



---

**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](http://www.dep.wv.gov)

August 20, 2013

**WELL WORK PERMIT**

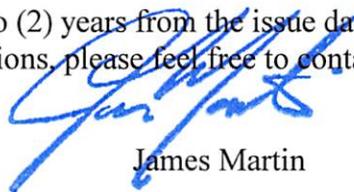
**Vertical Well**

This permit, API Well Number: 47-10501368, issued to HARD ROCK EXPLORATION, 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: HR-495A  
Farm Name: MCCLUNG, KENNETH & ELIKA  
**API Well Number: 47-10501368**  
**Permit Type: Vertical Well**  
Date Issued: 08/20/2013

**Promoting a healthy environment.**

10501368

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: Hard Rock Exploration, Inc. 494464205 Wirt Spring Creek Burning Springs, WV 7.5'  
Operator ID County District Quadrangle

2) Operator's Well Number: HR-495 3) Elevation: 1029'

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

5) Proposed Target Formation(s): Lower Huron Proposed Target Depth: 4560' TVD

6) Proposed Total Depth: 8350'TMD Feet Formation at Proposed Total Depth: Lower Huron

7) Approximate fresh water strata depths: Pittsburg estimated at 770' - 820'

8) Approximate salt water depths: 2000'

9) Approximate coal seam depths: None noted in offset wells

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)

Drill 12 3/8" hole on air/ Freshwater foam; Drill 8 3/4" hole on Air/Freshwater foam/Fluid; Drill Bottom hole on Air

KOP-3960', Land curve-4900'MD/ 4560'TVD , 4050'VS, 8350'TMD

Run 4.5" casing with open hole packer completion (Depths noted at bottom) -Set packers, cement on top packer, Fracture with Nitrogen gas.

Received  
AUG - 2 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

13) CASING AND TUBING PROGRAM

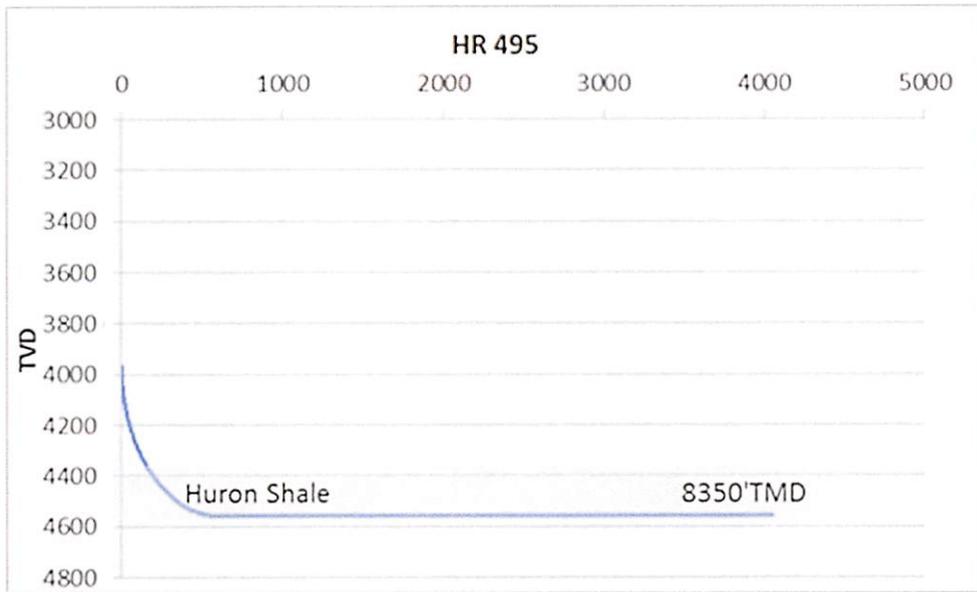
TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	
Conductor	13 3/8"	LS	37#	30'	30'	
Fresh Water	9 5/8"	LS	26#	920'	920'	455cuft-CTS
Coal						
Intermediate	7"	LS	19#	2310'	2310'	520cuft -CTS
Production	4 1/2"	N-80	11.6#	8350'	8350'	130cuft
Tubing						
Liners						

CK# 14588  
650'

*[Handwritten signature]*  
8/13

Packers: Kind: Mechanical Set open hole packer  
Sizes: 4.5" X 6 5/8" 10k diff Seal  
Depths Set Place 16stg open hole packer system from 4430'MD- 8350' (245' spacing per stg) , 17th packer at 2600' Dump 130cuft

NOTICE  
WELLBORE GRAPH  
HARD ROCK EXPLORATION WELL NO. HR-495



HARD ROCK EXPLORATION, INC.  
1244 MARTINS BRANCH ROAD  
CHARLESTON, WV 25312

7-25-13

Received  
AUG - 2 2013  
Office of Oil and Gas  
WV Dept. of Environmental Protection

10501368

WW-2A  
(Rev. 6-07)

1). Date: July 24, 2013  
2.) Operator's Well Number HR-495  
State 47- County 105 Permit 01368  
3.) API Well No.:

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

Check # 14588  
\$ 650.00

4) Surface Owner(s) to be served: W

(a) Name Kennith McClung  
Address 805 Fairview Ridge  
Palestine, WV 26160

(b) Name Keith Miller, et al.  
Address 4485 Parkersburg Road ✓  
Reedy, WV 25270

(c) Name \_\_\_\_\_  
Address \_\_\_\_\_

5) (a) Coal Operator  
Name None  
Address \_\_\_\_\_

(b) Coal Owner(s) with Declaration W  
Name Kennith McClung  
Address 805 Fairview Ridge  
Palestine, WV 26160

Name Keith Miller, et al. ✓  
Address 4485 Parkersburg Road  
Reedy, WV 25270

(c) Coal Lessee with Declaration  
Name None  
Address \_\_\_\_\_

6) Inspector 1475 Joe Taylor JA  
Address 497 Claylick Road  
Ripley, WV 25271  
Telephone (304)380-7469

**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)

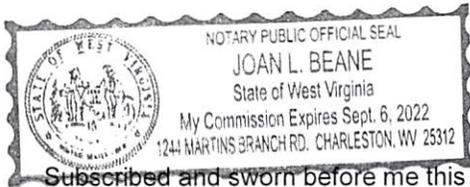
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through \_\_\_ on the above named parties by:

- 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 Hard Rock Exploration, Inc.  
By: Monica Parisel  
Its: Executive Vice President  
Address 1244 Martins Branch Road  
Charleston, WV 25312  
Telephone (304)984-9004

Subscribed and sworn before me this 29th day of July, 2013

Joan L. Beane Notary Public

My Commission Expires Sept. 6, 2022

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

Office of Oil and Gas  
Dept. of Environmental Protection  
- 2 2013

WW-2A Surface Waiver

SURFACE OWNER WAIVER

County Wirt Operator Hard Rock Exploration, Inc.  
Operator well number HR-495

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

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

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIFTEEN (15) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure a adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

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

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application for a Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through \_\_\_ including a work order on Form WW2-B, a survey plat, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Keith E. M. Class  
Signature

Date 7/30/13

Company Name \_\_\_\_\_  
By \_\_\_\_\_  
Its \_\_\_\_\_ Date \_\_\_\_\_

Keith E. M. Class  
Print Name

Signature \_\_\_\_\_ Date \_\_\_\_\_

Received  
AUG - 2 2013  
Office of Oil and Gas  
WV Dept. of Environmental Protection

WW-2A Surface Waiver

SURFACE OWNER WAIVER

County Wirt Operator Hard Rock Exploration, Inc.  
Operator well number HR-495

**INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A**

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

**WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

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

**Time Limits and methods for filing comments.** The law requires these materials to be served on or before the date the operator files his Application. You have **FIFTEEN (15) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure a adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

**Comments must be in writing.** Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

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

**VOLUNTARY STATEMENT OF NO OBJECTION**

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application for a Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through \_\_\_ including a work order on Form WW2-B, a survey plat, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Elika M. M. Clung Date 7-30-13 Company Name \_\_\_\_\_  
Signature By \_\_\_\_\_  
Elika M. M. Clung Its \_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date  
\_\_\_\_\_  
Signature \_\_\_\_\_  
Date

Received  
AUG - 2 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

10501368

WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

County Wirt  
Operator Hard Rock Exploration, Inc. Operator's Well Number HR-495

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

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

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

WAIVER

The undersigned coal operator \_\_\_\_/ owner \_\_\_\_/ lessee \_\_\_\_/ of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

*Kenneth E. McClung* Signature Date 7/30/13

Company Name \_\_\_\_\_  
By \_\_\_\_\_  
Its \_\_\_\_\_ Date \_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_

Received  
AUG - 2 2013  
Office of Oil and Gas  
WV Dept. of Environmental Protection

WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

County Wirt  
Operator Hard Rock Exploration, Inc. Operator's Well Number HR-495

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

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

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

WAIVER

The undersigned coal operator \_\_\_\_ / owner \_\_\_\_ / lessee \_\_\_\_ / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Erika M. McHenry Date 7-30-13  
Signature

Company Name \_\_\_\_\_  
By \_\_\_\_\_  
Its \_\_\_\_\_ Date \_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature  <input checked="" type="checkbox"/> <i>Kenneth McClung</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <i>Kenneth McClung</i> C. Date of Delivery <i>7/13/2013</i></p>
<p>1. Article Addressed to:</p> <p>Kennith and Elika McClung        805 Fairview Ridge        Palestine, WV 26160</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes        If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>
<p>2. Article Number        (Transfer from service label)</p>	<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature  <input checked="" type="checkbox"/> <i>Ronnie Miller</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p>
<p>1. Article Addressed to:</p> <p>Keith Miller et al        4485 Parkersburg Road        Reedy, WV 25270</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes        If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>
<p>2. Article Number        (Transfer from service label)</p>	<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

Received

AUG - 2 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

**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
Kennith E. & Erika M. McClung	Hard Rock Exploration, Inc.	% of 1/8	239/1
Russell E. & Polly A. Howdyshell	Hard Rock Exploration, Inc.	% of 1/8	240/304

**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:

Hard Rock Exploration, Inc.  
Monica Russell  
Executive Vice President

Received  
Office of Oil and Gas  
WV Dept. of Environmental Protection  
- 2 -

WW-2B1  
(5-12)

Well No. HR-495

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	<u>Standard Labs or Sturm Lab</u>
Sampling Contractor	<u>Standard Labs or Sturm Lab</u>

Well Operator	<u>Hard Rock Exploration, Inc.</u>
Address	<u>1244 Martins Branch Road</u>
	<u>Charleston, WV 25312</u>
Telephone	<u>(304)984-9004</u>

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.

**NOTICE****WATER TESTING  
HARD ROCK EXPLORATION WELL NO. HR-495A**

**THE FOLLOWING WATER SOURCES WERE IDENTIFIED WITHIN 2000' OF THE  
ABOVE PROPOSED WELL SITE:**

**KENNITH & ELIKA McCLUNG  
805 FAIRVIEW RIDGE  
PALESTINE, WV 26160**

**DANIEL BRINDO  
647 FAIRVIEW RIDGE  
PALESTINE, WV 26160**

**WILLIAM DUNBAR  
1909 SPENCER RD.  
RIPLEY, WV 25271**

**OR  
CHERI TAYLOR &  
TAMERA BUTTA  
PO BOX 173  
ELIZABETH, WV 26143**

**DAVID H. SUIT, ET UX,  
KEITH MILLER  
4485 PARKERSBURG RD.  
REEDY, WV 25270**

**TRUE LINE SURVEYING, INC.  
6211 FAIRVIEW DRIVE  
HUNTINGTON, WV 25705**

**07-11-13**

*Received*

AUG - 2 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

WW-9  
(5/13)

Page \_\_\_\_\_ of \_\_\_\_\_  
API Number 47 - 105 - \_\_\_\_\_  
Operator's Well No. HR-495

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Hard Rock Exploration, Inc. OP Code 494464205

Watershed (HUC 10) Buck Run of Spring Creek Quadrangle Burning Springs, WV 7.5'

Elevation 1029' County Wirt District Spring Creek

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 X No \_\_\_\_\_

If so, please describe anticipated pit waste: Drill Cuttings

Will a synthetic liner be used in the pit? Yes X No \_\_\_\_\_ If so, what ml.? 10 or greater 20 ml

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number UIC2D0190460, 3416729685 )
- Reuse (at API Number 8704669, 3502970, 3502987, 3502999, 8704700, 8704698, 8704703, 8704713 - Well will be noted in DMR )
- \_\_\_\_\_ 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

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

Additives to be used in drilling medium? Soap, KCl, or Clay Stay

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

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

-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 Monica Stephens

Company Official (Typed Name) Monica Stephens

Company Official Title Executive Vice President

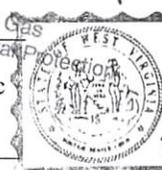
Subscribed and sworn before me this 29th day of July

Joan L. Beane

My commission expires Sept. 6, 2022

Received  
AUG - 2 2013  
5-1-13

Office of Oil and Gas  
WV Dept. of Environmental Protection  
Notary Public



NOTARY PUBLIC OFFICIAL SEAL  
JOAN L. BEANE  
State of West Virginia  
My Commission Expires Sept. 6, 2022  
1244 MARTINS BRANCH RD. CHARLESTON, WV 25311

Form WW-9

Operator's Well No. HR-495

Proposed Revegetation Treatment: Acres Disturbed 0.68 Prevegetation pH 5.5

Lime 3 Tons/acre or to correct to pH 6.5

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

Mulch Hay/Straw/Paper (Paper at 1600 lbs/acre) Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
Red Top	15	Red Top	15
Orchard Grass	25	Orchard Grass	25
Perennial Rye/Crimson Red Clover 25 Each		Perennial Rye/Crimson Red Clover 25 Each	
Annual Rye	40	Annual Rye	40

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: 

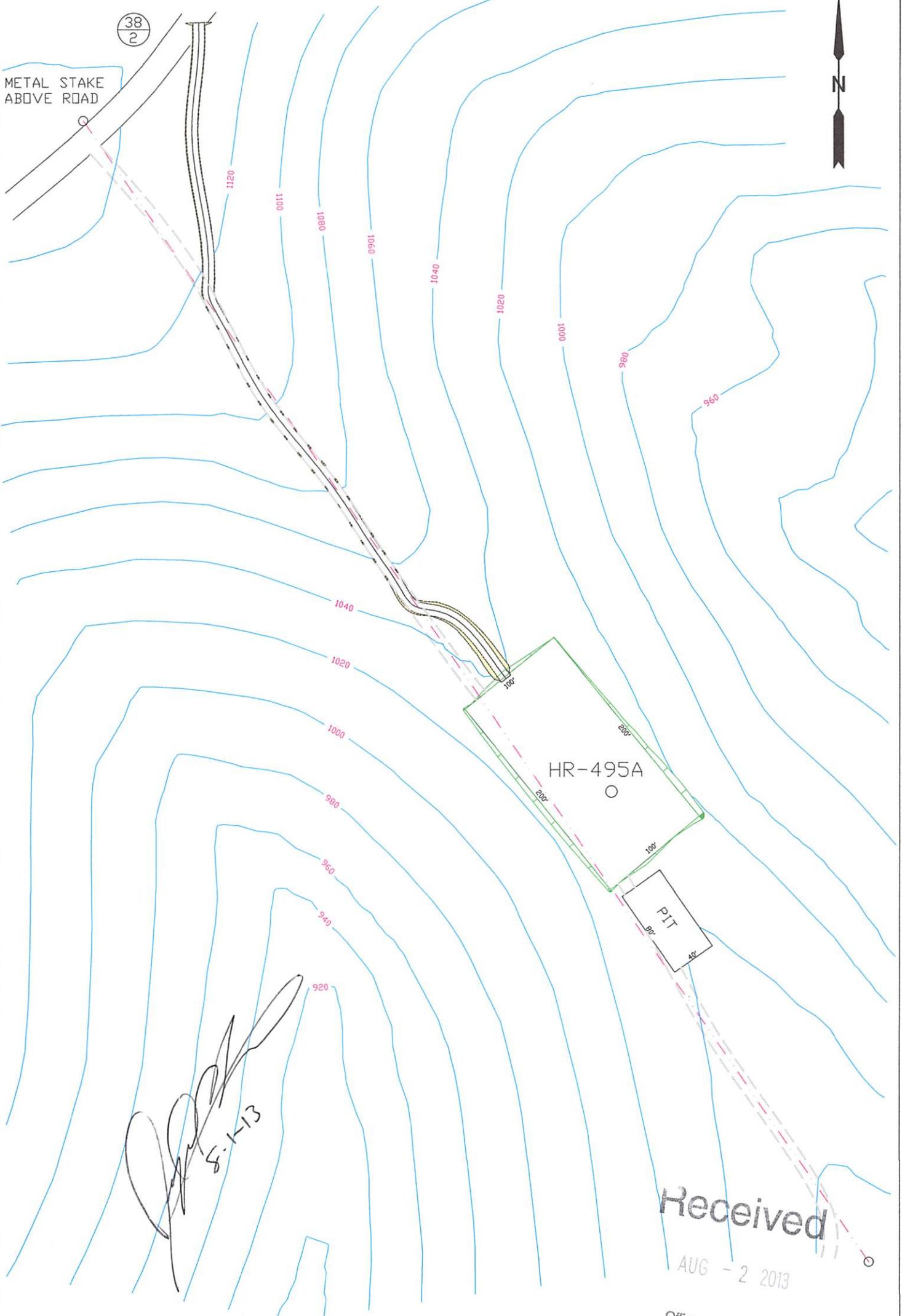
Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: Inspects Date: 8-1-13

Field Reviewed?  Yes  No

**Received**  
AUG - 2 2013  
Office of Oil and Gas  
WV Dept. of Environmental Protection

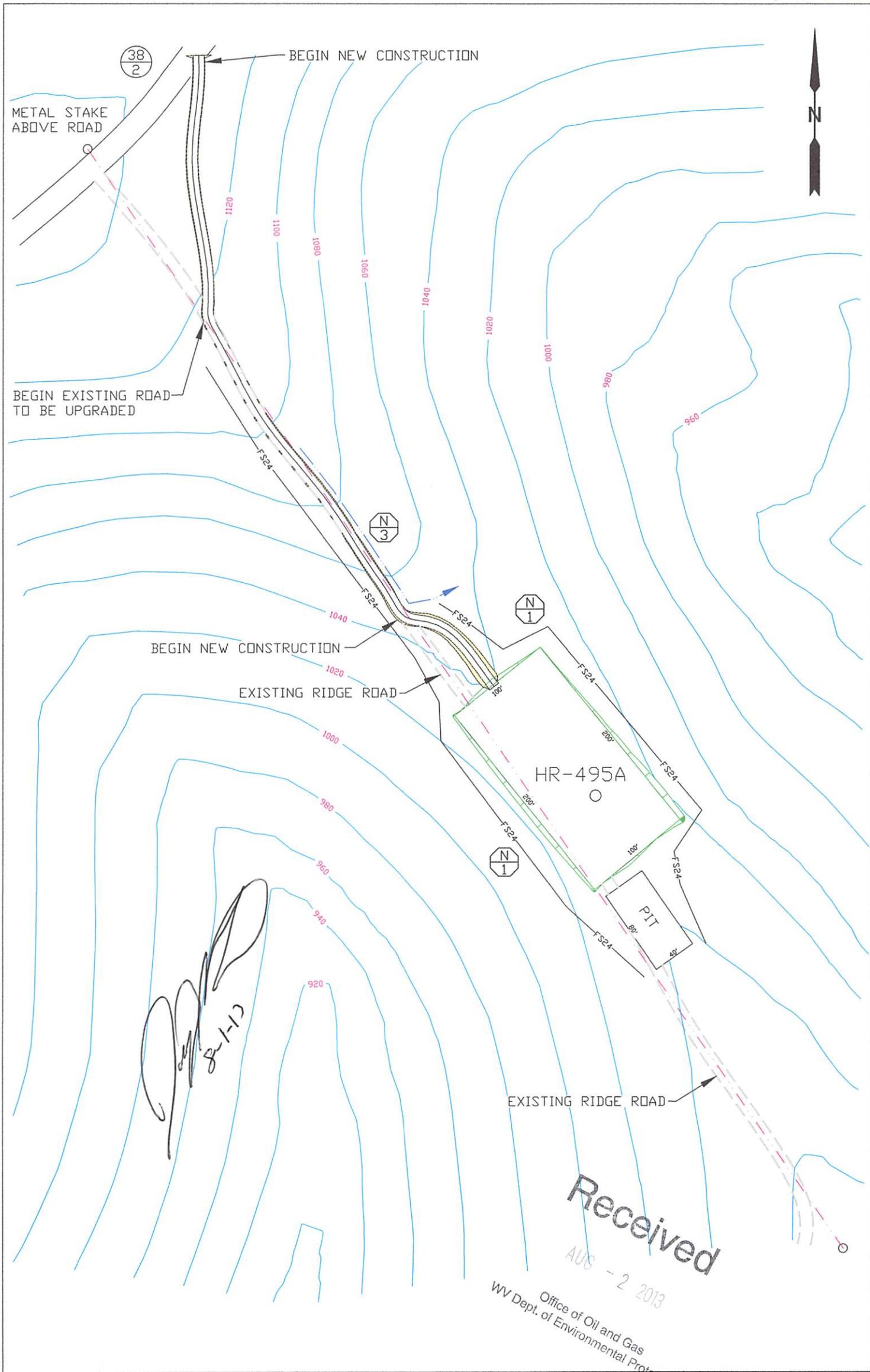
(38/2)  
METAL STAKE ABOVE ROAD



Received  
AUG - 2 2013

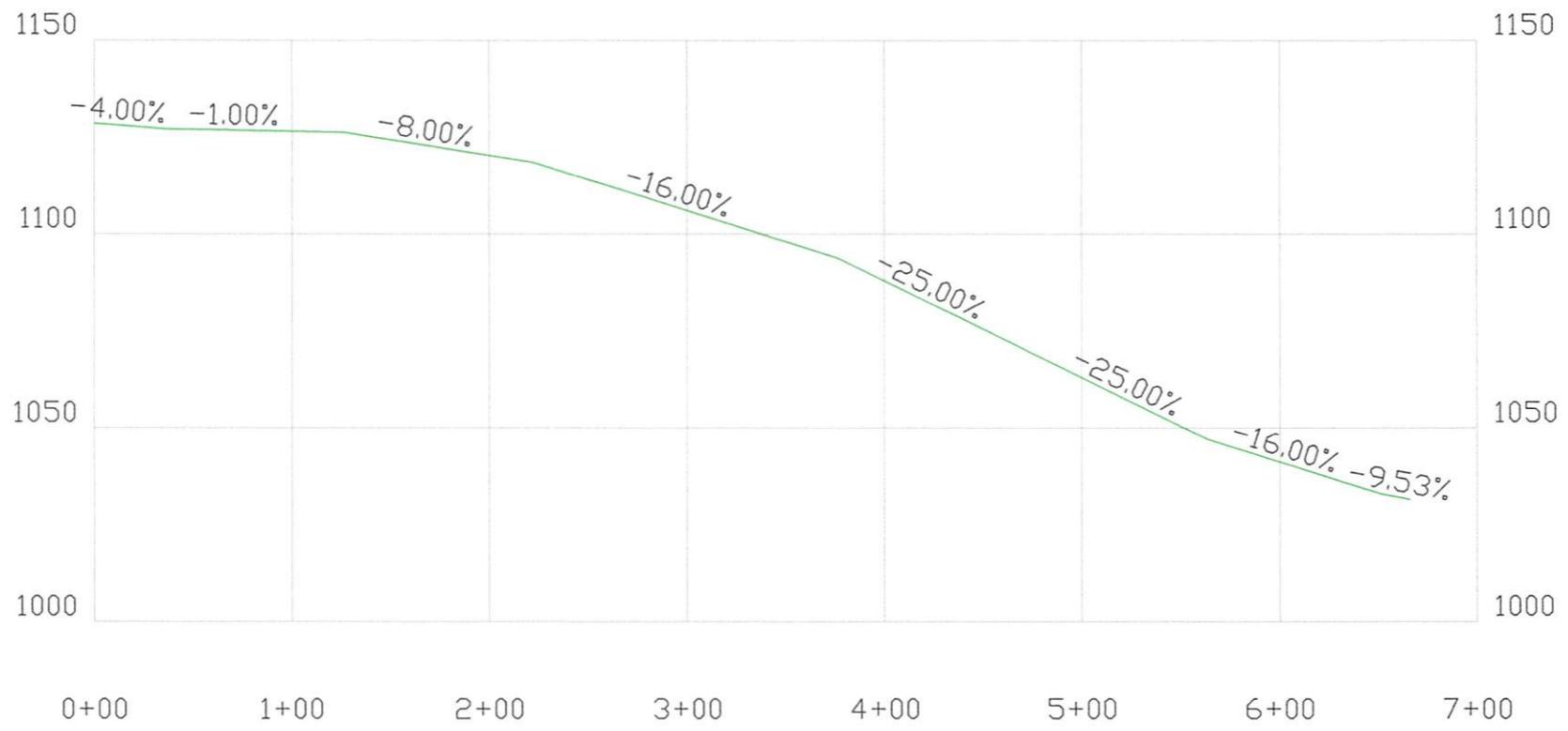
Office of Oil and Gas  
WV Dept. of Environmental Protection

DISTURBED AREAS		LEGEND		SITE PLAN	
WELL PAD CONSTRUCTION	0.50 AC.		STREAM	HARD ROCK EXPLORATION PROPOSED WELL # HR-495A	
NEW ACCESS ROAD CONSTRUCTION	0.18 AC.		PROPERTY LINE	SPRING CREEK DISTRICT, WIRT COUNTY BURNING SPRINGS QUAD, WV 7.5'	
ADDITIONAL CLEARING			SLOPE AREA	JULY 12, 2013	
			WETLAND	TRUE LINE SURVEYING 6211 FAIRVIEW DR. HUNTINGTON, WV 25705	
TOTAL DISTURBED AREA	0.68 AC		BUFFER AREA	PAGE <u>1</u> OF <u>1</u>	



LEGEND		EROSION AND SEDIMENT CONTROL PLAN	
PROVIDE FLEXTERRA HIGH PERFORMANCE FLEXIBLE GROWTH MEDIUM (HP-FLM) ON CUT AND FILL SLOPES	STREAM	HARD ROCK EXPLORATION PROPOSED WELL # HR-495A	
LEVEL SPREADER	PROPERTY LINE	SPRING CREEK DISTRICT, WIRT COUNTY BURING SPRINGS QUAD, WV 7.5'	
DIVERSION DITCH	SLOPE AREA	JULY 12, 2013	
BERM OUTLET	WETLAND	TRUE LINE SURVEYING 6211 FAIRVIEW DR. HUNTINGTON, WV 25705	
	FS24 24' COMPOST FILTER SOCK AS REQUIRED	PAGE <u>1</u> OF <u>1</u>	

89E10501



8-1-13  
*[Handwritten Signature]*

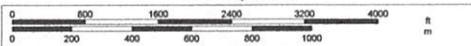
ROAD PROFILE
HARD ROCK EXPLORATION PROPOSED WELL # HR-495A
SPRING CREEK DISTRICT, WIRT COUNTY BURNING SPRINGS QUAD, WV 7.5'
JULY 12, 2013
TRUE LINE SURVEYING 6211 FAIRVIEW DR. HUNTINGTON, WV 25705
PAGE <u>1</u> OF <u>1</u>



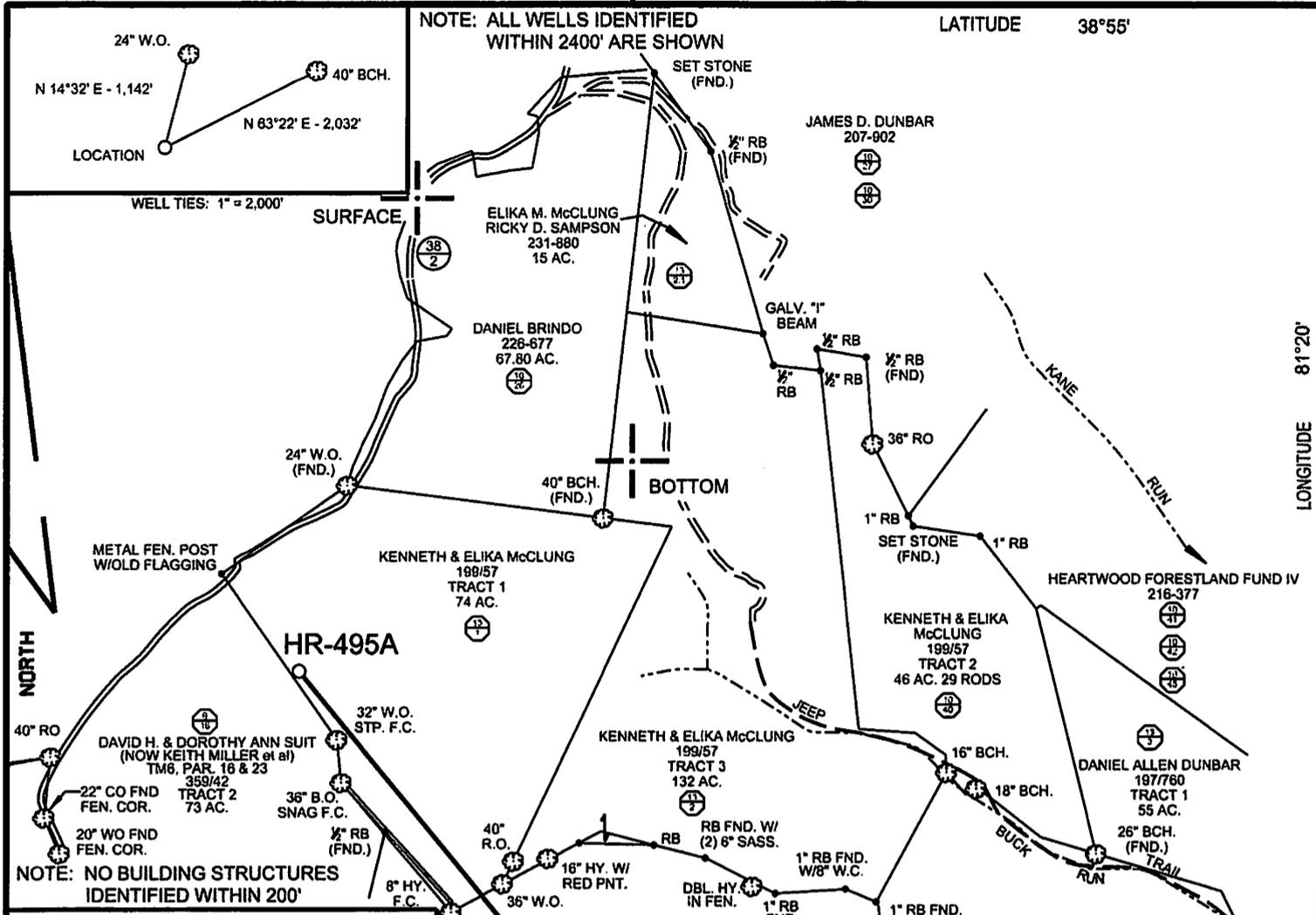


© 2001 DeLorme. XMap®. Data copyright of content owner.  
 Zoom Level: 13-0 Datum: NAD27

Scale 1 : 25,000  
 1" = 2,083 ft



SURFACE ← 10,800' ← 8,225' ← SURFACE



NOTE: ALL WELLS IDENTIFIED WITHIN 2400' ARE SHOWN

LATITUDE 38°55'

LONGITUDE 81°20'

5,422' SURFACE  
2,296' BOTTOM

NOTE: NO BUILDING STRUCTURES IDENTIFIED WITHIN 200'

SURFACE HOLE	
STATE PLANE WV NORTH/SOUTH ZONE NAD 1927 N - 695,843.35 : E - 1,894,341.82	
LATITUDE: (N) 38.9103259 LONGITUDE: (W) 81.3712862	
UTM, NAD83 17 - 84W TO 78W, METERS N - 4,306,900.218 : E - 467,822.806	
BOTTOM HOLE	
STATE PLANE WV NORTH/SOUTH ZONE NAD 1927 N - 698,975.12 : E - 1,896,570.73	
LATITUDE: (N) 38.9189488 LONGITUDE: (W) 81.3634970	
UTM, NAD83 17 - 84W TO 78W, METERS N - 4,307,854.353 : E - 468,501.968	

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

FILE NO.	HR-495A.DGN
DRAWING NO.	HR-495A
SCALE	1" = 1000'
MINIMUM DEGREE OF ACCURACY	1 : 200
PROVEN SOURCE OF ELEVATION	MAPPING GRADE GPS

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

(SIGNED) *Paul E. Miller*

R.P.E. \_\_\_\_\_ L.L.S. 647



STATE OF WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION OIL AND GAS DIVISION		DATE	JUNE 27, 2013		
		OPERATOR'S WELL NO.	HR-495A		
		API WELL NO.	47	105	01368 #
			STATE	COUNTY	PERMIT
WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION ___ WASTE DISPOSAL ___					
(IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___					
LOCATION: ELEVATION 1029'		WATER SHED	BUCK RUN OF SPRING CREEK		
DISTRICT	SPRING CREEK	COUNTY	WIRT		
QUADRANGLE	BURNING SPRINGS, WV 7.5'				
SURFACE OWNER	KENNETH & ELIKA McClung		ACREAGE	74	
OIL & GAS ROYALTY OWNER	McClung; Howdeyshell		LEASE ACREAGE	176.2	
	LEASE NO. _____				
PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____					
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___					
TARGET FORMATION	LOWER HURON	ESTIMATED DEPTH	8750' MO; 4560' TVD		
WELL OPERATOR	HARD ROCK EXPLORATION, INC.		DESIGNATED AGENT	JAMES L. STEPHENS	
ADDRESS	1244 MARTINS BR. ROAD, CHARLESTON, WV 25312		ADDRESS	SAME	

FORM WW-6

COUNTY NAME  
PERMIT