



west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Tuesday, December 3, 2019
WELL WORK PERMIT
Vertical / Re-Work

HG ENERGY, LLC
5260 DUPONT ROAD
PARKERSBURG, WV 26101

Re: Permit approval for M.A. BAYS NO. 125
47-043-03469-00-00

This well work permit 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 any additional specific 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 of 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.

Per 35 CSR 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- 0450.


James A. Martin
Chief

Operator's Well Number: M. A. BAYS NO. 125
Farm Name: HG ENERGY, LLC
U.S. WELL NUMBER: 47-043-03469-00-00
Vertical Re-Work
Date Issued: 12/3/2019

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 on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

RECEIVED
Office of Oil and Gas

NOV 12 2019

FORM WW-3 (B)
1/12



- 1) Date: 10/01/2019
- 2) Operator's Well No. MA Bays 125
- 3) API Well No.: 47 - 043 - 03469
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: 985' Watershed: Straight Fork
District: Duval County Lincoln Quadrangle Griffithsville 7.5'
- 7) WELL OPERATOR: HG Energy, LLC
Address 5260 Dupont Road
Parkersburg, WV 26101
- 8) DESIGNATED AGENT Diane White
Address 5260 Dupont Road
Parkersburg, WV 26101
- 9) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Jeffery Smith
Address 5369 Big Tyler Road
Cross Lanes, WV 25313
- 10) DRILLING CONTRACTOR
Name To Be Determined Upon Approval of Permit
Address _____

- 11) PROPOSED WELL WORK Drill / Drill deeper / Redrill / Stimulate
Plug off old formation / Perforate new formation / Convert
Other physical change in well (specify) SMALL HYDRAULIC FRACTURE

- 12) GEOLOGIC TARGET FORMATION Berea Depth 2486' Feet (top) to 2496' Feet (bottom)
- 13) Estimated Depth of Completed Well, (or actual depth of existing well): 2582.5' Feet
- 14) Approximate water strata depths: Fresh 60' Feet Salt 1150' Feet
- 15) Approximate coal seam depths: 593' - 600'

- 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 _____ psig (BHFP)

- 19) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour 25 bbl Bottom hole pressure 2400 psig

- 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
	Size	Grade	Weight per ft.	New	Used	For Drilling	Left In Well		
Conductor	11 5/8"	LS	NA		x	30'	30'	Sand In	Kinds
Fresh Water	7"	LS	17#	x		675'	675'	CTS	
Coal									Sizes
Intermediate									2.375" x 4.5"
Production	4 1/2"	J-55	10.5#	x		2582.5'	2582.5'	CTS	Depths set
Tubing	2 3/8"	J-55	4.7#	x		2275'			2175'
Liners							2275'		Perforations <u>40</u> Top <u>2486</u> Bottom <u>2496</u>

- 24) APPLICANT'S OPERATING RIGHTS were acquired from Isaac and Laura Bays
by deed x / lease _____ / other contract _____ / dated 05/07/1904 of record in the
Lincoln County Clerk's office in Lease Book 33 Page 394

JS

NOV 12 2019 State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
WV Department of Environmental Protection Well Operator's Report of Well Work
Environmental Protection

API 47-043-03469 County LINCOLN District DUVAL
Quad GRIFFITHSVILLE 7.5' Pad Name M.A. BAYS Field/Pool Name GRIFFITHSVILLE
Farm name HG ENERGY LLC Well Number 125
Operator (as registered with the OOG) H.G. ENERGY LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,231,847 M Easting 416,079 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 985' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 6/17/2013 Date drilling commenced 5/29/2014 Date drilling ceased 6/2/14
Date completion activities began 6/24/14 Date completion activities ceased 6/27/14
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 60' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1,150' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 593'-600' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

WR-35
Rev. 8/23/13

API 47-043-03469 Farm name HG ENERGY LLC Well number 125

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	12 1/4"	11 5/8"	30'	Used	LS		Sand In
Surface	8 3/4"	7"	675'	New	LS	84'	Y
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2582.5'	New	J-55		N
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 30 sks to surface on 7" surface cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	165	15.6	1.18	195	Surface	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix/ Econo	150	14.2	1.27	254	1130'	8
Tubing							

Drillers TD (ft) 2600' Loggers TD (ft) 2611'
 Deepest formation penetrated Berea Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) N/A

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

6 Centralizers every 84' from bottom on 4 1/2", Centralizer placed mid string on 7"

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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Office of Oil and Gas

NOV 12 2019

WV Department of
Environmental Protection

FORM WW-3 (A)
1/12



1) Date: October 1, 2019
2) Operator's Well No. M A Bays 125
3) API Well No.: 47 - 043 - 03469
State County Permit
4) UIC Permit No. UIC2R04301AP

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

5) Surface Owner(S) To Be Served ✓
(a) Name Terry & Dawna Allen
Address 28 Russell Road
Yawkey, WV 25573
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Jeffery Smith
Address 5369 Big Tyler Road
Cross Lanes, WV 25313
Telephone 681-313-6743
7) (a) Coal Operator
Name NA
Address _____
7) (b) Coal Owner(S) With Declaration Of Record
Name NA
Address _____
7) (c) Coal Lessee with Declaration Of Record
Name NA
Address _____

TO THE PERSONS NAMED ABOVE: You should have received this form and the following documents

- (1) The Application For A Liquid Injection or Waste Disposal Well Work Permit on Form WW-3(B), which sets out the parties involved in the drilling or other work;
- (2) The plat (surveyor's map) showing the well location on Form WW-6; and
- (3) The Construction and Reclamation Plan on Form WW-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

The date proposed for the first injection or waste disposal is _____ 20 19 .

THE REASON YOU HAVE RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION [(FORM WW-3(B))] DESIGNATED TO YOU. HOWEVER YOU ARE NOT REQUIRED TO TAKE ACTION AT ALL.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to a well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of the mailing or delivery to the Chief.

The person signing this document shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document 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 HG Energy, LLC
Address 5260 Dupont Road
Parkersburg, WV 26101
By: Diane White
Its: Agent
Signature: Diane White



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

October 1, 2019

Terry & Dawna Allen
28 Russell Road
Yawkey, WV 25573

RE: M. A. Bays No. 125 (47-043-03469)
Duval District, Lincoln County
West Virginia

Dear Landowner:

Enclosed are copies of various application papers that we have filed with the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas. A well work permit is being requested for the above-referenced well.

Pursuant to WV Code Chapter 22B, Article 6, you are receiving copies of this correspondence because the well or other anticipated disturbance is located on your surface property. Your rights as a landowner are detailed in the enclosed permit application papers.

No action on your part is required. If you have any questions or comments regarding this application, you may call this office at (304) 420-1119.

Very truly yours,

Diane White

Diane C. White

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Office of Oil and Gas

NOV 12 2019

Enclosures

WV Department of
Environmental Protection

47-043-03469 W

WW-9
(2/15)

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Office of Oil and Gas

API Number 47 - 043 - 03469

Operator's Well No. M A Bays 125

NOV 12 2019

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

WV Department of
Environmental Protection

FLUIDS/CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name HG Energy LLC OP Code 494497948

Watershed (HUC 10) Straight Fork Quadrangle Griffithville 7.5'

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste: NA

Will a synthetic liner be used in the pit? Yes No If so, what ml.? _____

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain No wastes anticipated, should there be any cuttings or fluids they will be hauled for disposal)

Will closed loop system be used? If so, describe: No

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. NA

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

Additives to be used in drilling medium? NA

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. None anticipated; If any, remove off site to an approved landfill

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

-Landfill or offsite name/permit number? NA

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

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

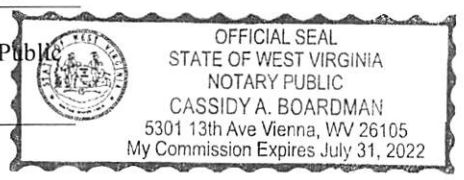
Company Official (Typed Name) Diane White

Company Official Title Agent

Subscribed and sworn before me this 1st day of October, 20 19

Cassidy Boardman Notary Public

My commission expires 7/31/2022



Form WW-9

Operator's Well No. M A Bays 125

HG Energy LLC

Proposed Revegetation Treatment: Acres Disturbed 0.1 acres Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch Straw 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

****Sediment Control Plan will be in effect at all times ****

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Jeddy Smith

Comments: _____

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Office of Oil and Gas

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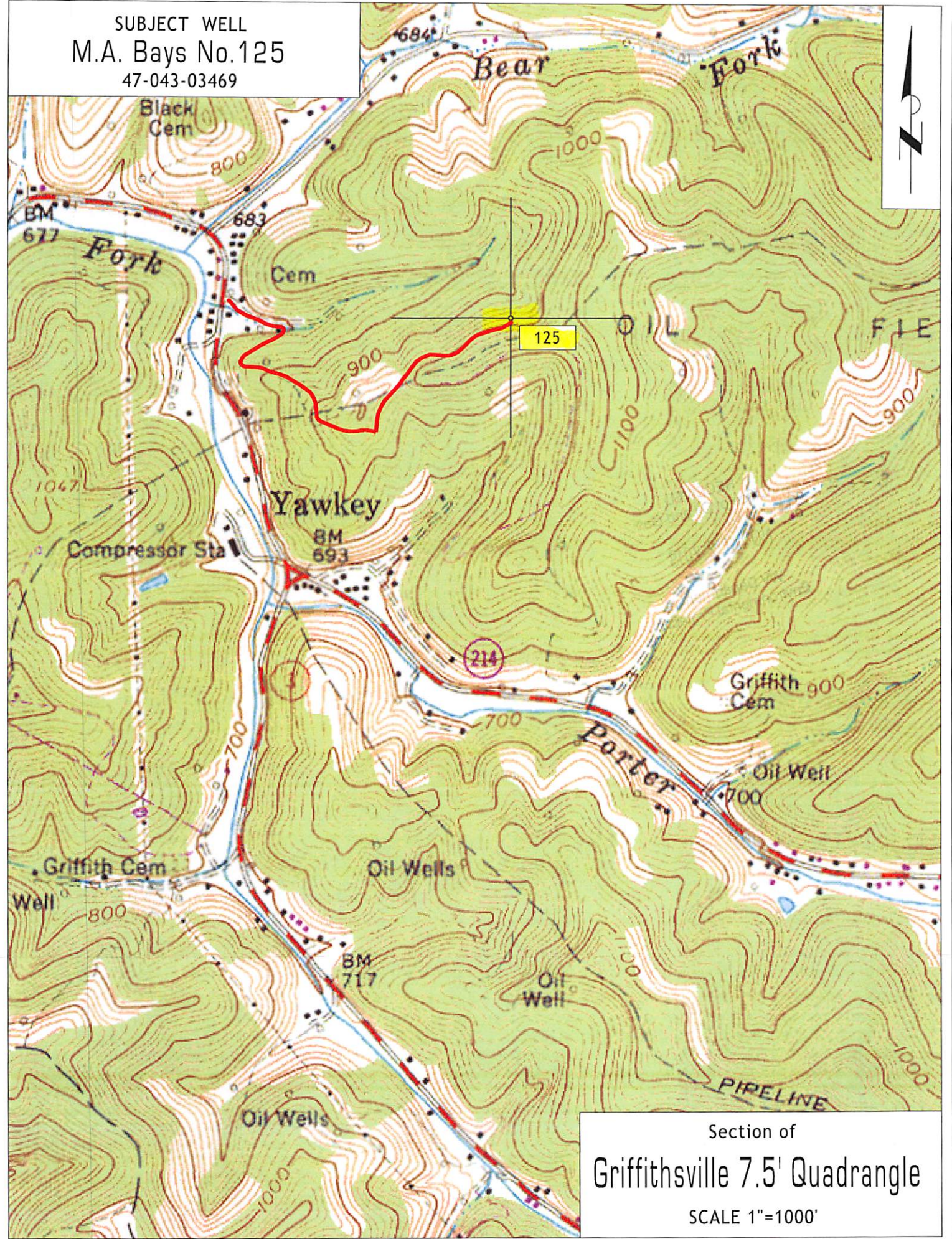
WV Department of
Environmental Protection

Title: Oil & Gas Inspector

Date: 10-11-19

Field Reviewed? Yes No

SUBJECT WELL
M.A. Bays No.125
47-043-03469



Section of
Griffithville 7.5' Quadrangle
SCALE 1"=1000'

Reclamation Plan For:

M.A. Bays No. 125

47-043-03469

NOTE:
THIS WELL WAS DRILLED IN 2014 AS PER PERMIT No.47-043-03468.
RECLAMATION WAS COMPLETED AND ALL E&S STRUCTURES ARE IN PLACE.
NO PIT WILL BE REQUIRED FOR PERMITTED WELL WORK

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

*HG Energy, LLC.
- Surface Owner*



920' of
0-5% Grade

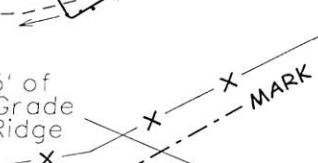
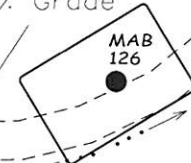
455' of
0-5% Grade
on Ridge

145' of
12% Grade

255' of
15% Grade
on Ridge

M.A. BAYS LEASE

AUSTIN GRIFFITH LEASE



*Terry & Dawna Allen
- Surface Owner*

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Office of Oil and Gas

NOV 12 2019

WV Department of
Environmental Protection

Notes:

- REQUESTED PERMIT IS FOR RECOMLETION OF EXISTING WELL.
- ALL ACCESS ROADS ARE EXISTING AND WILL BE MAINTAINED TO WVDEP STANDARDS.
- ANY DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WW-9.
- MAINTAIN SEDIMENT BARRIERS AND DRAINAGE STRUCTURES.
- DRAWING NOT TO SCALE.

Note: Drawing not to Scale

47-043-03469(1)



RECLAMATION PLAN SHOWING ROAD SYSTEMS TO BE USED FOR 2019 DRILLING PROGRAM

Lincoln County, W. Va.

GRIFFSHVILLE WATERFLOOD

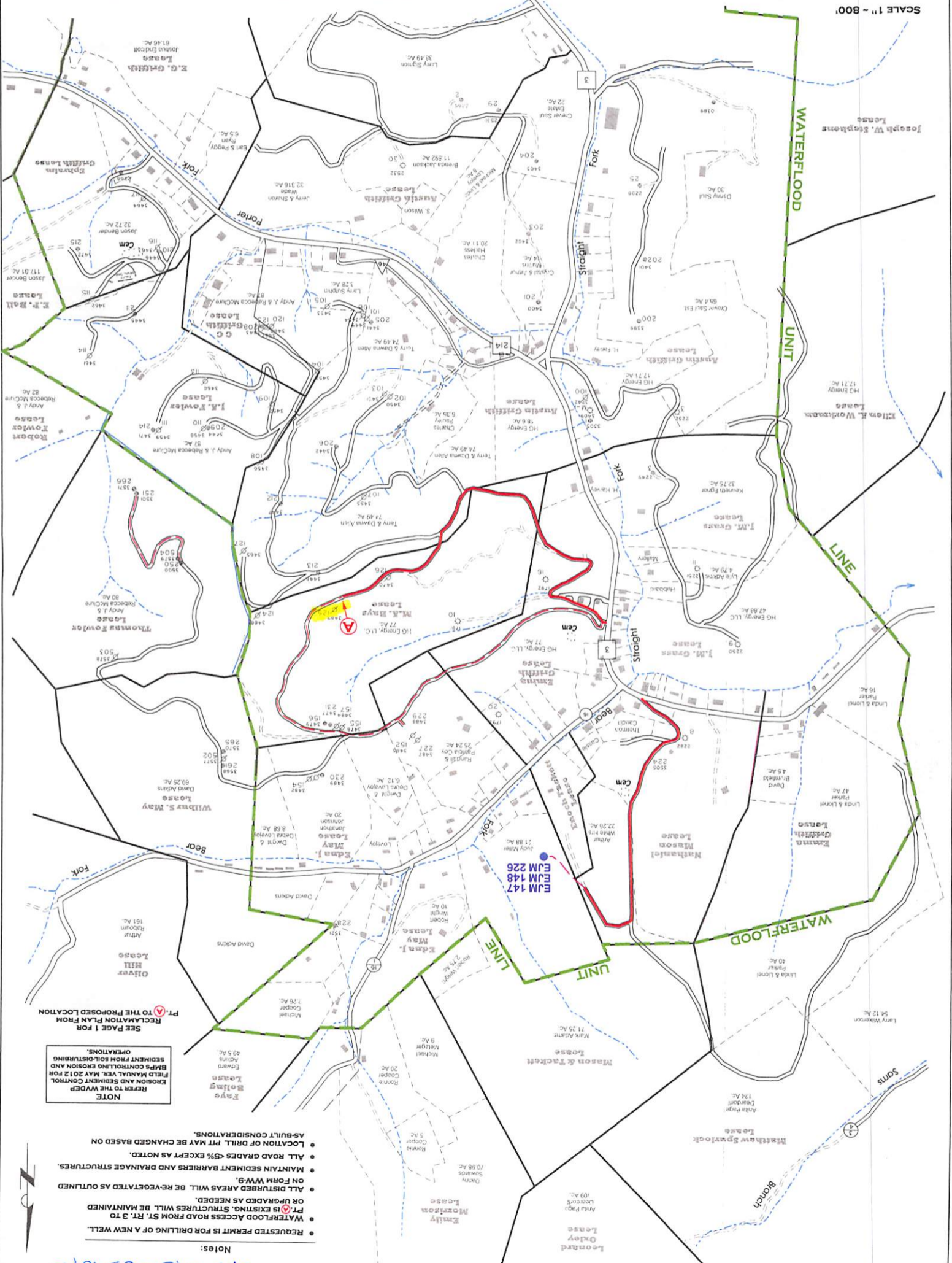
NOTES

1. REFER TO THE WVDSP 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 CONSTRUCTED UNDER CONDITIONS SET FORTH IN VARIOUS DRILLING PERMITS ISSUED BY WVDDEP-OG 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.
- LOCATION FOR PROPOSED WELLS
- WSM 265
- POTENTIAL WATER SUPPLY SOURCE TO BE DRAINED (APPROX.)

SCALE 1" = 800'



NOTE
REFER TO THE WVDSP EROSION AND SEDIMENTATION CONTROL MANUAL (VER. MAY 2012) FOR BMP'S CONTROLLING EROSION AND SEDIMENTATION FROM SOIL-DISTURBING OPERATIONS.

- Notes:**
- REQUESTED PERMIT IS FOR DRILLING OF A 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 OBTAINED ON FORM WW-9.
 - MAINTAIN SEDIMENT BARRIERS AND DRAINAGE STRUCTURES.
 - ALL ROAD GRADES <5% EXCEPT AS NOTED.
 - LOCATION OF DRILL. PT. MAY BE CHANGED BASED ON AS-BUILT CONSIDERATIONS.

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

47-043-03469W

Longitude = 81°57' 32.4"

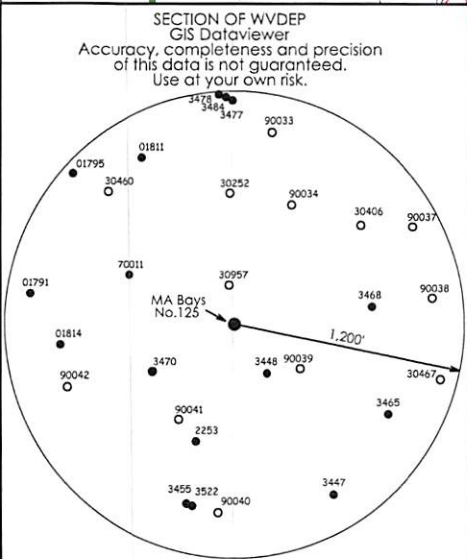
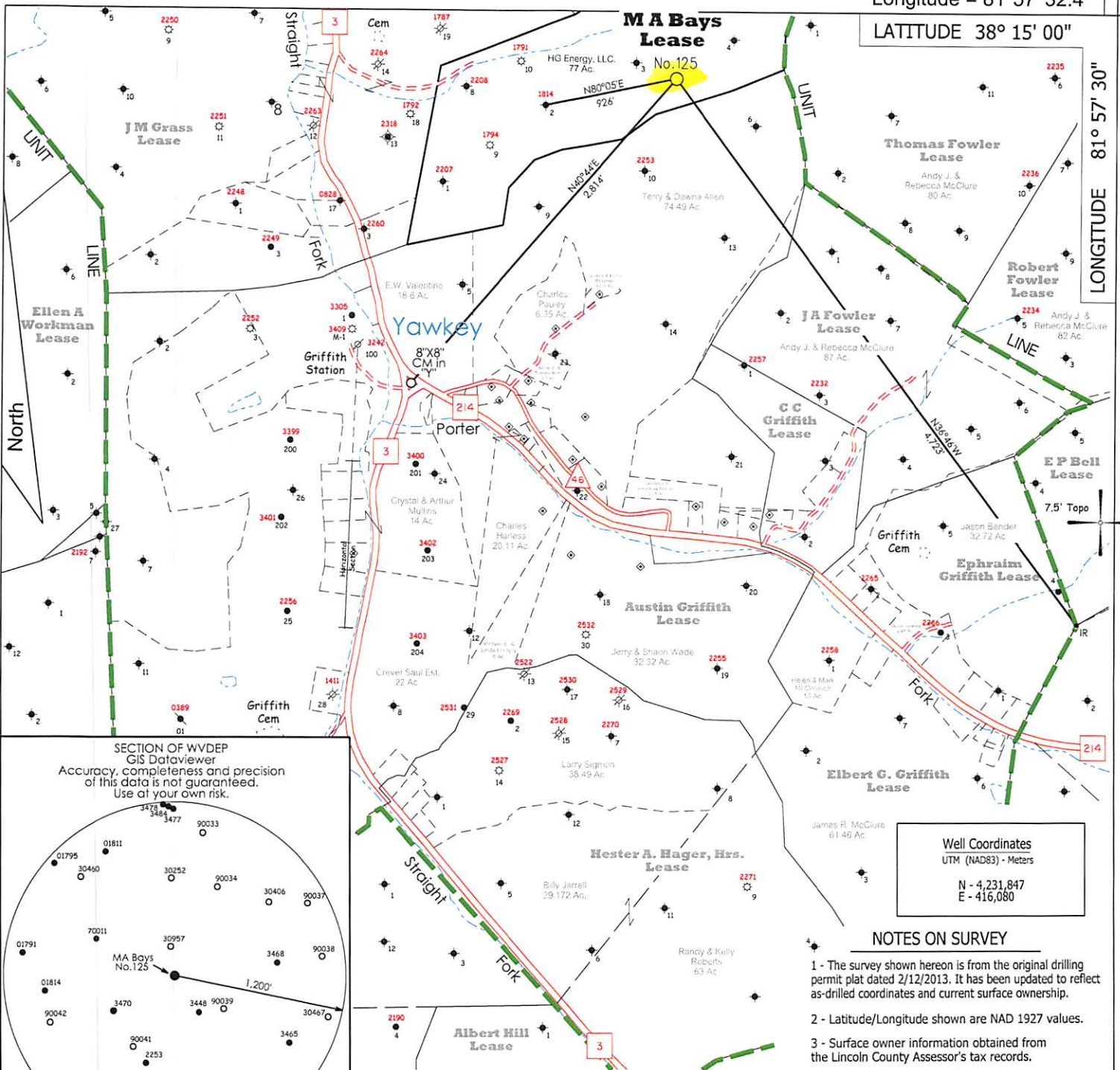
191'

LATITUDE 38° 15' 00"

LONGITUDE 81° 57' 30"

7,061'

Latitude = 38° 13' 50.2"



Well Coordinates
 UTM (NAD83) - Meters
 N - 4,231,847
 E - 416,080

NOTES ON SURVEY

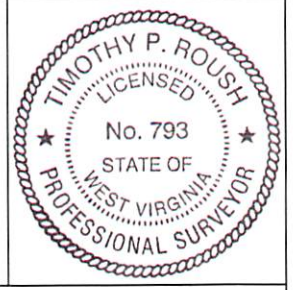
- 1 - The survey shown hereon is from the original drilling permit plat dated 2/12/2013. It has been updated to reflect as-drilled coordinates and current surface ownership.
- 2 - Latitude/Longitude shown are NAD 1927 values.
- 3 - Surface owner information obtained from the Lincoln County Assessor's 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. _____
 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

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

LOCATION: ELEVATION 985' WATERSHED Straight Fork
 DISTRICT Duval COUNTY Lincoln
 QUADRANGLE Griffithsville 7.5'

SURFACE OWNER HG Energy, LLC ACREAGE 77 Ac.
 OIL & GAS ROYALTY OWNER HG Energy, LLC, et al LEASE ACREAGE 77 Ac.
 LEASE NO. 71033-50

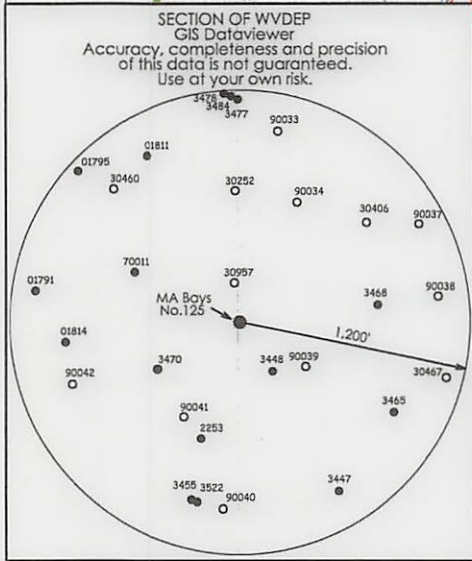
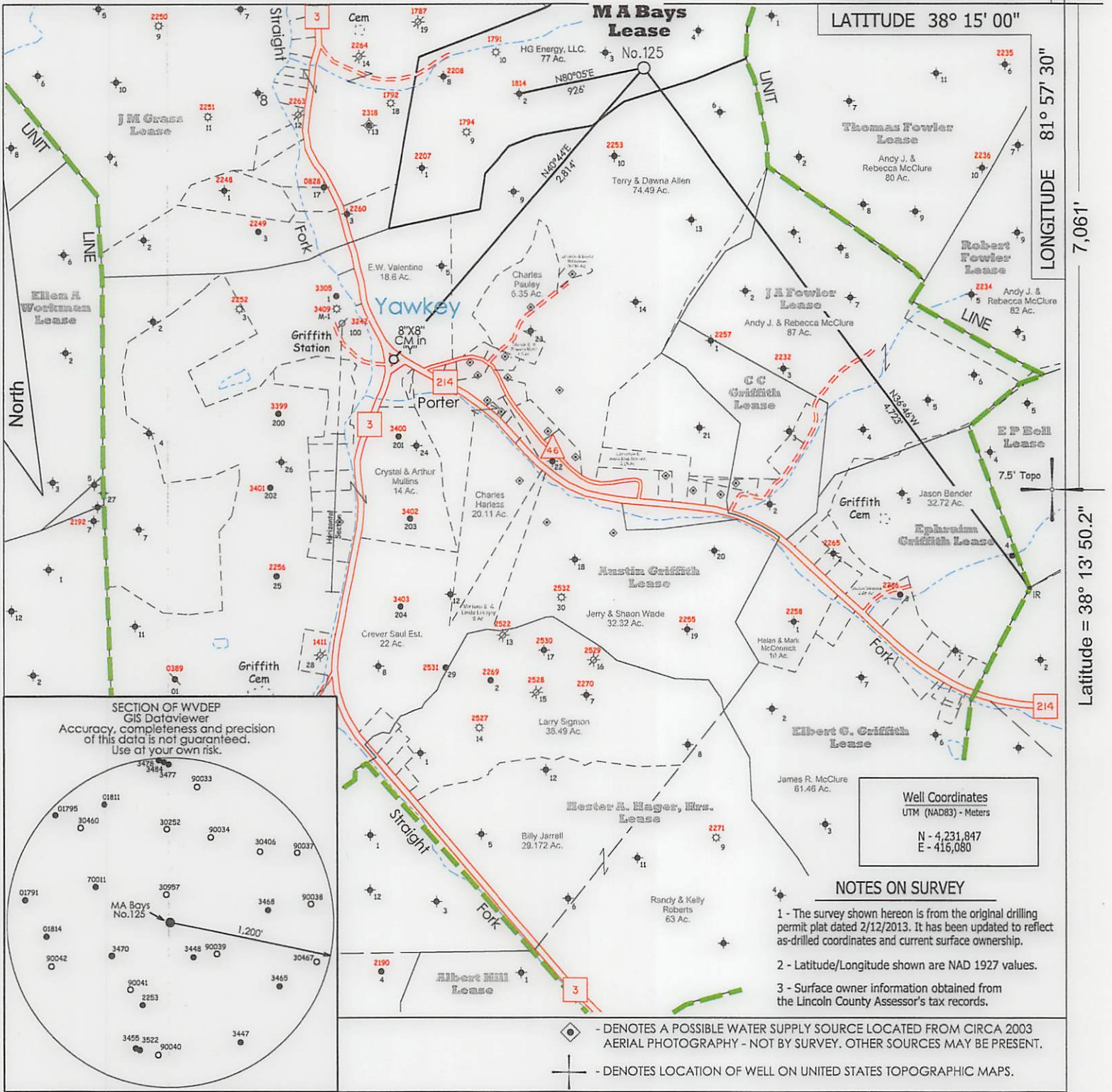
PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
 STIMULATE PLUG OFF OLD FORMATION ___ PERFORATE NEW
 FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Berea ESTIMATED DEPTH 2,600'

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

DATE September 4, 2019
 FARM M.A. Bays No.125
 API WELL NO. 47 - 043 - 03469W

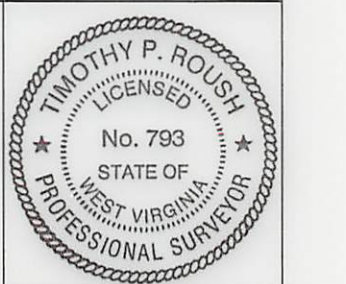
FORM IV-6



FILE NO. _____
 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) *[Signature]*
 TIMOTHY P. ROUSH PS 793



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

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

LOCATION: ELEVATION 985' WATERSHED Straight Fork
 DISTRICT Duval COUNTY Lincoln
 QUADRANGLE Griffithsville 7.5'

SURFACE OWNER HG Energy, LLC ACREAGE 77 Ac.
 OIL & GAS ROYALTY OWNER HG Energy, LLC., et al LEASE ACREAGE 77 Ac.
 LEASE NO. 71033-50

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 2,600'

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