

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

May 03, 2013

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-5101625, 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: MNDS9AHS

Farm Name: CONSOLIDATION COAL COMPA

API Well Number: 47-5101625

Permit Type: Horizontal 6A Well

Date Issued: 05/03/2013

Promoting a healthy environment.

INSPECTORS PERMIT SUMMARY FORM

GPS YES [] NO []

DAT	TE STARTED/LOCATION	:	•	OPERATOR:	NOBLE	ENERGY, INC.	
DRI	LLING COMMENCED:			FARM:	CONSO	LIDATION COA	AL COMPANY
TO	DATE:			Well No:	MNDS9	AHS	
WA	TER DEPTHS:			COAL DEPTHS			
ОΗ	ESTIONS FOR THIS REI 2.1 AND 35CSR 4-16 ANI	PORT ARE IN ACCC	RDANCE C	OF WV CODE 22 LUTION CONT	2-6-30 AN ROL PER	ID REGULATIC MIT.	NS 35CSR
PO	INTS ARE TO BE GIVE	N UP TO MAXIMU	M AS SHO	WN BASED O	N PERFO	ORMANCE.	
1.	DID OPERATOR GIVE	PROPER NOTICE T	O INSPECT	OR BEFORE TI	HE FOLL	OWING:	
	A. CONSTRUCTION			NO[] (2_PTS			(4_PTS)
	B. DRILLING		YES[] N	IO [] (2_PTS))		
2.	WAS THE TIMBER CU' BEFORE DIRT WORK	r, stacked, and i started?	BRUSH USI YES []	ED FOR SEDIM NO [] (2_PT	ENT BAF S)	RRIERS	(4_PTS)
3.	ARE ALL LOCATION A	ND/OR ROAD BAN	KS BEING	SLOPED? YES	S[] NC	[] (4_PTS)	(4_PTS)
	WERE THE FOLLOWING A. ROAD DITCHES C. CULVERTS E. DIVERSION DITCH G. TEMPORARY SEED	(1)_(2)_(3)_(4)_ (1)_(2)_(3)_(4)_ ES (1)_(2)_(3)_(PT	(PTS) (5)_(PTS) S)	B. CROSS DRD. CREEK CRF. BARRIERS	AINS OSSINGS	$(1)_{(2)_{(3)_{(4)}}}$ $(1)_{(2)_{(3)_{(4)}}}$	4)_(5)_(PTS) PTS)
				ITS AVAILABL	E FOR Q	UESTION 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	MAINTAIN	ED? YES[]	NO[]	(9_PTS)	(9_PTS)
7.	RECLAMATION:						
	A. ROADWAY	(1)_(2)_(3)_(PTS)	В	. LOCATION		(1)_(2)_(3)_(PT	TS)
	C. PITS	(1)_(2)_(3)_(PTS)	D	. PIPELINES		(1)_(2)_(3)_(P1	
	E. TANK DIKES	(1)_(2)_(3)_(PTS)	F.	API INSTALI	LED	YES[] NO[] (3_PTS)
	G. ADEQUATE SEED!	NG MATERIALS	(1)_(2)_(3)_(PTS)			
	H. WAS SEED BED A	DEQUATE					
			POIN	TS AVAILABL	E FOR Q	UESTION 7:	(24_PTS)
8.	WAS RECLAMATION	COMPLETED WITH	IIN:				
	6 MTHS OF TD 6_PTS	ONLY; 4 MTHS C	F TD 12_P	ΓS ONLY; 2 M	THS OF	TD 19_PTS ON	LY;
			POIN	ITS AVAILABL	E FOR Q	UESTION 8:	(19_PTS)
-	TOTAL MAXIMUM PO	SSIBLE SCORE OF	99.	TOTAL I	RECLAM	IATION SCOR	E:
	DATE RELEAS				NSPECTO	OR'S SIGNATUR	RE
	DATE KELEAS	ED		11			

NSPECTIONS:	
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PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) 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 § 22-6A-5a (12), 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. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the fill material shall be within plus or minus 2% (unless soil test results show a greater range of moisture content is appropriate and 95% compaction can still be achieved) of the optimum moisture content as determined by the standard proctor density test, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort. Each lift must meet 95 % compaction of the optimum density based on results from the standard proctor density test of the actual soils used in specific engineered fill sites. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 3. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 4. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 5. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS W.VA. CODE §22-6A - WELL WORK PERMIT APPLICATION

1) Well Operator: Nob	le Energy, Inc.	494501907	Marshall	Franklin	Powhatan Point
		Operator ID	County	District	Quadrangle
2) Operator's Well Nur	nber: MNDS 9 AHS	V	Vell Pad Nam	e: MNDS 9	
3 Elevation, current gr	ound: 1221.03 E	evation, proposed j	post-construc	tion:	1232.55
4) Well Type: (a) Gas Othe	er Oil				·
(b) If G	Shallow Horizontal	Deep			
5) Existing Pad? Yes of	YES(currently being built)				
	mation(s), Depth(s), Anticipa 6327', Thickness - 46', Pressure - 291		d Associated	Pressure(s):	
7) Proposed Total Vert8) Formation at Total V9) Proposed Total Mea	/ertical Depth: Marcellus sured Depth: 17004'				
10) Approximate Fresh 11) Method to Determine		756' Offset well data - Seneca	Technology dat	a base	
12) Approximate Saltw	-	Onioc won data Compos			
13) Approximate Coal		667.4 - 670.7 and Pittsbu	urgh - 756.9 - 762	2.8 We will be dri	lling into a Pillar
, <u></u>	h to Possible Void (coal mine	, karst, other):	We will be drilli	ng into a Pillar *See	attached MSHA letter
· · · · · · · · · · · · · · · · · · ·	coal seams tributary or adjace		Yes	- Mc Elroy Mine	
16) Describe proposed		epth to the Marcellus at an	estimated total ver	rtical depth of appr	oximately 6,327 feet.
If we should encounter an	unanticipated void we will install casing a	a minimum of 20' below t	he void but not mo	ore than 50' below	the void, set a basket
and grout to surface.				,	
The stimulation will be multiple	g/stimulating methods in detar stages divided over the lateral length of the w	il: rell. Stage spacing is depende	nt upon engineering	design. Slickwater fi	racturing technique will
be utilized on each stage using	g sand, water, and chemicals.		<u>. </u>		
18) Total area to be di	sturbed, including roads, stock	kpile area, pits, etc,	(acres):	19.2 acres	<u>\$ </u>
19) Area to be disturbe	ed for well pad only, less acce	ess road (acres):	10.0 acres	(no access road usin	ng private CONSOL road)

Ground Elev Azm WELLBORE DIAG	ation								Marshall Co		
Azm	ation				N	ND-9	A SHL	(Lat/Long)	(487488.	053N, 1638476.814	∮E) (NAD27)
EVETTORIS.			1213'			MND-	9A LP (Lat/Long)	•	149N, 1636584.349	
EVETTORIS.			324°		N	ND-9	A BHL	(Lat/Long)	(494566.	945N, 1631187.29	4E) (NAD27)
	GRAM	HOLE	CASING	GEOLOGY	MD	TVD	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS
				Conductor	40	40					
		26	20" 52# LS				AIR	To Surface	NA	Ensure the hole is clean at TD.	Conductor casing = 0.25" wa thickness
×	x		13 3/8"	Sewickly Coal Seam	673	673		15.6 ppg Type 1 + 2% CaCl, 0.25# Lost Circ	Bow Spring on first 2 joints then every third	Fill with KCI water once drilled to TD. Once casing is at setting depth, circulate	Conductor casing = 0.25" w thickness
		17 1/2	54.5#	Pittsburgh Coal	763	763	AIR	20% Excess	joint to 100' form	a minimum of one hole	Surface casing = 0.380" w thickness
	Ų		J-55 BTC	Base of Freshwater	756	756		Yield = 1.18	surface	volume prior to pumping cement.	Burst=2730 psi
				Int. Casing	906	906					
				Weir Sand	2451	2451		15.6ppg Class A		Fill with KCI water once	
				Berea Sand	2644	2644		+0.4% Ret, 0.15% Disp, 0.2% AntiFoam,	Bow spring centralizers	drilled to TD. Once casing	Intermediate casing = 0.35
×		12 3/8	9-5/8" 36# J-55 LTC	Gordon	2877	2877	AIR	0.125#/sk Lost Circ 30% Excess	every third joint to 100' feet from surface.	is at setting depth, circulate a minimum of one hole	wall thickness Burst=3520 psi
×	x		3-30 210	Speechley	3607	3607		Yield=1.19	feet from surface.	volume prior to pumping cement.	D anot 0020 pm
				Int. Casing	3725	3725		To Surface			
×	×			Java		5086	0.0		Rigid Bow Spring every		
		8.75" Vertical		Angola		5294	8.0ppg - 9.0ppg		third joint from KOP to		
							SOBM	14.8ppg Class A 25:75:0	тос		
				Rheinstreet	-	5859 6156		System +2.6% Cement			
				Sonyea		6175		extender, 0.7% Fluid Loss additive, 0.45%		Once at TD, circulate at	Production casing = 0.36
			5-1/2"	Middlesex	-	6182	-	high temp retarder, 0.2%		max allowable pump rate for at least 6x bottoms up.	wall thickness Burst=12640 psi
Š	X	8.75" Curve	20# HCP-110	West River	_	6227	12.0ppg- 12.5ppg	friction reducer		Once on bottom with casing, circulate a minimum	Note:Actual centralize
		0.75 Cuive	TXP BTC	Burkett	1	6271	SOBM	15% Excess Yield=1.27	Rigid Bow Spring every	of one hole volume prior to	
				Tully Limestone		6298	1		joint to KOP	pumping cement.	
				Hamilton		6307	1	TOC >= 200' above 9.625" shoe			
			1	Marcellus		6327	12.0ppg-				
		8.75" - 8.5" Lateral		TD	17004	6600	12.5ppg 12.5ppg SOBM				
×	×			Onondaga	· X:::::	6391	X	 	***************************************	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	

VW-9 Rev. 1/12		API No. 47 - Operator's Well	51 - 01625 No. MNDS 9 AHS	
Property Boundar Road Existing Fence Planned Fence Stream Open Ditch Rock North Buildings Water Wells		Diversion Spring Wet Spot Drain Pipe w/ size in inches Waterway Cross Drain Artificial Filter Strip XXXXXX Pit: Cut Walls Pit: Compacted Fill Walls Area for Land Application of Pit Waste		
Lime 2 to 3 tons	-20 or equivalent) 500	bpH _lbs/acre (500 lbs minimum) bns/acre	n pH	
Seed Type Tall Fescue Ladino Clover	Area I lbs/acre 40 5	Seed Mixtures Seed Type Tall Fescue Ladino Clover	Area II lbs/acre 40 5	
	tion,pit and proposed area for lan	d application.		
Title: Oil and Gas Inspector Field Reviewed?	Yes (Other	Eligo Cas



Site Safety Plan

Noble Energy, Inc. Moundsville 9 AHS

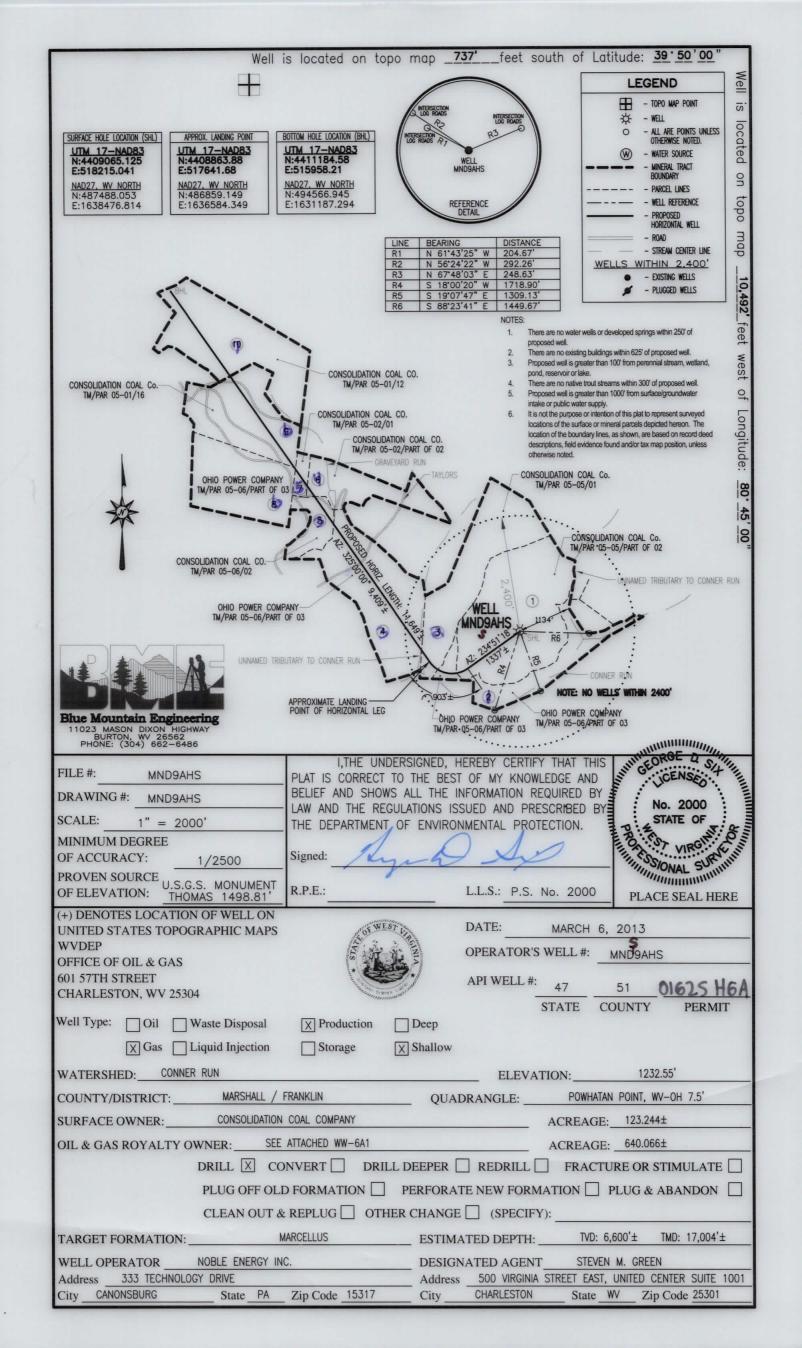
January 2013: Version 1

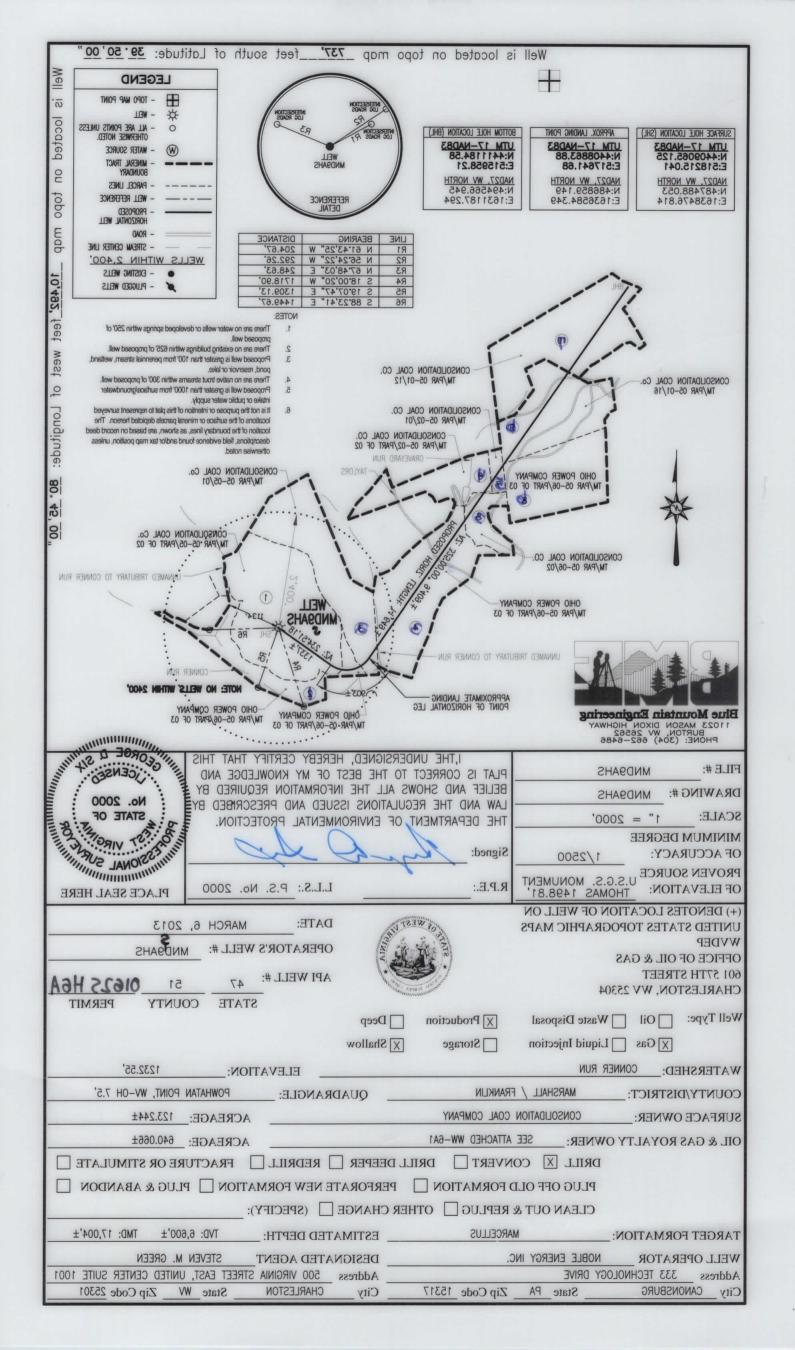
For Submission to
West Virginia Department of Environmental Protection,
Office of Oil and Gas

Noble Energy, Inc.
Appalachia Offices
333 Technology Drive, Suite 116
Canonsburg, PA 15317-9504

J-13-13

CHUN 2-13-13





WW-6AC (1/12)

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

Date of Notic	e Certification: 1/31/2013	A	API No. 47	- 051 - (01625
Dute of Hotel				Well No. MND	S 9 AHS
				ame: MNDS	
Notice has b	een given:				
Pursuant to th	e provisions in West Virginia Code §	22-6A, the Operator has provi	ded the req	uired parties w	ith the Notice Forms listed
below for the	tract of land as follows:				
State:	West Virginia		Easting:	518215.041	
County:	Marshall		Northing:	4409065.125	
District:	Franklin	Public Road Acces		Fish Creek Roa	ld
Quadrangle:	Powhatan Point	Generally used far	m name:	Consol	
Watershed:	Connor Run				
prescribed by it has provide information re of giving the requirements Virginia Code	West Virginia Code § 22-6A-7(b), ethe secretary, shall be verified and shed the owners of the surface describe equired by subsections (b) and (c), securification subsection (b), section sixteen of subsection (b), section sixteen of ethe § 22-6A-11(b), the applicant shall the have been completed by the applicant	all contain the following inforced in subdivisions (1), (2) and action sixteen of this article; (ii) every pursuant to subsection (at this article were waived in winder proof of and certify to the	mation: (14 dd (4), substitute the real), section to writing by	4) A certification (b), sec quirement was ten of this artice the surface ow	on from the operator that (i) tion ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice yner; and Pursuant to West
that the Ope	West Virginia Code § 22-6A, the Operator has properly served the required	erator has attached proof to the parties with the following:	is Notice C	Certification	OOG OFFICE USE ONLY
					ONLI
☐ 1. NO	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIR SEISMIC ACTIVITY WAS			RECEIVED/ NOT REQUIRED
□ 2. NO	TICE OF ENTRY FOR PLAT SURV	EY or 🔳 NO PLAT SURVE	EY WAS C	ONDUCTED	RECEIVED
☑ 3. NO	TICE OF INTENT TO DRILL or	. NOTICE NOT REQUIR NOTICE OF ENTRY FOR F WAS CONDUCTED or			RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER F (PLEASE ATTACH)	BY SURFA	CE OWNER	
■ 4. NO	TICE OF PLANNED OPERATION				☑ RECEIVED
■ 5. PU	BLIC NOTICE				☑ RECEIVED
■ 6. NO	TICE OF APPLICATION				RECEIVED

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-64. Pursuant to West Virginia Code § 22-64.11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

WW-6AC (1/12)

Certification of Notice is hereby given:

THEREFORE,	Laura Aukiris , hav	e read an	d understand	the notice requirements within West Virginia Code § 22-
6A. I certify tha	at as required under West Virginia Co	de § 22-	6A, I have se	erved the attached copies of the Notice Forms, identified
above, to the re	equired parties through personal service	ce, by re	gistered mail	or by any method of delivery that requires a receipt or
signature confirm	mation. I certify under penalty of law	that I hav	e personally	examined and am familiar with the information submitted
				nquiry of those individuals immediately responsible for
obtaining the in	formation, I believe that the information	n is true	, accurate and	d complete. I am aware that there are significant penalties
for submitting fa	alse information, including the possibil	ity of fin	e and impriso	onment.
Well Operator:	Noble Energy, Inc.	<u> </u>	Address:	333 Technology Drive, Suite 116
By:	Laura Adkins Zaura 2. Ul	lken,	2	Canonsburg, PA 15317
Its:	Regulatory Analyst		Facsimile:	724-820-3098
Telephone:	724-820-3061		Email:	ladkins@nobleenergyinc.com
				4 +1
	NOTARY SEAL	Subsci	ribed and swo	orn before me this 4m day of February.
			Ma.	
			Maria	Motary Public OMMONWEALTH OF PENNSYLVANIA
				COMMONWEALTH OF PENNSYLVANIA
		My Co	ommission Ex	kpires Notariai Seal
				Maria A. Yanni, Notary Public Cecil Twp., Washington County
				My Commission Expires May 10, 2015
Oil and Gas P	Privacy Notice:			MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



API NO. 47-051 - 01625 OPERATOR WELL NO. MNDS 9 AHS Well Pad Name: MNDS 9

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

Notice Time Requirement: notice shall be provided no later than to Date of Notice: 2 Date Permit Application Filed: 2	he filing date of permit application.
✓	•
Notice of: PERMIT FOR ANY WELL WORK CONSTRUCTION OF AN	OVAL FOR THE I IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-10(b)
PERSONAL REGISTERED METHOL	D OF DELIVERY THAT REQUIRES A T OR SIGNATURE CONFIRMATION
for a certificate of approval for the construction of an important or by registered mail or by any method of delivery that requires erosion and sediment control plan required by section seven of the owners of record of the surface of the tract on which the well is of tract or tracts overlying the oil and gas leasehold being developed or other land disturbance as described in the erosion and sediment this article; (3) The coal owner, operator or lessee, in the event [sic] is known to be underlain by one or more coal seams; (4) The gas leasehold being developed by the proposed well work, i enlargement, alteration, repair, removal or abandonment of any in surface owner or water purveyor who is known to the applicant the thousand five hundred feet of the center of the well pad which animals; and (6) The operator of any natural gas storage field we more than three tenants in common or other co-owners of intellands, the applicant may serve the documents required upon maintained pursuant to section eight, article one, chapter elevencontrary, notice to a lien holder is not notice to a landowner, unless that the contract of the service of the contract of th	ate of the application, the applicant for a permit for any well work or ent or pit as required by this article shall deliver, by personal service is a receipt or signature confirmation, copies of the application, the is article, and the well plat to each of the following persons: (1) The or is proposed to be located; (2) The owners of record of the surface by the proposed well work, if the surface tract is to be used for roads at control plan submitted pursuant to subsection (c), section seven of the tract of land on which the well proposed to be drilled is located are owners of record of the surface tract or tracts overlying the oil and if the surface tract is to be used for the placement, construction, impoundment or pit as described in section nine of this article; (5) Any to have a water well, spring or water supply source located within one in is used to provide water for consumption by humans or domestic ithin which the proposed well work activity is to take place. (c)(1) If the person described in the records of the sheriff required to be a of this code. (2) Notwithstanding any provision of this article to the east the lien holder is the landowner.
Notice is hereby provided to: SURFACE OWNER(s) Name: Consolidation Coal Company Address: 1000 Consol Energy Drive Canonsburg, PA 15317	COAL OWNER OR LESSEE Name: Consolidation Coal Company Address: 1000 Consol Energy Drive Canonsburg, PA 15317
Name: Address: SURFACE OWNER(s) (Road and/or Other Disturbance)	Name: Consolidation Coal Company Address: 1000 Consol Energy Drive Canonsburg, PA 15317
Name:	WATER PURVEYOR(s) Name: none Address:
Name:Address:	
SURFACE OWNER(s) (Impoundments/Pits) Name: Address:	OPERATOR OF ANY NATURAL GAS STORAGE FIELD Name: Address: *Please attach additional forms if necessary
	*Please attach additional forms if necessary

API NO. 47-051

OPERATOR WELL NO. MNDS 9 AHS
Well Pad Name: MNDS 9

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall also include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3)the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments.

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

API NO. 47-051 OPERATOR WELL NO. MNDS 9 AHS
Well Pad Name: MNDS 9

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

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

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have THIRTY (30) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and 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.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or

(4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Telephone:

Email:

API NO. 47-051

OPERATOR WELL NO. MNDS 9 AHS
Well Pad Name: MNDS 9

Notice is hereby given by:

Well Operator: Noble Energy, Inc.

724-820-3061

Address: 333 Technology Drive, Suite 116

Canonsburg, PA 15317

ladkins@nobleenergyinc.com Facsimile: 724-820-3098

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at deprivacyofficer@wv.gov.

Laura L. ackins



51-21625

WW-6A5 (1/12) Operator Well No. MNDS 9 AHS

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

Notic Date	e Time I of Notice	Requirement: notice shall be provided e: Date Permit	no l App	ater than th	e filing o	late of permit :	application.
Deliv	ery meth	nod pursuant to West Virginia Code	§ 22	-6A-16(c)			
		IED MAIL DE RECEIPT REQUESTED		HAND DELIVERY	Y		
return the pl requir drillind dama	receipt in the lanned of the lanned to be land to be land to ges to the land to land the la	requested or hand delivery, give the su peration. The notice required by this provided by subsection (b), section ter orizontal well; and (3) A proposed su e surface affected by oil and gas operate	rface sub of to rface ions	e owner who section shat his article to use and to the external ex	nose land all includ to a surfa compensant the dar	will be used fo e: (1) A copy ce owner whose ation agreement mages are comp	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information e land will be used in conjunction with the t containing an offer of compensation for pensable under article six-b of this chapter. atted in the records of the sheriff at the time
(at the	e address c:Cons ess: _1000	by provided to the SURFACE OWN listed in the records of the sheriff at the olidation Coal Company Consol Energy Drive onsburg, PA 15317			Name:	:	
Pursu	ant to W tion on t ty:	eby given: fest Virginia Code § 22-6A-16(c), notice the surface owner's land for the purpose West Virginia Marshall Franklin	e is	drilling a h — UTM —	en that th norizontal I NAD 83	well on the tra Easting: Northing:	well operator has developed a planned ct of land as follows: 518215.041 4409065.125 Fish Creek Road
Quad	rangle:	Powhatan Point		_		d farm name:	Consol
This Pursu to be horiz surfa infor- heade	provide ontal we ce affect mation re quarters,	d by W. Va. Code § 22-6A-10(b) to ll; and (3) A proposed surface use and ed by oil and gas operations to the ex- elated to horizontal drilling may be o	a su com tent btair	rface own apensation the damag and from the	er whose agreement ses are conne Secret	land will be untracted to the containing and ampensable undarry, at the WV	code section; (2) The information required used in conjunction with the drilling of a noffer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

FEB 19 2010

OIL AND GAS ROAD STATEWIDE BONDING AGREEMENT



THIS AGREEMENT, executed in duplicate, made and entered into this 2_ day of May_, 2012, by and between the WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, hereinafter called "DEPARTMENT," and Noble Energy, Inc, a Delaware, company, hereinafter called "COMPANY."

WITNESSETH:

WHEREAS, Company has horizontal gas well drilling operations in certain areas of West Virginia; and

WHEREAS, the Department believes that the frequent and repetitive use of certain sections of highways in the State by Company, its contractors, agents, independent contractors or suppliers of drilling materials or drilling equipment, and employees contributes to increased wear and tear to public roads in the state road system in the State, including local roads ("State Owned Roads"); and,

WHEREAS, the Department and Company have entered into this Agreement to satisfy the requirements of the Department's policy entitled "Oil & Gas Road Policy" dated January 3, 2012, as issued by Paul A. Mattox, Jr., Secretary of Transportation / Commissioner of Highways, and any subsequent related policies, hereinafter called "Policy", a copy of which is made a part of this Bonding Agreement and is identified as Attachment 1.

NOW, THEREFORE, for and in consideration of the mutual agreements hereinafter set forth, the parties agree as follows:

- I. For purposes of this Bonding Agreement, "Project Transportation Usage" of the Company shall be understood to mean use of one or more State Owned Roads for the delivery and removal of drilling materials and drilling equipment at the site or location of one or more of Company's horizontal gas well pad locations. To the extent reasonably practical, prior to commencing use of a State Owned Road for Project Transportation Usage after January 1, 2011, the Company shall submit to the Department a section or sections of current official WVDOH County Highway maps identifying the exact location of the proposed project and the State Owned Roads that the Company will utilize for the Project Transportation Usage.
- II. Company and Department shall within 14 days of the Company's submittal, agree to a list of these sections of State Owned Roads, hereinafter called "Project Roads List", to be utilized for each of Company's projects, identified by route number and milepost; at a time to be mutually agreed to by the parties prior to initial commencement of Project Transportation Usage of a particular State Owned Road on a Project Roads List, the Company and Department will jointly review the condition of the roads and bridges on the Project Roads List. The Department will document the road type and surface condition and general right-of-way width of each section of road on the Project Road List. Either party may supplement this documentation with photographs, video or other evidence of the present condition of the road surface, shoulders, ditches, culverts, bridges or other structures or appurtenances of roads on the Project Road List, as well as approaches to the roads, utility facilities located within or along the right-of-way, or any other condition, including third-party activities, that may affect the duties and responsibilities of the parties under this Agreement. A copy of any such documentation must be made and provided to the other party within ten business days after the joint review of the roads on the Project Roads List.
- III. Department shall issue a Project Agreement or Project Permit, as appropriate, to Company to use State Owned Roads and may include any minor or major improvements required of Company prior to, during or after Project with the assignment of responsibilities of both parties prior to, during and after the operator has completed well fracturing.



- IV. In the Project Agreement/Project Permit, the Department shall not require the use of State Owned Roads other than the roads proposed by Company unless the Department has safety concerns as to the Company's proposed roads. A failure to agree on roads that may otherwise be lawfully used for a particular Project Transportation Usage shall result in the designation of the State Owned Roads proposed by Company, with milepost determinations as designated by Department. This Agreement shall only cover portions of State Owned Roads designated on the Project Roads List.
- V. For the duration of Company's Project Transportation Usage of the Stated Owned Roads on the Project Roads List, whether by the Company, its contractors (while working on behalf of Company), agents, independent contractors or suppliers of drilling materials or drilling equipment, or employees, the Company agrees to pay for all reasonable maintenance and repair costs incurred by the Department to repair areas of the State Owned Roads included in the Project Roads List that were directly damaged by Company's Project Transportation Usage, as determined to be reasonably necessary and appropriate by the Department. The Department shall keep a record of all labor performed by Department employees and contractors for such maintenance and repairs and shall send an invoice for the same to Company.
- VI. Company shall be responsible for the cost of all maintenance and repairs reasonably necessary to put the existing roadways, bridges and appurtenances on the Project Roads List utilized for the Project Transportation Usage in the condition that existed immediately prior to the Project Transportation Usage. Company shall not be required to pay for maintenance or repairs to put any areas of such roadways, bridges and appurtenances on the Project Roads List in a condition better than the condition that existed immediately prior to the Project Transportation Usage. Company shall also not be required to pay for maintenance or repairs to any areas of these roadways, bridges or appurtenances on the Project Roads List that are not actually utilized for the Project Transportation Usage or for damage not caused by Project Transportation Usage.
- VII. Company shall notify the Department in writing of Company's final completion of Project Transportation Usage for particular roadways, bridges and appurtenances on the Project Roads List. Within fourteen days after its receipt of written notification of the completion of the Project Transportation Usage for all roads on a Project Roads List, the Department will review the condition of the roadways, bridges and appurtenances on the Project Roads List actually utilized for the Project Transportation Usage and advise Company of any final repairs reasonably necessary to leave these roads, bridges and appurtenances in a condition reasonably deemed by Department to be equal to their condition prior to commencement of Project Transportation Usage; and, upon completion of all such final repairs by or on behalf of Company and acceptance by Department, the Company shall be released from all further liability for maintenance or repairs to roads, bridges, or appurtenances on said Project Roads List. Any maintenance or repair work under the Project Agreement/Project Permit for roads, bridges or appurtenances on the Project Roads List may be performed by a contractor directly chosen by the Company as approved by the Department, the Department's workforce, or a private contractor hired by the Department through the public bid process in accordance with state law, all of which work shall be subject to the standards and specifications of the Department.
- vIII. In order to ensure performance of Company's performance and payment obligations under this Bonding Agreement, the Company shall post a corporate surety bond, hereinafter called "Master Bond", with the Department named as the beneficiary, which form of bond shall be subject to the consent of the Department, not to be unreasonably withheld. The amount and form of the bond shall be in accordance with the Policy as set forth above. However, the amount of the Master Bond does not limit the amount of claims that may be made by the Department against the Company under this Bonding Agreement. The Company shall provide the Master Bond to the Department within one (1) month after the execution of this Bonding Agreement. The Master Bond shall secure the good faith performance of all payment obligations of Company under the terms of this Bonding Agreement respecting the roads, bridges and appurtenances on the Project Roads List for each Project Transportation Usage undertaken by the Company, and shall remain in effect until termination of this Agreement. Company shall not be obligated to provide any other bonds, sureties, or other guarantees of performance to the Department for Company's use of State Owned Roads, except as required in this Agreement.



- IX. Company shall maintain Commercial General Liability Insurance in the amount of two million dollars, with a minimum coverage of one million dollars per occurrence, for personal injury or death to persons, or for property damage, resulting from Company's Project Transportation Usage and shall present evidence of such insurance to Department upon request.
- X. Company's usage of State Owned Roads under the Project Agreement/Project Permit shall comply with all applicable Federal, State and local laws and regulations including, but not limited to, to the extent applicable, the National Environmental Policy Act, Section 404 of the Clean Water Act, Section 106 of the National Historic Preservation Act, Rare, Threatened and Endangered Species Act, Section 401 Water Quality Certification, and hazardous waste requirements. Further, upon reasonable written request of Department, Company shall furnish Department with acceptable documentation of such compliance which is in the possession of the Company.
- XI. Company shall defend, indemnify and hold Department harmless from and against any and all losses, damage, and liability, and from all claims for damages on account of or by reason of bodily injury, including death, which may be sustained, or claimed to be sustained, by any person or persons, including employees of Department, and from and against any and all claims, losses or liabilities for damages to property, arising out of the negligent or willful acts or omissions of Company, its agents, independent contractors and suppliers of drilling materials or drilling equipment, employees and contractors, in the performance of all Project Transportation Usage activities undertaken pursuant to this Agreement (collectively, "claims"). The Company shall not be responsible to indemnify, defend or hold harmless Department for any claims caused by the negligent or willful acts or omissions of the Department or its agents, employees and contractors or third parties not performing work at the direction of Company or delivering drilling equipment or drilling materials, including water, for use by or for company.
- XII. If a provision of this Agreement is or becomes illegal, invalid or unenforceable in any jurisdiction, that shall not affect the validity or enforceability of any other provision of this Agreement; or the validity or enforceability in other jurisdictions of that or any other provision of this Agreement.
- XIII. Department shall give Company a minimum of thirty days written notice of default under the terms of this Bonding Agreement and the opportunity to cure this default during such thirty-day period. If a default is not cured to the satisfaction of Department, or provision acceptable to Department is not made for a cure, Department may then elect to terminate this Bonding Agreement in whole or in part, and may in addition exercise its rights under the Master Bond or seek any other lawful relief available. Company may terminate this Bonding Agreement upon thirty days written notice to Department for any reason. In the event Company terminates this Agreement for any reason, it shall be liable for the repair and maintenance costs set forth above for prior Project Transportation Usage.
- XIV. Nothing herein shall be construed to mean that Company shall have any jurisdiction or control over any public roads in the state road system.
- XV. Company, its contractors, agents, employees and suppliers shall at all times be subject to applicable provisions of state and federal law, including without limitation laws requiring operation of vehicles in accordance with legal size and weight restrictions and posted weight limits. Oversize/overweight permits for vehicle or loads not otherwise conforming with law must be obtained in accordance with law; Department agrees to work in good faith with Company to review and grant (where authorized by law) such permits in a timely manner upon request by Company.
- XVI. This Bonding Agreement shall be construed and enforced in accordance with the laws of the State of West Virginia, as they may be amended.
- XVII. This Bonding Agreement shall be binding upon the successors and assigns of each party hereto.

Office of Oil & Gas

be executed by their duly authorized officers effective as of the date first above written.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS

Low

By:

State Highway Engineer

Witness

Robert Ovitz

Title: Senior Operations Manager

(To be executed in duplicate)

REGEIVED

MAINTENAGE DIVISION

APPROVED AS TO FORM THIS 29 DAY OF my 20 / 2

ATTORNEY LEGAL DIVISION WEST VIRGINIA DIVISION OF HIGHWAYS CEE 1 0 3013

EROSION & SEDIMENT CONTROL PLANS

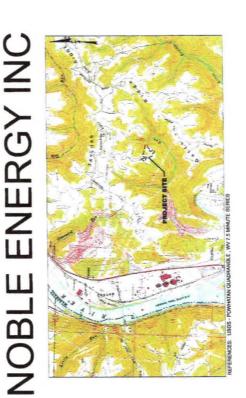
MND9HS WELL SITE

MARSHALL COUNTY, WEST VIRGINIA

FOR

CONSTRUCTION AND







WVDEP OOG

APPROVED

SUBMITTED: APRIL 10,2012 REVISED: SEPTEMBER 18,2012 PROJECT NO. 1216013

DIEFFENBAUCH & HRITZ

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SITE RESTORATION PLAN TYPICAL SECTIONS	SOILS PLAN	ACCESS ROAD PROFILE	PROPOSED BITE PLAN	OVERALL SITE PLAN	SMBTING BITE PLAN	GENERAL NOTES	TITLE SHEET	TITLE	INDEX

