



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

March 29, 2016

WELL WORK PERMIT
Secondary Recovery Well

This permit, API Well Number: 47-4303567, issued to HG ENERGY, LLC, 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: J. M. GRASS 161
Farm Name: EGNOR, KENNETH SR.

API Well Number: 47-4303567

Permit Type: Secondary Recovery Well

Date Issued: 03/29/2016

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 with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours.
7. Well work activities shall not constitute a hazard to the safety of persons.
8. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced, drilling ceased, completion of any other permitted well work and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

FORM WW-3 (B)
1/12



1) Date: 02/15/2016
 2) Operator's Well No. J. M. Grass 161
 3) API Well No.: 47 - Lincoln - s
 State County Permit
 4) UIC Permit No. UIC2R04301AP

STATE OF WEST VIRGINIA
 NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
 FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

5) WELL TYPE: Liquid Injection / Gas Injection (not storage) / Waste Disposal
 6) LOCATION: Elevation: 984' Watershed: Straight Fork
 District: Duval - 02 County Lincoln Quadrangle Griffithsville 7.5' - 385
 7) WELL OPERATOR: HG Energy, LLC 8) DESIGNATED AGENT Diane White
 Address 5260 Dupont Road Address 5260 Dupont Road
Parkersburg, WV 26101 Parkersburg, WV 26101
 9) OIL & GAS INSPECTOR TO BE NOTIFIED 10) DRILLING CONTRACTOR
 Name Jeremy James Name To Be Determined Upon Approval of the Permit
 Address PO Box 36 Address _____
Clendenin, WV 25045
 11) PROPOSED WELL WORK Drill / Drill deeper / Redrill / Stimulate
 Plug off old formation / Perforate new formation Convert
 Other physical change in well (specify) _____
 12) GEOLOGIC TARGET FORMATION Berea Depth 2915 Feet (top) to 2932 Feet (bottom)
 13) Estimated Depth of Completed Well, (or actual depth of existing well): 3155' MD Feet
 14) Approximate water strata depths: Fresh 364' Feet Salt 1214' Feet
 15) Approximate coal seam depths: 414'
 16) Is coal being mined in the area? Yes _____ No _____
 17) Virgin reservoir pressure in target formation 1250 psig Source Estimated
 18) Estimated reservoir fracture pressure 2650 psig (BHFP)
 19) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour 25 BBL Bottom hole pressure 2400 psi
 20) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES Fresh water, produced
water, bactericides and other chemicals as needed to maintain water quality and improve oil recovery.
 21) FILTERS (IF ANY) Cartridge filters and/or coal bed filters
 22) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL _____

23) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS <i>[Signature]</i> 2-24-16
	Size	Grade	Weight per ft.	New	Used	For Drilling	Left In Well		
Conductor									Kinds
Fresh Water	7"	LS	17#	X		514	514'	C.T.S.	
Coal									Sizes
Intermediate									2.375"
Production	4 1/2"	J-55	10.5#	X		3105'	3105'	150sks	Depths set
Tubing	2 3/8"	J-55	4.6#	X		2715"	2715"		2500'
Liners									Perforations
									Top Bottom

24) APPLICANT'S OPERATING RIGHTS were acquired from John and Martha Glass
 by deed _____ / lease x / other contract Office of Oil and Gas dated 07/10/1907 of record in the
Lincoln County Clerk's office in lease Book 36 Page 164

RECEIVED

MAR 09 2016

WW-2B1
(5-12)

Well No. JM Grass 161

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>Sturm Environmental</u>
Sampling Contractor	<u>Sturm Environmental</u>

Well Operator	<u>HG Energy, LLC</u>
Address	<u>5260 Dupont Road</u>
	<u>Parkersburg, WV 26101</u>
Telephone	<u>304-420-1119</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.

- See Attached Sheet -

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Office of Oil and Gas

MAR 09 2016

WV Department of
Environmental Protection

04/01/2016

WW-2B1
Page 2 - Continued

Well No. J M Grass 161

West Virginia Department of Environmental Protection
Office of Oil and Gas

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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.

Surface Owners Identified With Water Sources to be Sampled and Tested:

- | | |
|---|--|
| * John & Debra Hubbard
21 Ind Drive
Yawkey, WV 25573 | * Kenneth Egnor, Sr.
533 Laurel Fork
Sumerco, WV 25567 |
| * Merri & Bernie Mallory
9 Ind Drive
Yawkey, WV 25573 | |

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WV Department of
Environmental Protection

04/01/2016

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name HG Energy, LLC OP Code 494497948

Watershed Straight Fork Quadrangle Griffithville 7.5'

Elevation 984' County Lincoln District Duval

Description of anticipated Pit Waste: Fluids encountered while drilling subject well

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

Will a synthetic liner be used in the pit? Yes _____ If so, what mil.? 30 Mil

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Air, Fresh Water,

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

Additives to be used? Water, Soap, KCl

Will closed loop system be used? No

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 Native soil, cement, lime

-Landfill or offsite name/permit number? _____

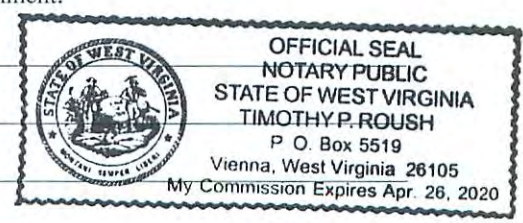
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations 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.

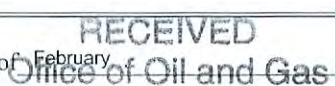
Company Official Signature Diane White

Company Official (Typed Name) Diane White

Company Official Title Agent



Subscribed and sworn before me this 15th day of February, 2015



[Handwritten Signature]

MAR 09 2016 Notary Public

My commission expires 7/26/2020

WV Department of Environmental Protection

04/01/2016

Form WW-9

Operator's Well No. JM Grass 161

LEGEND

Property Boundary	Diversion
Road	Spring
Existing Fence	Wet Spot
Planned Fence	Drain Pipe with size in inches
Stream	Waterway
Open Ditch	Cross Drain
Rock	Artificial Filter Strip
North	Pit: cut walls
Buildings	Pit: compacted fill walls
Water wells	Area for Land Application of Pit Waste
Drill site	

Proposed Revegetation Treatment: Acres Disturbed 1.8 acres Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

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

Mulch Straw 2 Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

**** Sediment Control Will Be In Place At All Times ****

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:

Comments: _____

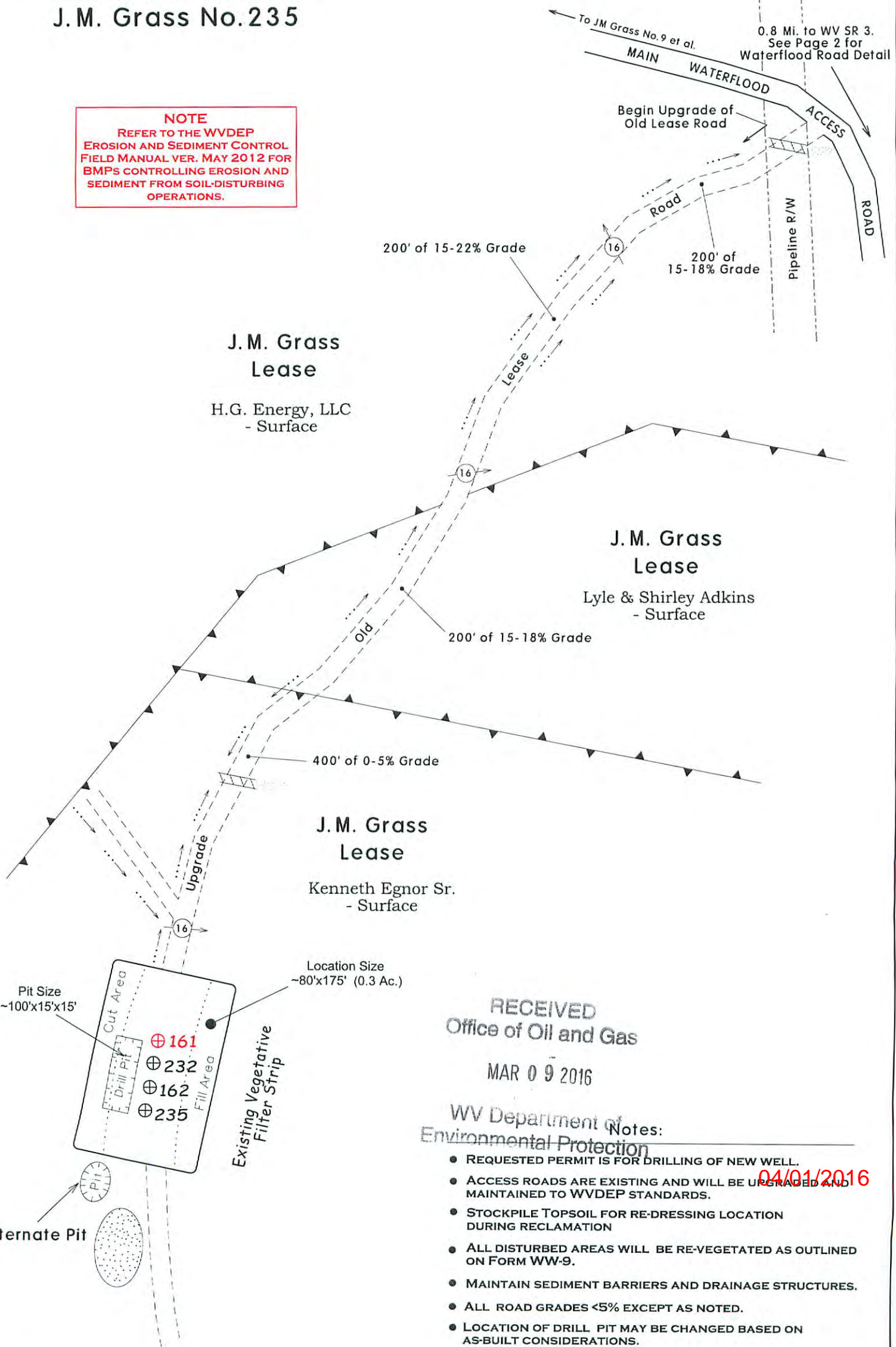
Title: inspector OOG RECEIVED Office of Oil and Gas 2016-16

Field Reviewed? (Lincoln) Yes No MAR 09 2016

Reclamation Plan For:

- J. M. Grass No. 161**
- J. M. Grass No. 162
- J. M. Grass No. 232
- J. M. Grass No. 235

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



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 Environmental Protection

- Notes:
- REQUESTED PERMIT IS FOR DRILLING OF NEW WELL.
 - ACCESS ROADS ARE EXISTING AND WILL BE UPGRADED AND MAINTAINED TO WVDEP STANDARDS.
 - STOCKPILE TOPSOIL FOR RE-DRESSING LOCATION DURING RECLAMATION
 - 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.

04/01/2016

Subject Well:
J.M Grass No.161

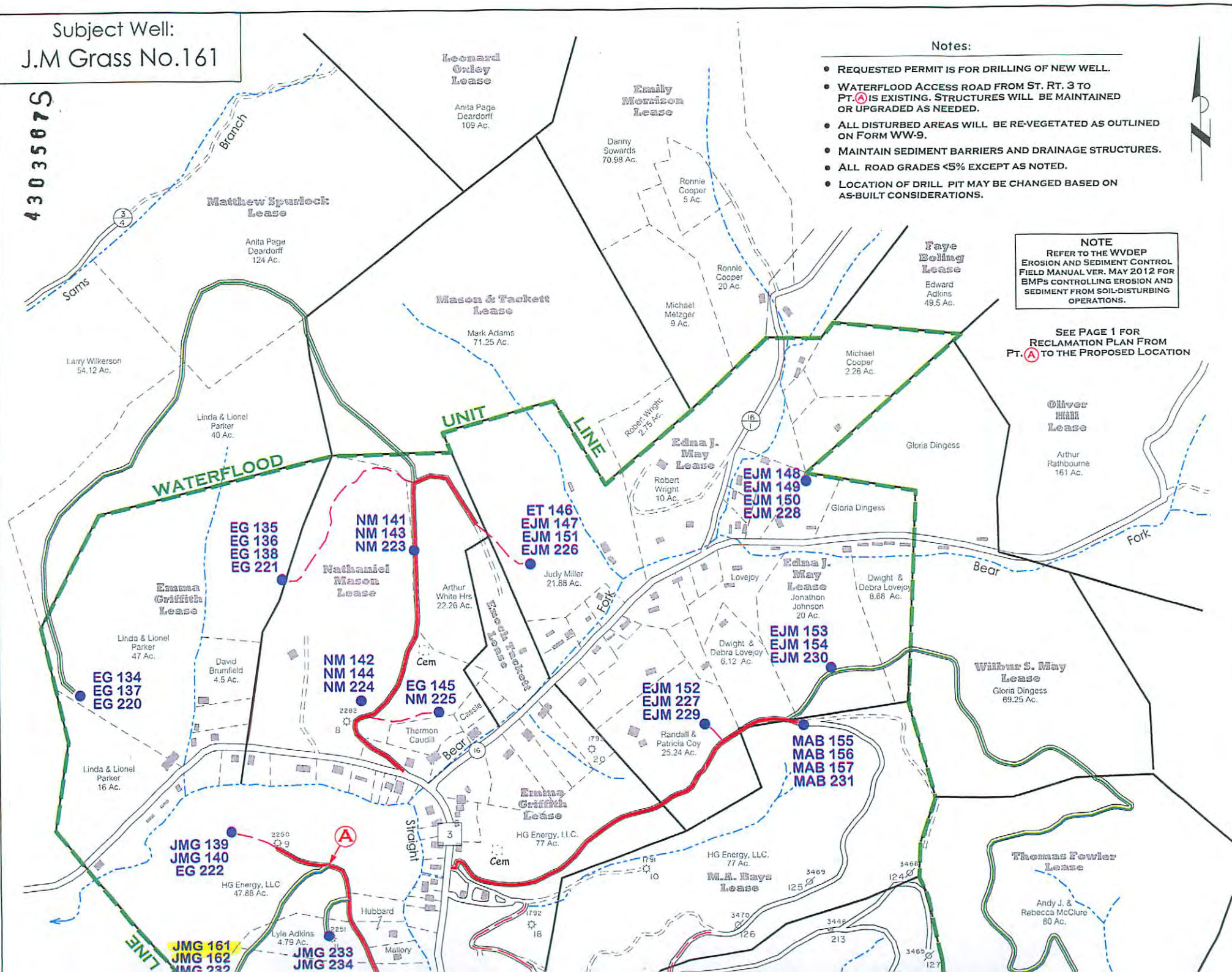
43035075

Notes:

- REQUESTED PERMIT IS FOR DRILLING OF NEW WELL.
- WATERFLOOD ACCESS ROAD FROM ST. RT. 3 TO PT. A IS EXISTING. STRUCTURES WILL BE MAINTAINED OR UPGRADED AS NEEDED.
- 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.

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.

SEE PAGE 1 FOR
RECLAMATION PLAN FROM
PT. A TO THE PROPOSED LOCATION



Oliver Hill Lease
Arthur Rathbourne
161 Ac.

Wilbur S. May Lease
Gloria Dingess
69.25 Ac.

Thomas Fowler Lease
Andy J. & Rebecca McClure
80 Ac.

EG 135
EG 136
EG 138
EG 221

NM 141
NM 143
NM 223

ET 146
EJM 147
EJM 151
EJM 226

EJM 148
EJM 149
EJM 150
EJM 228

EJM 153
EJM 154
EJM 230

EJM 152
EJM 227
EJM 229

MAB 155
MAB 156
MAB 157
MAB 231

JMG 139
JMG 140
EG 222

JMG 161
JMG 162
JMG 232

JMG 233
JMG 234

UNIT LINE

WATERFLOOD

LINE

Leonard Onley Lease
Anita Page Deardorff
109 Ac.

Emily Morrison Lease
Danny Sowards
70.98 Ac.

Matthew Spurlock Lease
Anita Page Deardorff
124 Ac.

Mason & Tackett Lease
Mark Adams
71.25 Ac.

Ronnie Cooper 5 Ac.
Michael Metzger 9 Ac.

Faye Boling Lease
Edward Adkins
49.5 Ac.

Larry Wilkerson
54.12 Ac.

Linda & Lionel Parker
40 Ac.

Edna J. May Lease
Robert Wright
10 Ac.

Ronnie Cooper 20 Ac.
Michael Cooper 2.26 Ac.

Emma Griffith Lease
Linda & Lionel Parker
47 Ac.

Nathaniel Mason Lease
Arthur White Hrs
22.26 Ac.

Edna J. May Lease
Robert Wright
10 Ac.

Edna J. May Lease
Jonathon Johnson
20 Ac.

Gloria Dingess
Dwight & Debra Lovejoy
8.68 Ac.

EG 134
EG 137
EG 220

David Brumfield
4.5 Ac.

NM 142
NM 144
NM 224

EG 145
NM 225

Dwight & Debra Lovejoy
6.12 Ac.

Wilbur S. May Lease
Gloria Dingess
69.25 Ac.

Linda & Lionel Parker
16 Ac.

Thermon Caudill

Edna J. May Lease
Jonathon Johnson
20 Ac.

Randall & Patricia Coy
25.24 Ac.

M.A. Bays Lease
HG Energy, LLC.
77 Ac.

Thomas Fowler Lease
Andy J. & Rebecca McClure
80 Ac.

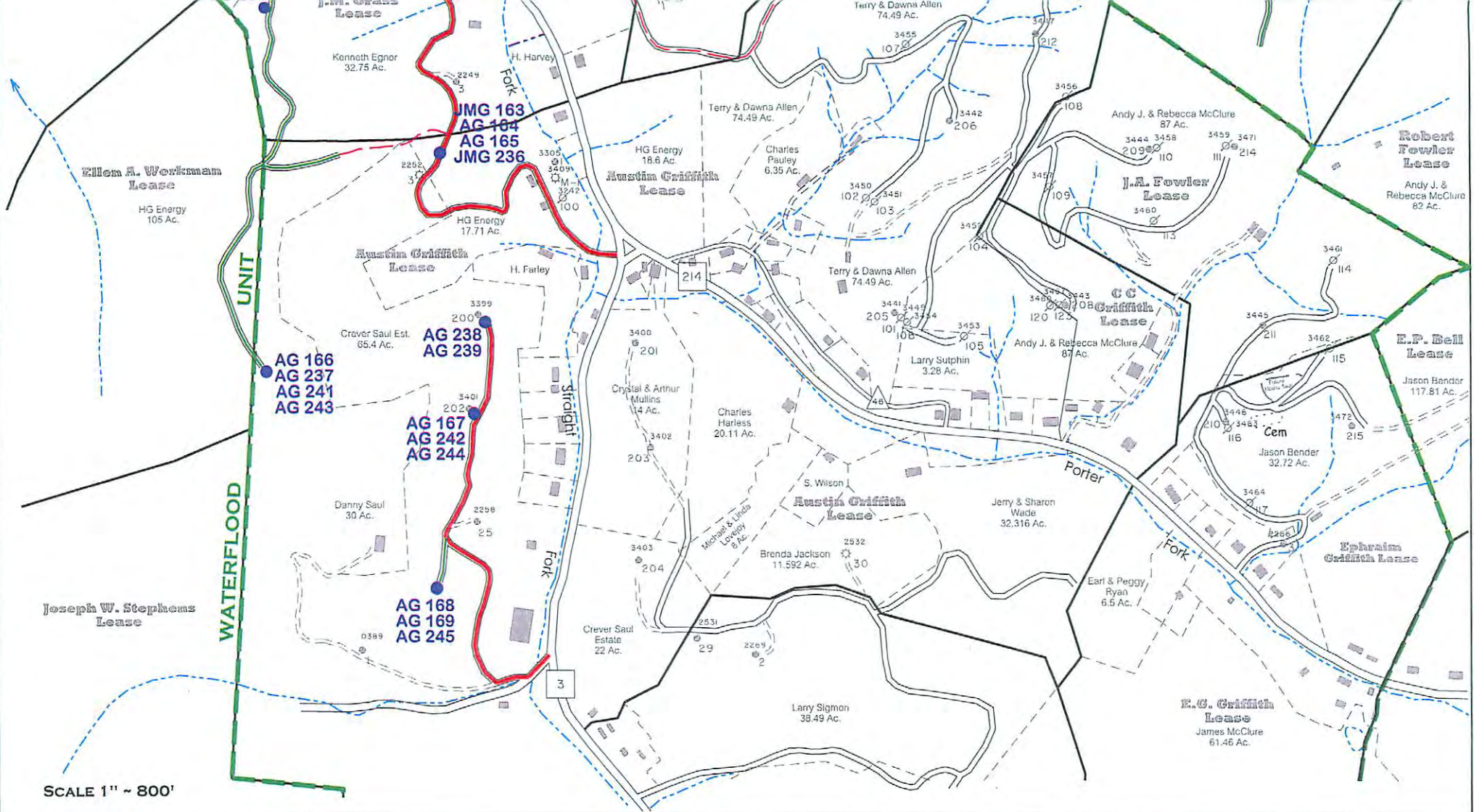
HG Energy, LLC
47.88 Ac.

Lyle Adkins
4.75 Ac.

HG Energy, LLC.
77 Ac.

M.A. Bays Lease
HG Energy, LLC.
77 Ac.

Andy J. & Rebecca McClure
80 Ac.



SCALE 1" ~ 800'



GRIFFITHSVILLE WATERFLOOD







Lincoln County, W.Va.

RECLAMATION PLAN SHOWING ROAD SYSTEMS TO BE USED FOR 2016 DRILLING PROGRAM (NORTH)

NOTES

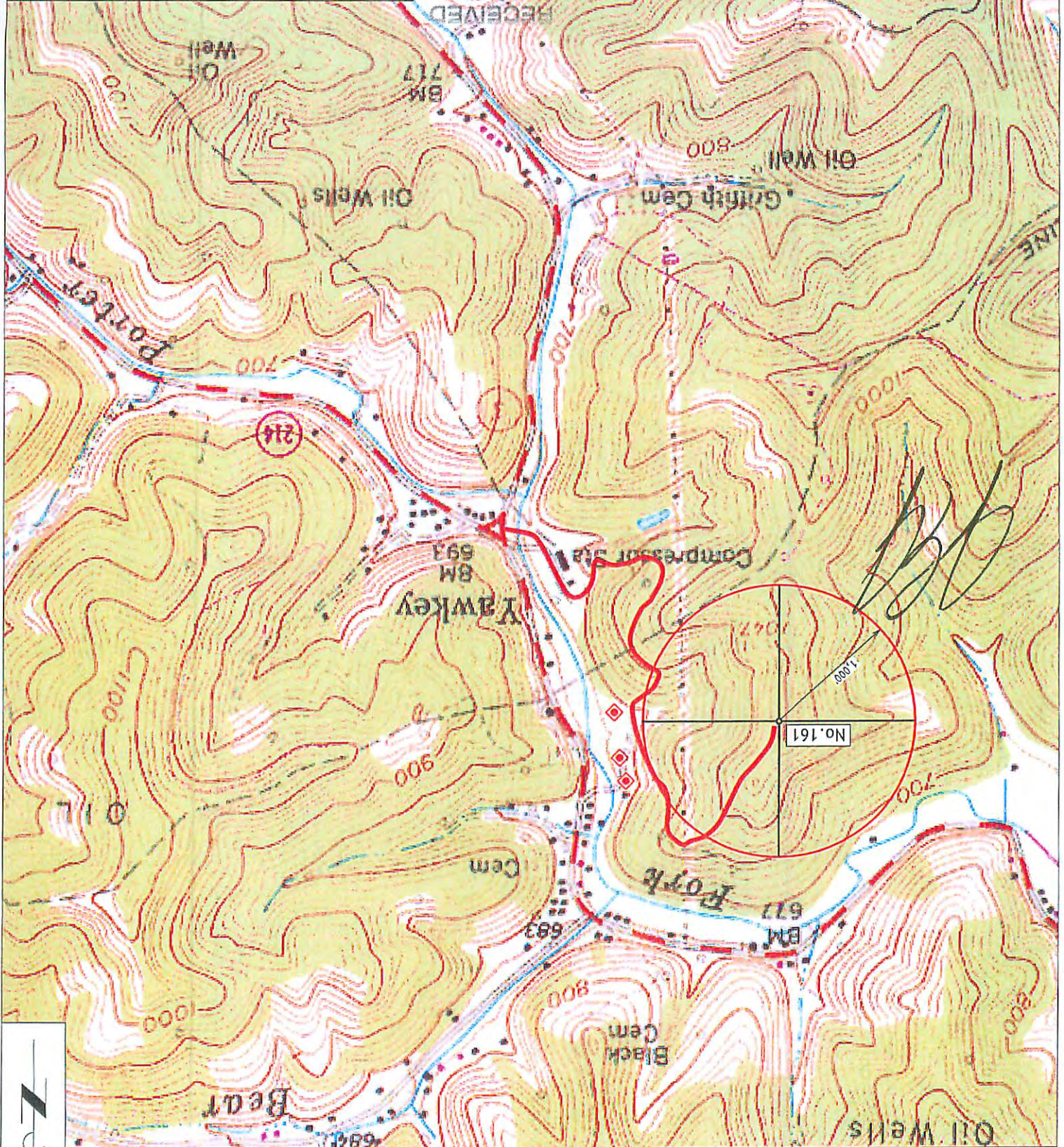
1. REFER TO THE WVDEP EROSION AND SEDIMENTATION CONTROL MANUAL (VER. MAY 20, 2013) FOR BMP'S CONTROLLING EROSION AND SEDIMENTATION FROM ALL SOIL-DISTURBING OPERATIONS.
2. SEE PAGE ONE OF RECLAMATION PLAN FOR DETAILS OF NEW ROAD CONSTRUCTION AND ROAD UPGRADES FROM POINT (A) TO DRILL SITE LOCATION.
3. EXISTING WATERFLOOD ACCESS ROADS WILL BE MAINTAINED IN PRESENT CONDITION. THESE ROADS WERE CONSTRUCTED UNDER CONDITIONS SET FORTH IN VARIOUS DRILLING PERMITS ISSUED BY WVDEP-OOG PRIOR TO 2015 (AS SHOWN). SEE PERMITS ON FILE FOR MORE DETAIL.

LEGEND

-  EXISTING WATERFLOOD ROADS TO BE USED.
-  OTHER EXISTING MAIN WATERFLOOD ROADS (POSSIBLE ACCESS).
-  EXISTING LEASE OR FARM ROADS TO BE UPGRADED.
-  NEW ROADS TO BE CONSTRUCTED.
-  JMG 161
LOCATION FOR PROPOSED WELLS
-  POTENTIAL WATER SUPPLY SOURCE TO BE SAMPLED (LOC. APPROX.)

9/20/10/4

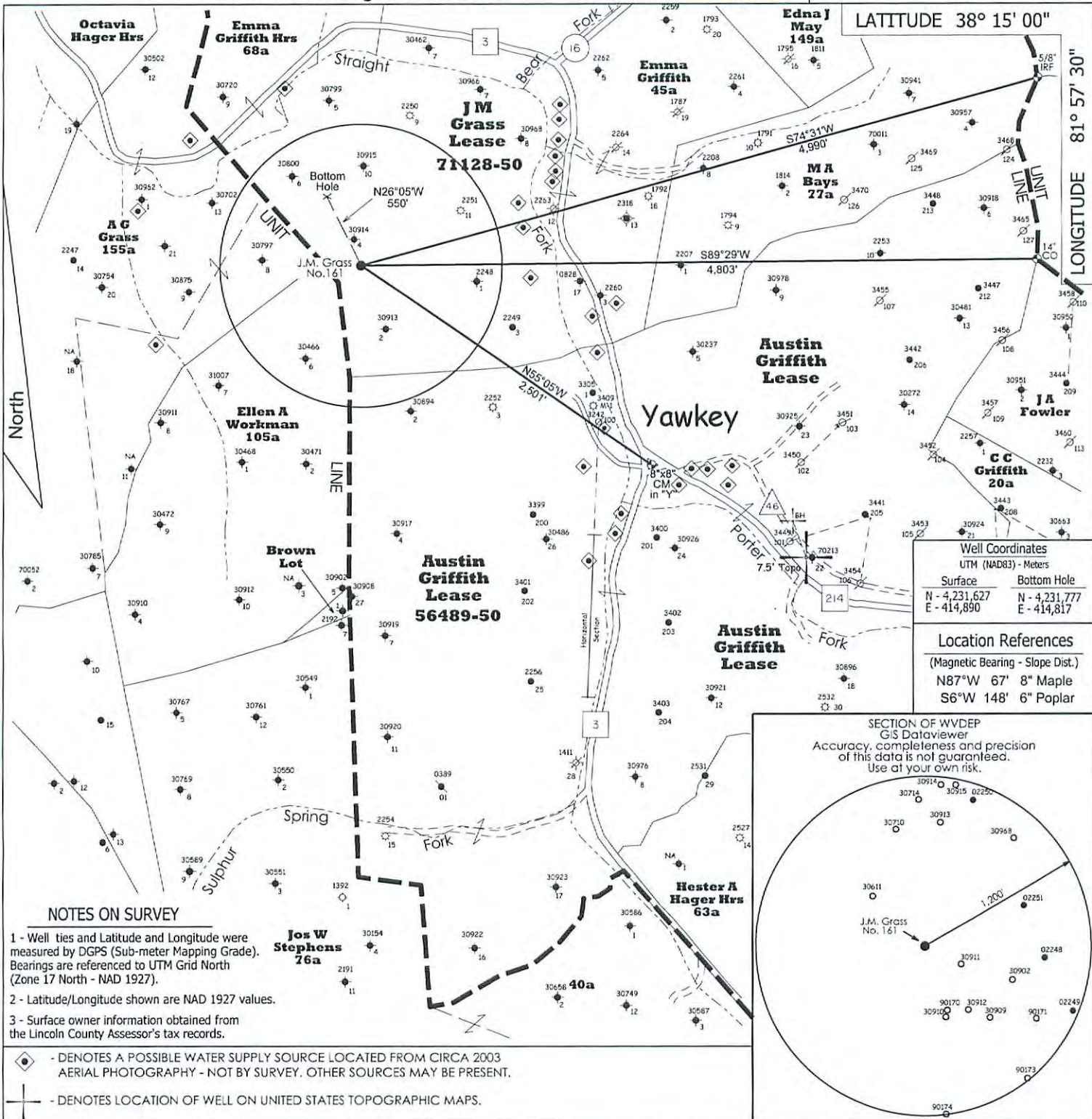
SUBJECT WELL
J.M. Grass No.161



NOTE:
No Known Water Supply
Sources are Located Within
1000' of Proposed Well

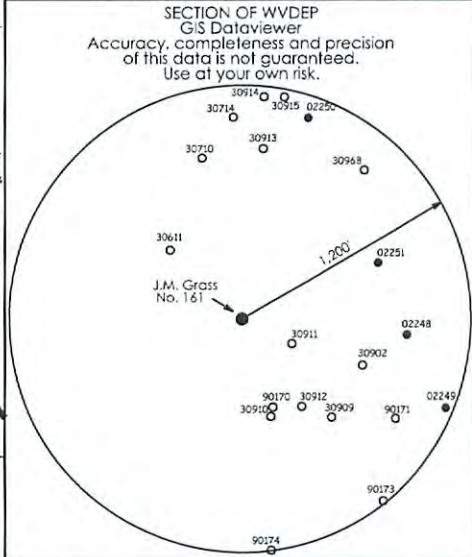
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Office of Oil and Gas
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Section of
Griffithsville 7.5' Quadrangle
SCALE 1"=1000'



Well Coordinates	
UTM (NAD83) - Meters	
Surface	Bottom Hole
N - 4,231,627	N - 4,231,777
E - 414,890	E - 414,817

Location References	
(Magnetic Bearing - Slope Dist.)	
N87°W 67'	8" Maple
S6°W 148'	6" Poplar



- NOTES ON SURVEY**
- 1 - Well ties and Latitude and Longitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1927).
 - 2 - Latitude/Longitude shown are NAD 1927 values.
 - 3 - Surface owner information obtained from the Lincoln County Assessor's tax records.
- ◆ - DENOTES A POSSIBLE WATER SUPPLY SOURCE LOCATED FROM CIRCA 2003 AERIAL PHOTOGRAPHY - NOT BY SURVEY. OTHER SOURCES MAY BE PRESENT.
 - ⊕ - DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.


FILE NO. 1168

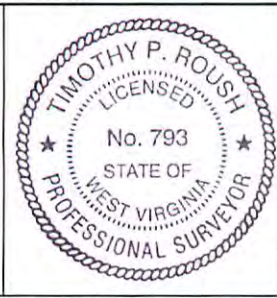
SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY Sub-Meter

PROVEN SOURCE OF ELEVATION DGPS Survey (Sub-Meter Mapping Grade)

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

(SIGNED)  TIMOTHY P. ROUSH PS 793



WEST VIRGINIA
Division of Environmental Protection
Office of Oil and Gas
601 57th Street
Charleston, West Virginia 25301

DATE February 9, 2016

FARM J.M. Grass No.161

APL WELL NO. 47 043 - 035675

RECEIVED MAR 09 2016
Office of Oil and Gas

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

LOCATION: ELEVATION 984' WATERSHED Straight Fork DISTRICT Duval COUNTY Lincoln QUADRANGLE Griffithville 7.5'

SURFACE OWNER Kenneth Egnor, Sr. ACREAGE 32.75 Ac.

OIL & GAS ROYALTY OWNER HG Energy, LLC., et al LEASE ACREAGE 100 Ac. LEASE NO. 71128-50

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 Berea ESTIMATED DEPTH 3,155' MD

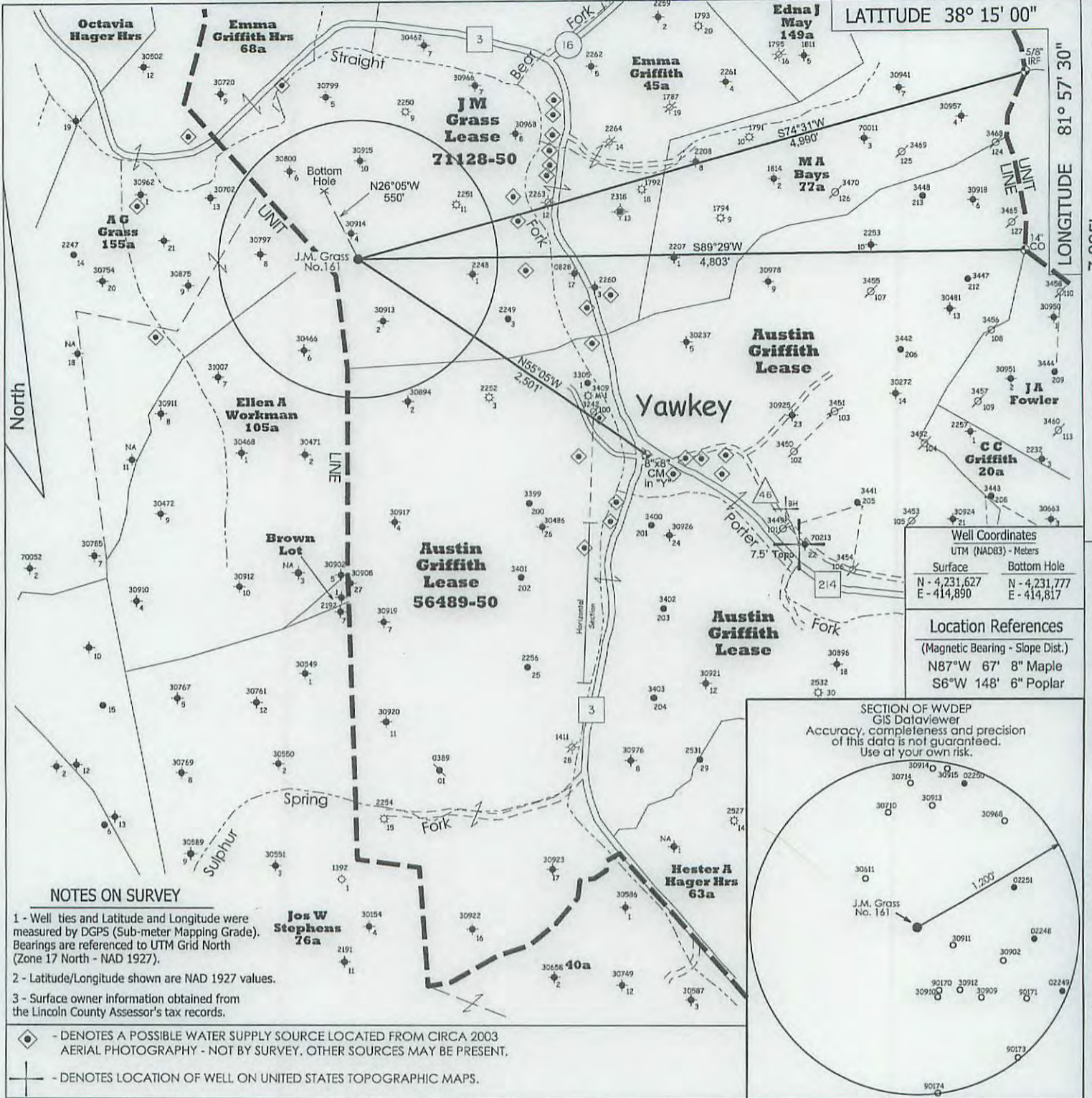
WELL OPERATOR HG Energy LLC. DESIGNATED AGENT Diane White
ADDRESS 5260 DuPont Road Parkersburg, WV 26101 ADDRESS 5260 DuPont Road Parkersburg, WV 26101

Bottom Hole Long. = 81°58' 24.3"

Longitude = 81°58' 21.18"

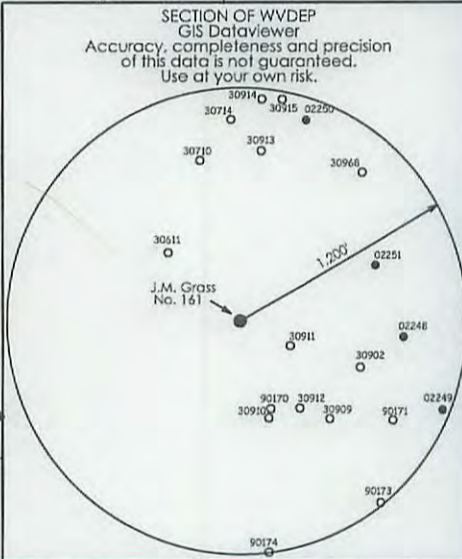
4,085'

LATITUDE 38° 15' 00"



Well Coordinates	
UTM (NAD83) - Meters	
Surface	Bottom Hole
N - 4,231,627	N - 4,231,777
E - 414,890	E - 414,817

Location References	
(Magnetic Bearing - Slope Dist.)	
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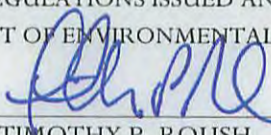
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Division of Environmental Protection
Office of Oil and Gas
601 57th Street
Charleston, West Virginia 25301



DATE February 9, 2016

FARM J.M. Grass No.161

API WELL NO. 47-043-03567 S

RECEIVED
Office of Oil and Gas
MAR 09 2016
WV Department of Environmental Protection

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

LOCATION: ELEVATION 984' WATERSHED Straight Fork

DISTRICT Duval COUNTY Lincoln

QUADRANGLE Griffithsville 7.5'

SURFACE OWNER Kenneth Egnor, Sr. ACREAGE 32.75 Ac.

OIL & GAS ROYALTY OWNER HG Energy, LLC., et al LEASE ACREAGE 100 Ac. **04/01/2016**

LEASE NO. 71128-50

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 Berea ESTIMATED DEPTH 3,155' MD

WELL OPERATOR HG Energy LLC. DESIGNATED AGENT Diane White
ADDRESS 5260 DuPont Road ADDRESS 5260 DuPont Road
Parkersburg, WV 26101 Parkersburg, WV 26101

FORM IV-6

Longitude = 81° 57' 30" 7,825' Latitude = 38° 13' 47.5" Bottom Hole Lat. = 38° 13' 42.63"