



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

PERMIT MODIFICATION APPROVAL

March ~~11~~, 2014

13

HG ENERGY, LLC
5260 DUPONT ROAD
PARKERSBURG, WV 26101

Re: Permit Modification Approval for API Number 3305530 , Well #: M. J. RATHBONE NO. 116
WELLSITE AND WELLBORE MOVED (SAME LEASE)

Oil and Gas Operator:

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

Please call James Martin at 304-926-0499, extension 1654 if you have any questions.

Sincerely,

Gene Smith
Regulatory/Compliance Manager
Office of Oil and Gas

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 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.

33-05530 M
M.J. RATHBONE 116

4029 9028 8204
1000 0000 0000
ETOL

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
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For delivery information visit our website at www.usps.com	
OFFICIAL USE	
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Total Postage & Fees	\$9.40

Postmark
Date
PARKERSBURG WV
FEB 26 8:52 AM
USPS
MJR 116-R

Sent To	Wolf Run Mining Company
Street, Apt. No.; or PO Box No.	2708 Cranberry Square
City, State, ZIP+4	Morgantown WV 26505

PS Form 3800, August 2005 See Reverse for Instructions

Received
FEB 26 2014
Office of Oil and Gas
WV Dept. of Environmental Protection

33055305M

7013 2630 0001 9028 8211

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Total Postage & Fees	\$ 7.17



MJR 116 R

VOID

Sent To
 Street, Apt. No., or PO Box No. Wolf Run Mining Company
 2709 Cranberry Square
 City, State, ZIP+4 Morgantown WV 26506

PS Form 3800, August 2006 See Reverse for Instructions

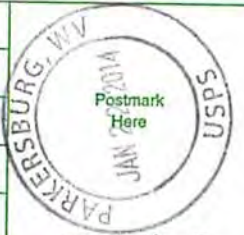
7012 2920 0001 3227 4562

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Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.17



MJR 116 R

Sent To
 Street, Apt. No., or PO Box No. Hilary Heights LTD- Beth Taylor
 142 Valley Street
 City, State, ZIP+4 Salem WV 26426

PS Form 3800, August 2006 See Reverse for Instructions

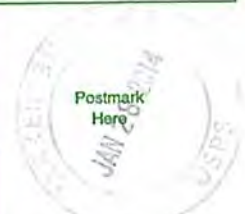
7013 2630 0001 9028 8242

U.S. Postal Service™
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For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 1.61
Certified Fee	3.30
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.61



MJR 116 R

Sent To
 Street, Apt. No., or PO Box No. Stacy and Lori Bokey
 RR 1, Box 299-46
 City, State, ZIP+4 Mount Clare, WV 26408

PS Form 3800, August 2006 See Reverse for Instructions

03/14/2014

WW-2B1

Well No. M.J. Rathbone No.116 - Rev 2

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:

Contractor Name Sturm Environmental Services
 Well operator's private laboratory

Well Operator HG Energy, LLC
Address 5260 Dupont Road
Parkersburg, WV 26101
Telephone 304-420-1119

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 underlining 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.

No known Water Supply Sources are located within 2000' of proposed well.

Testing will be completed on surface tracts owned by the Nardella's, the Bokey's and Hilary Heights LTD if there are water sources on the surface property.

**Water Supply Source Testing Request for:
 Wolf Summit - 2013
 Date: 12/18/2013**

Contact Information

Foreman: Pat Taylor
Phone: 304-782-2216
Cell: 304-677-2306

Well Reference: Sarah E. Adams 146, 148, 249, 150, 151

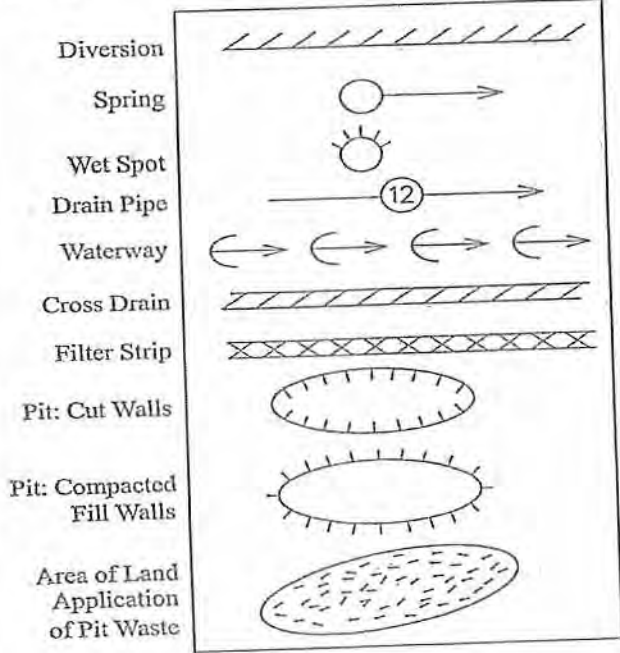
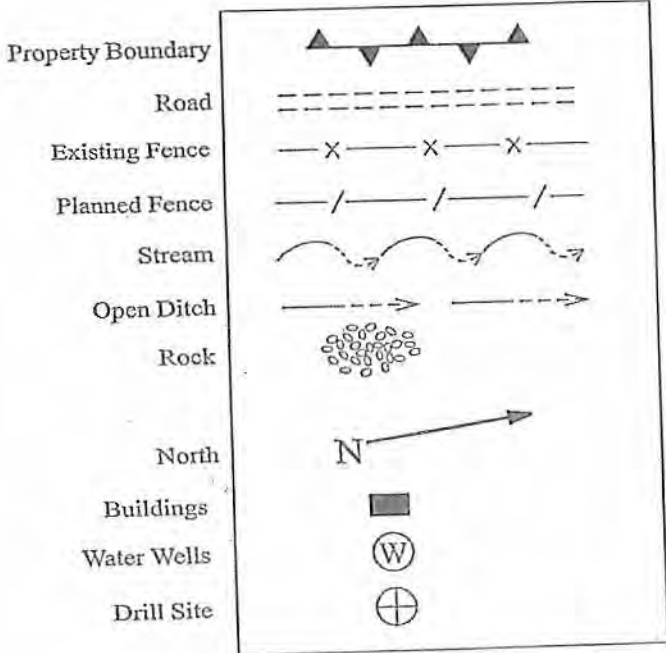
No.	Name	Phone	Comment
-----	------	-------	---------

1	Micheal & Lori Nardella 309 John Street Clarksburg, WV 26301	624-8844	Map 302, parcel 81
2	Hilary Heights Ltd Attn: Beth Arnold Taylor 142 Valley Drive Salem, WV 26426	782-2222	Map 302, parcel 81
3	Stacy & Lori Bokey Rt. 1, Box 299-46 Mount Clare, WV 26408	624-1038	Map 302, parcel 81
4			
5			

Well Reference:

	Ten Mile District in Harrison County, Tax Map 302, Parcel 81		

Legend



Proposed Revegetation Treatment: Acres Disturbed Area I
 Approx. 1.0 Ac. Prevegetation pH _____

Area II
 Approx. 0.5 Ac.

Lime _____ 2 Tons/Acre or Correct to pH 6.5
 Fertilizer (10-20-20 or Equivalent) 500 Lbs./Acre (500 lbs. Minimum)
 Mulch Straw 2 Tons/Acre

SEED MIXTURES

<u>Area I (Location)</u>	
Seed Type	Lbs./Ac.
Hall's Deer Forage Mix	50

<u>Area II (Road)</u>	
Seed Type	Lbs./Ac.
Hall's Deer Forage Mix	50

Attach:
 Drawing(s) of road, location, pit and proposed area for land application
 Photocopied section of involved 7.5' topographic sheet.

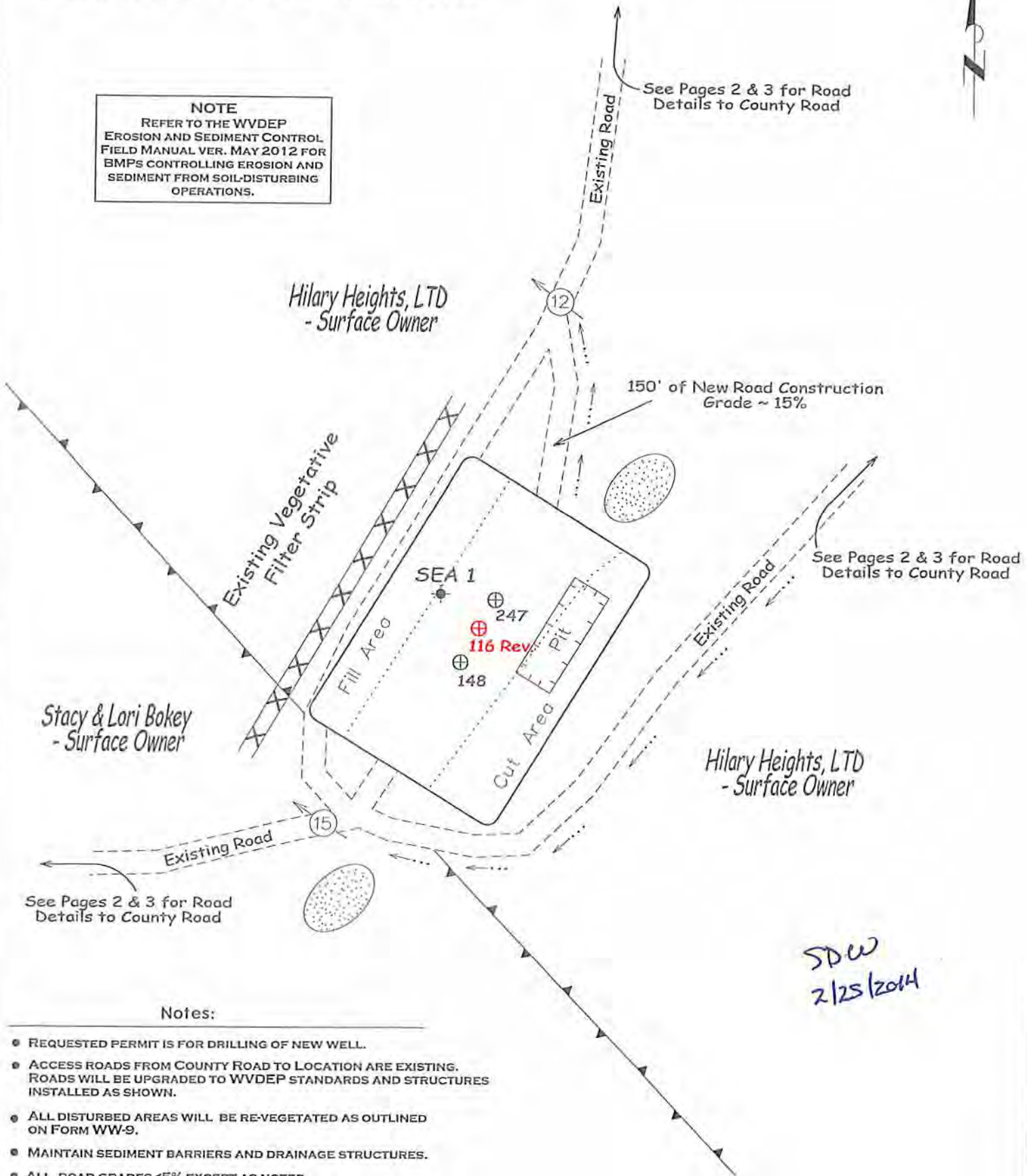
Plan approved by: S. J. Debnath
 Comments: Pre-seed/mulch all disturbed areas as soon as reasonably possible.
Upgrade EdS as necessary.
 Title: _____ Date: 2/25/2014

Field Reviewed? Yes No

Reclamation Plan For: M.J. Rathbone No. 116 Revised



NOTE
REFER TO THE WVDEP
EROSION AND SEDIMENT CONTROL
FIELD MANUAL VER. MAY 2012 FOR
BMPs CONTROLLING EROSION AND
SEDIMENT FROM SOIL-DISTURBING
OPERATIONS.






Notes:

- REQUESTED PERMIT IS FOR DRILLING OF NEW WELL.
- ACCESS ROADS FROM COUNTY ROAD TO LOCATION ARE EXISTING. ROADS WILL BE UPGRADED TO WVDEP STANDARDS AND STRUCTURES INSTALLED AS SHOWN.
- ALL DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WW-9.
- MAINTAIN SEDIMENT BARRIERS AND DRAINAGE STRUCTURES.
- ALL ROAD GRADES <5% EXCEPT AS NOTED.
- LOCATION OF DRILL PIT MAY BE CHANGED BASED ON AS-BUILT CONSIDERATIONS.
- DRAWING NOT TO SCALE.

SDW
2/25/2014

Reclamation Plan For: M.J. Rathbone No. 116 Revised Showing Road System to County Road

NOTE
REFER TO THE WVDEP
EROSION AND SEDIMENT CONTROL
FIELD MANUAL VER. MAY 2012 FOR
BMPs CONTROLLING EROSION AND
SEDIMENT FROM SOIL-DISTURBING
OPERATIONS.

- LEGEND**
-  EXISTING WATERFLOOD ROADS
 -  EXISTING LEASE OR FARM ROADS TO BE UPGRADED.
 -  NEW ROADS TO BE CONSTRUCTED

MJ Rathbone Lease
Hilary Heights, LTD
- Surface Owner

W.B. Carpenter Lease
Earl & Belva Junkins
- Surface Owner

Stacy & Lori Bokey
- Surface Owner

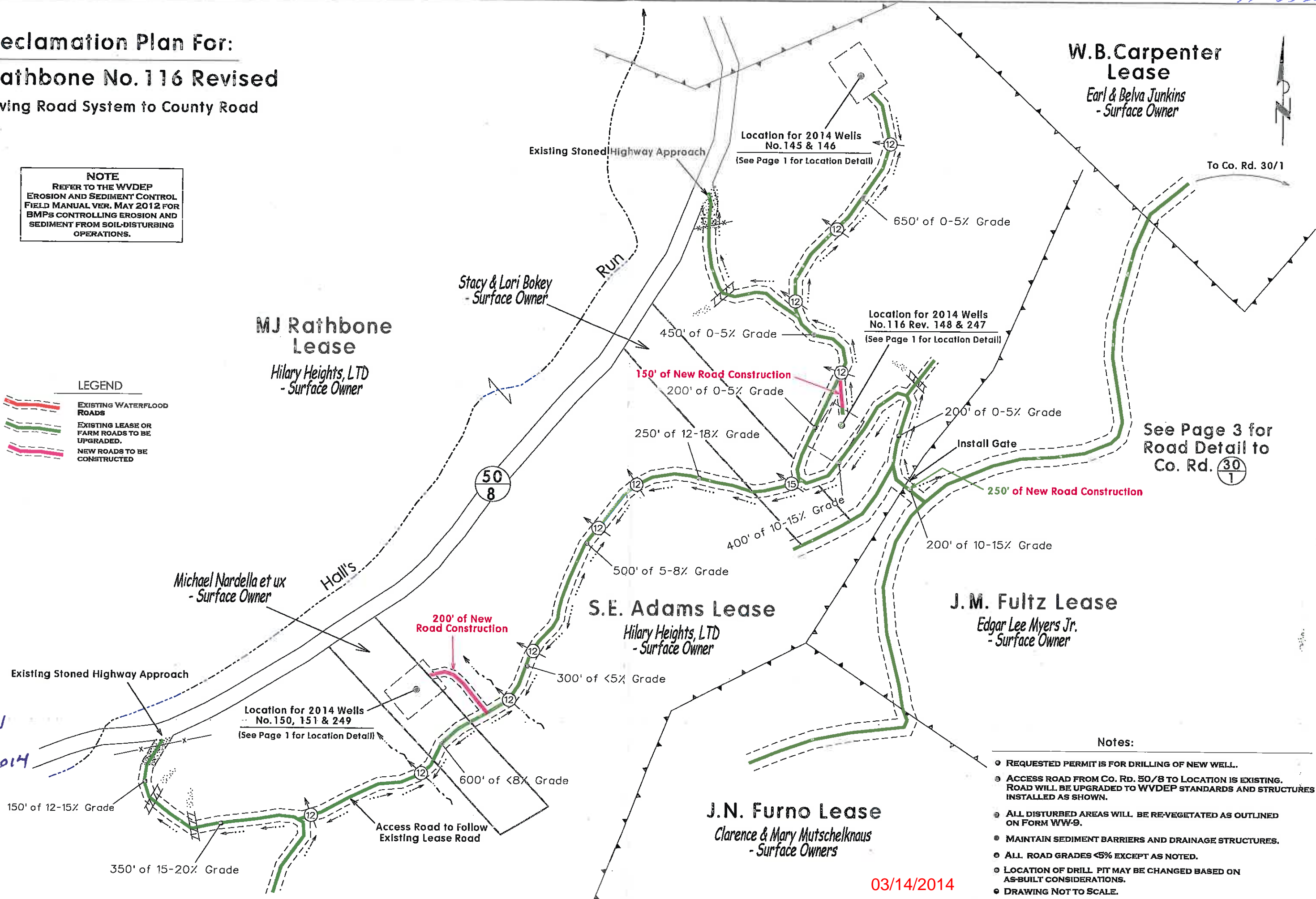
Michael Nardella et ux
- Surface Owner

S.E. Adams Lease
Hilary Heights, LTD
- Surface Owner

J.M. Fultz Lease
Edgar Lee Myers Jr.
- Surface Owner

J.N. Furno Lease
Clarence & Mary Mutschelknaus
- Surface Owners

SDW
2/25/2014

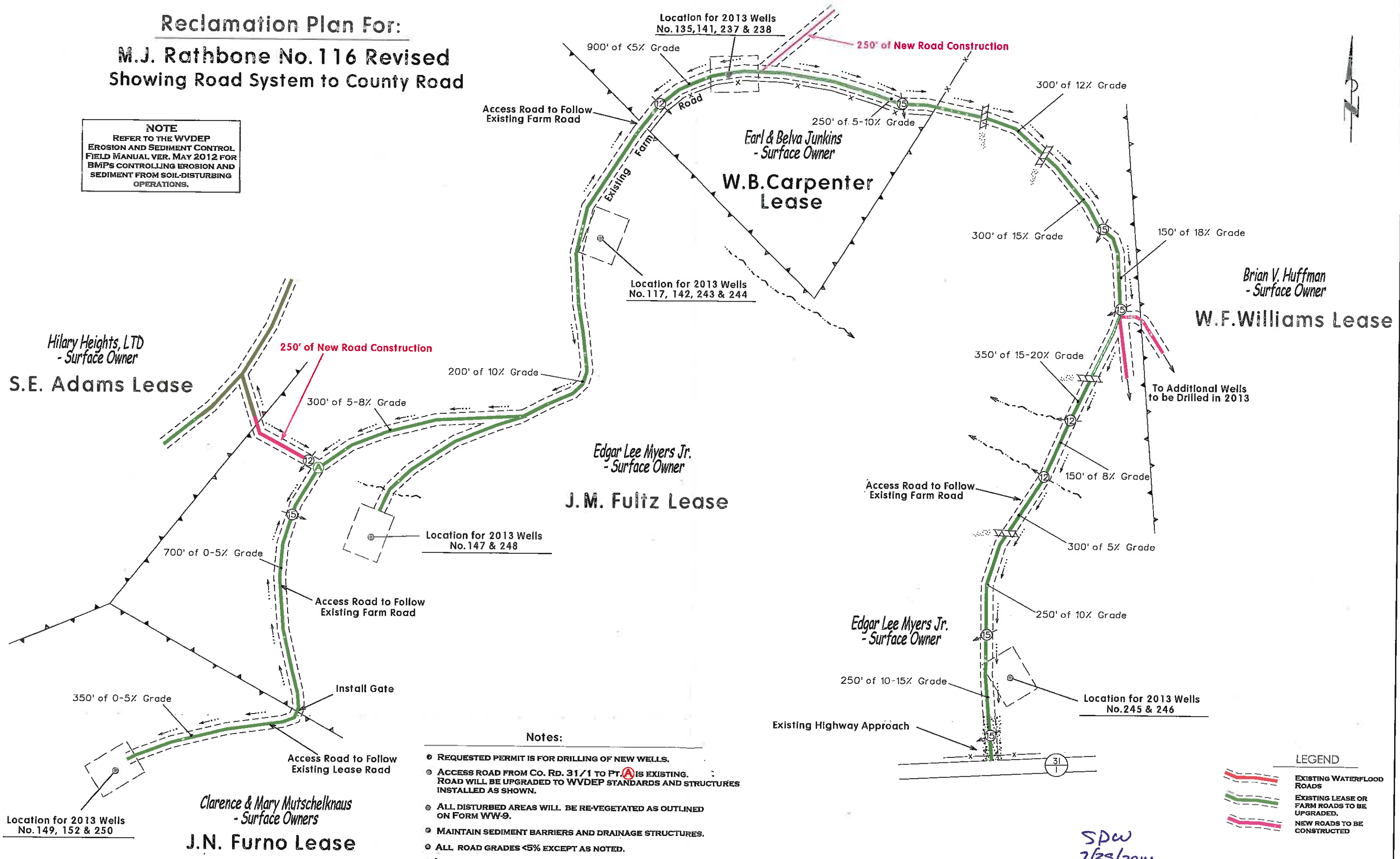


See Page 3 for Road Detail to Co. Rd. 30/1

- Notes:**
- REQUESTED PERMIT IS FOR DRILLING OF NEW WELL.
 - ACCESS ROAD FROM Co. Rd. 50/8 TO LOCATION IS EXISTING. ROAD WILL BE UPGRADED TO WVDEP STANDARDS AND STRUCTURES INSTALLED AS SHOWN.
 - ALL DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WW-9.
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Reclamation Plan For: M.J. Rathbone No. 116 Revised Showing Road System to County Road

NOTE
REFER TO THE WVDEP
EROSION AND SEDIMENT CONTROL
FIELD MANUAL VER. MAY 2012 FOR
BMP'S CONTROLLING EROSION AND
SEDIMENT FROM SOIL-DISTURBING
OPERATIONS.



- Notes:**
- REQUESTED PERMIT IS FOR DRILLING OF NEW WELLS.
 - ACCESS ROAD FROM Co. Rd. 31/1 TO PT. (A) IS EXISTING. ROAD WILL BE UPGRADED TO WVDEP STANDARDS AND STRUCTURES INSTALLED AS SHOWN.
 - ALL DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WW-9.
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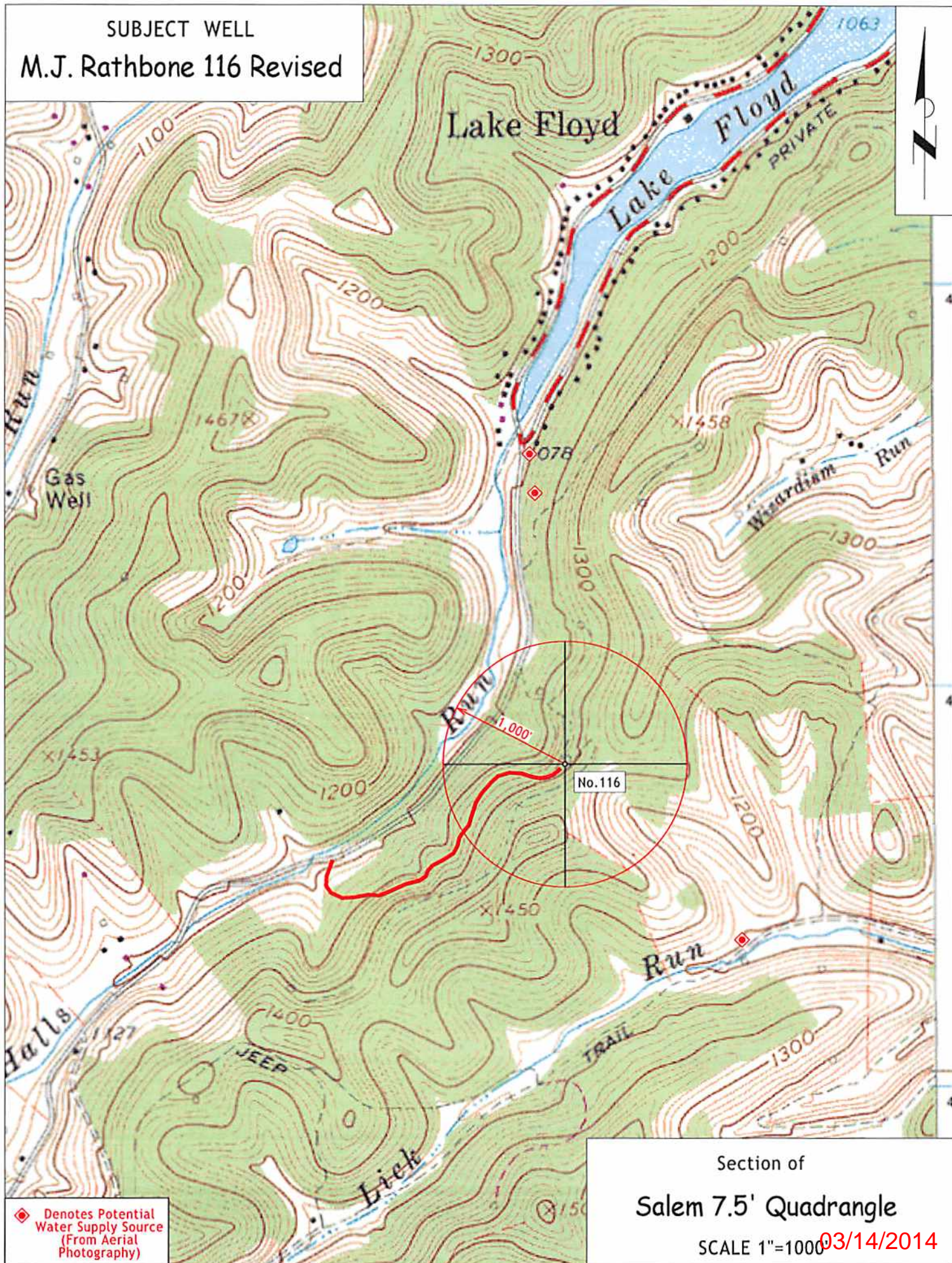
LEGEND

- EXISTING WATERFLOOD ROADS
- EXISTING LEASE OR FARM ROADS TO BE UPGRADED.
- NEW ROADS TO BE CONSTRUCTED

SPW
2/23/2014

03/14/2014

SUBJECT WELL
M.J. Rathbone 116 Revised



◆ Denotes Potential Water Supply Source (From Aerial Photography)

Section of
Salem 7.5' Quadrangle

SCALE 1"=1000' 03/14/2014

(BOT. HL: LON:-80°30'47.8") LON:-80°30'38.5"

3030

1 - Well ties and Latitude and Longitude were measured by Topcon Hiper GA survey grade GPS. Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1927).
2 - Surface owners, adjoiners information, Lease names, & line mapping obtained from HGE GIS system.
3 - No Title Opinion was provided to the Surveyor during this survey. This survey is subject to a complete title Opinion.

SURVEY NOTES

UTM Coordinates (Zone 17N-NAD 1983)		LOCATION REFERENCES
Surface	N-4,347,035m. E-542,222m.	UTM 27 N 34°34' W 16.8' EX: WELL S 24°11' W 143.7' 12" HICKORY
Bottom Hole	N-4,347,111m. E-542,000m.	Brg. Direction is prop. well to the ref.

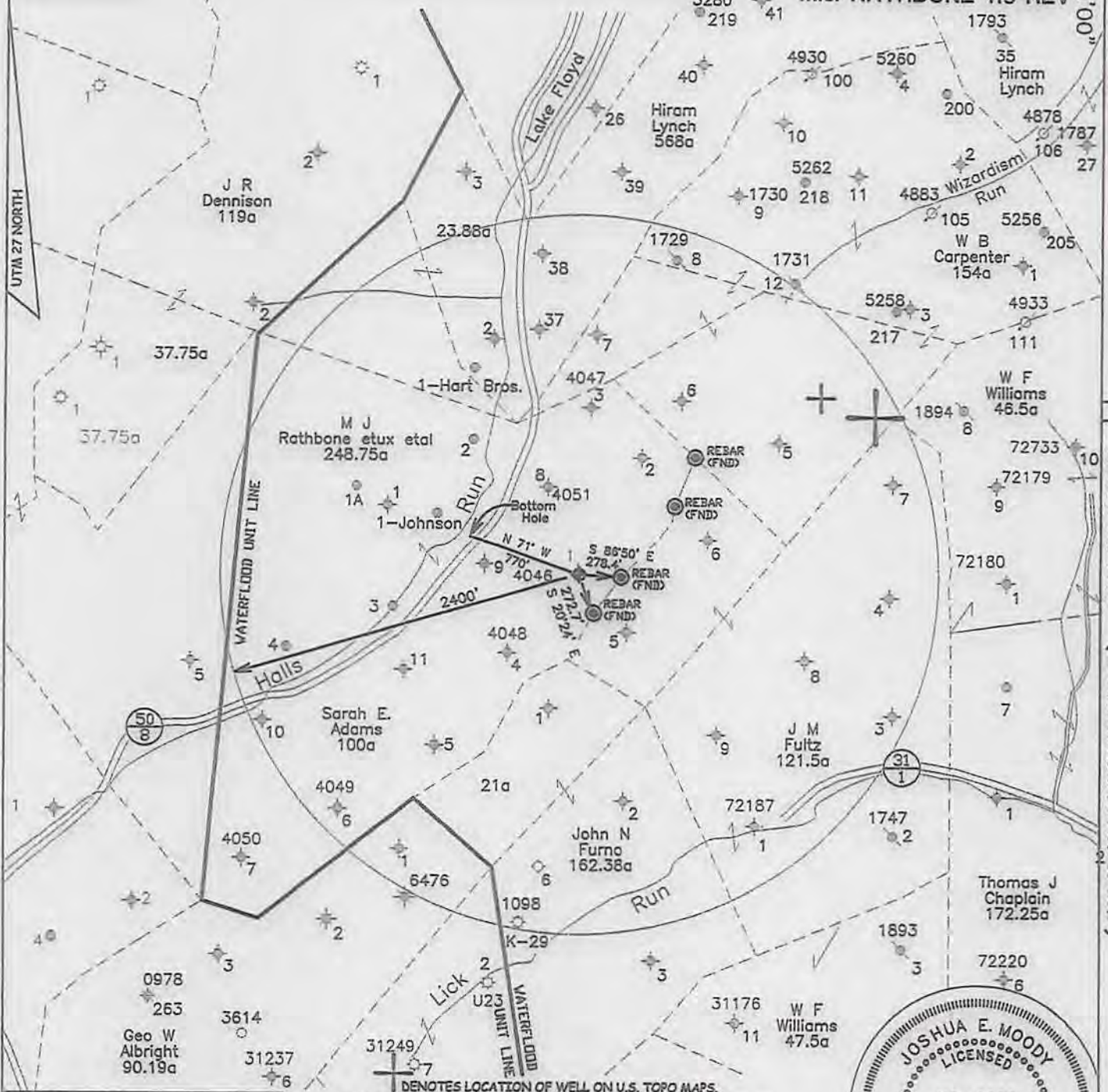
LAT: 39°17'30"
MAP OF
H.G. ENERGY, LLC
-WATERFLOOD UNIT-
M.J. RATHBONE 116-REV

LON: 80°30'00"

7330

LAT:39°16'17.6"

(BOTTOM HOLE: LAT:39°16'20.1")



↑ DENOTES LOCATION OF WELL ON U.S. TOPO MAPS.

JOB # 13-014
DRAWING # 13LAKEFLOYD FOLDER
SCALE 1" = 1500'
MINIMUM DEGREE OF ACCURACY 1/2500
PROVEN SOURCE OF ELEV. BENCH MARK H-80

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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



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

MOODY LAND SURVEYING, LLC
ST. MARYS, WV 26170



JOSHUA E. MOODY, P.S. 2020

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL HORIZONTAL
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 1267' WATERSHED HALL'S RUN API WELL # 47-033-05530
DISTRICT TEN MILE COUNTY HARRISON STATE COUNTY PERMIT
QUADRANGLE SALEM 7.5'

SURFACE OWNER HILARY HEIGHTS LTD ACREAGE 241.54 ACRES +/-
OIL & GAS ROYALTY OWNER HILARY HEIGHTS LTD., et al LEASE ACREAGE 148 ACRES +/-
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WILL BE DRILLED DIRECTIONALLY (N 71° W 770')
PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION 5TH SAND ESTIMATED DEPTH MD= 3,315'
WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT MIKE KIRSCH
ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

03/14/2014

Mod.

COUNTY NAME PERMIT

3305530 S M

(BOT. HL: LON:-80°30'47.8") LON:-80°30'38.5"

3030

SURVEY NOTES

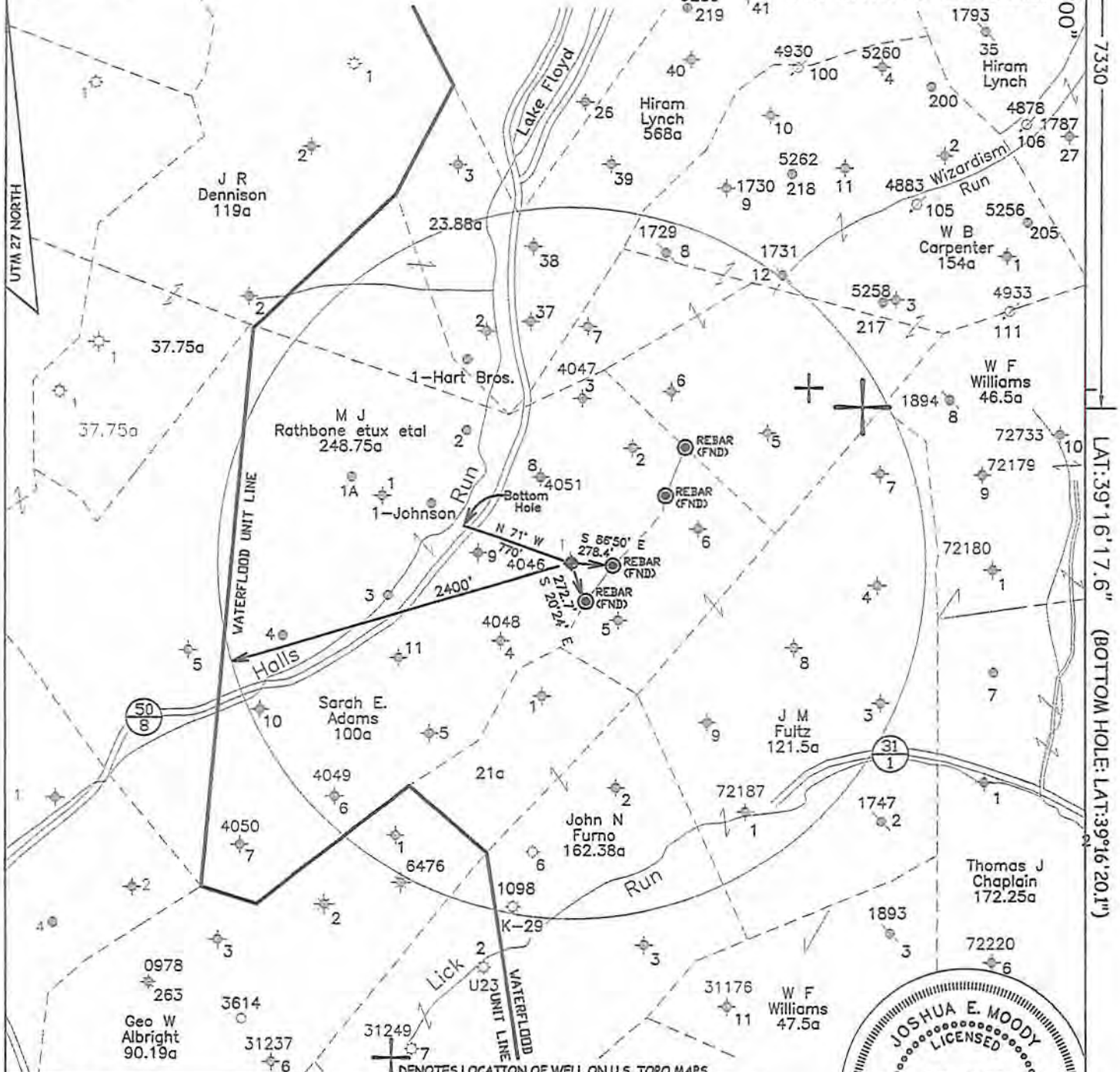
1 - Well ties and Latitude and Longitude were measured by Topcon Hiper GA survey grade GPS. Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1927).

2 - Surface owners, adjoining information, Lease names, & line mapping obtained from HGE GIS system.

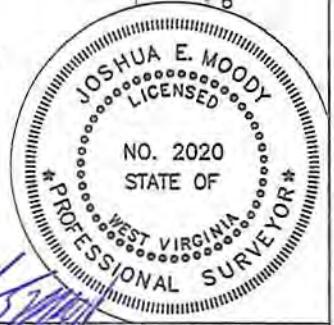
3 - No Title Opinion was provided to the Surveyor during this survey. This survey is subject to a complete title Opinion.

UTM Coordinates (Zone 17N-NAD 1983)		LOCATION REFERENCES
		UTM 27
Surface	N-4,347,035m. E-542,222m.	N 34°34' W 16.8' EX: WELL S 24°11' W 143.7' 12" HICKORY
Bottom Hole	N-4,347,111m. E-542,000m.	Brg. Direction is prop. well to the ref.

LAT: 39°17'30"
MAP OF
H.G. ENERGY, LLC
-WATERFLOOD UNIT-
M.J. RATHBONE 116-REV



⊕ DENOTES LOCATION OF WELL ON U.S. TOPO MAPS.



JOB # 13-014
 DRAWING # 13LAKEFLOYD FOLDER
 SCALE 1" = 1500'
 MINIMUM DEGREE OF ACCURACY 1/2500
 PROVEN SOURCE OF ELEV. BENCH MARK H-80

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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



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

MOODY LAND SURVEYING, LLC
 ST. MARYS, WV 26170

JOSHUA E. MOODY, P.S. 2020

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

DATE 9/17/13
 OPERATOR'S WELL M.J. RATHBONE # 116-REV.

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL HORIZONTAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1267' WATERSHED HALL'S RUN API WELL #
 DISTRICT TEN MILE COUNTY HARRISON 47 - 033 - 05530
 QUADRANGLE SALEM 7.5' STATE COUNTY PERMIT

SURFACE OWNER HILARY HEIGHTS LTD ACREAGE 241.54 ACRES +/-
 OIL & GAS ROYALTY OWNER HILARY HEIGHTS LTD., et al LEASE ACREAGE 148 ACRES +/-
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR
 STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
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 PLUG & ABANDON CLEAN OUT & REPLUG
 TARGET FORMATION 5TH SAND ESTIMATED DEPTH MD= 3,315'
 WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT MIKE KIRSCH
 ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD
 PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

03/14/2014

Mod.



HG Energy, LLC
5260 Dupont Road
Parkersburg, WV 26101
(304) 420-1100 - Office
(304) 863-3172 - Fax

RETURNED
Check # 2527
\$ 650.00

MODIFIED PERMIT

MOVED LOCATION
ON SAME LEASE

January 20, 2014

Mr. Jeff McLaughlin
WVDEP
Division of Oil & Gas
601 57th Street
Charleston, West Virginia 25304

RECEIVED
Office of Oil and Gas

FEB 24 2014

RE: M. J. Rathbone No. 116 – Revised 2 (47-033-5530)
Ten Mile District, Harrison County
West Virginia

WV Department of
Environmental Protection

Dear Mr. McLaughlin:

Enclosed are Forms WW-3A, WW-3A(1), WW-3B, WW-9, WW-3(B1), mylar of plat, reclamation plan, topo map and copies of the certified mailing receipts for a request to revise a permit to drill a liquid injection well. Also enclosed is our check in the amount of \$650.00 to cover the associated permit fees.

Very truly yours,

Diane C White

Diane C. White

Enclosures

cc: Hilary Heights, LTD – Beth Arnold Taylor – Certified
Stacy & Lori Bokey - Certified
Wolf Run Mining Company – Certified
Sam Ward – Inspector

03/14/2014

Nottingham, Justin E

From: Diane White <dwhite@hgenergyllc.com>
Sent: Wednesday, February 26, 2014 8:52 AM
To: Nottingham, Justin E
Subject: RE: Returning Check for 47-033-05530 "M.J. Rathbone 116"

Justin,

Ok, thanks for letting me know. I called Jeff about it a few months back and misunderstood. I thought since the location and methodology had changed the review process had to be like a new application. I'm sorry for the confusion and inconvenience.

Thanks for letting me know,
Diane

From: Nottingham, Justin E [<mailto:Justin.E.Nottingham@wv.gov>]
Sent: Tuesday, February 25, 2014 9:52 AM
To: Diane White
Cc: McLaughlin, Jeffrey W; Smith, Gene C; Chestnut, B.J
Subject: Returning Check for 47-033-05530 "M.J. Rathbone 116"

Diane,

The (\$650.00) check (#2527), that was for the well work application for well 47-033-05530 "M.J. RATHBONE 116", is being returned to you by mail. This well has a current well work permit that's active until 3/28/15, meaning that you will only need to send in a modification for the well work changes, which has no fee. If you have any questions then feel free to contact me.

Thanks,
Justin

Justin E. Nottingham

West Virginia Department of Environmental Protection

Office of Oil and Gas

Environmental Technician

601 57th Street, S.E.

Charleston, WV 25304

(304)-926-0499 (Ext. 1650)

(304)-926-0452 (fax)

Justin.E.Nottingham@wv.gov