

#### 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 21, 2013

## WELL WORK PERMIT

#### Re-Work

This permit, API Well Number: 47-3906345, issued to RAVEN RIDGE ENERGY, 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: M. BIRD 1A

Farm Name: ASHLEY, LESLIE AND CONNIE

API Well Number: 47-3906345 Permit Type: Re-Work

Date Issued: 11/21/2013

## **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. 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.
- 2. Well work activities shall not constitute a hazard to the safety of persons.

WW - 2B (Rev. 8/10)

Check# 8275 \$ 650,00

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

			E ENERGY		7 40 (075) 3 0 0 0 0 1	DIG SANDY	
	_			Operator ID	County	District	Quadrangle
Operator's	Well Numl	ber: MAF	RY BIRD 1A		3) Elevation:	1041'	
Well Type:	(a) Oil <u>X</u>	or Ga	as X				
	(b) If Gas:	Produ	uction X / Un	derground Sto	orage		
		Dee	p/ §	Shallow X			
Approximat	e fresh wa	ater strata	): WEIR Feet a depths: 1,300'- S: NO COAL LISTE	1,800'	Proposed Tai Proposed Total	get Depth: _2,2 al Depth: _2,2	2,300'
Approximat	e coal sea	ım depth	s: NONE				
)) Approxima	ate void de	epths.(co	al, Karst, other):	NO			
					10		<del>-</del>
) Does land	contain co	oal seam	s tributary to ac	tive mine?	10		
			nd fracturing meth				
			EVIOUSLY SHOT W		A COLUMN TO SERVICE SE	The state of the s	
			VOULD ASK TO RUN 4				
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3)		the same of the sa	ASING AND TUI		7,11	region 1	June
TYPE :	SPECIFIC	ATIONS					9-9-13
		12000	1	FOOTAGE	(INTERVALS	CEMEN	NI 9-9-13
	Size	<u>Grade</u>		For Drilling	Left in Well	A STATE OF THE STA	NI 9-9-13
Conductor	Size	Grade		Marie Constant			NI 9-9-13
	<u>Size</u> 9 5/8"	Grade LS		Marie Constant			9-9-73 Ft.)
resh Water			Weight per ft	For Drilling	Left in Well	Fill -up (Cu.	9-9-73 Ft.)
resh Water Coal			Weight per ft	For Drilling	Left in Well	Fill -up (Cu.	. Ft.)
resh Water Coal ntermediate	9 5/8"	LS	Weight per ft  17LBS	For Drilling 382'	Left in Well 382'	Fill -up (Cu.	NE O
Fresh Water Coal Intermediate Production	9 5/8"	LS J55	Weight per ft  17LBS  23LBS	For Drilling 382' 1831'	382'	EXISTI EXISTI	NG NG
Conductor Fresh Water Coal Intermediate Production Tubing Liners	9 5/8"	LS J55	Weight per ft  17LBS  23LBS	For Drilling 382' 1831'	382'	EXISTI EXISTI	NG NG
resh Water Coal Intermediate Production Tubing iners	9 5/8" 7" 4 1/2"	LS J55	Weight per ft  17LBS  23LBS	For Drilling 382' 1831'	382'	EXISTI EXISTI	NG NG
resh Water Coal Intermediate Production Tubing Liners Packers: Kind	9 5/8" 7" 4 1/2"	LS J55	Weight per ft  17LBS  23LBS	For Drilling 382' 1831'	382'	EXISTI EXISTI	NE C

**WW-2A** (Rev. 6-07)

1). Date: OCTOBER 11, 2013

2.) Operator's Well Number M. BIRD 1A
State County Permit

3.) API Well No.: 47- 039 - 06345

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

	Surface Owi (a) Name Address (b) Name	LESLIE AND CONNIE A  43 DOCTORS CREEK  CLENDENIN I DV 2	ASHLEY	5) (a) Coal Operator Name Address
	Address			(b) Coal Owner(s) with Declaration Name
		<u></u>		Address
	(c) Name			Name
	Address			Address
6) I	nspector	TEDDY LIDBAN		(a) Coal I access with Deal and the
	Address	PO BOX 1207		(c) Coal Lessee with Declaration Name
•	-luui 633	CLEDENIN, WV 25045		Address
-	Telephone	(304) 549-5915		Audiess
	. С. Ср С С	<del></del>	PERSONS NA	MED ABOVE TAKE NOTICE THAT:
	Included is the	e lease or leases or	other continuing	contract or contracts by which I hold the right to extract oil and gas
<u>OR</u>				•
	included is the	e information require	ed by Chapter 22	2, Article 6, Section 8(d) of the Code of West Virginia (see page 2)
appl	i certify to lication, a loca	tion plat, and accom Personal Service	ipanying docume ce (Affidavit attac	
	<u>_</u> X	Certified Mail (F	ostmarked post	tal receipt attached)
	l have roo	Publication (No	tice of Publicatio	on attached)
issu	ed under this	ia ana understana C application.	napter 22-6 and	d 35 CSR 4, and I agree to the terms and conditions of any permit
	I certify u	nder penalty of law	that I have person	sonally examined and am familiar with the information submitted on
this	application fo	rm and all attachme	ents, and that ba	ased on my inquiry of those individuals immediately responsible for
obta	ining the infor	mation, I believe tha	t the information	n is true, accurate and complete.
impr	isonment .		illicant penaities	s for submitting false information, including the possibility of fine and
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		OFFICIAL SEAL DTARY PUBLIC	Well Operator	RAVEN RIDGE ENERGY, LLG
Si Si	T STA	EOFWERI VINOS	By:	RYAN CUNNINGHAM
		Windham Energy, LLC	Its:	OFFICER
1/6	320 Perroyh	mingham Energy, LLL nie Avenue, Charlesion, WV 25302 nies Avenue, Charlesion, WV 25302 nies Explose Vebrusry 10, 2015 nies Explose Vebrusry 10, 2015	Address	3230 PENNSYLVANIA AVENUE
<b></b>	The state of the s		Talanhana	CHARLESTON, WV 25302
Subs	scribed and sv	vorn before me this	Telephone  10 day of	(304) 344 - 93-91 OCTOBER , 2013
	\ _		uu, o,	, 2013
بل	<u> </u>	1) Bar	つ /	Notary Public
•	Commission E	•	10, 2015	
Oil an	d Gas Privacy N	otice		

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 <a href="mailto:depprivacyofficer@wv.gov">depprivacyofficer@wv.gov</a>

# 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
ALVIN L. ENGELKE, AGENT	CONNINGHAM ENERGY, WE		260/431

Raven Ridge Energy has the right to operate Cunningham Energy, LLC's lease by contractual arrangement.

#### 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 he reby a cknowledges 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 ac quired from the appropriate aut hority before the affected activity is initiated.

Well Operator: By:Its:

RAVEN RIDGEENERY, PHAN CHANJINGHAM OFFICER

1AN \$ 0 2013

THE RESERVE WAR TO SERVE THE

11/22/2013 WV Deparment of

Received

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3406345R

#### AGREEMENT

This agreement is made and entered into this 16<sup>th</sup> day of February, 2012 by and between Cunningham Energy, LLC, a West Virginia limited liability company and Raven Ridge Energy, LLC, a West Virginia limited liability company.

This agreement gives permission to Raven Ridge Energy to operate any leases (owned property or otherwise leased) maintained by Cunningham Energy, LLC for any and all past, current or future projects to be developed by or for Cunningham Energy, LLC.

CUNNINGHAM ENERGY, LLC

RECEIVED
Office of Oil and Gas

NOV 1 8 2013

Environmental Protection

RAVEN RIDGE ENERGY

State of West Virginia County of Kanawha

The foregoing instrument was acknowledged before me this 16<sup>th</sup> day of February, 2012 by Ryan E. M. Cunningham, Officer of Raven Ridge Energy, LLC., a West Virginia Limited Liability Company, on behalf of the company.

CONTROL DE LES CONTRO

Notary Public

Olio 2015
My Commission Expires

State of West Virginia County of Kanawha

The foregoing instrument was acknowledged before me this 16<sup>th</sup> day of February, 2012 by Ryan E. M. Cunningham, Owner of Cunningham Energy, LLC., a West Virginia Limited Liability Company, on behalf of the company.

Notary Public

My Commission Expires

WW-9 (5/13)

	Page	of	_
API Number 47 39	-06345		
Operator's Well	No. M. BIRD#1A		

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

### FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name_ RAVEN RIDGE ENERGY, LLC OP Code 494485865
Watershed (HUC 10) DOCTOR'S CREEK Quadrangle CLIO 7.5'
Elevation 1,041' County KANAWHA District BIG SANDY  Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No X  If so, please describe anticipated pit waste: NO PIT - STORAGE TANK WILL BE USED
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes
Will a pit be used for drill cuttings? Yes No X
If so, please describe anticipated pit waste: NO PIT - STORAGE TANK WILL BE USED
Will a synthetic liner be used in the pit? Yes No X 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? NO
Drilling medium anticipated for this well? Air, freshwater, oil based, etc. AIR, FRESHWATER
-If oil based, what type? Synthetic, petroleum, etc. N/A
Additives to be used in drilling medium? N/A
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A
-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  Company Official Title OFFICER  Company Official Title OFFICER
Subscribed and sworn before me this 10 day of OCTOBER 20 13
Notary Public State Of West Wrights
My commission expires 10/10/2013  DANIELLE N. RAYS Ourning Energy LIC 220 Page April 2 June 20

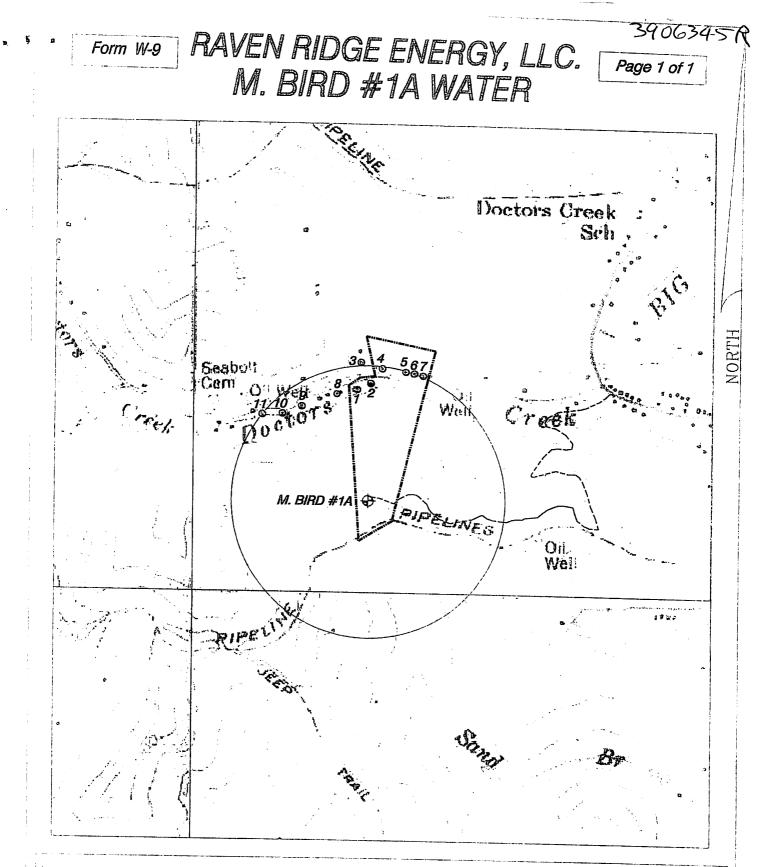
Field Reviewed?

## Operator's Well No. M. BIRD #1A

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Stream Comment	garantee ga	Waterwes	
Open Ditch	and the same of th	Zuiss Deum.	
10cl 455585		Continue - Water States	
Notin N	· ·	en our walls	
Buildings		First communications file wells	
Wasar wells (W)		and the comment of the W	2516
Onto and			
Proposed Revegetation Treatme	ent: Acres Disturbed 3.5	D	
		Prevegetation pH	
	Tons/acre or to correct to pH	0.5	
Fertilizer (10-20-20 or	equivalent) 1/3 TON lbs	acre (500 lbs minimum)	
Mulch HAY 2	Tons/a		
	Tons/a	cre	
	Seed	i Mixtures	
Area	I	Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	ORCHARD GRASS	15
ALSIKE CLOVER	5	ALSIKE CLOVER	5
ANNUAL RYE	15		
Attach:			
Drawing(s) of road, location,pit	and proposed area for land appl	ication.	
Photocopied section of involved	7.5' topographic sheet.		
Plan Approved by:	interior		
Comments Operate	OF WILL UDGMORD	men Line 110 to To-	Post 11 do a
PRSOPPOLE ANCLY	to Erosion to a	1000 for 110 to Topa ley minimal.	+ 41016 TO MAKE
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Title:	CECES	Date: 12-4-7	

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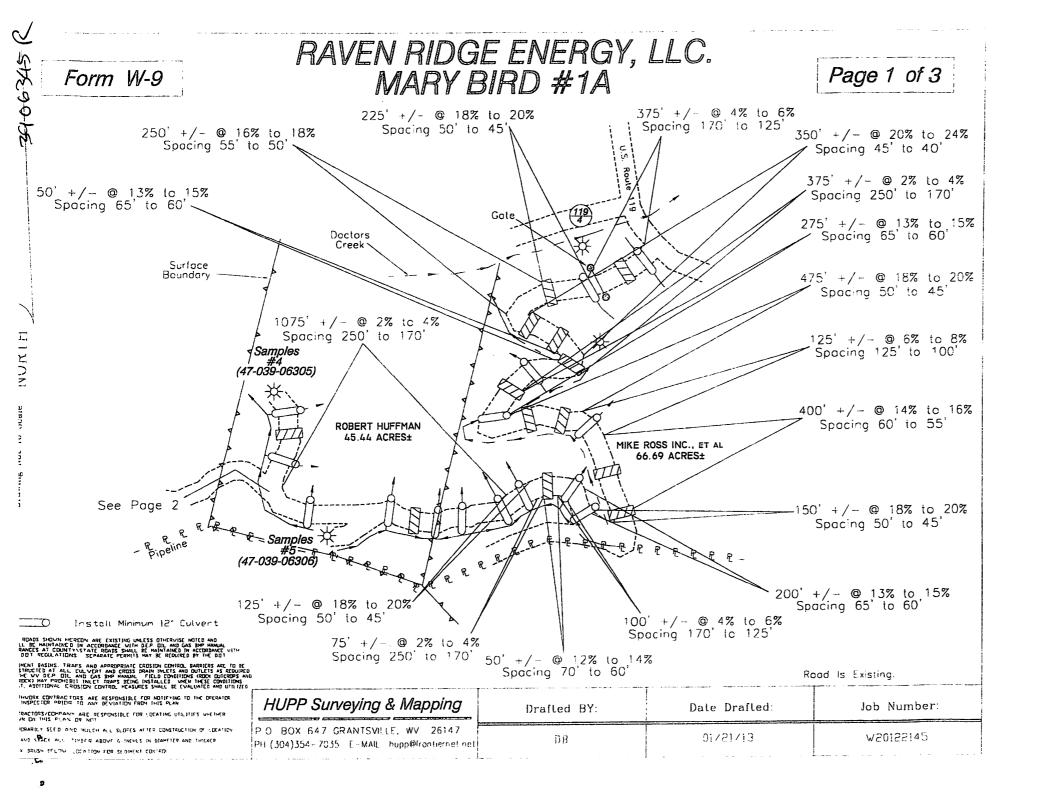
## HUPP Surveying & Mapping

PO BOX 647 GRANTSVILLE, WV 26147 PH (304)354-7035 E-MAIL: hupp@frontiernet.net 1" = 1000' Clio Quad Raven Ridge Energy, LLC. 3230 Pennsylvania Ave. Charleston, WV 25302

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Office of Oil and Gas WV Dept. of Environmental Protection



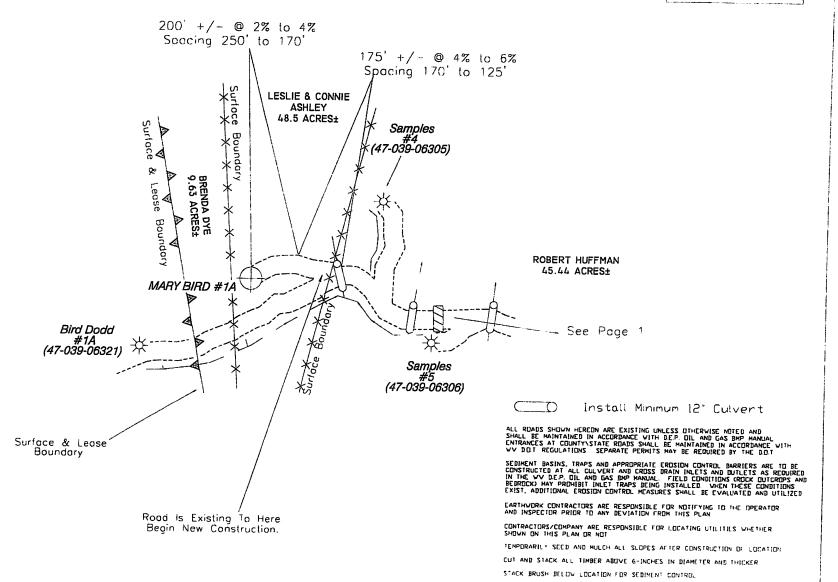
# Office of Oil and Gas WV Dept. of Environmental Protection

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Form W-S

## RAVEN RIDGE ENERGY, LLC. MARY BIRD #1A

Page 2 of 3



HUPP Surveying & Mapping	Drafted BY:	Date Drafted:	Job Number
P.O. BOX 647 GRANTSVILLE, WV 26147 PH (304)354 - 7035 E-MAIL hupp@frontiernet.net		01/21/13	W20122145

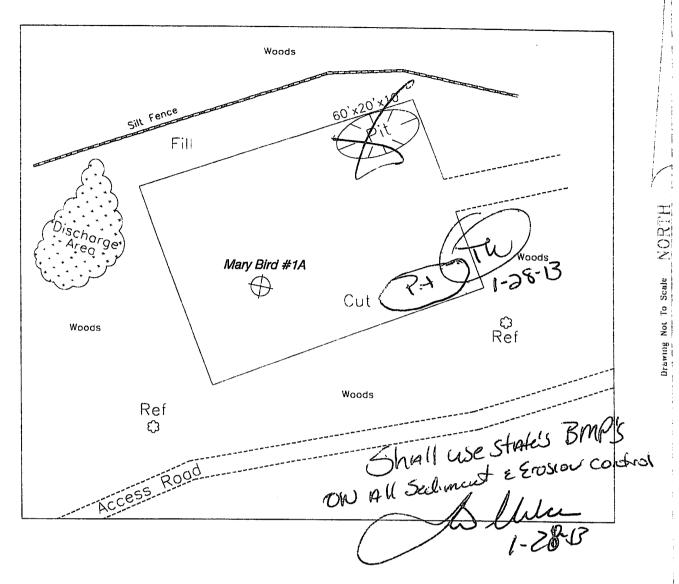
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Form W-9

# RAVEN RIDGE ENERGY, LLC. MARY BIRD #1A

39 06345 R Page 3 of 3



ALL ROADS SHOWN HEREIN ARE EXISTING UNLESS CITHERVISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE VITH DEP OIL AND GAS DHP MANUAL ENTRANCES AT COUNTY-STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE VITH VV DOLT REGULATIOMS. SEPARATE PERHITS HAV BE REQUIRED BY THE OIL

SEDIMENT BASINS, TRAPS AND APPEDPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND DUTLETS AS REQUIRED IN THE VV DEP. DIL AND GAS BHP HANJAL. FIELD CONDITIONS CRICK DUTCROPS AND BEDROCKS MAY PROHIBIT INLET TRAPS ELING INSTALLED. WHEN THESE CONDITIONS EXIST. ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR MOTIFYING TO THE UPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN

SHOWN ON THIS PLAN OR NOT TEMPORARILY SEED AND MULCH ALL SLOPES AFTER CONSTRUCTION OF LUCATION

CUT AND STACK ALL TIMBER ABOVE 6-INCHES IN DIAMETER AND THICKER

STACK BRUSH BELOW LOCATION FOR SEDIMENT CONTROL

HUPP Surveying & Mapping	Drafted BY:	Date Drafted:	Job Number
PO BOX 647 GRANTSVILLE, WV 26147 PH:(304)354-7035 E-MAIL; hupp@frontiernet.net	DB	01/51/13	W20122145

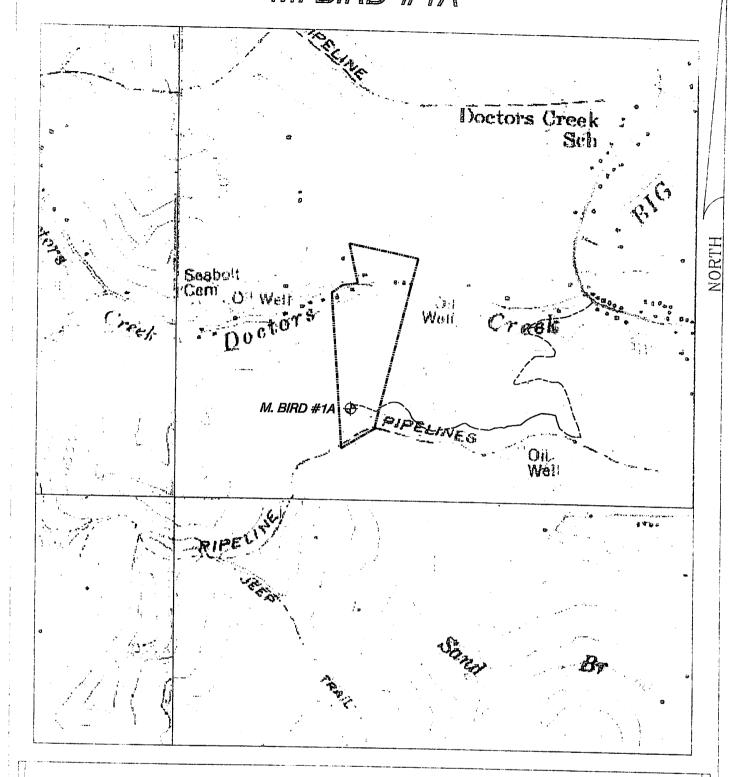
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Office of Oil and Gas WV Dept. of Environmental Protection Form W-9

# RAVEN RIDGE ENERGY, LLC. [ M. BIRD #1A

Page 1 of 1



## HUPP Surveying & Mapping

P.O. BOX 647 GRANTSVILLE, WV 26147 PH: (304)354-7035 E-MAIL: hupp@frontiernet.net l" = 1000' Clio Quad Raven Ridge Energy, LLC. 3230 Pennsylvania Ave. Charleston, WV 25302

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Office of Oil and Gas WV Dept. of Environmental Protection

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PageAPI Number 47	of
Operator's Well No. M. BIRD #1	iA

## 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 RAVEN RIDGE ENERGY, LLC		OP Code 4	94485865
Watershed DOCTORS CREEK	Qua	_	
Elevation 1.04 ) •	County KANAWHA	District E	BIG SANDY
Description of anticipated Pit Waste: WAT			·
Do you anticipate using more than 5,000 b	bls of water to complete the	proposed well work? Y	res No X
Will a synthetic liner be used in the pit? $\underline{\underline{Y}}$	ES If so, wi	nat mil.? 30	
Proposed Disposal Method For Treated Pit    X	Wastes: n jection ( UIC Permit Numbe	erisposal location)	
Drilling medium anticipated for this well?  -If oil based, what type? Synthetic	Air, iresnwater, oil based, e	c. AIR, FRESHWATER	
Additives to be figed; again tract out only	OIAI		
Will closed loop system be used ?			
Drill cuttings disposal method? Leave in p  -If left in pit and plan to solidify w  -Landfill or offsite name/permit no	hat medium will be used? (	Cement, lime, sawdust Lli	ME
provisions of the permit are enforceable by law or regulation can lead to enforcement a	y law. Violations of any ter ction. at I have personally examinated and that, based on my the information is true, acc	m or condition of the ge  ted and am familiar with  inquiry of those indiv	the information submitted on this
Company Official Signature			
Company Official (Typed Name) RYAN CU	NNINGHAM		
Company Official Title OFFICER			
Subscribed and sworn before me this 37	day of Marie	<u> </u>	
My commission expires	4/10/2015	Notary	OFFICIAL SEAL  NOTATY PUBLIC  STATE OF WEST VIRGINIA  DANIELLE N. BAYS  Curringham Brisny, LLC  S200 Permisylamic Associa, Chockston, WV 25302

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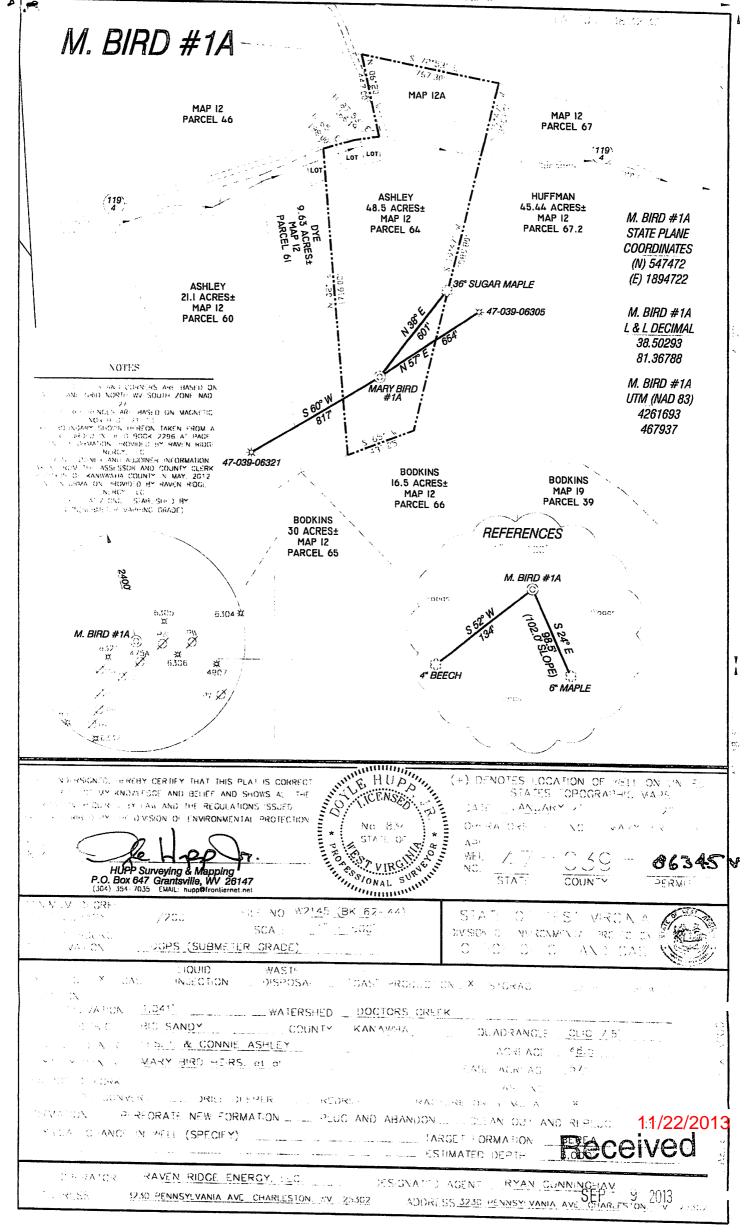
Office of Oil and Gas

WV Dept. of Environmental Protection

WV Dept. of Environmental Protection

WV Dept. of Environmental Protection

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LONG. 81'22'04.4" --



September 9, 2013

DEP Office of Oil & Gas Attn: Permit Application Dept. Charleston, WV

> Re: Mary Bird 1A API # 47-3906345

Dear Sirs -

Please see attached a modified WW-2B along with the previously submitted and approved permit application for the Mary Bird 1A well, API # 47-3906345. We would ask that this permit be re-issued so that we may run 4 ½" casing and frac this previously producing well. I understand that this well is in the process of being released so therefore we have enclosed the permit application fee of \$650.00 as well.

If you should have any further questions or concerns, please feel free to contact me.

Thank you,

Luch n 450gg

Danielle Boggs Operations Manager Cunningham Energy, LLC 3230 Pennsylvania Ave. Charleston, WV 25302 (304) 344-9291

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