

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

November 10, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-6101339, issued to NOUMENON CORPORATION, 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: 3-8

Farm Name: CONSOL. COAL

API Well Number: 47-6101339

Permit Type: Plugging Date Issued: 11/10/2014

PERMIT CONDITIONS

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

CONDITIONS

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

McLaughlin, Jeffrey W

From: Russell Bolyard <rbolyard@lauritaenergy.com>

Sent: Thursday, October 30, 2014 2:57 PM

To: McLaughlin, Jeffrey W

Subject: Affidavit and Bond Hole information

Attachments: Affidavits for Noumenon.pdf

Jeffery, sorry for the delay, I had to wait to talk to Mr. Shuman regarding the Bond Hole test he said he is fine with proceeding on to a couple of tests in the fieled to verify that the casing for the degas holes we intend to plug are cemented in as we have represented. I attached a pdf of Affidavits for all of the plugging permits I submitted to date. Let me know how to proceed from here, Thanks Russell

Russell L. Bolyard Laurita Energy LLC Business Development Manager P.O. Box 182 Granville, WV 26534 rbolyard@lauritaenergy.com Phone: (304) 692-0556

AFFIDAULTS FOR: 061-01336-C
01337-C
01339-C
01349-C
01350-C
01351-C
01357-C
01357-C
01357-C
01360-C
01363-C
01361-C

Affidavit

I, Russell L. Bolyard hereby affirm that on the August the 19th, 2014 I personally visited Coal Bed Methane Well Site 47-061-01339-C, Well # 3-8 and verified its location and that I visually confirmed that to the best of my knowledge the well casing was cemented in to the surface.

Russell L. Bolyard

INDIVIDUAL ACKNOWLEDGMENT

State of: West Virginia County of: Monongalia

On this, the <u>29th</u>, <u>October</u>, 2014, before me, a notary public, personally appeared <u>Russell L. Bolyard</u> known to me (or satisfactorily proven) to be the person whose name he subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Notary Public

My commission expires: August 22, 2017

Orticial Seal
Biotery Public, State Of West Verglain
Lois A Brown
1652 Urito Sandy Road
Bruceton Mills WV 26528
My commission expires August 22, 2017

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DCT 3 0 2014

WV Department of Environmental Protection WW-4B Rev. 2/01

1) Date August 12	,	2014
2) Operator's	- 13	
Well No. 3-8		
3) API Well No.	47-061	- 01339-C

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

4)		d injection/ Waste disposal/ derground storage) Deep/ Shallow_X
5)	Location: Elevation 344 meters	Watershed Monongahela River
	District Clay	County Monongalia Quadrangle Blacksville
6)	Well Operator Noumenon Corporation	7) Designated Agent Lonnie Atkins
	Address 2461 Mason Dixon Hwy	Address 2461 Mason Dixon Hwy
	Core, WV 26541	Core, WV 26541
8)	Oil and Gas Inspector to be notified	9) Plugging Contractor
	Name Gayne Knitowski	Name Noumenon Corporation
	Address P.O. Box 108	Address 2461 Mason Dixon Hwy
	Gormania, WV 26720	Core, WV 26541

See Attached Work Order

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence work can commence. SEP 1 6 2014

Work order approved by inspector

WW-4B Application for Permit to Plug or Abandon Section 10-Work Order

API Well No: 47-061-01339-C

Operator Well #: 3-8

Well History: Well 3-8 which was converted in 1998 to a Coal Bed Methane recovery well, previously the well had been installed as a Degas/Ventilation hole to support deep mining operations of the CONSOL Humphrey No. 7 Mine which was located in the Pittsburgh coal seam. According to Mr. Roger Duckworth, 37 Sand Plant Rd, Worthington, WV 26591 who was employed by CONSOL for many years and whose primary responsibility was to manage the DeGas development operations within the mine area the following procedures were used to construct the Degas Wells: The wells were generally drilled to the Sewickley Coal seam or approximately 90-100 feet above the Pittsburgh coal seam. The holes were cased and cemented in with solid steel pipe of varying diameters through the Waynesburg coal seam. Below the Waynesburg coal a slotted steel pipe was installed to the Sewickley Coal Seam. It was generally understood that the strata that broke above the mine due to subsidence would typically roofed out in or around the Sewickley Horizon this allowed the methane gas to then vent through the holes and the slotted pipe helped maintain an open pathway to the surface if the strata shifted.

Casing Diameter: 5" Casing Thickness: 1/4" Casing Reported Depth: 602.0'

Estimated Casing Weight: 10,088 lbs. Required lifting Capacity: 15,132 lbs.

*

Casing Retrieval (35-4-13.6): Noumenon Corporation will make a reasonable effort to cut and pull all recoverable casing from the well. Noumenon Corporation proposes to use a Bucyrus-Erie 28L Spudder Rig or other similar type equipment with a lifting capacity of at least 150% the estimated weight of the casing to perform the extraction process. If the pipe can be removed it will be brought to the surface in manageable lengths and cut using a Hydraulic Cut off saw, the pipe will be stockpiled for later removal or loaded immediately onto a trailer for removal to the Noumenon supply yard or taken straight to a salvage yard. If the casing cannot be pulled with reasonable effort then the operator will make reasonable attempts to perforate the pipe and squeeze cement behind the pipe in the grouting process so as to prevent contamination of the fresh water zone.



Plugging Methods (35-4-14): The operator shall remove/bail all oils and or salt waters from the well prior to initiating the plugging process. The operator will install a bottom plug that is 100 feet thick from the base of the well using API Class A Portland Hydraulic Cement (with a Calcium Chloride content of 3% or less and no other additives) On top of the bottom plug the operator may install a Spacer plug of 6% Bentonite gel using a mixture rate of 100 lbs per 5bbl of water. The operator would then install a top or surface plug of cement as per the criteria mentioned above, a minimum of 100' feet below the surface. The Cement grout and bentonite gel shall be placed in the hole under pressure using a tremie tube and grout pump. No workable coal seams lie above the Sewickley coal seam.

Plugging and Well Records (35-4-12.1): The operator and or contractor hired to perform the plugging and Shall maintain a log or records of such detail that the entries and related data on Form WR-38 "Affidavit of Plugging and Filling Well" can be completed. The WR-38 shall reflect all data discovered or changes 114 made after the permitted well work has been finished.

(V/V Department of Environmental Protection Reclamation of the Site: Upon completion of the well plugging all equipment, piping and other debris from the plugging operation shall be removed from the site. All disturbance created by the plugging or access to the well site shall be reclaimed and vegetated to prevent erosion and sedimentation. The operator shall use utilize WV Department of Environmental Protections Best Management Practices as the criteria for Erosion and Sediment Control and revegetation.

Monument: Upon completion of the site reclamation and in conjunction with the closure of the well the operator shall install a monument in accordance with 35-4-(5) (b) and as follows:

- 1. The monument shall be made of steel pipe.
- 2. The diameter shall be 6"
- 3. The pipe shall be imbedded into the well head 10 feet below the surface level and protrude 30" above the ground surface.
- 4. The pipe shall be sealed with concrete cement.
- 5. The API Number shall painted onto the pipe in 1/2" height numbering.

Responsible Parties: The operator, contractors and drillers including all service companies are directed that they shall comply with WV Code 22-6

THEN IT IS NOT NECESSARY TO PULL OR PERFORATE CASING.

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Office of Oil and Gas
SEP 1 6 2014

WV Department of Environmental Protection 11/14/2014

FORM WW-5B (8/1998)

Page 1 of 2

STATE OF WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS COALBED METHANE PERMIT APPLICATION

1) Well	perator: Noumenon Corporation 2) Well Name 3-8
3) Opera	or's Well Number 3-8 4) Elevation 1132'
5) Well	ype: (a) Oil/ or Gas/ (b) If Gas: Production/ Underground Storage/ CBM/ Deep/ Shallow/
6) Propo	ed Target Formation(s):
7) Propo	ed Total Depth: 690' feet As determined by wire line - 19
	timate Fresh Water Strata Depths:
9) Appr	cimate Salt Water Depths: Unknown
10)	Approximate Coal Seam Depths: Pittsburgh 430' - See Attachment
:	Does Land Contain Coal Seams Tributary to Active Mines? Yes/ NoX/
12)	(a) Proposed Well Work: Conversion to CBM Well
(b)	If Stimulation Proposed, Describe Means to be Used to Stimulate Well:
13)	(a) Does the proposed operation plan to convert an existing well (as defined in W. Va. Code § 22-6-1) or a vertical ventilation hole to a coalbed methane well? Yes/ No/
(b) !	If yes, please attach to this Application a list of all formations from which production is anticipated and a description of any plans to plug any portion of the well.
14)	(a) Will the proposed coalbed methane well be completed in some but not all coal seams for production (except for a gob well or vent hole proposed to be converted to a well)? Yes/ No/
(b)	If yes, please attach to this Application a plan and design for the well which will protect all workable coal seams which will be penetrated by the well.
15)	(a) Does the proposed operation include horizontal drilling of a well commenced on the surface? Yes/ No/
(b)	If yes, please attach to this Application a description of such operations, including both the vertical and horizontal alignment and extent of the well from the surface to total depth.

FORM WW-5(B)_(8/1998)

Page 2 of ____ 2

CASING AND TUBING PROGRAM

TYPE	SPECIFICA	TIONS	FOOTAGE INTERVALS			CEMENT	
٠	Size	Grade	Weight per ft.	For Drilling	Left in Well	Fill-up (cu. ft.)	
Conductor	5"				602'		
Fresh Water							
Coal							
Intermediate							
Production							
Tubing:							
Liners						11-0-10-0-10-10-10-10-10-10-10-10-10-10-	

PAC	CKERS:

	For Office of Oil and Gas Use Only
·	Fee(s) paid: Well Work Permit Reclamation Fund WPCP
	Plat WW-9 WW-5B Bond (Type)

ATTACHMENT WW-5B-10

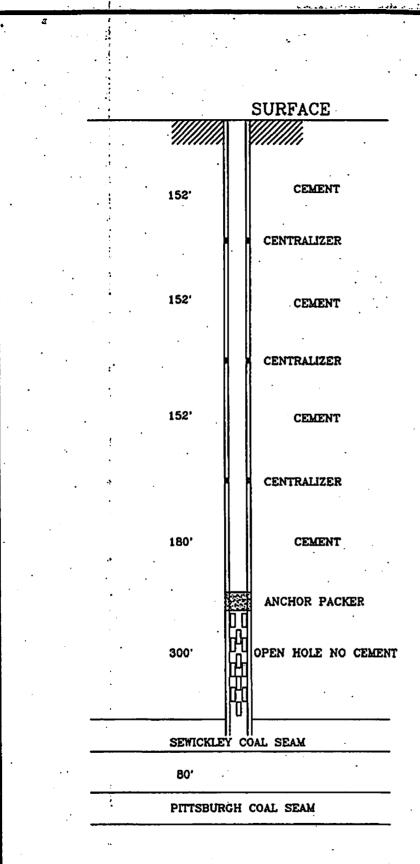
Well # 3-8 ·			
Approximate Pittsburgh coal elev	vation:	430.'	
Approximate surface elevation:	1132'		_

Within 750 horizontal feet and 100 vertical feet of the Pittsburgh coal seam, there are no workable coal seams due to the thickness, quality, and marketability as per the WV Geological Survey Reports of 1913 for Monongalia County.

According to the WV Geological Report, the General Interval for the coal seams located above the Pittsburgh coal seam are:

Washington	510 feet	approximate thickness 2.0
Waynesburg-A	420 feet	approximate thickness 2.0
Waynesburg	360 feet	approximate thickness 5.0
Sewickley	100 feet	approximate thickness 5.0
Redstone	25 feet	approximate thickness 2.0

There is no known commercial development of these seams in the area of the Coalbed Methane Well.



DEPTH - VARIES DIAMETER - VARIES 3/4" CASING THICKNESS TYPICAL BOREHOLE PLAN FOR ALL DEGASIFICATION BOREHOLES

NOT TO SCALE

MFN - 338-D

WW-4A Revised 6-07

1) Date:		August 12th	August 12th, 2014			
2) Operator's 3-8		s Well Numb	er			
3)	API Well I	No.: 47 -	061		01339-C	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

	rface Own Name	er(s) to be served: WV DNR Public Land Corporation	5) (a) Coal Operator Name	Murray Energy Corporation	/
	lress	Building 74	Address	46226 National Road	
Aut	iress	324 Fourth Ave	Address	St. Clairsville, OH 43950	
(h)	Name	South Charleston, WV 25303	(b) Coal Own	ner(s) with Declaration	
	iress	Count Chanceton, 111 2000	Name	ier(s) with Declaration	
2100	11000		Address		
			, Manual Control		
(c) 1	Name		Name		
Add	dress		Address		
6) Insp	ector	Gayne Knitowski	(c) Coal Less	see with Declaration	
Add	ress	P.O. Box 108	Name		
		Gormania, WV 26720	Address		
Tele	phone	(304) 546-8171			
101		SONS NAMED ABOV	ell on Form WW-4B, which s		
	well it. (2) The pl The reason y However, you	at (surveyor's map) showing the well ou received these documents is that you le ou are not required to take any action at all that under Chapter 22-6 of the West Virgi	have rights regarding the applica		

OFFICIAL SEAL NOTARY PUBLIC By:	President
STATE OF WEST VIRGINIA RUSSELL L. BOLYARD Addr	
11 Monument Lane, Morpantown, WV 26508	Core, WV 26541
My Commission Expires August 25, 2019 Teler	hone (304) 296-5460
Subscribed and Morn before the this	5th day of August RECEIVED Notary Public Office of Oil and G

My Commission Expires Oil and Gas Privacy Notice August 25th, 2019

SEP I 6 7014

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.

280		OMAIL Only; No Ins	RE(urance C	Coverage Provided)
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9	City, State, SOU	TH CHARI	ESTON	, WV 25303
	PS Form 3800. August 1	and a		See neverse for instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	I
 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. 	B. Received by (Printed Name) G. Date of Delivery	
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WV DNR PUBLIC LAND CORP BUILDING 74 324 FOURTH AVE		
SOUTH CHARLESTON, WV 25303	3. Service Type ☐ Certified Mail® ☐ Priority Mail Express™ ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery	
	4. Restricted Delivery? (Extra Fee) ☐ Yes	
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PS Form 3811, July 2013 Domestic Re	etum Receipt	RECEIVED

Office of Oil and Gas

SEP 1 6 2014

WV Department of Environmental Protection

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ST. Clairsville, OH 43950	3. Service Type ☐ Certified Mail® ☐ Priority Mail Express™ ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery
	4. Restricted Delivery? (Extra Fee) ☐ Yes
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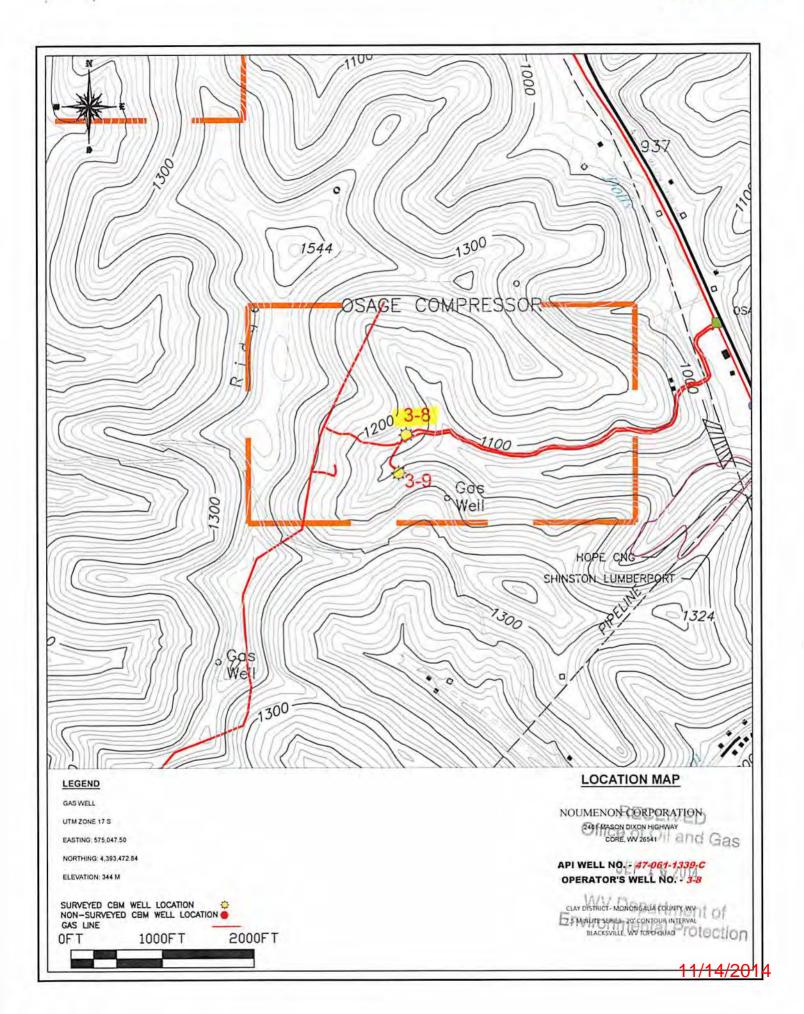
WW-9 Rev. 5/08

F	age 1	of 1	
API Number 47 -	061	01339-C	
Operator's Well No	3-8		

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 Noumenon Corporation		OP Code	
Watershed Monongahela	Quadrangle Blacksville		
Elevation 344 meters (1124) County Money		_{District} Clay	
Description of anticipated Pit Waste: Not Applicable	e		
Will a synthetic liner be used in the pit?	4.	BE CONTAI	EFFLUENT MINED IN TAI
Proposed Disposal Method For Treated Pit Wastes: Land Application		1,00 5(5	
Underground Injection (UIC Pe	ermit Number)
Reuse (at API Number)
Off Site Dispposal (Supply form	n WW-9 for disposal loca	tion)	
Other (Explain			
Proposed Work For Which Pit Will Be Used:			
Drilling	Swabbing		
Workover	Plugging		
Other (Explain	and conditions of the GEI	Environmental Prote	ction. I understand tha
Other (Explain	and conditions of the GES st Virginia Department of ns of any term or conditionally examined and ambased on my inquiry of its true, accurate, and cossibility of fine or imprise	Environmental Prote on of the general per familiar with the info those individuals in omplete. I am aware	ction. I understand tha mit and/or other applic ormation submitted on nmediately responsible
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WW-7 8-30-06



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

I comb han	President	8/15/3014 Date
/ Um // had	id Gus.	01.
 Letter size copy of the I the undersigned, hereby certify belief and shows all the informat prescribed by the Office of Oil are 	ion required by law and the	est of my knowledge and
	Real-Time Differential X	-
Mapping Grade GPS X:		W/V Department of Environmental Protection
Rea	ll-Time Differential	
Survey grade GPS: Post		SEP 1 0 2011
 Accuracy to Datum – 3.05 meters Data Collection Method: 		Office of Oil and Gas
	a level (MSL) – meters.	RECEIVED
The Responsible Party named abore preparing a new well location pla above well. The Office of Oil and the following requirements: 1. Datum: NAD 1983, Z	t for a plugging permit or a	ssigned API number on the coordinates that do not meet
UTM GPS EASTING: 5750		LEVATION: 344
UTM GPS NORTHING: 439		244
ROYALTY OWNER: WV I		nd Division
SURFACE OWNER: WV [ONR Public Lar	ad Division
QUADRANGLE: Blacks		nd Division
COUNTY: Monongalia		ct: Clay
RESPONSIBLE PARTY NAM	E: LOTTING ALKITS	
FARM NAME: CONSO	Langia Atkini	
FARM NAME; CONSO	L Energy Inc	ZNO.:
API: 47-061-01339-0		
	OCATION FURN	

