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**west virginia** department of environmental protection

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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

December 09, 2013

**WELL WORK PERMIT**

**Re-Work**

This permit, API Well Number: 47-3906347, 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: OSBORNE 1A  
Farm Name: BODKINS, DANIEL & LAURA  
**API Well Number: 47-3906347**  
**Permit Type: Re-Work**  
Date Issued: 12/09/2013

# 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

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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 within 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. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. 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.
6. 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.
7. Well work activities shall not constitute a hazard to the safety of persons.
8. This permit is being conditioned to address the possibility of flooding in the area of this well. Any tanks stored on this location must be securely anchored in cement to prevent the loss of tanks should a flood occur. In addition, cages must be placed around the well head to prevent debris from damaging the well head.

3906347R

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: RAVEN RIDGE ENERGY, LLC  
Operator ID: 494485865 County: KANAWHA 39 District: BIG SANDY 1 Quadrangle: CLENDENIN 299

2) Operator's Well Number: OSBORNE 1A 3) Elevation: 980'

4) Well Type: (a) Oil  or Gas   
(b) If Gas: Production  / Underground Storage \_\_\_\_\_  
Deep \_\_\_\_\_ / Shallow

5) Proposed Target Formation(s): WEIR Proposed Target Depth: 2,200'  
6) Proposed Total Depth: 2,500' Feet Formation at Proposed Total Depth: 2,100' - 2,500'  
7) Approximate fresh-water strata depths: 200'  
8) Approximate salt water depths: 1,200' - 1,700'

9) Approximate coal seam depths: NO COAL LISTED ON TITLE

10) Approximate void depths,(coal, Karst, other): NONE

11) Does land contain coal seams tributary to active mine? NO

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)  
PERFORM A SINGLE STAGE WATER FRAC ON THE WEIR FORMATION OF AN EXISTING WELL

*[Signature]*  
11.25.13

13) CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	
Conductor	13 3/8"	J55	42LBS	40	EXISTING	CTS
Fresh Water	9 5/8"	LS	17LBS	350'	EXISTING	CTS
Coal						
Intermediate	7"	J55	23LBS	1,850'	EXISTING	CTS
Production	4 1/2"	J55	10.5LBS	2250'	EXISTING	CTS
Tubing						
Liners						

Packers: Kind: \_\_\_\_\_  
Sizes: \_\_\_\_\_  
Depths Set \_\_\_\_\_

Received  
NOV 25 2013  
Office of Oil and Gas  
Department of Environmental Protection

12/13/2013

WW-2A  
(Rev. 6-07)

1.) Date: NOVEMBER 25, 2013  
2.) Operator's Well Number OSBORNE 1A  
State          County          Permit           
3.) API Well No.: 47-39-6347

**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:	5) (a) Coal Operator
(a) Name <u>DANIEL AND LAURA BODKINS</u> ✓	Name <u>  </u>
Address <u>P.O. BOX 847</u>	Address <u>  </u>
<u>CLENDENIN, WV 25045</u>	
(b) Name <u>  </u>	(b) Coal Owner(s) with Declaration
Address <u>  </u>	Name <u>  </u>
	Address <u>  </u>
(c) Name <u>  </u>	Name <u>  </u>
Address <u>  </u>	Address <u>  </u>
6) Inspector <u>TERRY URBAN</u>	(c) Coal Lessee with Declaration
Address <u>P.O. BOX 1207</u>	Name <u>  </u>
<u>CLENDENIN, WV 25045</u>	Address <u>  </u>
Telephone <u>(304) 549-5915</u>	

**TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:**

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

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)
- 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 RAVEN RIDGE ENERGY, LLC  
By: RYAN E. M. CUNNINGHAM  
Its: OFFICER  
Address 3230 PENNSYLVANIA AVENUE  
CHARLESTON, WV 25302  
Telephone (304) 344-9291

Subscribed and sworn before me this 25 day of NOVEMBER, 2013

Danielle N. Bays Notary Public  
My Commission Expires 2/10/2015

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov)

Received  
25 2013

Office of Oil and Gas  
Environmental Protection

3906347R

7012 2920 0001 2086 1799

**U.S. Postal Service**  
**CERTIFIED MAIL - RECEIPT**  
*(Domestic Mail Only, No Insurance Coverage Provided)*

For delivery information, visit our website at [www.usps.com](http://www.usps.com).

Postage	\$	
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	\$	

Sent To: Daniel & Laura Bodems ✓  
 Street, Apt. No., or PO Box No. P.O. Box 847  
 City, State, ZIP+4 Clendenen, WV 26045

PS Form 3800, August 2005 See Always for Instructions



**Received**  
 NOV 25 2013  
 Office of Oil and Gas  
 WV Dept. of Environmental Protection  
 12/13/2013

3906347R

WW-2A1  
(Rev. 1/11)

Operator's Well Number OSBORNE 1A

**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 ENGELKE, AGENT	CUNNINGHAM ENERGY, LLC	1/2 OF 1/8	260/431
LINDA OSBORNE	CUNNINGHAM ENERGY, LLC	1/2 OF 1/8	260/775
EMMA JEAN LADD	CUNNINGHAM ENERGY, LLC	1/2 OF 1/8	260/80
	SEE ATTACHED AGREEMENT		

**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 the affected activity is initiated.

Well Operator:  
By: Its:

RAVEN RIDGE ENERGY, LLC  
RYAN E. M. CUNNINGHAM  
OFFICER

Received

NOV 25 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

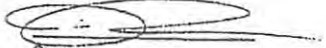
12/13/2013

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

  
Owner

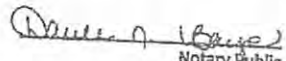
RAVEN RIDGE ENERGY

  
Officer

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.

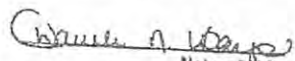


  
Notary Public  
2/16/2015  
My Commission Expires

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  
2/16/2015  
My Commission Expires

Received

NOV 23 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

12/13/2013

3906347R

WW-9  
(5/13)

Page \_\_\_\_\_ of \_\_\_\_\_  
API Number 47 -39 -6347  
Operator's Well No. OSBORNE 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 49445865

Watershed (HUC 10) SAND BRANCH OF BIG SANDY CREEK Quadrangle CLENDENIN

Elevation 980' 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

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

If so, please describe anticipated pit waste: WE INTEND TO USE FRAC TANKS - NO PIT

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 VIKING WELL SERVICE WILL DISPOSE )
- 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. N/A

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

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 \_\_\_\_\_

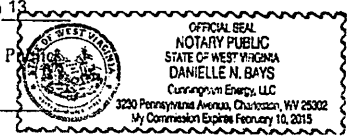
Company Official (Typed Name) RYAN E. M. CUNNINGHAM

Company Official Title OFFICER

Subscribed and sworn before me this 25TH day of NOVEMBER, 20 13

Daniel N. Bays Notary Public

My commission expires 02/10/2015



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NOV 25 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection  
12/13/2013



3906347R

Form WW-9

Operator's Well No. OSBORNE 1A

Proposed Revegetation Treatment: Acres Disturbed 1.5 Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 1/3 lbs/acre (500 lbs minimum)

Mulch HAY 2 Tons/acre

Seed Mixtures

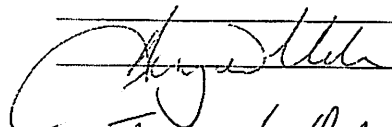
Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY 31	40	ORCHARD GRASS	15
ALSIKE CLOVER	5	ALSIKE CLOVER	5
ANNUAL RYE	15		

Attach:  
Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: \_\_\_\_\_

Comments: \_\_\_\_\_

  
Title: Inspector Oil & Gas

Date: 11-25-13

Field Reviewed?  Yes  No

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Office of Oil and Gas  
WV Dept. of Environmental Protection

12/13/2013

3906347R

Form W-9

# RAVEN RIDGE ENERGY, LLC. Osborne #1A

Page 1 of 3

250' +/- @ 16% to 18%  
Spacing 55' to 50'

50' +/- @ 13% to 15%  
Spacing 65' to 60'

175' +/- @ 14% to 16%  
Spacing 60' to 55'

200' +/- @ 11% to 13%  
Spacing 75' to 65'

150' +/- @ 2% to 4%  
Spacing 250' to 170'

375' +/- @ 4% to 6%  
Spacing 170' to 125'

75' +/- @ 2% to 4%  
Spacing 170' to 170'

275' +/- @ 2% to 4%  
Spacing 65' to 60'

475' +/- @ 18% to 20%  
Spacing 50' to 45'

125' +/- @ 6% to 8%  
Spacing 125' to 100'

400' +/- @ 14% to 16%  
Spacing 60' to 55'

250' +/- @ 4% to 6%  
Spacing 170' to 125'

*Open with 10' grade  
to make passage  
to a minimum  
width  
Note*

Doctors  
Creek

Pipeline

Cromwell #2  
(47-039-04907)

ROSS, INC.,  
ET AL  
66.69  
ACRES  
MAP 12  
PARCEL 68

HUPP Surveying & Mapping

Drafted BY:

Date Drafted

Job Number

P.O. BOX 647 GRANISWA L. WA 98541  
Ph: (360) 544-1100 FAX: (360) 544-1101

08

11/13/13

W12-01140

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NOV 25 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

Drawing Not To Scale

NORTH

Install Minimum 18" Culvert  
All work shown herein are existing unless otherwise noted and shall be maintained in accordance with DEP, ER, and Gas law and rules. In absence of contradictory scales shown, all dimensions in accordance with all applicable regulations. SEPARATE PERMITS MAY BE REQUIRED BY THE LOCAL GOVERNMENT. OBTAINING PERMITS AND APPROPRIATE EMISSION CONTROL MEASURES ARE TO BE DONE BY THE CLIENT. ALL WELLS AND OTHER DEEP DRILLING AND OTHER AS REQUIRED BY THE STATE OF WEST VIRGINIA. FIELD CONDITIONS (ROCK OUTCROPPES AND OTHER) MAY CAUSE THE LINES TO BE SHOWN TO BE DIFFERENT FROM THE ACTUAL. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROPRIATE EMISSION CONTROL MEASURES. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROPRIATE EMISSION CONTROL MEASURES. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROPRIATE EMISSION CONTROL MEASURES.

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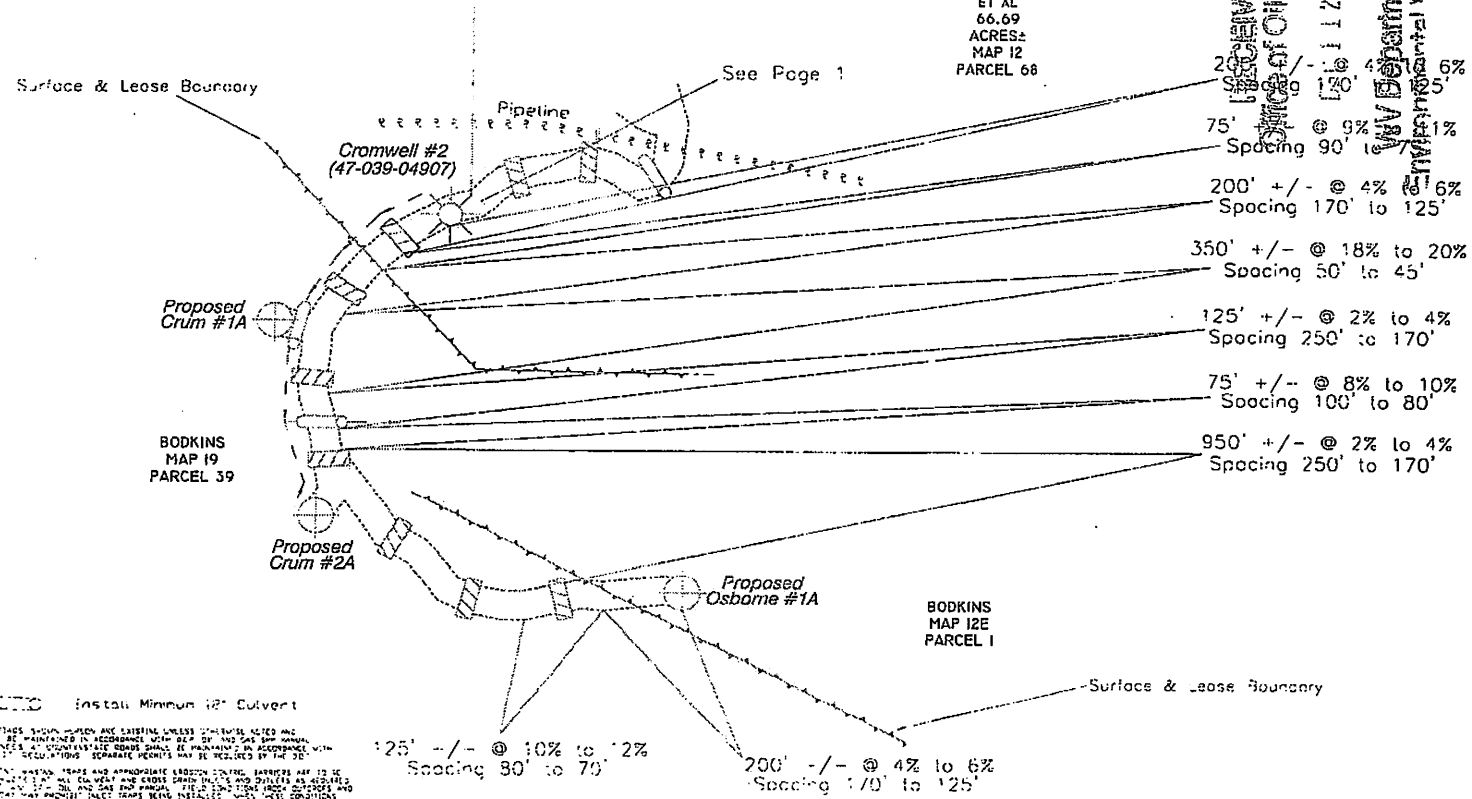
Form W-9

# RAVEN RIDGE ENERGY, LLC. Osborne #1A

Page 2 of 3

Road is Existing To Here.  
Begin New Construction.

ROSS, INC.,  
ET AL  
66.69  
ACRES±  
MAP 12  
PARCEL 68



Office of Oil & Gas  
West Virginia Department of Environmental Protection

Drawing Not To Scale NORTH

Install Minimum 12" Culvert

ALL GRADES SHOWN, EXISTING AND PROPOSED, SHALL BE MAINTAINED TO ACCORDANCE WITH THE DESIGN AND CONSTRUCTION STANDARDS SET FORTH IN THE WEST VIRGINIA REGULATIONS, SEPARATE PERMITS MAY BE REQUIRED BY THE DEP. ALL NECESSARY PERMITS AND APPROPRIATE EROSION CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT. ALL NECESSARY PERMITS AND APPROPRIATE EROSION CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT. ALL NECESSARY PERMITS AND APPROPRIATE EROSION CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.

**HUPP Surveying & Mapping**  
P.O. BOX 647 GRAN TOWNSHIP, WV 26141  
PHONE: 304-725-1235 FAX: 304-725-1236

Drafted BY:	Date Drafted:	Job Number:
CS	11/5/12	WV0128143

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NOV 25 2012

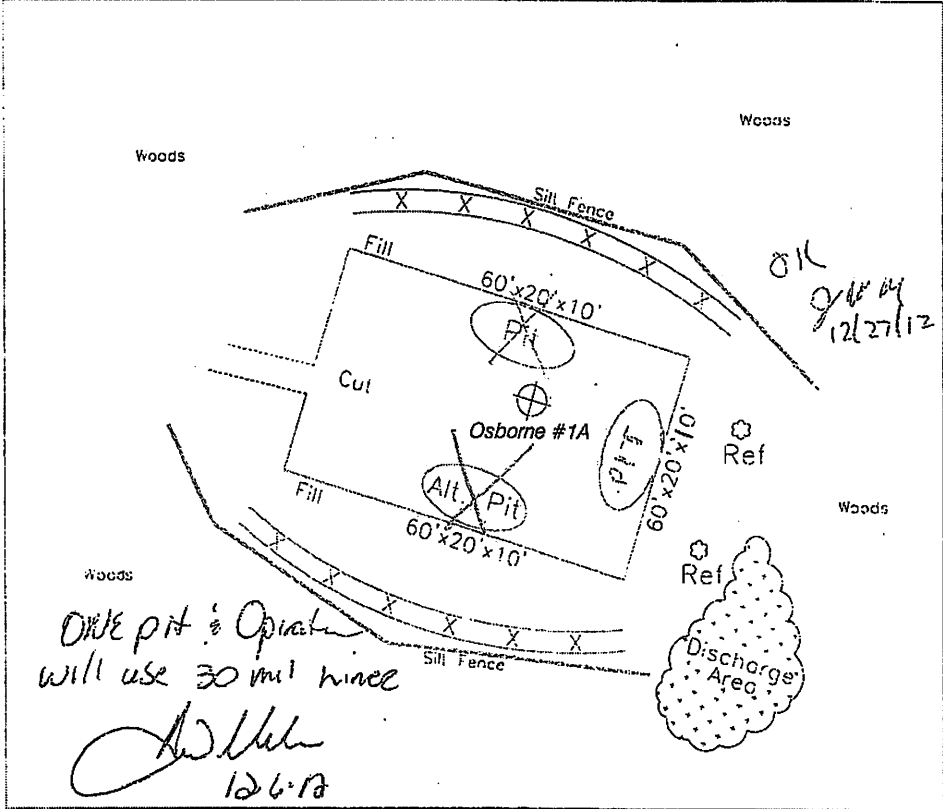
Office of Oil and Gas  
WV Department of Environmental Protection

# RAVEN RIDGE ENERGY, LLC. Osborne #1A

Form W-9

Page 3 of 3

Detail Sketch for Osborne #1A



Drawing Not To Scale NORTH

ONE pit to operate  
will use 30 mil liner

*A. W. H.*  
12.6.12

○— Install Minimum 12" Culvert

ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH DEP OIL AND GAS BMP MANUAL. ENTRANCES AT CELESTYSTATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH WV DEP REGULATIONS. SEPARATE PERMITS MAY BE REQUIRED BY THE UDI.

SEDIMENT BASINS, TRAPS AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL DELVERED AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE WV DEP OIL AND GAS BMP MANUAL. FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST, ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFYING TO THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

CONTRACTORS/COMPANY ARE RESPONSIBLE FOR LOCATING UTILITIES WHETHER SHOWN ON THIS PLAN OR NOT.

TEMPORARILY SEED AND MULCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

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

STACK BRUSH BELOW LOCATION FOR SEDIMENT CONTROL.

RECEIVED  
Office of Oil & Gas  
DEC 11 2012  
WV Department of Environmental Protection

HUPP Surveying & Mapping P.O. BOX 647 GRANTSVILLE, WV 26147	Drafted BY:	Date Drafted:	Job Number:
	DB	11/15/12	W20122143

## Received

NOV 25 2013

12/13/2013

3906347R

Office of Oil and Gas

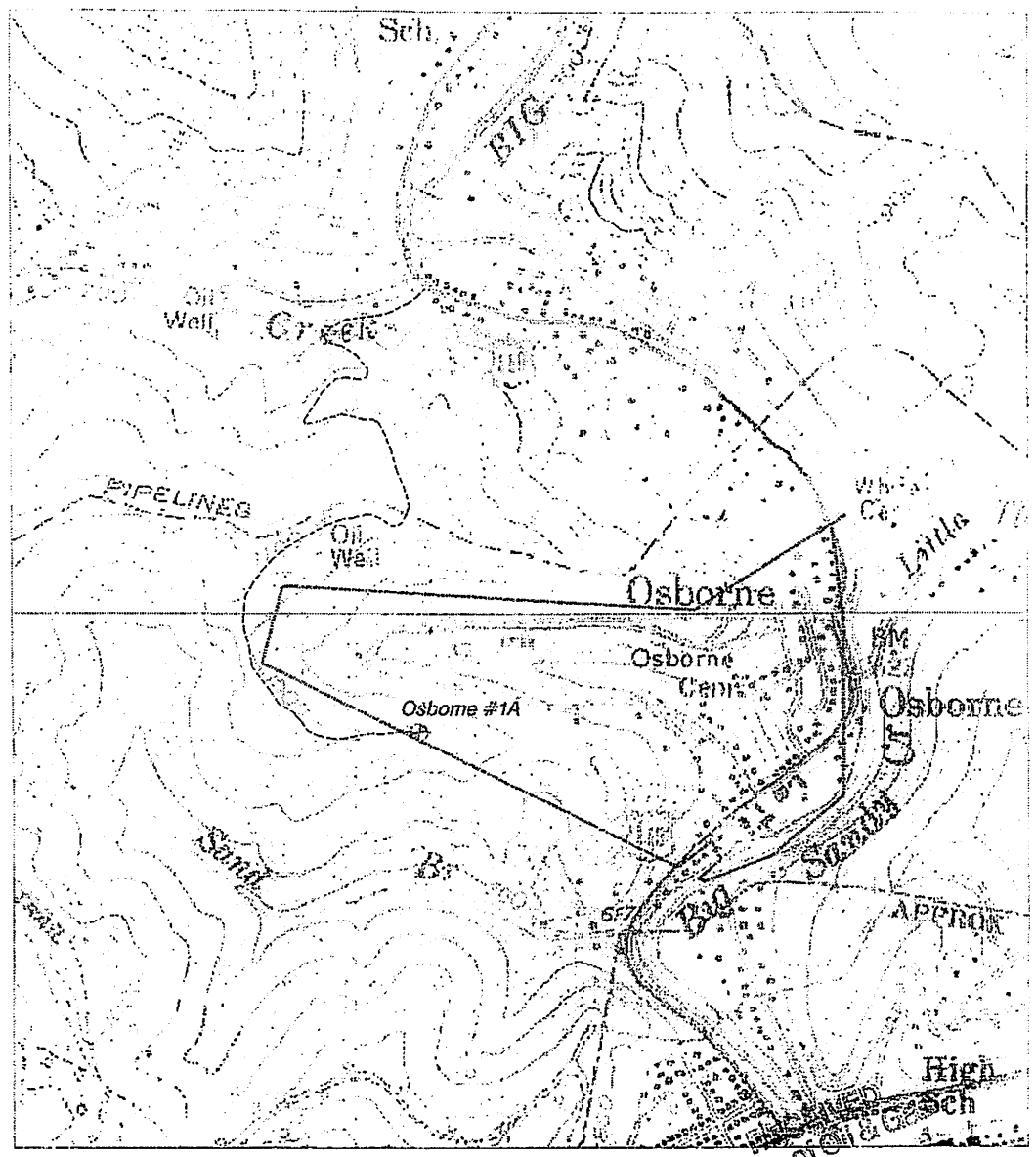
NOV 25 2013

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Form W-9

# RAVEN RIDGE ENERGY, LLC. OSBORNE #1A

Page 1 of 1



**HUPP Surveying & Mapping**  
 P.O. BOX 647 GRANTSVILLE, WV 26147  
 PH: (304)354-7035 E-MAIL: hupp@frontiernet.net

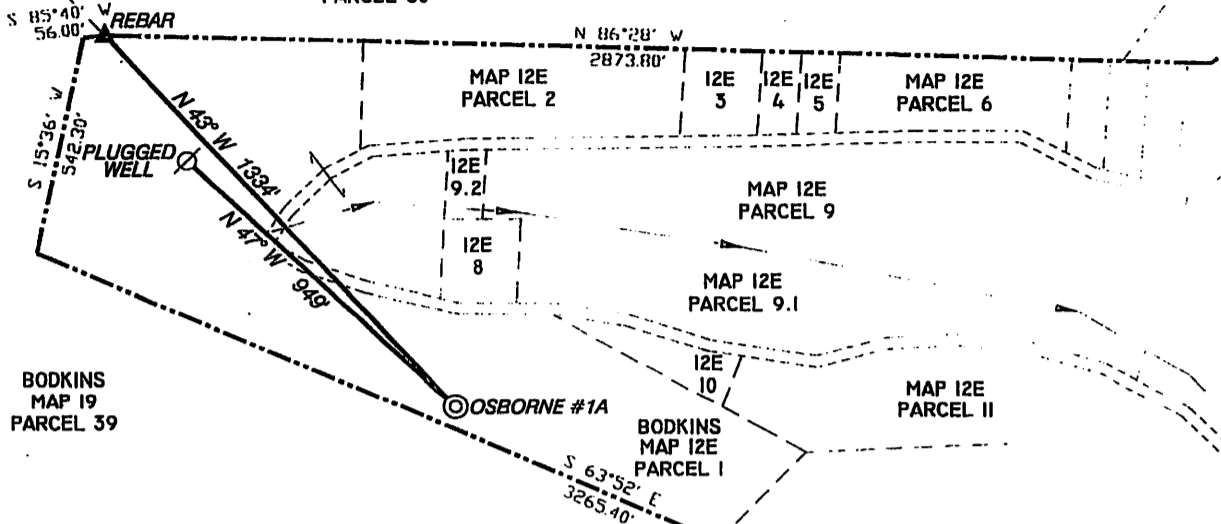
1" = 1000'  
 Clendenin Quad

Raven Ridge Energy, LLC  
 3230 Pennsylvania Ave.  
 Charleston, WV 25302

12/13/2013

# OSBORNE #1A

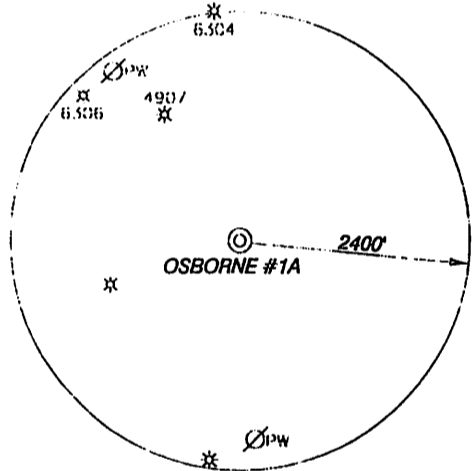
ROSS, INC., ET AL  
66.69 ACRES±  
MAP 12  
PARCEL 68



**OSBORNE #1A**  
 STATE PLANE  
 COORDINATES  
 (N) 545611  
 (E) 1897216

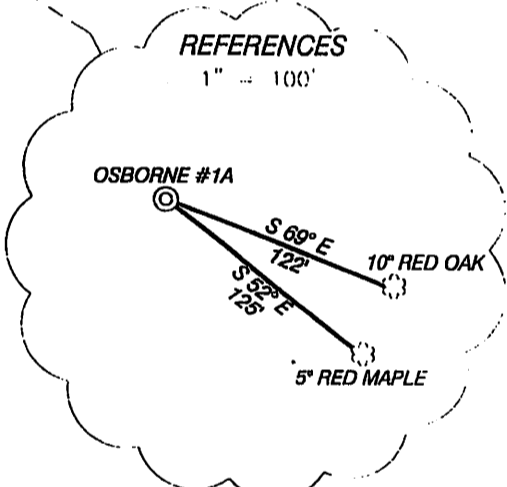
**OSBORNE #1A**  
 L & L DECIMAL  
 38.49785  
 81.35914

**OSBORNE #1A**  
 UTM (NAD 83)  
 4261126 N  
 468697 E

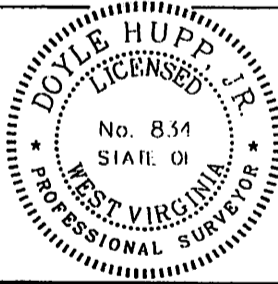


### NOTES

TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '77  
 TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 08-06-12  
 LEASE BOUNDARY SHOWN HEREON TAKEN FROM A LEGAL DESCRIPTION PROVIDED BY RAVEN RIDGE ENERGY, LLC  
 SURFACE OWNER AND ADJUNCT INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF KANAWHA COUNTY IN MAY, 2012 AND INFORMATION PROVIDED BY RAVEN RIDGE ENERGY, LLC  
 WELL LAT./LONG. ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE)



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 DIVISION OF ENVIRONMENTAL PROTECTION.



(1) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 DATE NOVEMBER 15, 2012  
 OPERATORS WELL NO. OSBORNE #1A  
 API WELL NO. 47-039-06347R  
 STATE COUNTY PERMIT

P.S. 8.54  
 Doyle Hupp, Jr.  
 HUPP Surveying & Mapping  
 P.O. Box 647 Grantsville, WV 26147  
 (304) 354-7035 EMAIL: hupp@frontiernet.net

MINIMUM DEGREE OF ACCURACY 1/200  
 FILE NO. W2143 (BK 60-1)  
 HORIZONTAL SOURCE SCALF 1" = 500'  
 ELEVATION SOURCE DGPS (SUBMETER GRADE)

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

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 980' WATERSHED SAND BRANCH OF BIG SANDY CREEK  
 DISTRICT BIG SANDY COUNTY KANAWHA QUADRANGLE CLENDENIN 7.5'

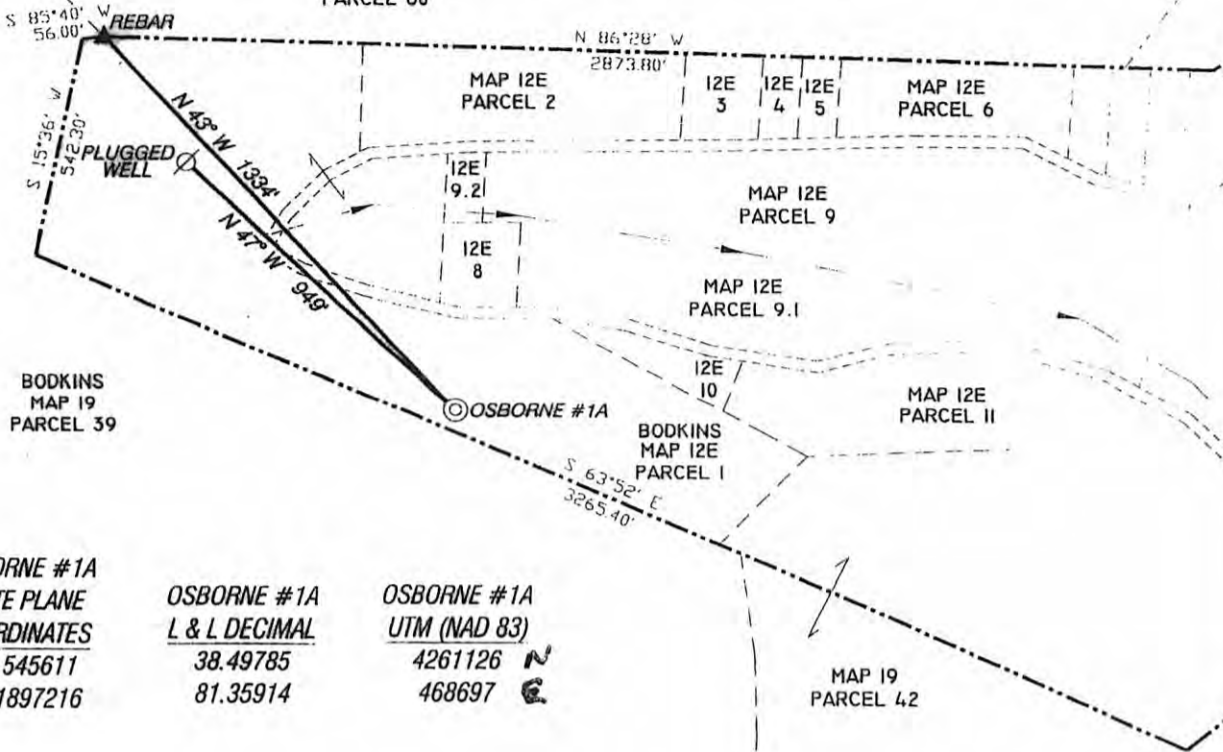
SURFACE OWNER DANIEL & LAURA BODKINS ACREAGE 23.861  
 ROYALTY OWNER ALVIN ENGELKE-AGENT, et al LEASE ACREAGE 124.81 **12/13/2013**

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATION  PLUG OR GRAB   
 PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER   
 PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION BEREA ESTIMATED DEPTH 3,000'

WELL OPERATOR RAVEN RIDGE ENERGY, LLC. DESIGNATED AGENT RYAN CUNNINGHAM  
 ADDRESS 3230 PENNSYLVANIA AVE. CHARLESTON, WV 25302 ADDRESS 3230 PENNSYLVANIA AVE. CHARLESTON, WV 25302

# OSBORNE #1A

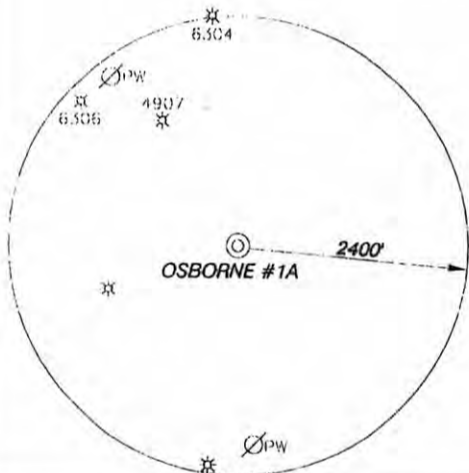
ROSS, INC., ET AL  
66.69 ACRES±  
MAP 12  
PARCEL 68



**OSBORNE #1A**  
**STATE PLANE**  
**COORDINATES**  
 (N) 545611  
 (E) 1897216

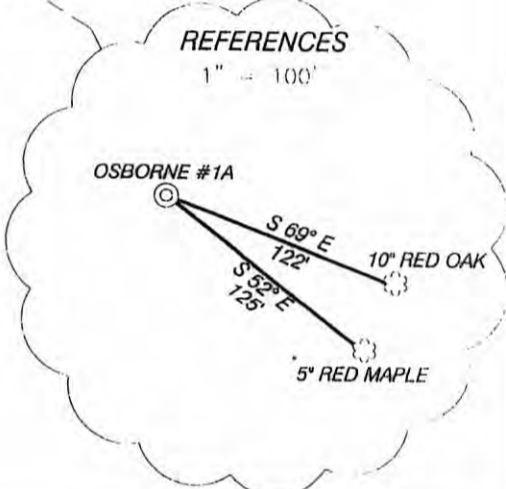
**OSBORNE #1A**  
**L & L DECIMAL**  
 38.49785  
 81.35914

**OSBORNE #1A**  
**UTM (NAD 83)**  
 4261126 N  
 468697 E



### NOTES

TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27  
 TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 08-06-12  
 LEGAL BOUNDARY SHOWN HEREON TAKEN FROM A LEGAL DESCRIPTION PROVIDED BY RAVEN RIDGE ENERGY, LLC.  
 SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF KANAWHA COUNTY IN MAY, 2012 AND INFORMATION PROVIDED BY RAVEN RIDGE ENERGY, LLC.  
 WELL LAT/LONG ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).



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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 8.54

*Doyle Hupp, Jr.*  
 HUPP Surveying & Mapping  
 P.O. Box 647 Grantsville, WV 26147  
 (304) 354-7035 EMAIL: hupp@frontiernet.net



(1) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE NOVEMBER 15, 2012  
 OPERATORS WELL NO. OSBORNE #1A  
 API WELL NO. 47-039-06347R  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION DGPS (SUBMETER GRADE)  
 FILE NO. W2143 (BK 60-1)  
 SCALE 1" = 500'

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

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 980' WATERSHED SAND BRANCH OF BIG SANDY CREEK DISTRICT BIG SANDY COUNTY KANAWHA QUADRANGLE CLENDENIN 7.5'

ACREAGE 23.86 ACRES  
 LEASE ACREAGE 124.8 ACRES

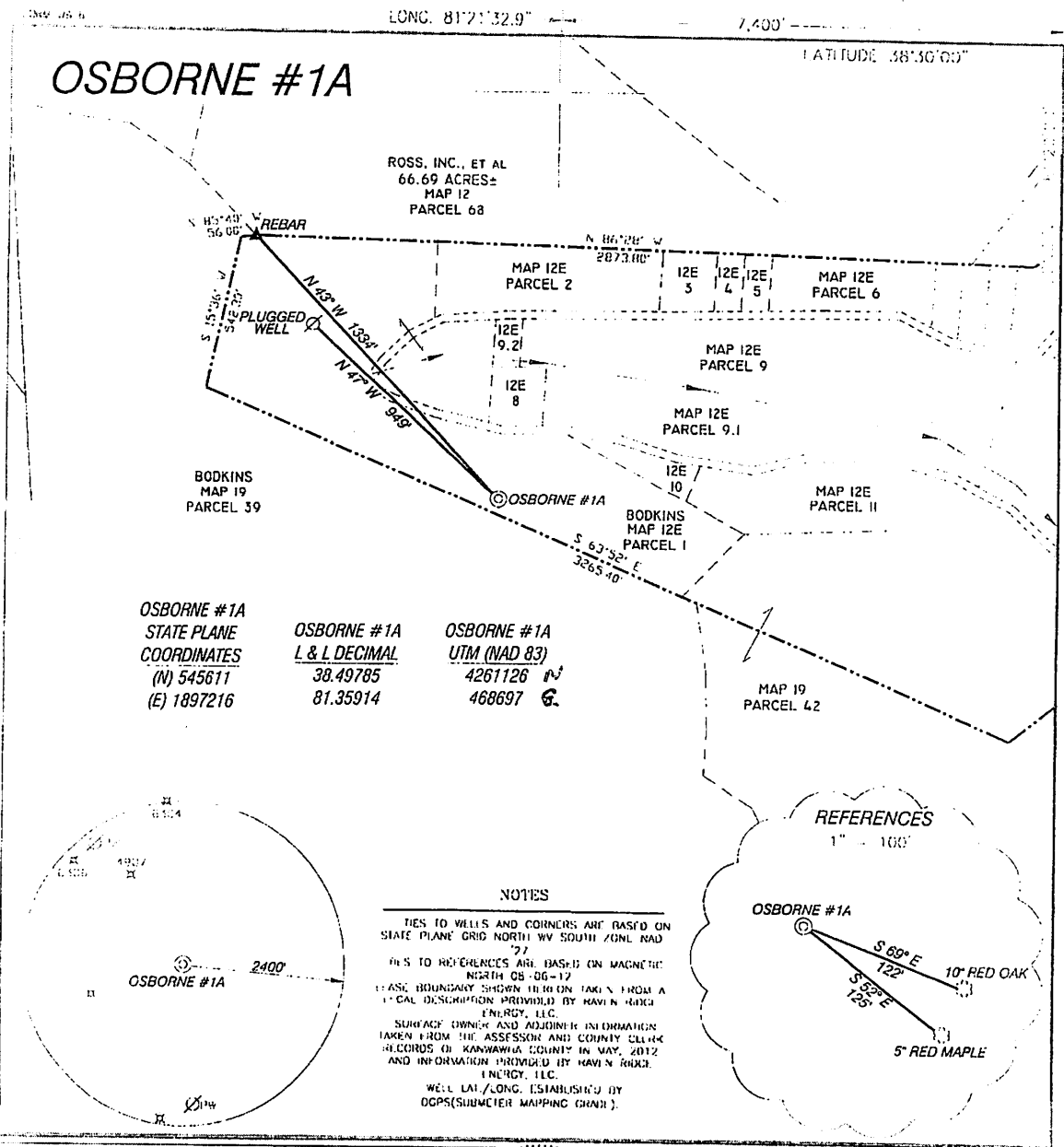
PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATION  PLUG AND ABANDON  PERFORATE NEW FORMATION  CLEAN OUT AND REPLUG  OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION BEREA ESTIMATED DEPTH 3,000'

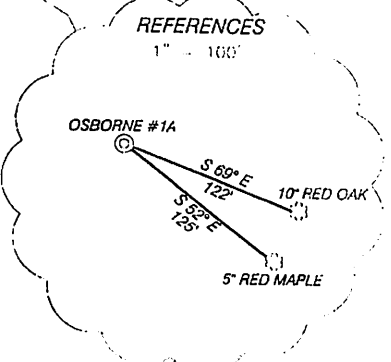
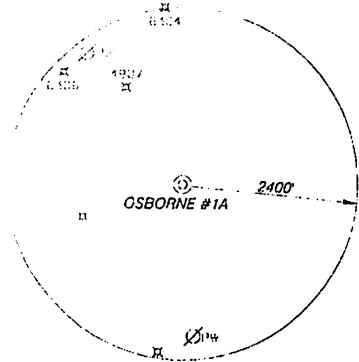
OPERATOR RAVEN RIDGE ENERGY, LLC. DESIGNATED AGENT RYAN CUNNINGHAM  
 ADDRESS 3230 PENNSYLVANIA AVE. CHARLESTON, WV 25302 ADDRESS 3230 PENNSYLVANIA AVE. CHARLESTON, WV 25302

12/13/2013

39 06347R



<b>OSBORNE #1A</b>	<b>OSBORNE #1A</b>	<b>OSBORNE #1A</b>
<b>STATE PLANE</b>	<b>L &amp; L DECIMAL</b>	<b>UTM (NAD 83)</b>
<b>COORDINATES</b>		
(N) 545611	38.49785	4261126
(E) 1897216	81.35914	468697



**NOTES**

TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE RAD 27.

TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 08-06-12.

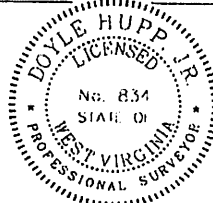
LEASE BOUNDARY SHOWN IS BASED ON TAKEN FROM A LOCAL DESCRIPTION PROVIDED BY RAVIN RIDGE ENERGY, LLC.

SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF KANAWHA COUNTY IN MAY, 2012 AND INFORMATION PROVIDED BY RAVIN RIDGE ENERGY, LLC.

WELL LAT/LONG ESTABLISHED BY DGPS (SUDDICHER MAPPING CORP).

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 enforced by the DIVISION OF ENVIRONMENTAL PROTECTION.

*Doyle Hupp*  
 HUPP Surveying & Mapping  
 P.O. Box 647 Grantsville, WV 20147  
 (304) 354-1335 EMAIL: hupp@trionet.net



(1) DENIES LOCATION OF WELL ON ONE OF STATES TOPOGRAPHIC MAPS

DATE: NOVEMBER 15, 2013

OPERATORS WELL NO.: OSBORNE #1A

API: 47-039-06347R

WELL NO.: 47-039

NO.: 06347R

STATE: COUNTY: PERMIT:

MAP SCALE: 1/200 FILE NO. W2143 (BK 60-1)

MAP SCALE: 500'

DATE: 11/15/13

DATE: 11/15/13

DATE: 11/15/13

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

WELL TYPE	LIQUID INJECTION	WASTE DISPOSAL	IF "GAS" PRODUCTION	STORAGE	DEEP STORAGE
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WELL LOCATION	WATERSHED		SAND BRANCH OF <u>BIG SANDY CREEK</u>		
DISTRICT	BIG SANDY		COUNTY KANAWHA		
LEASE OWNER	DANIEL & LAURA BODKINS		QUADRANGLE	CLEDENNIN 7.0'	
LEASE NUMBER	ALVIN ENGLIKE - AGENT, et al		ACREAGE	23.861	
DEED BOOK			LEASE ACREAGE	124.8	
DEED	<input checked="" type="checkbox"/> CONVERT		DRILL DEEPER	REDRILL	FRACURE OR STIMULATE
REVISION	PERFORATE NEW FORMATION		PLUG AND ABANDON	CLEAN OUT AND REPERFORATE	
REVISION	TARGET FORMATION		DEPTH 3,000'		

OPERATOR: RAVIN RIDGE ENERGY, LLC. DESIGNATED AGENT: RYAN CUNNINGHAM

ADDRESS: 5230 PENNSYLVANIA AVE, CHARLESTON, WV 25302 ADDRESS: 553230 PENNSYLVANIA AVE, CHARLESTON, WV

Received  
 NOV 25 2013  
 Office of Oil and Gas  
 Division of Environmental Protection

12/13/2013



3906347 R

WW-2B1  
(5-12)

Well No. OSBORNE 1A

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 STRUM ENVIRONMENTAL  
Sampling Contractor HUPP SURVEYING

Well Operator RAVE RIDGE ENERGY, LLC  
Address 3230 PENNSYLVANIA AVENUE  
CHARLESTON, WV 25302  
Telephone (304) 344-9291

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.

*Already performed.*

Received

DEC 25 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

12/13/2013

3906347R

**Nottingham, Justin E**

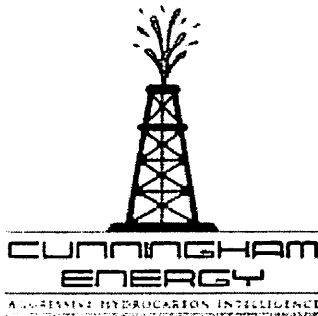
---

**From:** Danielle Boggs <dani.bays@cunninghamenergy.com>  
**Sent:** Monday, November 25, 2013 1:52 PM  
**To:** Nottingham, Justin E  
**Subject:** Osborne 1A / 47-3906347  
**Attachments:** SKMBT\_C35131125143200.pdf

Please see attached the application to re-permit the Osborne 1A (API 47-3906347). I am also forwarding the check for the fee for both this well and the Osborne 2A (API 47-390638) and mylars today via regular mail.

Please let me know if you need anything further.

Thank you,  
*Danielle N. Boggs*  
*Cunningham Energy*  
3230 Pennsylvania Ave  
Charleston, WV 25302  
Direct: (304) 344-9291  
Cell: (304) 553-5850  
Fax: (304) 344-9290  
[www.cunninghamenergy.com](http://www.cunninghamenergy.com)



**NOTICE OF CONFIDENTIALITY**

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**Received**

NOV 25 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

12/13/2013