**west virginia** department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

June 19, 2013

**WELL WORK PERMIT**

**Vertical Well**

This permit, API Well Number: 47-9703853, issued to MOUNTAIN V OIL & GAS, 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: ROESSING #1 WV 0457
Farm Name: ROESSING, GEORGE HENRY ,JR.
**API Well Number: 47-9703853**
**Permit Type: Vertical Well**
Date Issued: 06/19/2013

**Promoting a healthy environment.**

# PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

## CONDITIONS

1. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.

2. Pursuant to 35 CSR § 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.

3. Pursuant to 35 CSR § 4-19.1.c, if the operator is unable to sample and analyze any water well or spring 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 30 mil thickness synthetic liner.

# Directions to Proposed Roessing No. 1 / WV0457

1 From exit 99 of I-79 proceed East on U.S. Route 33 & 119 for approximately 11.9 miles.

2 Take Buckhannon/Philippi Rt. 20 Exit off of U.S. Route 33 & 119.

3 Turn right on State Route 20 and follow for approximately 2.3 miles.

4 Turn left on County Route 9 (Tallmansville Road) and follow for approximately 3.4 miles.

5 Turn left on existing well access road flagged in orange and pink ribbon and follow for approximately 0.1 miles.

6 Turn left on proposed road following edge of field and follow for approximately 0.1 miles to proposed Roessing Well No.1/WV0457.

Surface Owner: George Henry Roessing Jr.
Phone: 304-472-5569

Received
Office of Oil & Gas

MAY 27 2013

**WW - 2B**
**(Rev. 8/10)**

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

97 06 268

1) Well Operator **Mountain V Oil & Gas, Inc.** | **310020** Operator ID | **Upshur** County | **Washington** District | **Buckhannon 7.5'** Quadrangle

2) Operator's Well Number: **Roessing #1 WV0457** Elevation: **1,728'**

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

5) Proposed Target Formation(s): **Marcellus** Proposed Target Depth: **7285'**
6) Proposed Total Depth: **7285** Feet Formation at Proposed Total Depth: **Onondaga**
7) Approximate fresh water strata depths: **198'**
8) Approximate salt water depths: **n/a**

9) Approximate coal seam depths: **363, 450, 562**

10) Approximate void depths, (coal, karst, other): **None**

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

12) Describe proposed well work in Detail **To Drill and Stimulate** SEE ADDENDUM

13) CASING AND TUBING PROGRAM

| TYPE | SPECIFICATIONS Size | Grade | Weight per ft | FOOTAGE INTERVALS For Drilling | Left in Well | CEMENT Fill -up (Cu. Ft.) |
|---|---|---|---|---|---|---|
| Conductor | 13 3/8" | | | 42' | 42' | Sand |
| Fresh Water | 9 5/8" | | | 615' | 615' | CTS or 35 CSR 18 – 11.1 |
| Coal | | | Bill Hatfield 5/8/13 | | | |
| Intermediate | 7" | | | 1800' | 1800' | CTS or 35 CSR 18 – 11.1 |
| Production | 4 ½" | | | 7285' | 7285' | SEE ADDENDUM |
| Tubing | | | | | | |
| Liners | | | | | | |

Packers: Kind
Sizes
Depths Set

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Office of Oil & Gas
MAY 27 2013

# Addendum to WW-2B
# Roessing #1 WV0457 API 47-097-03853

12) Describe proposed well work in detail:

1. Construct the drilling location.
2. Drill a 16" hole to approximately 42'.
3. Run approximately 42' of 13-3/8" casing and fill around outside of casing with cuttings.
4. Drill a 12-1/4" hole to approximately 630'.
5. Run approximately 615' of 9-5/8" casing.
6. Cement the 9-5/8" casing back to surface.
7. Drill an 8-3/4" hole to the approximate depth of 1,825'.
8. Run approximately 1,800' of 7" casing.
9. Cement the 7" casing back to surface.
10. Drill a 6-1/4" hole to the estimated total depth of approximately 7,285'.
11. Run approximately 7,285' of 4-1/2" casing.
12. Cement the 4-1/2" casing back to a point above the anticipated perforations.
13. Perforate the Marcellus Shale formation.
14. Frac the Marcellus Shale formation with approximately 200,000# of 80/100 sand and 400,000# of 40/70 sand and 14,000 barrels of water.
15. Reclaim the drilling location.

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Office of Oil & Gas

JUN 18 2013

WW2-A
(Rev. 6-07)

1) Date: **April 22, 2013** 9703853
2) Operator's Well Number
**Roessing #1 WV0457**

3) API Well No.: 47 - 097 - _____
State County Permit

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

4) Surface Owner(s) to be served:
(a) Name **George H. Roessing, Jr.** ✓
Address PO Box 47
Buckhannon, WV 26201
(b) Name _____
Address _____
(c) Name _____
Address _____

5) (a) Coal Operator
Name _____
Address _____

(b) Coal Owner(s) with Declaration
Name **CoalQuest Development LLC** ✓
Address 300 Corporate Drive
Scott Depot, WV 25560
Name _____
Address _____

6) Inspector **Bill Hatfield**
Address **P.O. Box 522**
**Buckhannon, WV 26201**
Telephone **304-767-1828**

(c) Coal Lessee with Declaration
Name _____
Address _____

## TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

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

OR

X 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)
XX 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.

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
James D. Andrews
Buckhannon, WV
My Commission Expires February 16, 2018

Well Operator **Mountain V Oil & Gas, Inc.**
By: **Mike Shaver**
Its: **President**
Address **P.O. Box 470**
**Bridgeport, WV 26330**
Telephone **(304) 842-6320**

Received
Office of Oil & Gas
MAY 2 7 2013

Subscribed and sworn before me this 6th day of May, 2013

_____ Notary Public

My Commission Expires 2-15-2018

**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 depprivacyoffier@wv.gov.**

9703853

**WW-2A Surface Waiver**

## SURFACE OWNER WAIVER

County **Upshur** Operator **Mountain V Oil & Gas, Inc.**

Operator well number **Roessing #3 WV0459**

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

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

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

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

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

**Time Limits and methods for filing comments.** The law requires these materials to be served on or before the date the operator files his Application. You have **FIFTEEN (15) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure 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

George H. Roessing Jr. Date 4-30-13
Signature

George H. Roessing Jr.
Print Name

FOR EXECUTION BY A CORPORATION, ETC.

Company Name
By
Its

Received
Office of Oil & Gas
MAY 27 2013

Signature Date

9703853

**WW-2A Coal Waiver**

## COAL OPERATOR, OWNER, OR LESSEE WAIVER

County **Upshur**

Operator **Mountain V Oil & Gas, Inc.** Operator's Well Number **Roessing #1 WV0457**

## 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 Code 22-6-15, 16 or 17, must be filed with the Chief of the Office of Oil and Gas within fifteen (15) days after the receipt of this application by the Office. Mail objections to:

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

## WAIVER

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

FOR EXECUTION BY A NATURAL PERSON

_____ Date _____
Signature

FOR EXECUTION BY A CORPORATION, ETC.

Company Name Wolf Run Mining Company
By Jeffrey A Kelley
Its General Manager Date 5/23/13
Signature Date 5/23/13

Received
Office of Oil & Gas
MAY 2 2013

9703853

WW-2A1
(Rev. 8/02)

Operator's Well Number **Roessing #1 WV0457**

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 |
|---|---|---|---|
| **George Roessing** | **Lock 3 Oil, Coal and Dock Company** | **1/8th** | **45/59** |
| **Lock 3 Company** | **Mountain V Oil & Gas, Inc. (Farmout)** | **7/8th** | **97/571** |

**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 Services
- 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: **Mountain V Oil & Gas, Inc.**
By: **Mike Shaver**
Its: **President**

Received
Office of Oil & Gas

MAY 27 2013

9703853

WW2-B1 Well No. **Roessing #1 WV0457**

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.

If no water well or spring is located within 1000 feet, the Chief may require the operator to sample and analyze water from a water well or spring within 2000 feet of the proposed well site.

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

The laboratory used by the operator to analyze the samples will be approved by the Chief. The operator named below has decided to use the following laboratory to analyze the water samples:

**XX** Contractor Name **Angle Right Land Surveying, LLC – Reliance Laboratories**
_____ Well operator's private laboratory

Well Operator **Mountain V Oil & Gas, Inc.**
Address **P.O. Box 470**
**Bridgeport, WV 26330**
Telephone **(304) 842-6320**

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 please indicate such.

Note: _____ There appears to be no potable water sources within 1000'; Therefore, no test will be run.
XX There appears to be Five (5) potable water sources within 1000'; Therefore, test will be offered and samples taken as required.

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Office of Oil & Gas
MAY 2 2013

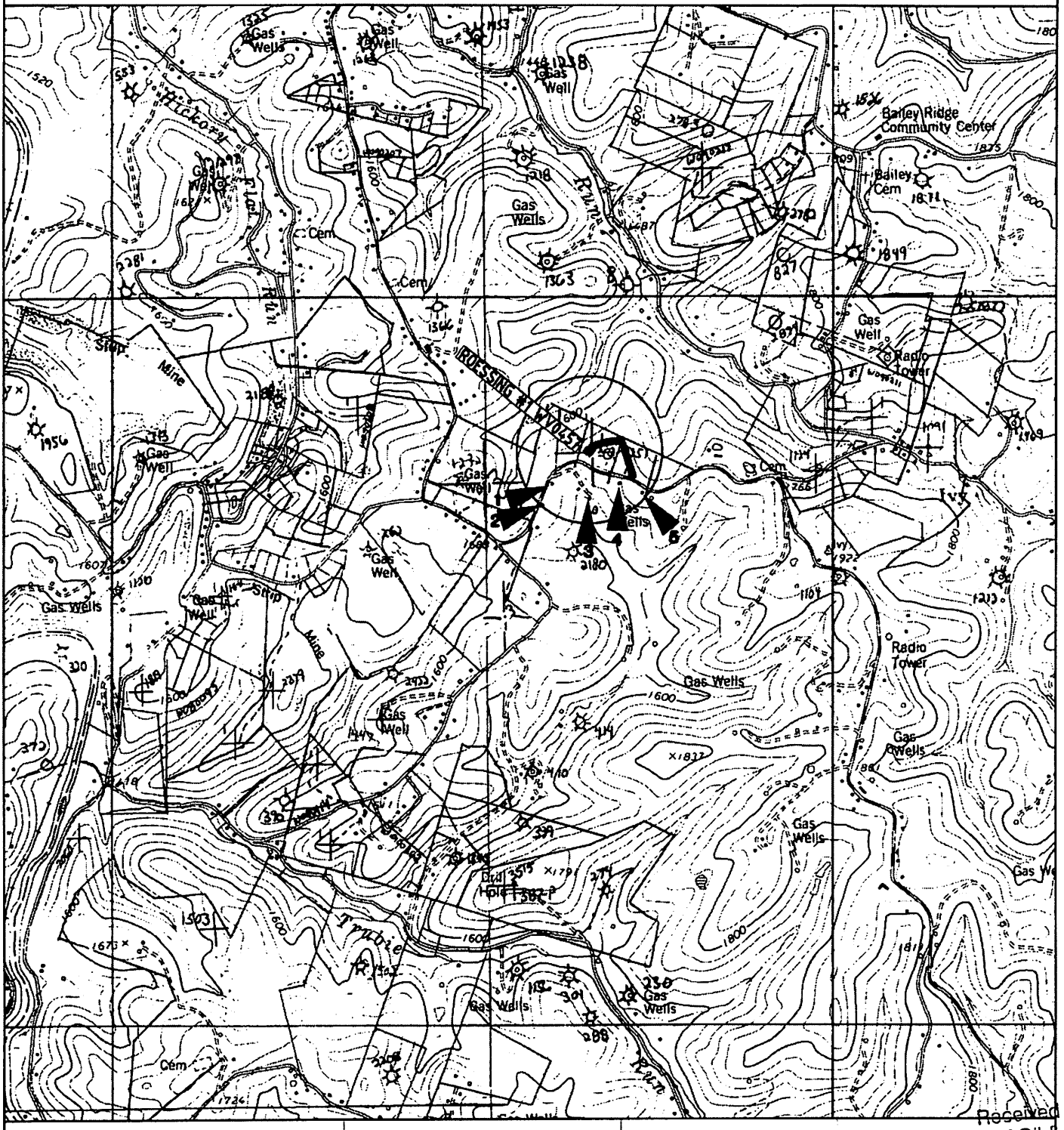
***See Attached**

9703853

WW9

# ROESSING #1 WV0457
# POSSIBLE WATER SAMPLE SITES

PAGE OF




| | OPERATOR | TOPO SECTION | WELL NAME |
|---|---|---|---|
| ANGLE RIGHT LAND SURVEYING, LLC<br>PO BOX 681<br>GRANTSVILLE, WV 26147<br>(304) 354-0065<br>130597 | MOUNTAIN V OIL & GAS, INC.<br>P.O. BOX 470<br>BRIDGEPORT, WV 26330 | BUCKHANNON 7.5' | ROESSING #1 WV0457 |
| | | SCALE: 1"=2000' | DATE: 04/15/2012 |

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Office of Oil & Gas
2012

1= Timothy Lane Leggett and Kristina J., HC 36 Box 188, Buckhannon, WV 26201 (304) 472-9275
2=Thomas P. and Trudy L. Crawford, HC 36 Box 185, Buckhannon, WV 26201 (304) 472-3077
3= Kristina Newman Leggett, HC 36 Box 186, Buckhannon, WV 26201 (304) 472-9275
4= Kerry W. and Linda Patterson, HC 36 Box 189, Buckhannon, WV 26201 (304) 472-1845
5= Kerry W. and Linda Patterson, HC 36 Box 189, Buckhannon, WV 26201 (304) 472-1845

**STATE OF WEST VIRGINIA**
**DIVISION 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 Mountain V Oil & Gas, Inc. OP Code _____

Watershed Tributary of Little Sand Run Quadrangle Buckhnnaon 7.5'

Elevation 1663' County Upshur District Washington

Description of anticipated Pit Waste: Drill Cuttings and Frac Flowback Water

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

Will a synthetic liner be used in the pit? Yes What ml.? 30 Mil

Proposed Disposal Method For Treated Pit Wastes:

_____ Land Application
100% Underground Injection ( UIC Permit Number Haun No. 1 UIC2D0973737 )
_____ Reuse (at API Number _____ )
_____ Off Site Dispposal (Supply form WW-9 for disposal location)
_____ Other (Explain _____

Drilling Medium anticipated for this well? Air, Freshwater, oil based, etc. Air for vertical
-If oil based, what type? Synthetic, petroleum, etc. _____
Additives to be used? _____
Drill cuttings disposal metod? Leave in pit, landfill, removed offsite, etc. Landfill
-If left in pit and plan to solidify what medium will be used? Cement, lime, sawdust
-Landfill or offsite name/permit number? Meadowfill Land fill SWF 1032-98, S & S Landfill SWF 4902-77
Northwestern SWF 1025/WV0109410

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 Division 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) **Mike Shaver**

Company Official Title **President**

Subscribed and sworn before me this 6th day of May, 2013

_____ Notary Public

My commission expires 2-15-2018

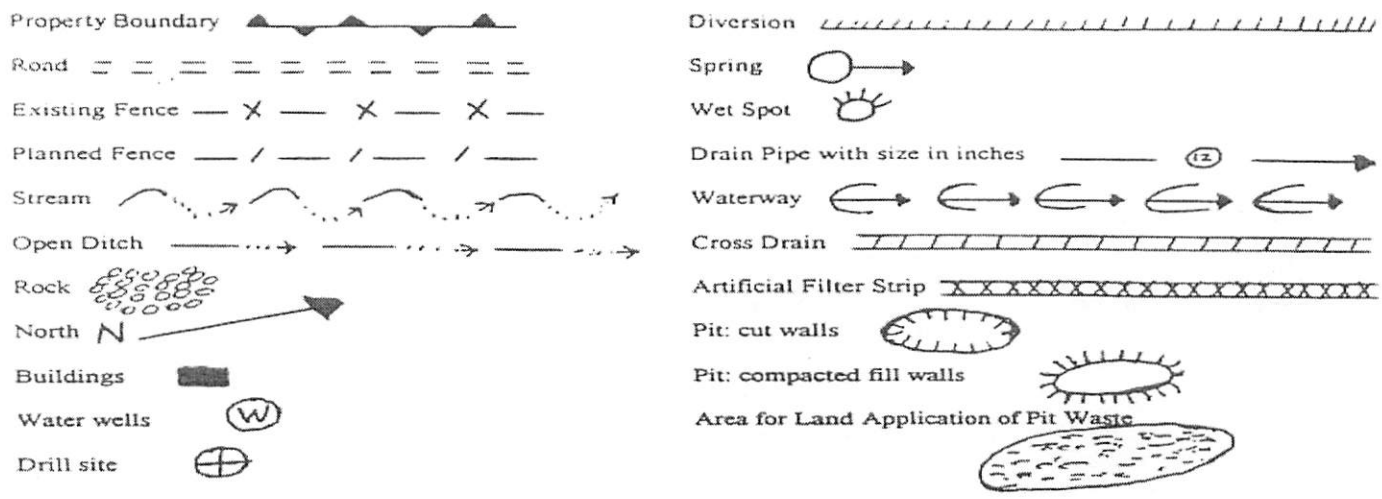
OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
James D. Andrews
Buckhannon, WV
My Commission Expires February 15, 2018

Received
Office of Oil & Gas
MAY 27 2013

Form WW-9

Operator's Well No. **Roessing #1 WV0457** 9703853

LEGEND




Proposed Revegetation Treatment: Acres Disturbed **2.38** Prevegetation pH _____

Lime **3** Tons/acre or to correct to pH **6.5**

Fertilizer (10-20-20 or equivalent) **⅓ ton** lbs/acre (500 lbs minimum)

Mulch **Hay** **2** Tons/acre

Seed Mixtures

| Area I | | Area II | |
|---|---|---|---|
| Seed Type | lbs/acre | Seed Type | lbs/acre |
| **Meadow Mix** | **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: Bill Hatfield

Comments: _____

Title: oil & gas inspector Date: 5/8/13

Field Reviewed? (✓) Yes ( ) No

Received
Office of Oil & Gas

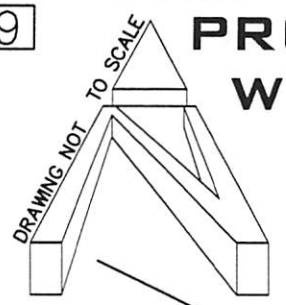
MAY 27 2013

9703853

WW-9

# PROPOSED ROESSING WELL NO. 1 WV0457

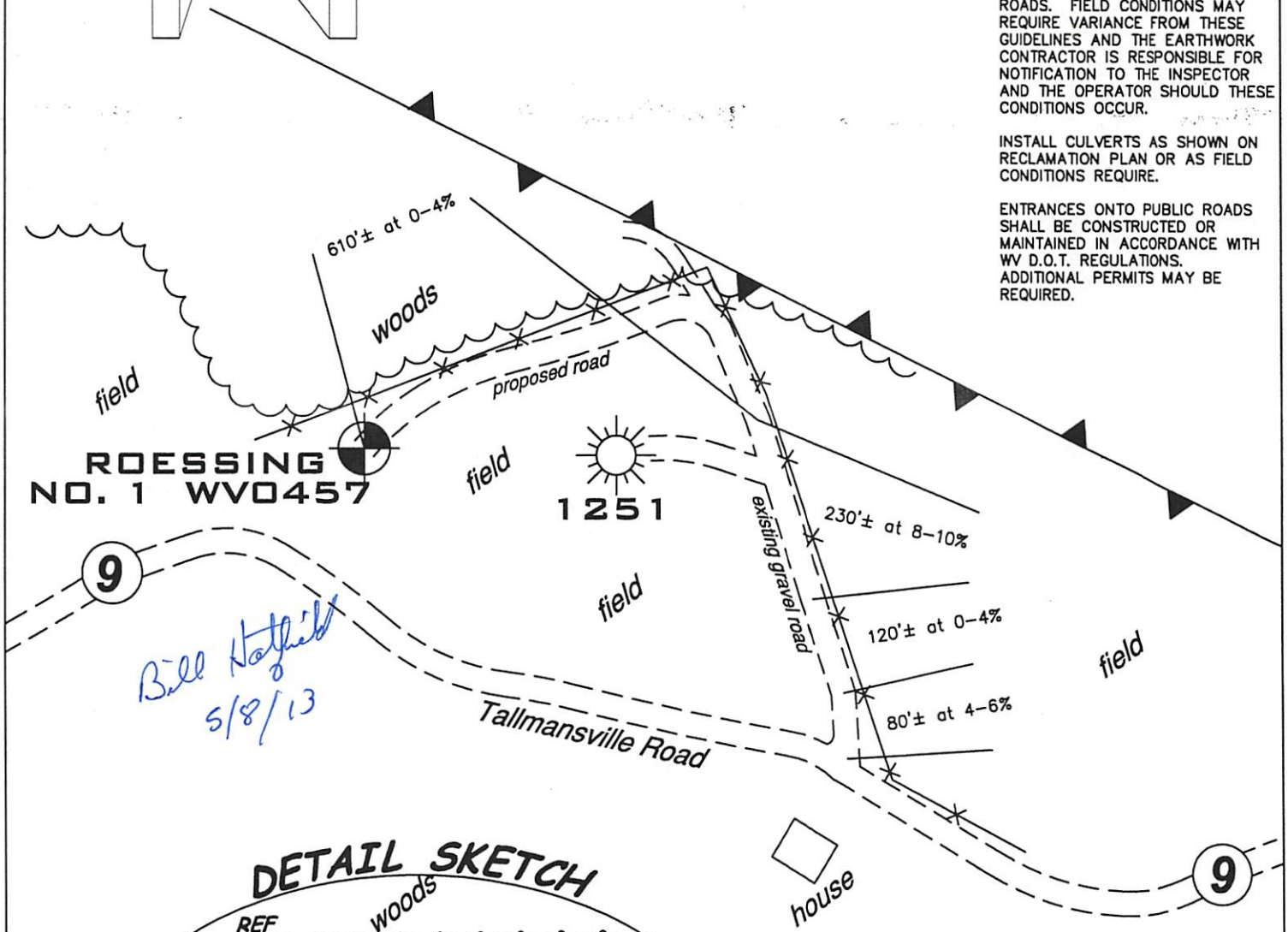
PAGE OF




REFERENCE IS HEREBY MADE TO THE WV D.E.P. OFFICE OF OIL & GAS, "EROSION AND SEDIMENT CONTROL FIELD MANUAL" FOR REQUIREMENTS AND BMPs FOR AVERAGE FIELD CONDITIONS CONCERNING THE MAINTENANCE OF EXISTING ROADS AND THE CONSTRUCTION OF PROPOSED ROADS. FIELD CONDITIONS MAY REQUIRE VARIANCE FROM THESE GUIDELINES AND THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION TO THE INSPECTOR AND THE OPERATOR SHOULD THESE CONDITIONS OCCUR.

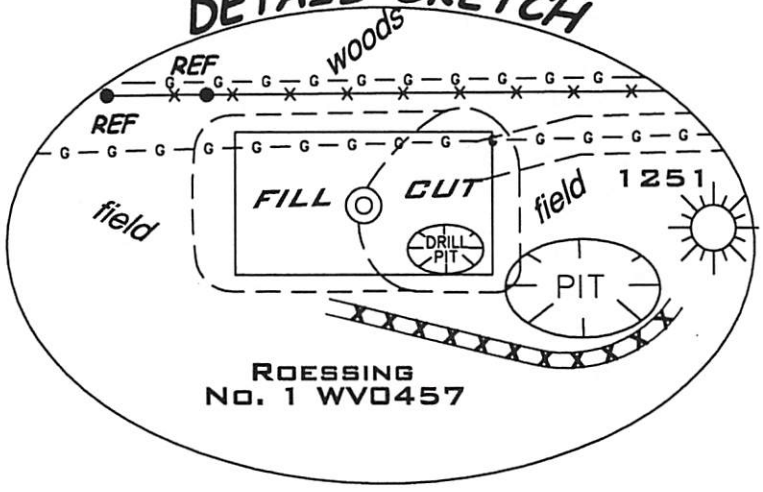
INSTALL CULVERTS AS SHOWN ON RECLAMATION PLAN OR AS FIELD CONDITIONS REQUIRE.

ENTRANCES ONTO PUBLIC ROADS SHALL BE CONSTRUCTED OR MAINTAINED IN ACCORDANCE WITH WV D.O.T. REGULATIONS. ADDITIONAL PERMITS MAY BE REQUIRED.




Bill Hatfield
5/8/13

## DETAIL SKETCH




ALL TREES 6-INCHES AND ABOVE ARE TO BE CUT AND STACKED. BRUSH SLASHINGS ARE TO UTILIZED DOWN SLOPE OF SITE AND STRUCTURES TO ACT AS A CONTROL BARRIER IF AVAILABLE.

Received
Office of Oil & Gas
MAY 07 2013

TEMPORARILY SEED AND MULCH ALL SLOPES UPON CONSTRUCTION OF LOCATION.

ANGLE RIGHT
LAND SURVEYING, LLC.
P.O. BOX 681
GRANTSVILLE, WV 26147
(304) 354-0065
angleright@frontiernet.net

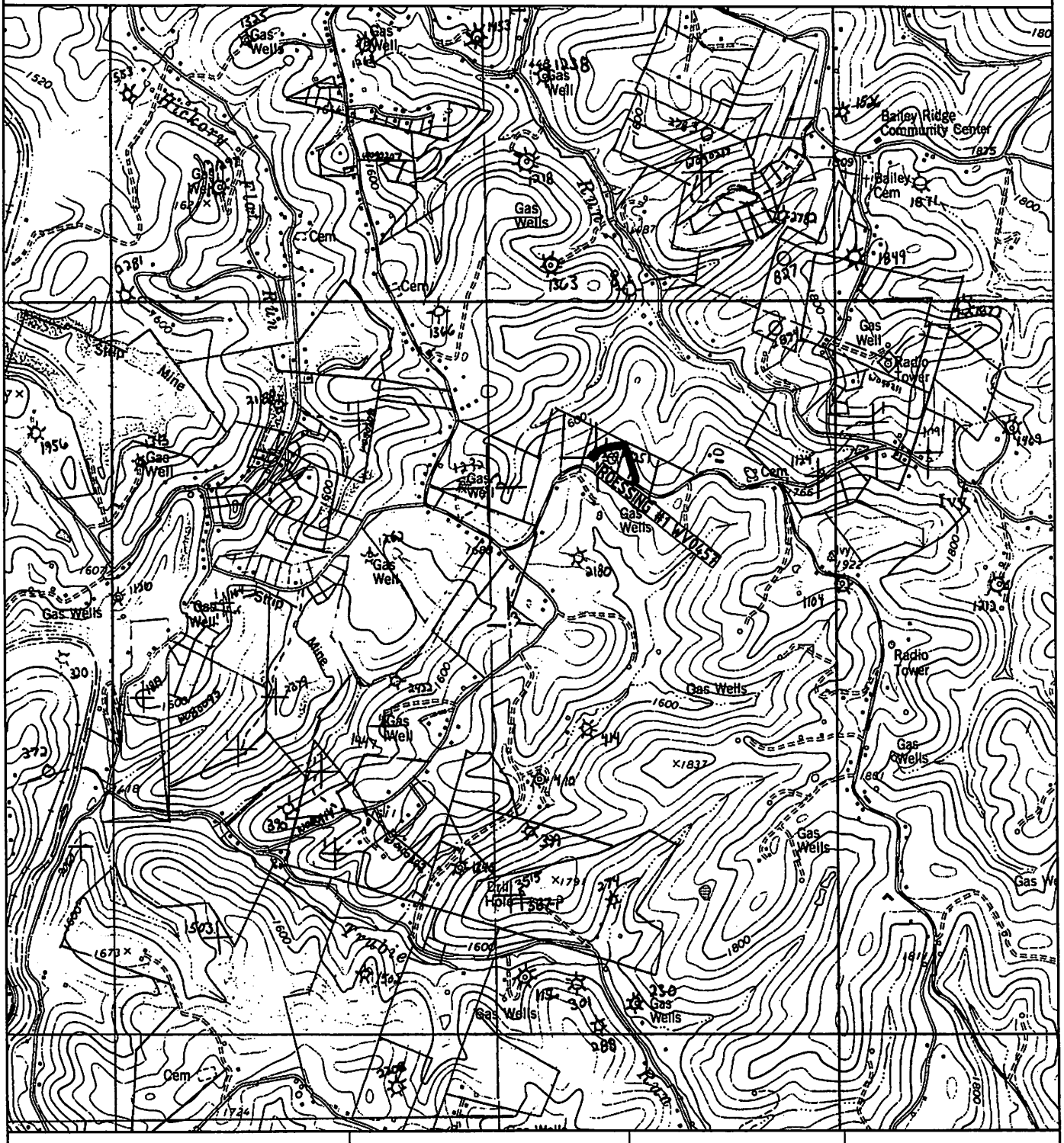
| DATE: 04/15/2013 | PROJECT NO: 130597 | DRAWN BY: T.A.S. |
|---|---|---|

9703853

WW9

# ROESSING #1 WV0457

PAGE OF




| | OPERATOR | TOPO SECTION | WELL NAME |
|---|---|---|---|
| ANGLE RIGHT LAND SURVEYING, LLC<br>PO BOX 681<br>GRANTSVILLE, WV 26147<br>(304) 354-0065<br>130597 | MOUNTAIN V OIL & GAS, INC.<br>P.O. BOX 470<br>BRIDGEPORT, WV 26330 | BUCKHANNON 7.5' | ROESSING #1 WV0457 |
| | | SCALE: 1"=2000' | DATE: 04/15/2012 |

NAD 83 LON: 80°12'11.1"
DECIMAL LAT: 80.20308

10,405"

# ROESSING LEASE
# WELL NO. 1 WV0457
# 130± ACRES

LATITUDE 38° 57' 30"

LONGITUDE 80° 10' 00"

6,195'

NAD 83 LAT: 38°56'29.1"
DECIMAL LAT: 38.94143

WV SOUTH ZONE
GRID NORTH

REFERENCE NOTES

LEASE AS SHOWN TAKEN TITLE BY HYMES AND COONTS, P.L.L.C.

OWNERSHIP TAKEN FROM PUBLIC RECORDS OF UPSHUR COUNTY, WV IN APRIL, 2013.

LAT./LONG. BY DIFFERENTIAL SUBMETER MAPPING GRADE GPS DRAFTED BY: T.A.S.

YVONNE FOSTER
8.09 AC
6J-75

DAVID SHEPPARD
62.09 AC
6J-82

GEORGE HENRY ROESSING JR.
118.93 AC
6J-83

Tributary of Little Sand Run

N 16° E 1023.00'

S 10° W 1027.12'

198.00'

381.15'

528.00'

S 64° E 1221.00'

6AC TRACT

6ROODS TR

Roessing No. 1 WV0457

7.5AC TRACT

528.00'

S 64° E

7.5AC TRACT

594.00'

4AC 3ROOD TRACT

LEASE RUNS WITH ROAD

LEASE RUNS WITH ROAD

LEASE RUNS WITH ROAD

1230

S 79°00' W 1799.7'

S 31°35' W 1878.1'

2AC TR

SURFACE HOLE

28AC 2ROODS TRACT

5AC TRACT

REFERENCES

Woods

FENCE POST FENCE POST

N 54° W 127.70'

MAG. 04/11/2013

N 65°30' W 186.50'

Field

Field

Roessing No. 1 WV0457

1" = 100'

M. CARPENTER et al
16.19 AC
6J-54.3

N 36° E 1386.00'

1138.50'

S 28°47' W 2260.6'

FENCE POST

S 20°30' W

Tributary of Trible Run

GEORGE H. ROESSING III
8.15 AC
6J-57.1

SHELLEY CUTRIGHT
2AC
6J-71.1

28" WHITE OAK SNAG, FND.

S 54° 02.25' E

P/O
48AC 3ROODS
35PLS TRACT

N 36°15' W

N 52° W 441.37'

Roessing No. 1 WV0457

1230

1251

2400'

1154

2180

S.E. LEWIS
59.95AC
6J-62

S. STANKUS
0.827 AC
6J-134

E. ROBERTS
1.11AC
6J-57.2

PROPOSED WELL
NAD83 UTM
COORDINATES
N) 4,310,578.4 M
E) 569,063.9

(+)DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

FILE NUMBER 130597(WB20-64)

DRAWING NUMBER 120597_WP1

SCALE 1" = 600'

MINIMUM DEGREE OF ACCURACY 1/200

PROVEN SOURCE OF ELEVATION SUBMETER 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

P.S. 1006

TERRY A. SHREVE LICENSED No. 1006 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

ANGLE RIGHT LAND SURVEYING, LLC.
GRANTSVILLE, WV 26147
(304) 354-0065

STATE OF WEST VIRGINIA

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

DATE: APRIL 15, 2013

OPERATORS WELL NO. ROESSING NO. 1/ WV0457

API WELL NO. 47 - 097 - 03853
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION ELEVATION 1,728' WATERSHED TRIBUTARY OF LITTLE SAND RUN

DISTRICT WASHINGTON COUNTY UPSHUR

QUADRANGLE BUCKHANNON 7.5' LEASE NUMBER

SURFACE OWNER GEORGE HENRY ROESSING, JR. ACREAGE 118.93±

OIL & GAS ROYALTY OWNER GEORGE HENRY ROESSING, JR. LEASE ACREAGE 130±

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___
PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE (SPECIFY) ___

PLUG & ABANDON ___ CLEAN OUT & REPLUG ___

TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,285'

WELL OPERATOR MOUNTAIN V OIL & GAS, INC. DESIGNATED AGENT MIKE SHAVER

ADDRESS P.O. BOX 470, BRIDGEPORT, WV 26330 ADDRESS P.O. BOX 470, BRIDGEPORT, WV 26330

COUNTY NAME PERMIT

A.R.L.S

9703853

MOUNTAIN V
OIL & GAS, INC.

P. O. Box 470
Bridgeport, WV 26330

Office: 304-842-6320
Fax: 304-842-0016

CK # 44343
$650.00

May 20, 2013

Jeff McLaughlin
WV DEP
Office of Oil & Gas
601 57th Street SE
Charleston, WV 25304

Re: **Operation if open mine is encountered while drilling the following wells:**

- **Roessing #1 WV0457, Washington District, Upshur County, WV**

Dear Jeff,

It has been brought to my attention that the aforesaid mentioned wells are spotted in an area where we could encounter a mine void. Please see below on our course of action in the event an open mine is encountered while drilling.

Mountain V Oil & Gas, Inc. would like to take this time to inform you that if in fact we encounter a mine void during the drilling of these particular wells then we will take the following actions:

- Run mine string to TD
- Balance cement to shut off bottom using Class A cement with 3% cacl2 50% excess
- Place cement basket above mine or void fill basket to surface down outside of casing to surface
- Class A cement 3% cacl2

Respectfully Yours,

Jamie Andrews
Mountain V Oil & Gas, Inc.

Received
Office of Oil & Gas

MAY 27 2013

9703853

MOUNTAIN V
OIL & GAS, INC.

P. O. Box 470
Bridgeport, WV 26330

Office: 304-842-6320
Fax: 304-842-0016

Check # 4434
$ 650.00

Check # 4434
$ 650.00

Check # 4435
$ 650.00

May 20, 2013

Jeff McLaughlin
WV DEP
Office of Oil & Gas
601 57th Street SE
Charleston, WV 25304

Re: **Three New Vertical Marcellus Well Permit**
**Roessing #1 WV0457, Washington District, Upshur County, WV**
**Roessing #2 WV0458, Washington District, Upshur County, WV**
**Roessing #3 WV0459, Washington District, Upshur County, WV**

Dear Jeff,

Please find enclosed with this letter the Permit Application for the following well site located Upshur County, West Virginia:

- Roessing #1 WV0457, Washington District, Upshur County, WV
- Roessing #2 WV0458, Washington District, Upshur County, WV
- Roessing #3 WV0459, Washington District, Upshur County, WV

All three well permits are accompanied by an executed Surface Waiver and Coal Waiver. This is in a closed section of a mine and we have entered into an agreement with the coal company for drilling. More than likely we will be encountering an open mine, but there is a chance of hitting a coal pillar. So I have attached a letter to each well permit that illustrates the mine string we will run if an open mine is encountered.

Should you have any questions comments or concerns or I failed to supply you with all supporting data to permit the plugging of this well please contact me at your convenience.

Respectfully Yours,

Jamie Andrews
Mountain V Oil & Gas, Inc.

Received
Office of Oil & Gas

MAY 27 2013