



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 31, 2015

WELL WORK PERMIT

Vertical Well

This permit, API Well Number: 47-8704770, 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: P.A. BAYS 209
Farm Name: NIDAY, ORLANDO B.
API Well Number: 47-8704770
Permit Type: Vertical Well
Date Issued: 03/31/2015

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 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.

WW - 2B
(Rev. 8/10)

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

1) Well Operator: HG Energy, LLC
Operator ID: 494497948 County: Roane District: Smithfield Looneyville 7.5'

2) Operator's Well Number: P. A. Bays 209 3) Elevation: 1162'

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

5) Proposed Target Formation(s): Big Injun Proposed Target Depth: TVD 2280', TMD 2730'

6) Proposed Total Depth: 2730' TMD Feet Formation at Proposed Total Depth: Big Injun

7) Approximate fresh water strata depths: 450'

8) Approximate salt water depths: 1675'

9) Approximate coal seam depths: NA

10) Approximate void depths, (coal, Karst, other): NA

11) Does land contain coal seams tributary to active mine? NA

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)
Drill and stimulate production well in the Big Injun. Stimulation will be small hydraulic fracture.

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	
Conductor						
Fresh Water	7"	LS ST&C	17#	575'	575'	CTS
Coal						
Intermediate						
Production	4 1/2"	J-55	10.5#	2690'	2690'	RECEIVED 200 SKS Office of Oil and Gas
Tubing						
Liners						FEB 20 2015

Packers: Kind: _____
Sizes: _____
Depths Set _____

WV Department of Environmental Protection

WW-2A
(Rev. 6-14)

1). Date: February 6, 2015
2.) Operator's Well Number P. A. Bays 209
State County Permit
47- Roane -

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 Orland B. Niday
5) (a) Coal Operator Name

1917
1918
1919

1920
1921
1922

8704770

7014 0510 0000 4074 5415

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

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

PAB 209

Sent To Orland B. Niday

Street, Apt. No.;
or PO Box No. 184 Parkersburg Road

City, State, ZIP+4 Spencer, WV 25276

PS Form 3800, August 2006 See Reverse for Instructions



2934 56-250/42 02

DATE 2-10-2015

PAY TO THE ORDER OF WV D.E.P.

HG ENERGY, LLC 03-11
 304-422-6665
 5260 DUPONT RD
 PARKERSBURG, WV 26101

\$ 650.00 DOLLARS

Six Hundred Fifty Dollars and 00/100

Peoples BANK
 Working Together. Building Success.
 800.374.6123
peoplesbankcorp.com

FOR Permit P A Bays # 209

Orland B. Niday

RECEIVED
 Office of Oil and Gas
 FEB 20 2015
 WV Department of
 Environmental Protection

WW-2A1
(Rev. 1/11)

Operator's Well Number PA Bays 209

**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
-----------------------	-----------------------	---------	-----------

- See attached-

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

RECEIVED
Office of Oil and Gas

Well Operator: Diane White
 By: Its: HG Energy, LLC FEB 20 2015
Diane White, Agent

WV Department of
Environmental Protection

Form WW-2A(1)
(10/10)

Operator's Well No. P. A. Bays No. 209

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:

<u>Grantor, Lessor, etc.</u>	<u>Grantee, Lessee, etc.</u>	<u>Royalty</u>	<u>Book/Page</u>
P. A. and Louise Bays	South Penn Oil Company	1/8	15/542

Merger and Conveyance dated July 3, 1963, from South Penn Oil Company to Penzoil Company, Kanawha County, Book 153, Page 35,

Assignment, Conveyance and Bill of Sale dated December 28, 1998, from Penzoil Company to Pennz Energy Exploration and Production, Wetzel County, Book 12, Page 177.

Certificate of Merger filed with the WV Secretary of State, December 31, 1999, whereby Pennz Energy Exploration and Production, successor in interest to; to Penzoil Company, merged with Devon Energy Production Company, LP, Wetzel County, Book 12, Page 278.

Deed, Assignment and Bill of Sale dated June 1, 2000, from Devon Energy Production Company, LP to East Resources, Inc., recorded in Wetzel County, Book 370, Page 580.

Assignment, Conveyance and Bill of Sale, dated January 1, 2011, from East Resources, Inc., to HG Energy, LLC, Wetzel County, Book 118A, Page 253.

Upon information and belief, Operator's lease and/or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including the use of access roads, pipelines and utilities.

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

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WV Division of Water and Waste Management
WV Division of Natural Resources
WV Division of Highways
U.S. Army Corps of Engineers
US Fish and Wildlife Service
County Floodplain Coordinator

RECEIVED
Office of Oil and Gas

FEB 20 2015

Well Operator: HG Energy, LLC

By: Diane C. White
Its: Agent

Diane White
WV Department of
Environmental Protection

WW-2B1
(5-12)

Well No. P. A. Bays No. 209

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 Sturm Environmental
Sampling Contractor Sturm Environmental

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 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.

Surface Owners with Water Sources Identified for Sampling / Analyzing

SEE TOPO
MAP

- * Richard Fisher
4513 Clay Road
Spencer WV 25276
- * Casie Roberts
4454 Clay Road
Spencer WV 25276

- * Brenda Chadwell
4530 Clay Road
Spencer WV 25276

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Office of Oil and Gas

FEB 20 2015

West Virginia Department of Environmental Protection

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name HG Energy, LLC OP Code 494497948

Watershed (HUC 10) Laurel Fork Quadrangle Looneyville 7.5'

Elevation 1162' County Roane District Smithfield

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

Will a pit be used for drill cuttings? Yes X No _____

If so, please describe anticipated pit waste: Fluids encountered while drilling subject well

Will a synthetic liner be used in the pit? Yes X No _____ If so, what ml.? 20 mil

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number 25-561)
- _____ Reuse (at API Number _____)
- _____ Off Site Disposal (Supply form WW-9 for disposal location)
- _____ Other (Explain _____)

Will closed loop system be used? No

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

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

Additives to be used in drilling medium? Water, soap, KCl

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 6th day of February, 2015 WV Department of Environmental Protection
[Signature] Notary Public

My commission expires Oct. 4, 2016

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S DIANNE DUNN
6255 Rockwell Road
Parkersburg, West Virginia 26101
My Commission Expires Oct 4, 2016



8704770

Form WW-9

Operator's Well No. PA Bays 209

Proposed Revegetation Treatment: Acres Disturbed 1.2 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 should 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

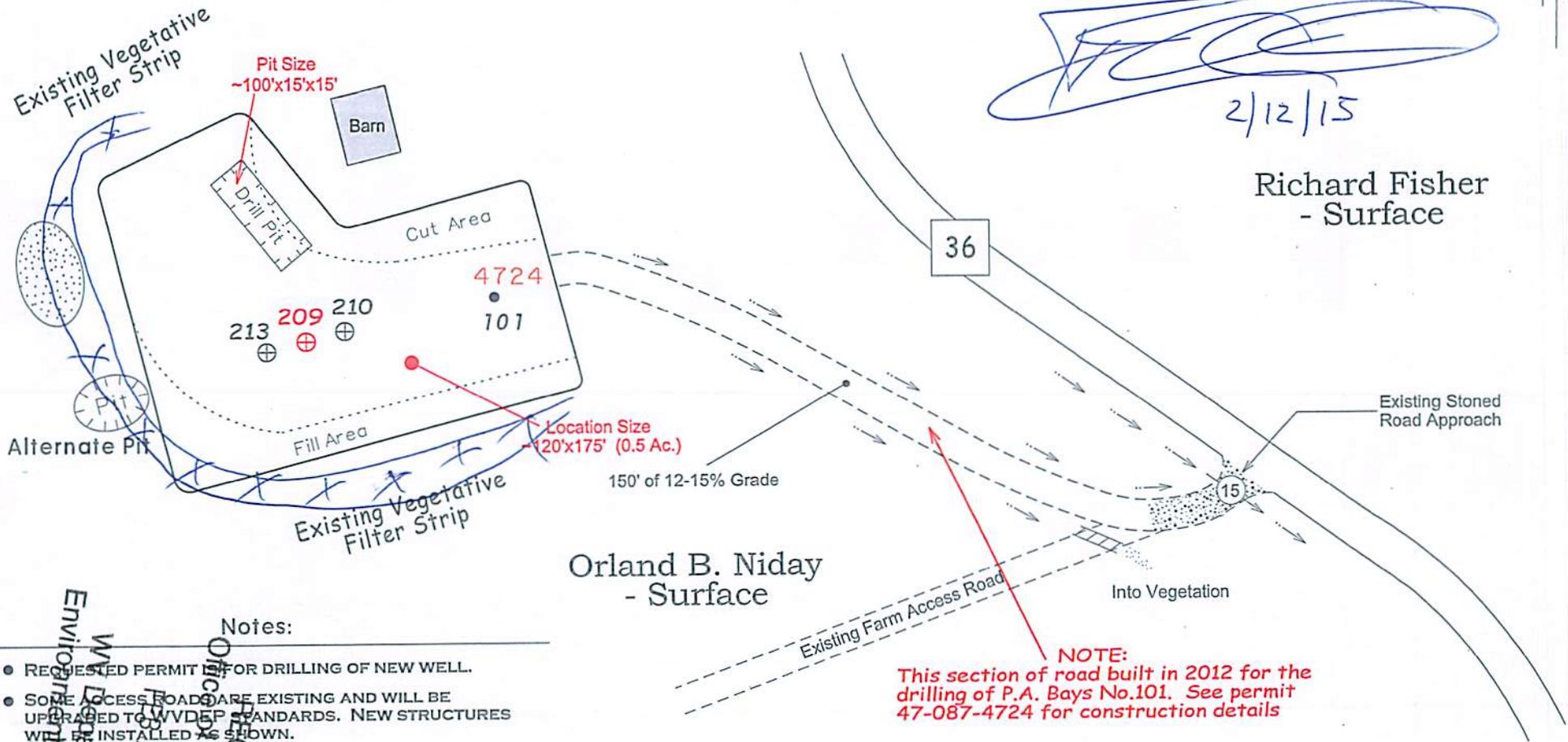
Date: 2/12/15

Field Reviewed? Yes No

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Office of Oil and Gas
FEB 20 2015
WV Department of
Environmental Protection

Reclamation Plan For:

P.A. Bays No. 209 Charles McGraw No. 210 & Elkannah Smith No. 213



Richard Fisher
- Surface

Orland B. Niday
- Surface

Notes:

- REQUESTED PERMIT FOR DRILLING OF NEW WELL.
- SOME ACCESS ROADS ARE EXISTING AND WILL BE UPGRADED TO WVDEP STANDARDS. NEW STRUCTURES WILL BE INSTALLED AS SHOWN.
- STOCKPILE TOPSOIL AT RE-DRESSING LOCATION DURING RECLAMATION.
- ALL DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WV-9.
- WHERE POSSIBLE, OIL, GAS AND WATER PIPELINES AND ELECTRIC LINES WILL BE INSTALLED WITHIN ACCESS ROAD LOD'S UNDER THIS PERMIT
- 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.

NOTE:
This section of road built in 2012 for the drilling of P.A. Bays No.101. See permit 47-087-4724 for construction details

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

RECEIVED
 Office of Grand
 WVDEP
 Environmental
 Director
 2/12/15

8704770

SUBJECT WELL
P.A. Bays No.209



◆ Denotes Potential Water Supply Source and Surface Owner (From Aerial Photography)

FEB 2 2015
Section of
Looneyville 7.5' Quadrangle
U.S. Department of
Environmental Protection
SCALE 1"=1000

(BOT. HL: LON:-81°17'02.3")

LON: -81°16'55.5"

9155'

LON: 81°15'00"

14285'

LAT: 38°42'38.8"

(BOTTOM HOLE: LAT:38°42'41.4")

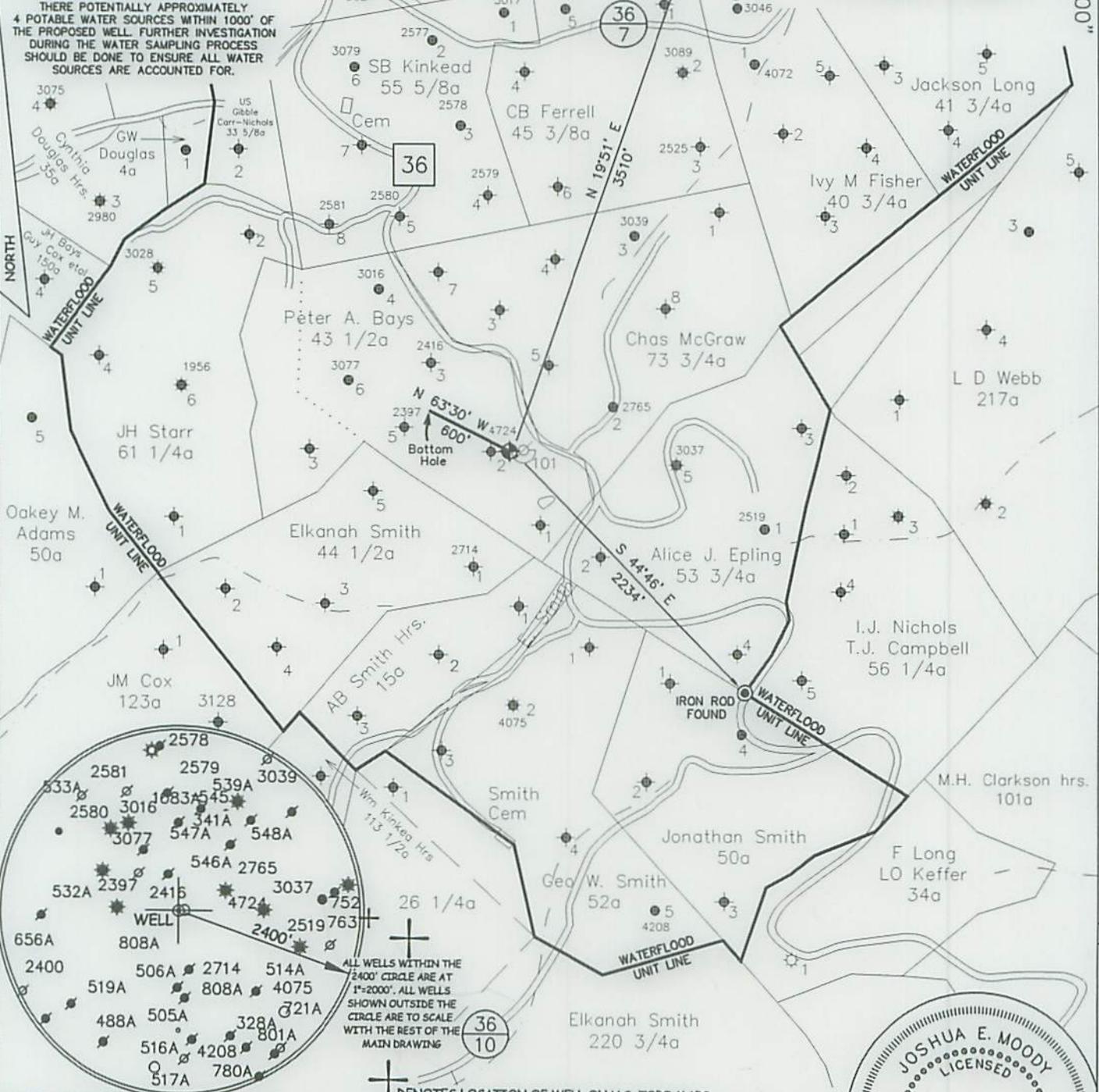
- SURVEY NOTES**
- 1 - Well ties and Latitude and Longitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1927).
 - 2 - Surface owners and adjoining information obtained from the Roane County Assessor's tax records.
 - 3 - No Title Opinion was provided to the Surveyor during this survey. This survey is subject to a complete title Opinion.
 - 4 - Existing well spots from HGE or Seneca Tech, Inc. data

UTM Coordinates (Zone 17N-NAD 1983)	
Surface	N-4,284,730m. E-475,489m.
Bottom Hole	N-4,284,812m. E-475,325m.

LOCATION REFERENCES	
MAGNETIC BEARING	
N 35° E 92.0'	S.W. BARN CORNER
S 89° E 92.0'	BAYS WELL #101

LAT: 38°45'00"

MAP OF H.G. ENERGY, LLC -WATERFLOOD UNIT- P.A. BAYS 209



JOB # 14-033
DRAWING # 14CLOVER FOLDER
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEV. 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 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
DATE 12/15/14
OPERATOR'S WELL
P.A. BAYS # 209

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 1162' WATERSHED LAUREL FORK
DISTRICT SMITHFIELD COUNTY ROANE
QUADRANGLE LOONEYVILLE 7.5'

RECEIVED
API WELL # 47
Office of Oil and Gas
STATE COUNTY PERMIT
FEB 20 2015

SURFACE OWNER ORLANDO B. NIDAY ACREAGE 16.56 ACRES +/-
OIL & GAS ROYALTY OWNER IRIS M. NIDAY ET AL LEASE ACREAGE 43.50 ACRES +/-
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE
STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WELL WILL BE DRILLED DIRECTIONALLY (N 63°30' W 600')
PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION BIG INJUN
WELL OPERATOR H.G. ENERGY, LLC
ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101

ESTIMATED DEPTH TVD=2,280' MD=2,730'
DESIGNATED AGENT DIANE WHITE
ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101

PARKERSBURG, WV 26101
 ADDRESS 5260 DUPONT ROAD
 WELL OPERATOR H.G. ENERGY, LLC
 TARGET FORMATION BIG INJUN
 PLUG & ABANDON CLEAN OUT & REPLUG
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WELL WILL BE DRILLED DIRECTIONALLY (N 83.30° W 600')
 STIMULATE X PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR
 OIL & GAS ROYALTY OWNER IRIS M. NIDAY ET AL
 SURFACE OWNER ORLANDO B. NIDAY
 QUADRANGLE LOONEYVILLE 7.5,
 DISTRICT SMITHFIELD
 COUNTY ROANE
 STATE COUNTY PERMIT
 OFFICE OF OIL AND GAS
 WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 RECEIVED
 Office of Oil and Gas
 47
 PERMIT

PARKERSBURG, WV 26101
 ADDRESS 5260 DUPONT ROAD
 DESIGNATED AGENT DIANE WHITE
 ESTIMATED DEPTH TVD=2,280', MD=2,730'
 LEASE # 74936-20
 COUNTY NAME
 STATE COUNTY PERMIT
 OFFICE OF OIL AND GAS
 WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 RECEIVED
 Office of Oil and Gas
 47
 PERMIT

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 MAPPING GRADE GPS
 PROVEN SOURCE OF ELEV.
 ACCURACY 1/200
 MINIMUM DEGREE OF
 SCALE 1" = 100'
 DRAWING # 14-033
 JOB # 14-033

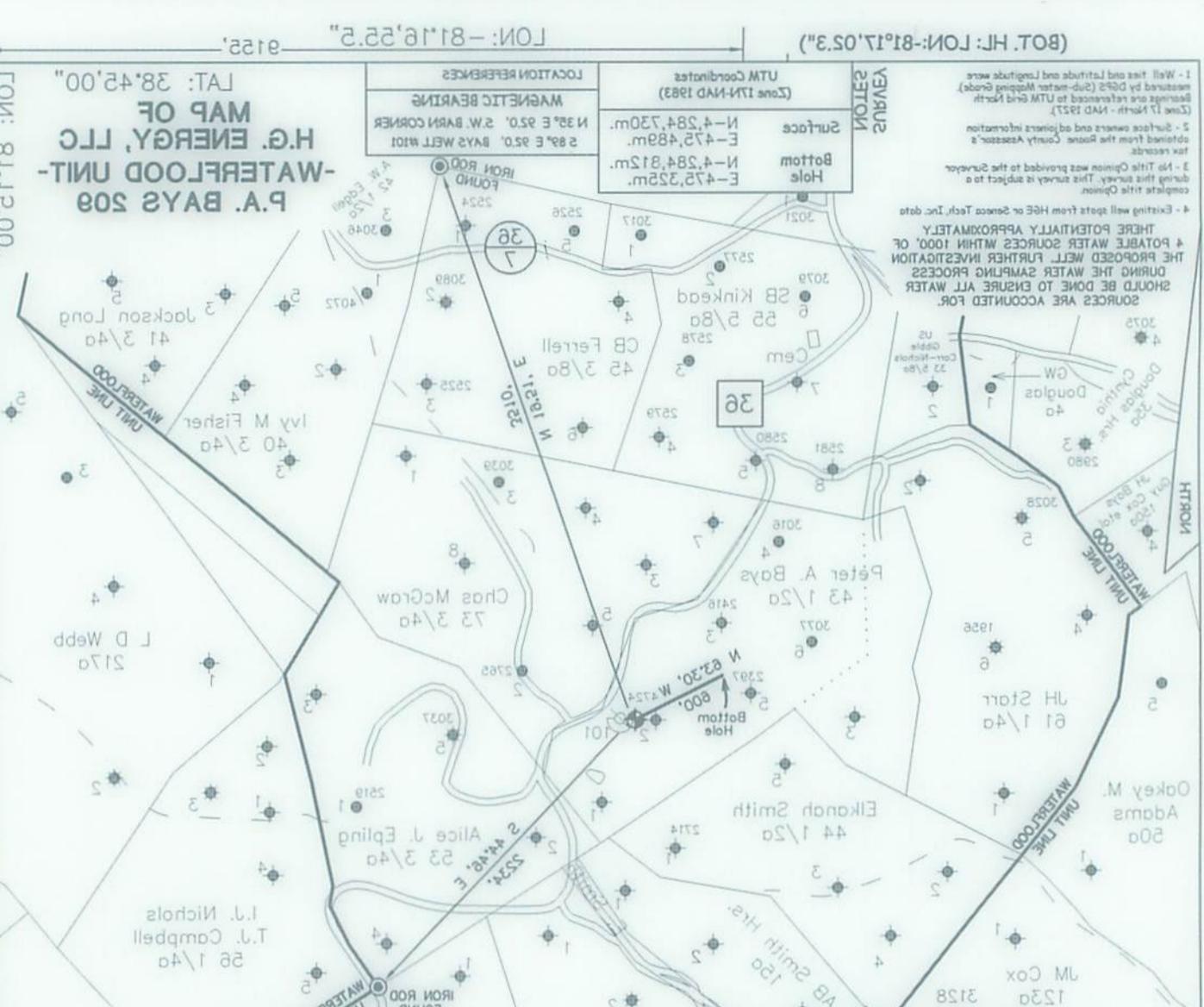
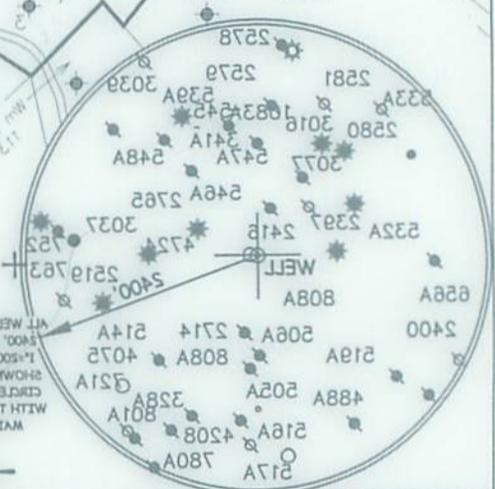
ST. MARYS, WV 26120
MOODY LAND SURVEYING, LLC
OFFICE OF OIL AND GAS
OF ENVIRONMENTAL PROTECTION,
WEST VIRGINIA DEPARTMENT



THE DEPARTMENT OF ENVIRONMENTAL PROTECTION
 REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PERSCRIBED BY
 THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION
 I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO
 DENOTES LOCATION OF WELL ON U.S. TOPO MAPS.



P.A. BAYS # 209
 OPERATOR'S WELL
 DATE 12/12/14
 JOSHUA E. MOODY, P.S. 2020



1 - Well ties and latitudes and longitudes were measured by GPS (2nd-order mapping grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1983).
 2 - Surface owners and adjacent information obtained from the Roane County Assessor's tax records.
 3 - A title opinion was provided to the surveyor during the survey. This survey is subject to a complete title opinion.
 4 - Existing well spots from HEC or Geacra Tech, Inc. data. THERE POTENTIALLY APPROXIMATELY 4 POTABLE WATER SOURCES WITHIN 1000' OF THE PROPOSED WELL. FURTHER INVESTIGATION DURING THE WATER SAMPLING PROCESS SHOULD BE DONE TO ENSURE ALL WATER SOURCES ARE ACCOUNTED FOR.

UTM Coordinates (Zone 17N-NAD 1983)	LOCATION REFERENCES
Surface N-4284,730m E-475,489m	MAGNETIC BEARING N 35° E 95.0', S.W. BARN CORNER S 89° E 95.0', BAYS WELL W101
Bottom Hole N-4284,812m E-475,325m	

LAT: 38.45.00"
 LON: 81.12.00"
 MAP OF
H.G. ENERGY, LLC
-WATERFLOOD UNIT-
P.A. BAYS 209

8704770



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

CK 2934
650.00

February 6, 2015

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

RE: P. A. Bays No. 209
Smithfield District, Roane County
West Virginia

Dear Mr. McLaughlin:

Enclosed are the Forms WW-2A, WW-2A (1), WW-2B, WW-9, WW-2(B1), mylar of plat, reclamation plan, topo map and copy of the certified mailing receipt for a permit to drill the above-captioned shallow, producing well. Our check in the amount of \$650 is attached.

If you have any questions regarding this application, please call me at 304-420-1119.

Very truly yours,

Diane White

Diane C. White

Enclosures

cc: Orland B. Niday - Certified
Ed Gainer - Inspector

RECEIVED
Office of Oil and Gas
FEB 20 2015
WV Department of
Environmental Protection

1000

1000

1000

RECEIVED
BUREAU OF OIL AND GAS
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