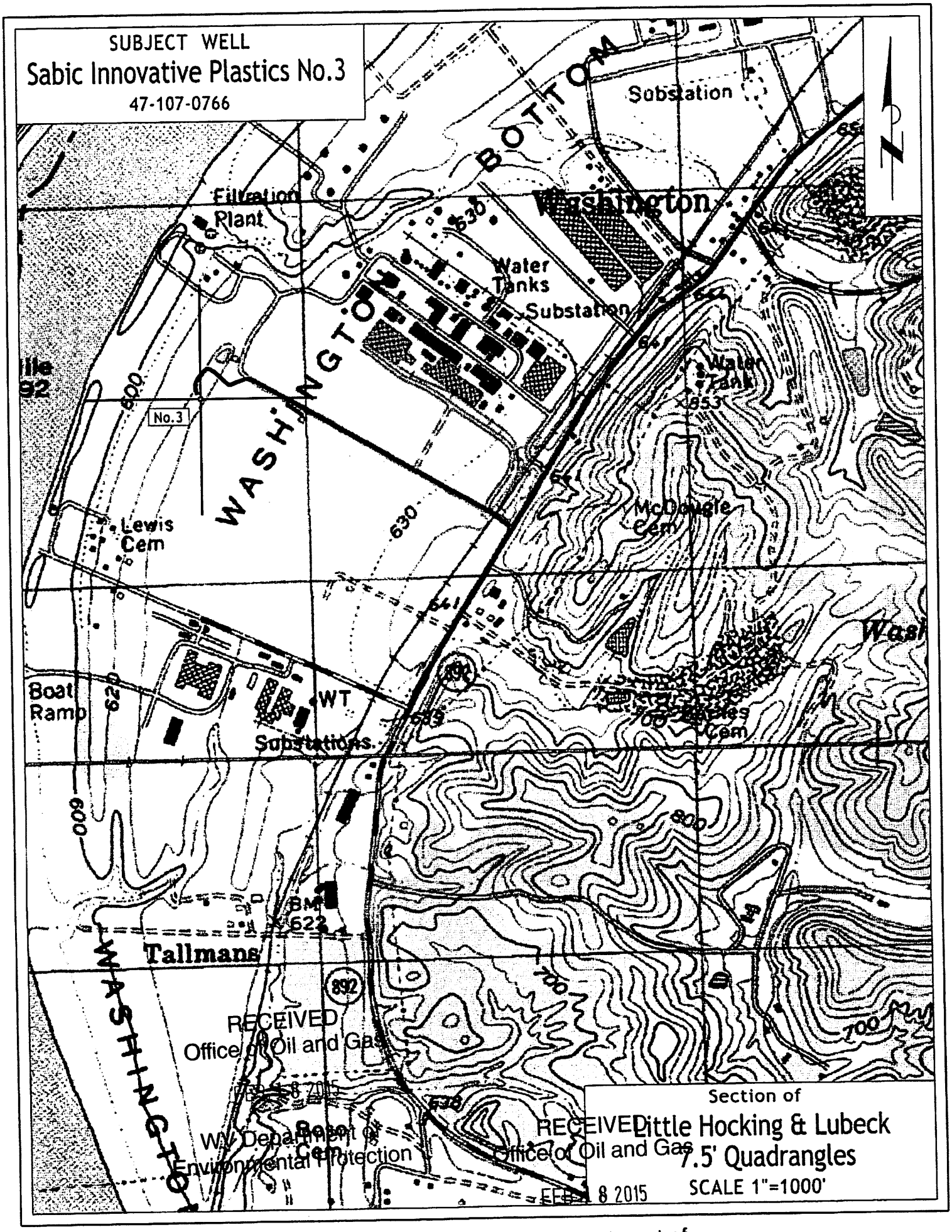

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10700766P

WW-7
5-02

West Virginia Department of Environmental Protection
Office of Oil & Gas

WELL LOCATION FORM: GPS

API: 47- 107 - 0766 WELL NO: 3

FARM NAME: Sabic Innovative Plastics

RESPONSIBLE PARTY NAME: Sabic Innovative Plastics

COUNTY: Wood DISTRICT: Lubeck

QUADRANGLE: Little Hocking 7.5'

SURFACE OWNER: Appalachian Shale Cracker Enterprise, LLC

ROYALTY OWNER: Sabic Innovative Plastics

UTM GPS NORTHING: 4,345,712 (NAD 83)

UTM GPS EASTING: 440,740 (NAD 83) GPS ELEVATION: 188 m. (616.0')

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 & 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 X Post Processed Differential X
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.

Timothy P. Roush — Professional Surveyor
Signature — Title

10/14/2014
Date

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Office of Oil and Gas

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WV Department of
Environmental Protection

10700766P

Michael Baker
INTERNATIONAL

Innovation Done Right...We Make a Difference

January 30, 2015

Appalachian Shale Cracker Enterprise, LLC
1735 Market Street, Floor 28
Philadelphia, PA 19103-7501

RE: Notice of Application to Plug and Abandon a Gas Well
Well 3 (47-107-0766)
SABIC Innovative Plastics US, LLC
9226 DuPont Road
Washington, WV 26181

To whom it may concern:

SABIC Innovative Plastics US, LLC (SABIC) is applying for a permit from the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas to plug and abandon the above-referenced gas well. On behalf of SABIC, Michael Baker Jr., Inc. (Baker) is submitting the following documents to Appalachian Shale Cracker Enterprise, LLC (ASCENT) because it is the surface owner and/or coal operator/owner/lessee of record.

- Form WW-4A – Notice of Application to Plug and Abandon a Well
- Form WW-4B – Application for a Permit to Plug and Abandon (signed off by inspector)
- Form WW-7 – Well Location Form and Topography Map of Well (in lieu of plat/Form WW-6)
- Surface Owner Waiver
- Coal Operator/Owner/Lessee Waiver
- Available Well Records/Completion Report

If you have no objection to the proposed well work, please indicate such by signing and filing the aforementioned Surface Owner Waiver and Coal Operator/Owner/Lessee Waiver with the WVDEP, Office of Oil and Gas at the following address.

- Chief, Office of Oil and Gas
  Department of Environmental Protection
  601 57th Street SE
  Charleston, WV 25304

Any comments regarding the proposed well work must be filed in person or received in the mail by the Chief's office within five days after the permit application filing date. If you have any questions or require additional information, please feel free to contact me at (412) 269-6136 or via e-mail at smoffett@mbakerintl.com.

Sincerely,
MICHAEL BAKER JR., INC.

Scott K. Moffett, PG, PMP
Project Manager

Enclosure: Notice of Application to Plug and Abandon a Gas Well

cc: Mr. Scott Dansey, SABIC (electronic copy)
Mr. John Garner, SABIC (electronic copy)

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FEB 18 2015
WV Department of
Environmental Protection

100 Airside Drive | Moon Township, PA 15108
Office: 412.269.6300 | Fax: 412.375.3980

10700766P

Michael Baker
INTERNATIONAL

Innovation Done Right...We Make a Difference

February 11, 2015
Mr. Jeff McLaughlin
West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street, SE
Charleston, WV 25304-2345

CK 1542
$100.00

RE: Permit Application to Plug and Abandon
Well 3 (47-107-0766)
SABIC Innovative Plastics US, LLC
9226 DuPont Road
Washington, WV 26181

Dear Mr. McLaughlin:

On behalf of SABIC Innovative Plastics US, LLC (SABIC), Michael Baker Jr., Inc. (Baker) is submitting to the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas the enclosed application for a permit to plug and abandon Well 3 (47-107-0766) at the above-referenced facility. Per our previous telephone conversations, a complete application package is enclosed:

- Form WW-4B (signed off by inspector)
- Form WW-4A
- Form WW-9
- Form WW-7 and Topography Map of Well (in lieu of mylar plat)
- Well Records/Completion Report
- Certified Mail Receipt (and cover letter delivered to property owner/coal operator/owner/lessee)
- A $100 fee made payable to the WVDEP

Please note that the required bond is already on file at the WVDEP.

In accordance with SABIC's Consent Order dated December 17, 2014, the above-referenced well must be plugged by April 30, 2015. SABIC has retained Meadows Well Service and intends to begin plugging of the well as soon as possible, so timely processing of this permit application is greatly appreciated. If you have any questions or require additional information, please feel free to contact me at (412) 269-6136 or via e-mail at smoffett@mbakerintl.com.

Sincerely,

MICHAEL BAKER JR., INC.

Scott K. Moffett, PG, PMP
Project Manager

RECEIVED
Office of Oil and Gas
FEB 18 2015
WV Department of
Environmental Protection

Enclosure: Permit Application (original and 2 copies)

cc: Mr. Scott Dansey, SABIC (electronic copy)
Mr. John Garner, SABIC (electronic copy)

10700766F

FORM WV-2 (Obverse) 7/85

RECEIVED NOV 26 1986 DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

1) Date: September 15, 19 86
2) Operator's Well No. Borg-Warner # 3
3) API Well No. 47 -107-0766-Rev -F
State County Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, OIL AND GAS DIVISION
APPLICATION FOR A WELL WORK PERMIT

4) WELL TYPE: A Oil ____ / Gas XX / Underground storage ____ / Deep ____ / Shallow XX /
B (If "Gas", Production XX / Watershed: Ohio River
5) LOCATION: Elevation: 603.25 County: Wood 107 Quadrangle: Little Hocking 437
District: Lubeck 1053
6) WELL OPERATOR BORG-WARNER CORP CODE: 6500
Address P. O. Box 1868
Parkersburg, WV 26101
7) DESIGNATED AGENT Arthur Sandy
Address P O Box 1868
Parkersburg, WV
8) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Glen P. Robinson
Address Rt. 1, Mt. Pleasant Est.
Mineral Wells, WV 26150
9) DRILLING CONTRACTOR:
Name
Address
10) PROPOSED WELL WORK: Drill ____ / Drill deeper ____ / Redrill ____ / Stimulate XX /
Plug off old formation ____ / Perforate new formation XX /
Other physical change in well (specify)
11) GEOLOGICAL TARGET FORMATION, 475 Oriskany, Gordon, Berea
12) Estimated depth of completed well, 4116 feet
13) Approximate trata depths: Fresh, ____ feet; salt, 1300 feet.
14) Approximate coal seam depths: ____ Is coal being mined in the area? Yes ____ / No XX /
15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS Size	Grade	Weight per ft.	New	Used	FOOTAGE INTERVALS For drilling	Left in well	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
Conductor									Kinds
Fresh water	11 3/4	H-40	42	XX		110	110	to surface	Sizes
Coal									
Intermediate	8 5/8	K-55	24	XX		1929.6	1929.6	to surface	Depths set
Production	5 1/2	K-55	17	XX		4061	4061	20 sx	
Tubing									Perforations:
Liners									Top Bottom

RECEIVED Office of Oil and Gas FEB 18 2015 WV Department of Environmental Protection

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-107-0766-F December 5 19 86
Date

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires December 5, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

8793

Bond:	Agent:	Plat:	Casing	Fee	WPCP	S&E	Other
✓	AB	[signature]	[signature]	423827 15-4	Tank	[signature]	

OK HPR

NOTE: Keep one copy of this permit posted at the drilling location.

Director, Division of Oil and Gas File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

10700766

OG – 1
Rev. – 71

RECEIVED
MAR 4 1977

MAR 3 0 1977

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE March 3, 1977

Surface Owner Borg-Warner Corporation Att.: Arthur Sandy
Address P. O. Box 1868, Parkersburg, WV26101
Mineral Owner Same
Address
Coal Owner None
Address
Coal Operator
Address

Company Borg Warner Corporation
Address P.O.Box1868, Parkersburg, WV 26101
Farm Borg-Warner Corporation Acres 190.79
Location (waters) Ohio River
Well No. Three Elevation 599.5
District Lubeck County Wood
Quadrangle Little Hocking 7 1/2

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for Drilling. This permit shall expire if operations have not commenced by 7-8-77.

Robert F. Bell
Deputy Director - Oil & Gas Division

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Office of Oil and Gas
FEB 18 2015
WV Department of Environmental Protection

INSPECTOR TO BE NOTIFIED Paul Goodwin
PH: 477-2455 ADDRESS Smithville, W. Va.

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated Oct. 9, 1970 by Arthur O. Mollendick made to Borg Warner Corporation and recorded on the _____ day of _____ 19___, in Wood County, Book 579 Page 605

X NEW WELL _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE

_____ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

West Virginia Geological and Economic Survey
P. O. Box 879
Morgantown, W. Va. 26505

Very truly yours Borg Warner Corporation
(Sign Name) Arthur P. Sandy
Well Operator

Address of Well Operator
P. O. Box 1868
Street
Parkersburg,
City or Town
W. Va.
State

(Woo-754-expired)

*SECTION 3 . . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements.
Signed by: Arthur P. Sandy

Woo-766
4 7-107
PERMIT NUMBER

10700766

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE

DRILLING CONTRACTOR: (If Known)
NAME _____
ADDRESS _____
TELEPHONE _____

RESPONSIBLE AGENT:
NAME Arthur Bendy
ADDRESS P.O.Box 1868, Parkersburg, WV 26101
TELEPHONE 485 1771

ESTIMATED DEPTH OF COMPLETED WELL: 4200 ROTARY X CABLE TOOLS _____

PROPOSED GEOLOGICAL FORMATION: Oriskany

TYPE OF WELL: OIL _____ GAS _____ COMB. X STORAGE _____ DISPOSAL _____
RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10	150	150	Surface
9 - 5/8			
8 - 5/8	1841	1841	500' to 1341'
7			
5 ½	4071	4071	300' to 3771'
4 ½			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 40 FEET _____ SALT WATER _____ FEET _____
APPROXIMATE COAL DEPTHS None _____
IS COAL BEING MINED IN THE AREA? No BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, $100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

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WV Department of
Environmental Protecti

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

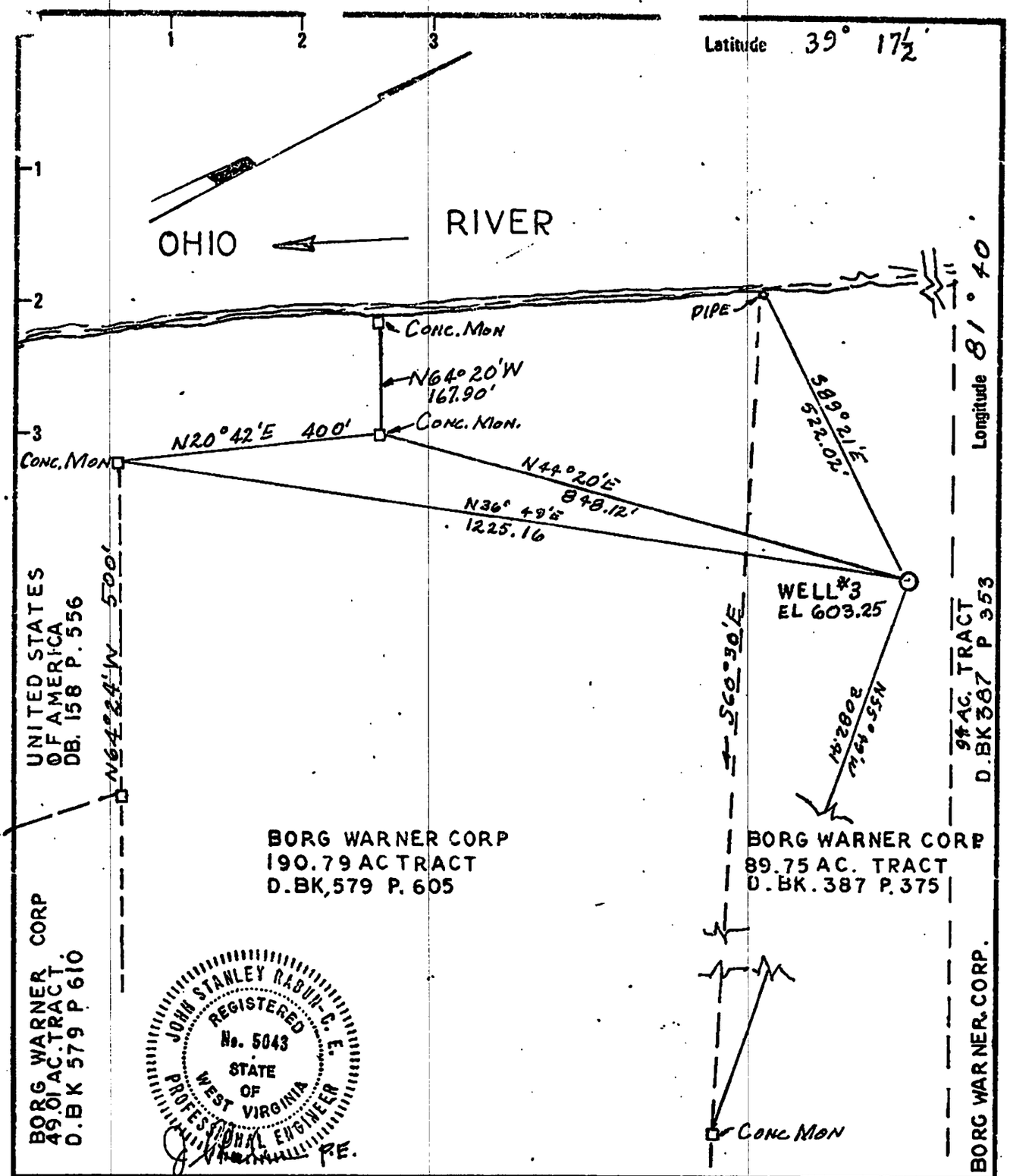
WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

_____
For Coal Company

_____
Official Title

10700766P



RELOCATION ☑
New Location ☐
Drill Deeper ☐
Abandonment ☐

Minimum Error of Closure .....
Source of Elevation BORG WARNER CORP CONC MON #1 EL 644.337

"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."

Company BORG WARNER CORP.
Address WOODMAR PLANT WASHINGTON, W. VA.
Farm BORG WARNER CORP.
Tract ____ Acres 89.75 Lease No. ____
Well (Farm) No. 3 Serial No. ____
Elevation (Spirit Level) ____
Quadrangle LITTLE HOCKING 7½' SERIES
County WOOD District LUBECK
Engineer J. Rabun P.E.
Engineer's Registration No. W.Va. No. 5043
File No. ____ Drawing No. ____
Date 4-21-77 Scale 1"=200'

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

WELL LOCATION MAP
FILE NO. 107-0766

+ 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.

N22061