



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

June 05, 2014

WELL WORK PERMIT
Vertical Well

This permit, API Well Number: 47-5101764, issued to NOBLE ENERGY, INC., 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: MND 99 V
Farm Name: CONSOLIDATION COAL COMPA
API Well Number: 47-5101764
Permit Type: Vertical Well
Date Issued: 06/05/2014

Promoting a healthy environment.

INSPECTORS PERMIT SUMMARY FORM

GPS YES [] NO []

DATE STARTED/LOCATION: _____ OPERATOR: NOBLE ENERGY, INC.
 DRILLING COMMENCED: _____ FARM: CONSOLIDATION COAL COMPANY
 TO DATE: _____ DEPTHS: _____ Well No: MND 99 V
 WATER DEPTHS: _____ COAL DEPTHS _____

QUESTIONS FOR THIS REPORT ARE IN ACCORDANCE OF WV CODE 22-6-30 AND REGULATIONS 35CSR 4-12.1 AND 35CSR 4-16 AND THE GENERAL WATER POLLUTION CONTROL PERMIT.

POINTS ARE TO BE GIVEN UP TO MAXIMUM AS SHOWN BASED ON PERFORMANCE.

1. DID OPERATOR GIVE PROPER NOTICE TO INSPECTOR BEFORE THE FOLLOWING:

A. CONSTRUCTION	YES [] NO [] (2_PTS)	(4_PTS) _____
B. DRILLING	YES [] NO [] (2_PTS)	
2. WAS THE TIMBER CUT, STACKED, AND BRUSH USED FOR SEDIMENT BARRIERS BEFORE DIRT WORK STARTED? YES [] NO [] (2_PTS) (4_PTS) _____
3. ARE ALL LOCATION AND/OR ROAD BANKS BEING SLOPED? YES [] NO [] (4_PTS) (4_PTS) _____
4. CONSTRUCTIONS:
WERE THE FOLLOWING SEDIMENT CONTROL STRUCTURES PROPERLY INSTALLED/MAINTAINED?

A. ROAD DITCHES (1)_ (2)_ (3)_ (4)_ (PTS)	B. CROSS DRAINS (1)_ (2)_ (3)_ (4)_ (5)_ (PTS)
C. CULVERTS (1)_ (2)_ (3)_ (4)_ (5)_ (PTS)	D. CREEK CROSSINGS (1)_ (2)_ (3)_ (PTS)
E. DIVERSION DITCHES (1)_ (2)_ (3)_ (PTS)	F. BARRIERS (1)_ (2)_ (3)_ (PTS)
G. TEMPORARY SEEDING YES [] NO [] (10_PTS)	

POINTS AVAILABLE FOR QUESTION 4: (33_PTS) _____

5. HAS TOP SOIL (IF ANY) BEEN STOCKED PILED? YES [] NO [] (2_PTS) (2_PTS) _____
6. IS THE PIT PROPERLY INSTALLED AND MAINTAINED? YES [] NO [] (9_PTS) (9_PTS) _____
7. RECLAMATION:

A. ROADWAY (1)_ (2)_ (3)_ (PTS)	B. LOCATION (1)_ (2)_ (3)_ (PTS)
C. PITS (1)_ (2)_ (3)_ (PTS)	D. PIPELINES (1)_ (2)_ (3)_ (PTS)
E. TANK DIKES (1)_ (2)_ (3)_ (PTS)	F. API INSTALLED YES [] NO [] (3_PTS)
G. ADEQUATE SEEDING MATERIALS (1)_ (2)_ (3)_ (PTS)	
H. WAS SEED BED ADEQUATE (1)_ (2)_ (3)_ (PTS)	

POINTS AVAILABLE FOR QUESTION 7: (24_PTS) _____

8. WAS RECLAMATION COMPLETED WITHIN:
6 MTHS OF TD 6_PTS ONLY; 4 MTHS OF TD 12_PTS ONLY; 2 MTHS OF TD 19_PTS ONLY;

POINTS AVAILABLE FOR QUESTION 8: (19_PTS) _____

TOTAL MAXIMUM POSSIBLE SCORE OF 99.

TOTAL RECLAMATION SCORE: _____

DATE RELEASED

INSPECTOR'S SIGNATURE

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. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code §22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR 4-19.1.c, if the operator is unable to sample and analyze any water well or spring with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. 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.
5. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours.
6. Well work activities shall not constitute a hazard to the safety of persons.



DRILLING WELL PLAN
MND-99V
Marcellus Observation Well
Marshall County, WV

MND-99V SHL (Lat/Long) (491736.63N, 1638825.55E) (NAD27)

Ground Elevation 1192'
Azim 56°

MND-99V BHL (Lat/Long) (492004.45N, 1639222.41E) (NAD27)

WELLBORE DIAGRAM	HOLE	CASING	GEOLOGY	Top	Base	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS	
											TD
	26	20" 94#	Conductor	40	40	AIR	To Surface	N/A	Ensure the hole is clean at TD	Stabilize surface fill/soil. Conductor casing = 0.438" wall thickness	
	12-3/8"	9-5/8" 36# HCK-55 BTC	Pittsburgh Coal Surface/Coal Casing	714 1112	722 1112	AIR	15.6 ppg Class A to surface plus 50% Excess Yield = 1.18	Bow Spring on first 2 joints then every third joint to 100' form surface	Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	Surface/Coal casing = 0.352" wall thickness Burst=3520psi Casing stuck at 1112', perforated at 800' and cemented from there.	
			Price Formation	2270	2270						
			Weir Sand	2430	2430						
			Contingency Int. Casing	2680	2680						
			KOP	2700 MD	2700 TVD						
			Speechley		3586						
			Drop to Vertical	4170 MD	4100 TVD						
		4-1/2"		Angola	5094	5716					
		11.6# P-110 BTC		Rheinstreet	5716	5987	AIR	14.8 ppg Class A TOC >= 500' above 9.625" shoe plus 30% Excess	Rigid Bow Spring centralizers every other joint to TOC	Once casing is at setting depth, circulate a minimum of two hole volumes prior to pumping cement.	6DLS build, Tangent @ 19', 6DLS drop back to vertical Production casing = 0.25" wall thickness Burst=10690 psi
		8-3/4"		Sonyea	5987	5917					
				Cashaqua	5917	6068					
				Middlesex	6068	6091					
				Burkett	6158	6176					
				Tully Limestone	6176	6202					
			Hamilton	6202	6237						
			Marcellus	6237	6290						
			Onondaga	6299							
			TD	6397 TVD	(6468' MD)						

4705101764M

JIN 9/24/2014

Received
SEP 26 2014
Office of Oil and Gas
WV Dept. of Environmental Protection

DRILLING WELL PLAN		MIND-99V		MIND-99V SHL (Lat/Long)		MIND-99V BHL (Lat/Long)		MIND-99V BHL (Lat/Long)		MIND-99V BHL (Lat/Long)	
MND-99V		MND-99V		MND-99V		MND-99V		MND-99V		MND-99V	
Marcellus Observation Well		Marcellus Observation Well		Marcellus Observation Well		Marcellus Observation Well		Marcellus Observation Well		Marcellus Observation Well	
Marshall County, WV		Marshall County, WV		Marshall County, WV		Marshall County, WV		Marshall County, WV		Marshall County, WV	
(491736.73N, 1638825.5E) (NAD27)		(491736.73N, 1638825.5E) (NAD27)		(491736.73N, 1638825.5E) (NAD27)		(491736.73N, 1638825.5E) (NAD27)		(491736.73N, 1638825.5E) (NAD27)		(491736.73N, 1638825.5E) (NAD27)	
Ground Elevation		1192'		1192'		1192'		1192'		1192'	
Azim		56°		56°		56°		56°		56°	
WELLBORE DIAGRAM		WELLBORE DIAGRAM		WELLBORE DIAGRAM		WELLBORE DIAGRAM		WELLBORE DIAGRAM		WELLBORE DIAGRAM	
HOLE	CASING	GEOLOGY	Top	Base	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS		
26	20" 94#	Conductor	40	40	AIR	To Surface	N/A	Ensure the hole is clean at TD.	Stabilize surface fill/soil. Conductor casing = 0.438" wall thickness		
12-3/8"	9-5/8" 36# HCK-55 BTC	Pittsburgh Coal	843	848	AIR	15.6 ppg Class A to surface plus 50% Excess Yield = 1.2	Bow Spring on first 2 joints then every third joint to 100' form surface	Fill with fresh water (<3%KCL) gel mud once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	Surface/Coal casing = 0.352" wall thickness Burst=3520psi		
8-3/4"	7-26# P-10 TXP BTC	Price Formation	2270	2270	AIR	15.6 ppg Class A to surface plus 50% Excess Yield = 1.2	Bow spring centralizers every third joint to 100' feet from surface	Fill with gel mud once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	CONTINGENCY STRING (IF HOLE PROBLEMS ARE ENCOUNTERED) Intermediate casing = 0.362" wall thickness Burst=9960 psi		
8-3/4" or 7-7/8" Vertical/ Deviation	4-1/2" P-110 BTC	Contingency Int Casing	2680	2680	AIR	14.8 ppg Class A TOC >= 200' above 9.625' shoe plus 30% Excess	Rigid Bow-Spring centralizers every joint to TOC	Fill with gel mud once drilled to TD. Once casing is at setting depth, circulate a minimum of two hole volumes prior to pumping cement.	60LS build, Tangent @ 19'. 60LS drop back to vertical Production casing = 0.25" wall thickness Burst=10690 psi		
		KOP	2700 MD	2700 TVD							
		Speechley		3586							
		Drop to Vertical	4170 MD	4100 TVD							
		Angola	5094	5716							
		Rheinsteel	5716	5987							
		Sonyea	5987	5917							
		Cashaqua	5917	6068							
		Middlesex	6068	6091							
		Burkott	6158	6176							
		Tully Limestone	6176	6202							
		Hamilton	6202	6237							
		Marcellus	6237	6290							
		Onondaga	6290	6296							
		TD		6389 TVD							



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MAY 08 2014
WV Department of
Environmental Protection

WW - 2B
(Rev. 8/10)

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Noble Energy, Inc.

<u>494501907</u>	<u>Marshall</u>	<u>Franklin</u>	<u>Powhatan Point</u>
Operator ID	County	District	Quadrangle

2) Operator's Well Number: MND 99 V 3) Elevation: 1192'

4) Well Type: (a) Oil _____ or Gas X
 (b) If Gas: Production X/other / Underground Storage _____
 Deep _____ / Shallow X

5) Proposed Target Formation(s): Marcellus, Burkett Proposed Target Depth: Deepest 6237'

6) Proposed Total Depth: 6389' TVD 6825 MD Feet Formation at Proposed Total Depth: Huntermville Chert

7) Approximate fresh water strata depths: 518' and 655'

8) Approximate salt water depths: None noted in offsets

9) Approximate coal seam depths: Sewickley 673', Pittsburgh 763'

10) Approximate void depths, (coal, Karst, other): None Anticipated; Drilling in Pillar-see map attached

11) Does land contain coal seams tributary to active mine? Yes, Ireland Mine

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)
Well is to be drilled at a slight deviation (schematic attached) to the Marcellus between two MND 3 laterals. This well will be used to observe and measure fracturing data from the MND 3 laterals. Additional information is attached describing our proposed well work and data gathering.

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	
Conductor	20"	New	94#	40'	40'	CTS
Fresh Water	13 3/8"	J-55	54.5#	1180'	1180'	CTS
Coal	"	"	"	"	"	"
Intermediate	9 5/8"	J-55	36#	2680'	2680'	CTS (Contingency String for Red Rock)
Production	4 1/2"	HCP-110	11.6#	6825'	6825'	TOC @ 200' above casing shoe plus 30%
Tubing						
Liners						

Packers: Kind: Please see well prognosis and procedure.

Sizes: _____

Depths Set _____

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 2013985191
 65000

WW - 2B
 (Rev. 8/10)

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

3 558

1) Well Operator: Noble Energy, Inc. 494501907 Marshall Franklin Powhatan Point
494501907 Operator ID County District Quadrangle

2) Operator's Well Number: MND 99 V 3) Elevation: 1192'

4) Well Type: (a) Oil _____ or Gas X
 (b) If Gas: Production X/other / Underground Storage _____
 Deep _____ / Shallow X

5) Proposed Target Formation(s): Marcellus, Burkett Proposed Target Depth: Deepest 6237'

6) Proposed Total Depth: 6389' TVD 6825 MD Feet Formation at Proposed Total Depth: Huntermville Chert

7) Approximate fresh water strata depths: 518' and 655'

8) Approximate salt water depths: None noted in offsets

9) Approximate coal seam depths: Sewickley 673', Pittsburgh 763'

10) Approximate void depths, (coal, Karst, other): None Anticipated; Drilling in Pillar-see map attached

11) Does land contain coal seams tributary to active mine? Yes, Ireland Mine

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)

Well is to be drilled at a slight deviation (schematic attached) to the Marcellus between two MND 3 laterals. This well will be used to observe and measure fracturing data from the MND 3 laterals. Additional information is attached describing our proposed well work and data gathering.

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	20"	New	94#	40'	40'	CTS
Fresh Water	13 3/8"	J-55	54.5#	1180'	1180'	CTS
Coal	"	"	"	"	"	"
Intermediate	9 5/8"	J-55	36#	2680'	2680'	CTS (Contingency String for Red Rock)
Production	4 1/2"	HCP-110	11.6#	6825'	6825'	TOC @ 200' above casing shoe plus 30%
Tubing						RECEIVED Office of Oil and Gas MAY 08 2014
Liners						

Packers: Kind: Please see well prognosis and procedure.

Sizes: _____

Depths Set _____

WV Department of
 Environmental Protection

WW-2A
(Rev. 6-07)

1.) Date: _____
2.) Operator's Well Number _____ MND 99 V
State _____ County _____ Permit _____
3.) API Well No.: 47- _____ - _____

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Consolidation Coal Company-Jason Witt
Address 46226 National Rd. ✓
Saint Clairsville, OH 43950
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Jim Nicholson WVOOG State Inspector
Address PO Box 44
Moundsville, WV 26041-1534
Telephone 304-552-3874

5) (a) Coal Operator
Name Consolidation Coal Company-Jason Witt
Address 46226 National Road ✓
Saint Clairsville, OH 43950
(b) Coal Owner(s) with Declaration
Name Consolidation Coal Company-Jason Witt ✓
Address 46226 National Road
Saint Clairsville, OH 43950
Name Consol Energy, Inc.-Don Puglio ✓
Address 1000 Consol Energy Drive
Canonsburg, PA 15317
(c) Coal Lessee with Declaration ✓
Name Consolidation Coal Company-Jason Witt
Address 46226 National Road
Saint Clairsville, OH 43950

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

X Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas

OR

Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through ___ on the above named parties by:

- _____ Personal Service (Affidavit attached)
- X _____ Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

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, 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 and imprisonment.

Well Operator Noble Energy, Inc. *Laura L. Adkins*
By: _____
Its: Regulatory Analyst
Address 333 Technology Drive Suite 116
Canonsburg, PA 15317
Telephone 412-841-9567

Subscribed and sworn before me this 7 day of MAY, 2014

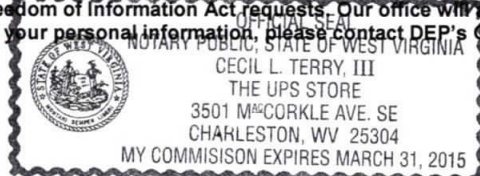
Notary Public

My Commission Expires 3/31/2015

Oil and Gas Privacy Notice

RECEIVED
Office of Oil and Gas
MAY 08 2014
Department of Environmental Protection

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



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MND 99 V

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OFFICIAL USE
 SAINT CLAIRSVILLE, OH 43950

Postage	\$	\$3.04
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00

Consolidation Coal Company
 Jason Witt
 46226 National Road
 Saint Clairsville, OH 43950

See Reverse for Instructions

Postmark Here
 11
 MAY 08 2014
 SISSONVILLE BRANCH
 05/08/2014

MND 99 V

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U.S. Postal Service™
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OFFICIAL USE
 CANONSBURG, PA 15317

Postage	\$	\$2.86
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00

Consol Energy, Inc.
 Attn: Don Puglio
 1000 Consol Energy Dr.
 Canonsburg, PA 15317

See Reverse for Instructions

Postmark Here
 MAY 08 2014
 SISSONVILLE BRANCH
 05/08/2014

MND 99 V

RECEIVED
 Office of Oil and Gas
 MAY 08 2014
 WV Department of
 Environmental Protection

WW-2A Surface Waiver

SURFACE OWNER WAIVER

County Marshall Operator Noble Energy, Inc. Operator well number MND 99 V

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (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 57th 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 FIFTEEN (15) 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 a 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.

List of Water Testing Laboratories. The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

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 Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through ___ including a work order on Form WW2-B, a survey plat, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

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

FOR EXECUTION BY A CORPORATION, ETC.

RECEIVED
Office of Oil and Gas
MAY 08 2014

Signature Date

Company Name By Its Date

Print Name

WV Department of Environmental Protection
Signature Date

WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

County Marshall
Operator Noble Energy, Inc.

Operator's Well Number MND 99 V

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

To the coal operator, owner, or lessee named on page WW2-A. You are hereby notified that any objection you wish to make or are required to make by WV Code 22-6-15, 16 or 17, must be filed with the Chief of the Office of Oil and Gas within fifteen (15) days after the receipt of this application by the Office. Mail objections to:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0499 extension 1654

WAIVER

The undersigned coal operator ____/ owner ____/ lessee ____/ of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of well location, the well location has been added to the mine map. 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.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Signature Date _____

Company Name _____
By _____
Its _____ Date _____

Signature Date _____

RECEIVED
Office of Oil and Gas
MAY 08 2014
WV Department of
Environmental Protection

WW-2A1
(Rev. 1/11)

Operator's Well Number MND 99 V

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8(d)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Consolidation Coal Company	CNX Gas Company, LLC	100%/Fee	646/493
CNX Gas Company, LLC	Noble Energy, Inc.	100%/Fee	752/66

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before any related activity is initiated.

Well Operator:
By: Its:

Noble Energy, Inc.

Jack D. [Signature] / Jack D. [Signature]
Senior Operations handman

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Office of Oil and Gas
WV Department of Environmental Protection
MAY 18 2014

WW-2B1
(5-12)

Well No. MND 99 V

West Virginia Department of Environmental Protection
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Laboratory Name ALS Labs
Sampling Contractor Moody Environmental

Well Operator Noble Energy, Inc.
Address 333 Technology Drive Suite 116
Canonsburg, PA 15317
Telephone 724-820-3118

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

There are no water wells or springs within 1000'. Please see map attached.

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Office of Oil and Gas
West Virginia Department of Environmental Protection

WW-9
(5/13)

Page _____ of _____
API Number 47 - _____ - _____
Operator's Well No. MND 99 V

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Noble Energy, Inc. OP Code 494501907

Watershed (HUC 10) Short Creek Quadrangle Powhatan Point

Elevation 1192' County Marshall District Franklin

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes _____ No X

Will a pit be used for drill cuttings? Yes _____ No X

If so, please describe anticipated pit waste: no pit-closed loop

Will a synthetic liner be used in the pit? Yes _____ No _____ If so, what 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 _____)

Will closed loop system be used? Yes

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Air thru coal string, then SOBM

-If oil based, what type? Synthetic, petroleum, etc. Synthetic

Additives to be used in drilling medium? See attached

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Offsite, list attached

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) _____

-Landfill or offsite name/permit number? _____

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 Laura L. Adkins

Company Official (Typed Name) Laura L. Adkins

Company Official Title Regulatory Analyst

Subscribed and sworn before me this 7 day of MAY

[Signature]

My commission expires 3/31/2015

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Office of Oil and Gas
MAY 08 2014
WV Department of Environmental Protection

OFFICIAL SEAL
NOTARY PUBLIC, STATE OF WEST VIRGINIA
CECIL L. TERRY, III
THE UPS STORE
3501 Mth CORKLE AVE. SE
CHARLESTON, WV 25304
MY COMMISSISON EXPIRES MARCH 31, 2015

51-1764

Operator's Well No. MND 99 V

Proposed Revegetation Treatment: Acres Disturbed _____ Prevegetation pH _____

Lime 2 to 3 Tons/acre or to correct to pH _____

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

Mulch Hay or Straw at 2 Tons/acre

Seed Mixtures

Seed Type	Area I	lbs/acre
Tall Fescue		40
Ladino Clover		5
See Site Plans for Complete List		

Seed Type	Area II	lbs/acre
Tall Fescue		40
Ladino Clover		
See Site Plans for Complete List		

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Office of Oil and Gas

JUN 02 2014

WV Department of
Environmental Protection

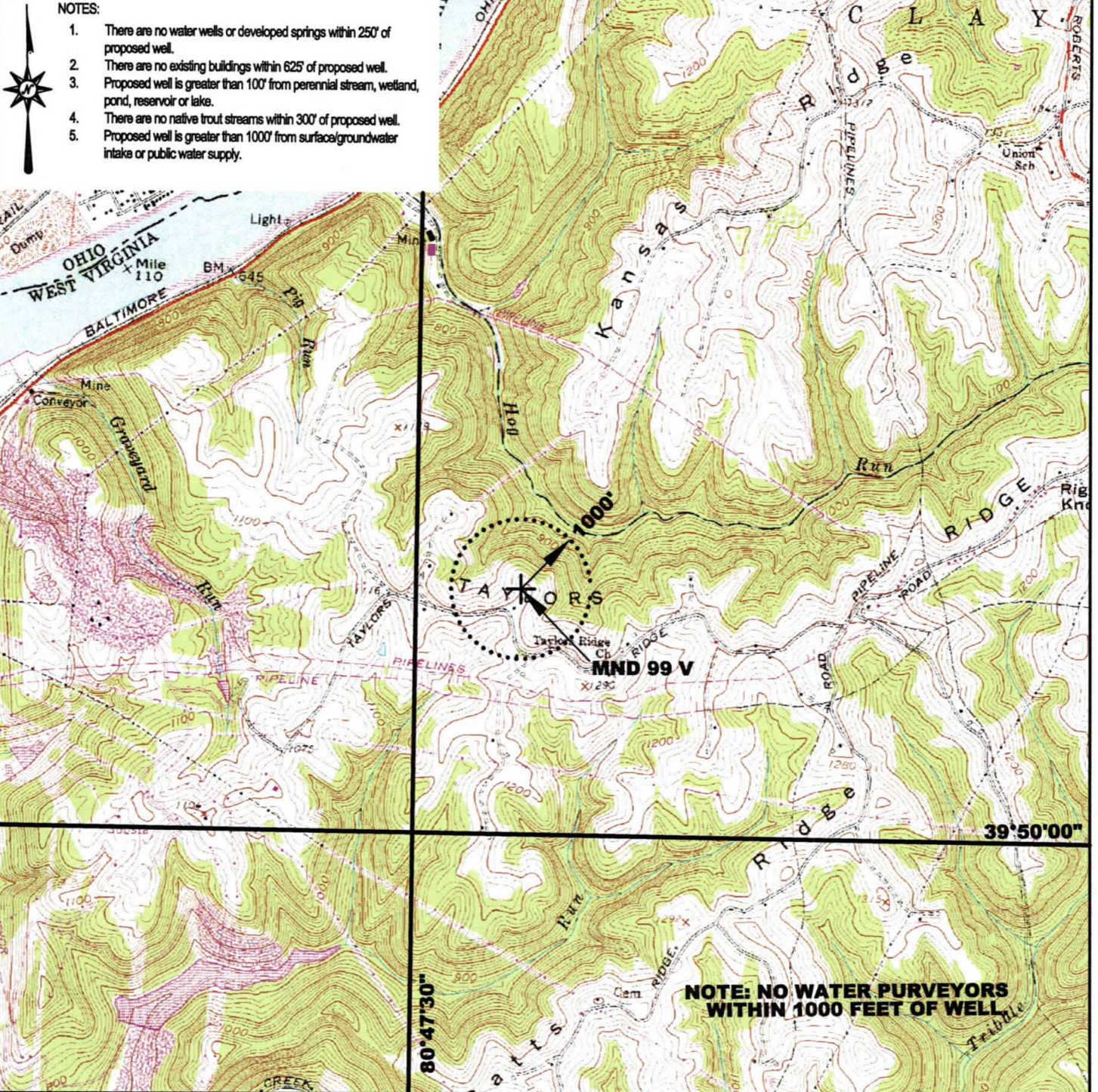
Attach:
Drawing(s) of road, location, pit and proposed area for land application.
Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]
Comments: _____

Title: OOG State Inspector Date: 5/12/14
Field Reviewed? Yes No

NOTES:

1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.




Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

PREPARED FOR:
NOBLE ENERGY, INC.
 333 TECHNOLOGY DRIVE
 SUITE 116
 CANNONSURG, PA 15317

LEGEND
 (W) - WATER PURVEYOR
 + - EXISTING WELLS

MND 99 V
LOCATION MAP
MARSHALL COUNTY
FRANKLIN DISTRICT
WEST VIRGINIA

TOPO QUAD: POWHATTAN POINT, OHIO-WV
 SCALE: 1" = 2000'
 DATE: December 18, 2013

Well is located on topo map 11,670 feet south of Latitude: 39° 52' 30"

Well is located on topo map 10,202 feet west of Longitude: 80° 45' 00"

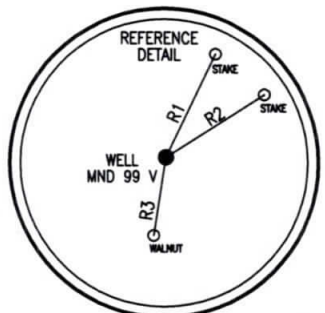


LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- WATER SOURCE
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- WELL BORE PATH
- ROAD
- STREAM CENTER LINE

WELLS WITHIN 1200'

- EXISTING WELLS
- PLUGGED WELLS



LINE	BEARING	DISTANCE
R1	N 25°44'15" E	198.6194'
R2	N 57°38'02" E	203.2679'
R3	S 08°48'50" W	137.7892'

SURFACE HOLE LOCATION (SHL)	BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83	UTM 17-NAD83
N:4410361.28	N:4410444.86
E:518299.66	E:518419.22
NAD27, WV NORTH	NAD27, WV NORTH
N:491736.73	N:492004.45
E:1638825.50	E:1639222.41
LAT/LON DATUM-NAD83	LAT/LON DATUM-NAD83
LAT:39.843066692	LAT:39.843817
LON:80.786106007	LON:-80.784706

- NOTES:
- There are no water wells or developed springs within 200' of proposed well.
 - There are no existing buildings within 200' of proposed well.
 - It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

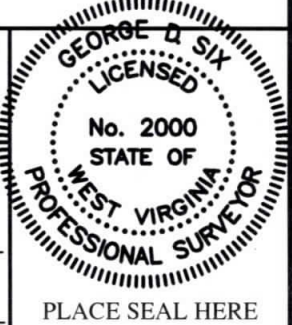
Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

FILE #: MND 99 V
 DRAWING #: MND 99 V
 SCALE: 1" = 500'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT 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 DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed:

R.P.E.: _____ L.L.S.: P.S. No. 2000



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP

OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304

DATE: MAY 29, 2014

OPERATOR'S WELL #: MND 99 V

API WELL #: 47 51 01764
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep OTHER
 Gas Liquid Injection Storage Shallow

WATERSHED: SHORT CREEK - OHIO RIVER ELEVATION: 1192.00'

COUNTY/DISTRICT: MARSHALL / FRANKLIN QUADRANGLE: POWHATAN POINT, OH-WV 7.5'

SURFACE OWNER: CONSOLIDATION COAL COMPANY ACREAGE: 20.85±

OIL & GAS ROYALTY OWNER: CONSOLIDATION COAL COMPANY ACREAGE: 20.85±

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,389'± TMD: 6,825'±

WELL OPERATOR NOBLE ENERGY, INC. DESIGNATED AGENT STEVEN M. GREEN
 Address 333 TECHNOLOGY DRIVE, SUITE 116 Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 590
 City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301