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

July 17, 2013

WELL WORK PERMIT

Secondary Recovery Well

This permit, API Well Number: 47-3305754, 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: T.J. CHAPLAIN #132
Farm Name: MYERS, ORVILLE ET AL.
API Well Number: 47-3305754
Permit Type: Secondary Recovery Well
Date Issued: 07/17/2013

Promoting a healthy environment.

PERMIT CONDITIONS

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

CONDITIONS

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

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

3. Pursuant to 35 CSR § 4-19.1.c, if the operator is unable to sample and analyze any water well or spring within one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.

4. All pits must be lined with a minimum 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. No land application of pit fluids.

33057545

WW-3B
10/07

1) Date May 14, 2013
2) Operator's Well No. T. J. Chaplain No. 132
3) API Well No. 47 - 033 -
State County Permit
4) UIC Permit No. UIC2R03301AP

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 X Gas Injection (not storage) ____ Waste Disposal ____

6) LOCATION: Elevation 1366' Watershed Branch of Lick Run
District Tenmile 09 County Harrison 33 Quadrangle Wolf Summit 7.5' 692

7) WELL OPERATOR: HG Energy, LLC 494497948
5260 Dupont Road
Parkersburg, WV 26101

8) DESIGNATED AGENT: Mike Kirsch
5260 Dupont Road
Parkersburg, WV 26101

9) OIL & GAS INSPECTOR TO BE NOTIFIED:
Name Sam Ward
Address P. O. Box 2327
Buckhannon, WV 26201

10) DRILLING CONTRACTOR:
Name
Address

11) PROPOSED WELL WORK: Drill X Drill Deeper ____ Redrill ____ Stimulate X
Plug Off Old Formation ____ Perforate New Formation ____ Convert ____
Other Physical Change in Well (specify) ____

12) Geological target formation Fifth Sand Depth 3,010 Ft. (Top) to 3,016 Ft. (Bottom)

13) Estimated depth of completed well (or actual depth of existing well) 3050' TVD 3150' TMD Ft.

14) Approximate water strata depths: Fresh 250 Ft. Salt 1,635 Ft.

15) Approximate coal seam depths: 600 Ft.

16) Is coal being mined in the area? ____ Yes X No

17) Virgin reservoir pressure in target formation: 1,250 psig. Source Estimated

18) Estimated reservoir fracture pressure: 2,650 psig.

19) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour 25 BBL Bottom Hole Pressure 2,400 psi

20) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES and other chemicals as needed to maintain water quality and improve oil recovery. Fresh water, produced water, bactericides

21) FILTERS (IF ANY) Cartridge filters and/or coal bed filters

22) SPECIFICATION FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL

23) CASING AND TUBING PROGRAM

SDW 5/23/2013

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILLUP OR SACKS (CU. FT.)	PACKERS
	Size	Grade	Weight	New	Used	For Drilling	Left in Well		
Conductor									Kinds
Fresh Water	7"	L.S.	17#	X		675'	675'	Cement to Surface	Tension
Coal									Sizes
Intermediate									2.375" x 4.5"
Production	4 1/2"	J-55	10.5#	X		3150'	3150'	150 sacks CTS	Depths Set
Tubing	2 3/8"	J-55	4.6 #	X		2850'	2850'		2750'
Liners									Perforations
									Top Bottom

24) APPLICANTS OPERATING RIGHTS were acquired from Josephine K. Myers
by Deed ____ Lease X Other Contract ____ Dated February 28, 1994 of record in the
Harrison County Clerk's Office in ____ Book 1248 at Page 928

Received
Office of Oil & Gas
MAY 27 2013

33057545

WW-3A
10/07

1) Date: May 14, 2013
2) Operator's Well No. T. J. Chaplain No. 132
3) API Well No. 47 033 -
State County Permit
4) UIC Permit No. UIC2R03301AP

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

Check #2208 $650.00

5) Surface Owner(s) To Be Served
(a) Name Orville Myers ✓
Address RR 4, Box 531
Salem, WV 26426
(b) Name Brian V. Huffman ✓
Address RR 4, Box 530
Salem, WV 26426
(c) Name
Address

6) Inspector Sam Ward
Address P. O. Box 2327
Buckhannon, WV 26201
Telephone 389-7583

7 (a) Coal Operator
Name NA
Address

7 (b) Coal Owner(s) With Declaration Of Record
Name NA
Address

Name
Address

7(c) Coal Lessee With Declaration Of Record
Wolf Run Mining Co. ✓
2708 Cranberry Square
Morgantown, WV 26505

TO THE PERSON(S) 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 To be determined

THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON FORM WW-3(A) DESIGNATED TO YOU. HOWEVER YOU ARE NOT REQUIRED TO TAKE ANY 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."

Received Office of Oil & Gas MAY 27 2013

Well Operator HG Energy, LLC
Address 5260 Dupont Road
Parkersburg, WV 26101

By: Diane C. White
Its: Accountant

Signature Diane White

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at: depprivacyofficer@wv.gov

33057545

WW-2B1 Well No. T. J. Chaplain No. 132

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:

X 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

Received
Office of Oil & Gas
MAY 27 2013

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.

Requests for Water Sampling were initiated 4/19/13 with the first permit applications of this group of 30 applications. Water testing/analysis was requested for:

Earl & Belva Junkins RR 5, Box 1226 Salem, WV 26426	Brian Huffman RR 4, Box 530 Salem, WV 26426	Susan Junkins RR 2, Box 119A Bristol, WV 26426	Gary Winters & Ruth Kennedy RR 2, Box 119 Bristol, WV 26426	Claude & Jean Tetrick RR 2, Box 40 Bristol, WV 26426
John & Brenda Scotchie RR 2, Box 42 Salem, WV 26426	Linda Smith 9046 Westville Drive Camden Wyoming, DE 19934	Dennis McAvey RR 2, Box 41 Bristol, WV 26332	Mazza Donna Devericks RR 2, Box 80 Bristol, WV 26332	

33057545

Form WW-9
Rev. 10/94

API Number 47- 033 -

Operator's Well No. T. J. Chaplain No. 132

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 HG Energy, LLC OP Code 494497948

Watershed Branch of Lick Run Quadrangle Wolf Summit 7.5'

Elevation 1366' County Harrison District Tenmile

Description of anticipated Pit Waste: Fluids encountered in drilling shallow well.

Do you anticipate more than 5,000 bbls of water to complete the proposed well worl Yes ____ No X

Will a synthetic liner be used in pit? Yes If so, what mil.? ~~10 Mil.~~ 20 MIL

Proposed Disposal Method For Treated Pit Wastes:

~~X~~ Land Application HAUL PIT WATER.

____ Underground Injection (UIC Permit Number ____)

____ Reuse (at API Number ____)

____ Off Site Disposal (Supply Form WW-9 for disposal location)

____ Other (Explain ____)

SDW 5/23/2013

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

- If oilbased, what type? Synthetic, petroleum, etc. NA

Additives to be used? Water, Soap, KCI

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc.

- 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 C White

Company Official (Typed Name) Diane C. White

Company Official Title Accountant

Subscribed and sworn before me this 15 day of MAY 2013

Tina L Pett Notary Public

My commission expires NOV. 12, 2018

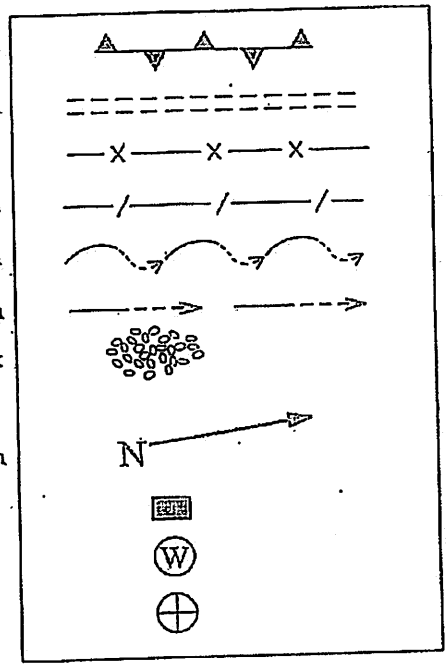
Received
Office of Oil & Gas
MAY 27 2013

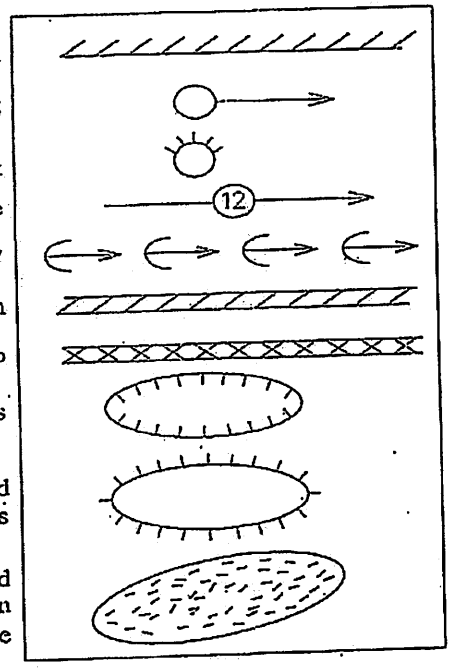
Form WW-9

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
TINA L. PETHTEL
HG Energy, LLC
5260 Dupont Road
Parkersburg, West Virginia 26101
My Commission Expires Nov. 12, 2018

33057545

Legend





Proposed Revegetation Treatment: Acres Disturbed

Area I
Approx. 1.5 Ac.

Area II
Approx. 1.0 Ac.

Prevegetation pH _____

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

Area I (Location)

Seed Type	Lbs/Ac.
Tall Fescue	40
Ladino Clover	5

Area II (Road)

Seed Type	Lbs/Ac.
Tall Fescue	40
Ladino Clover	5

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

Plan approved by: Sam DiWanetti

Comments: Pre-seed+mulch. Upgrade E+S as necessary per WV DEP E+S Manual

Title: Oil & Gas Inspector

Date: 5/23/2013

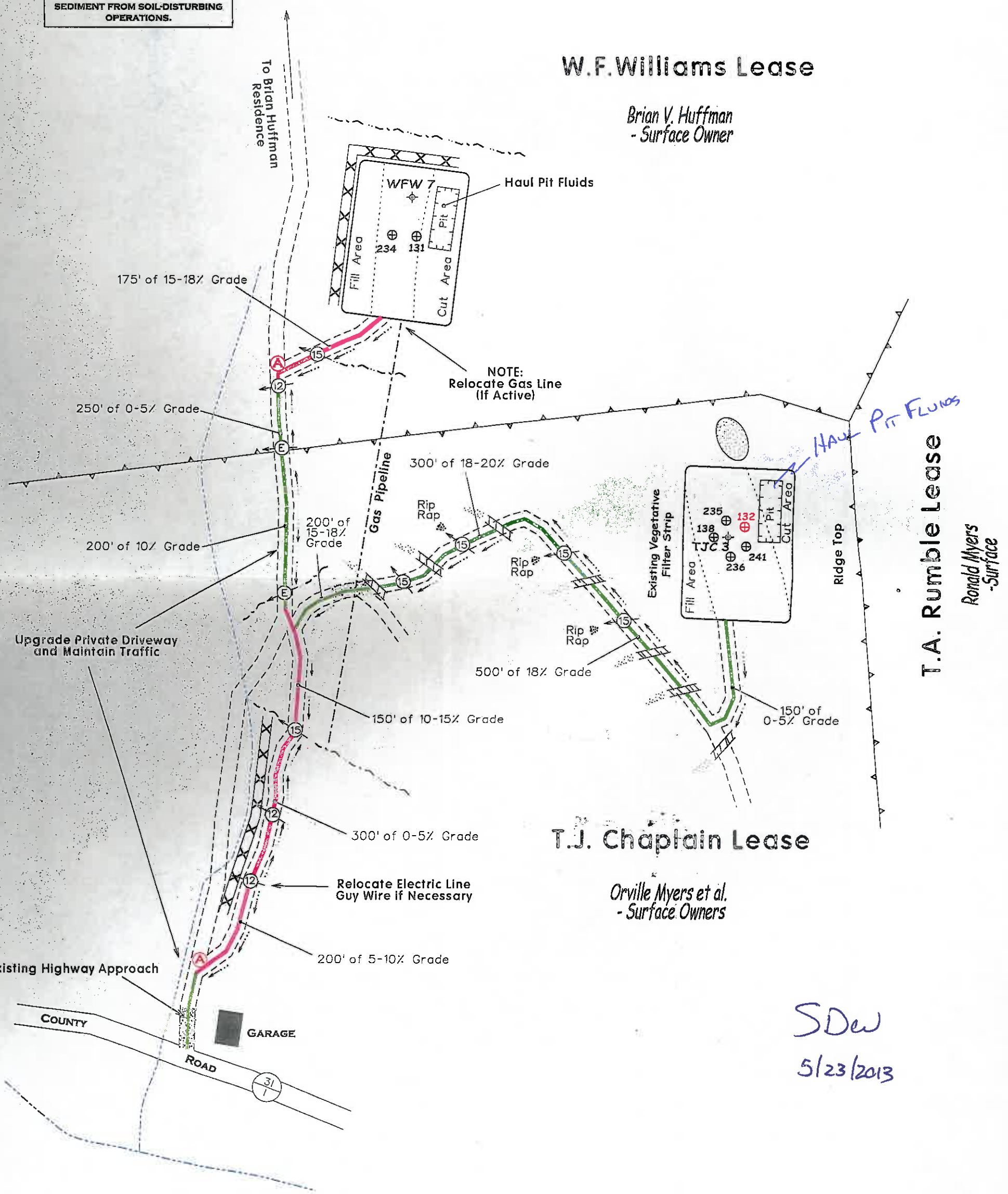
Field Reviewed? (X) Yes ( ) No

3305 7545

Reclamation Plan For:

T.J. Chaplain No. 132

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



SDW
5/23/2013

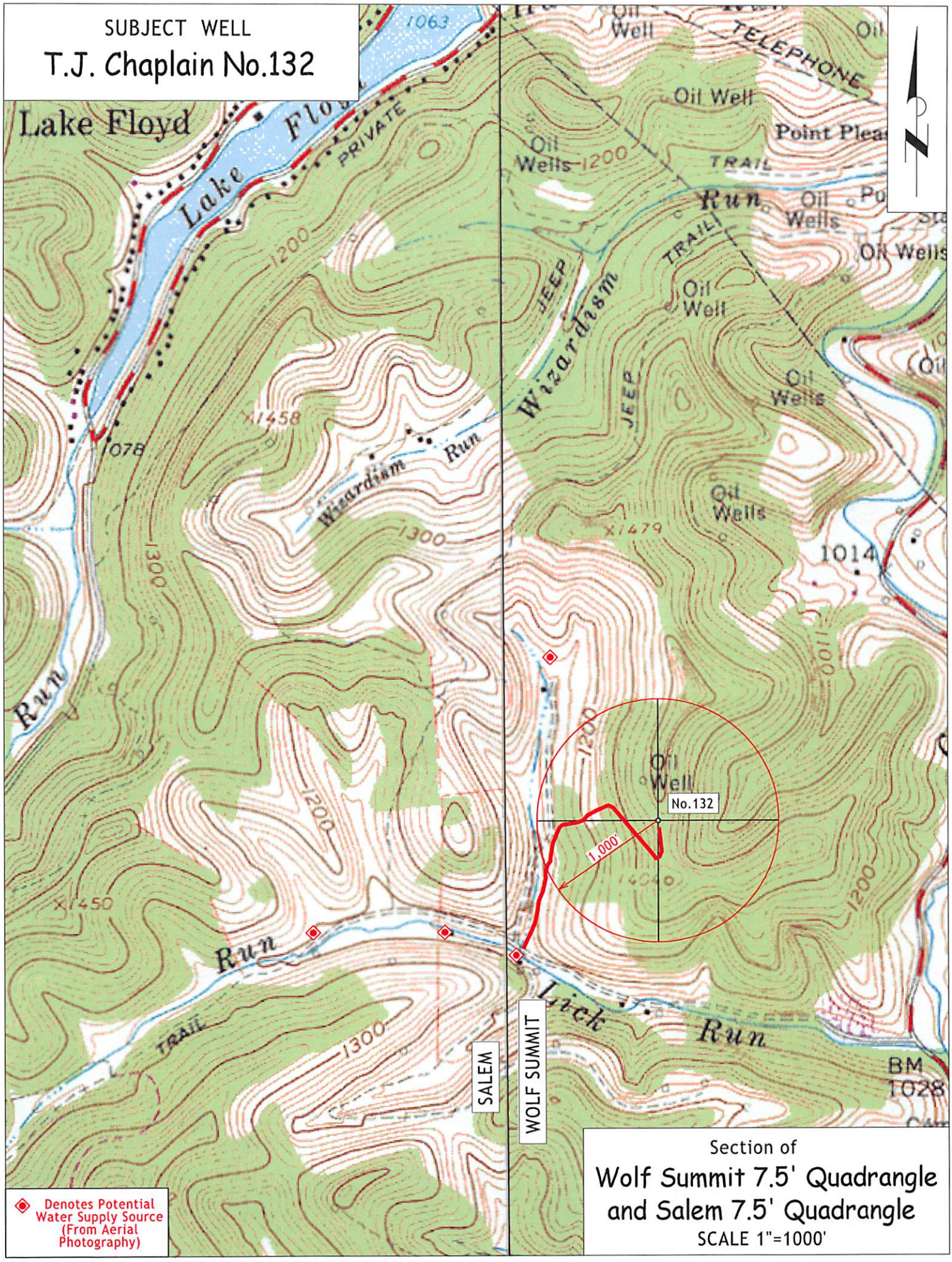
Notes:

- 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.
- 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.

LEGEND

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

33057545


SUBJECT WELL
T.J. Chaplain No.132
Lake Floyd
Lake Floyd
PRIVATE
TELEPHONE
Oil Well
Oil Wells
Point Pleas
TRAIL
Run
Wizardism
JEEP
Wizardism Run
1200
1300
1078
1014
1100
1063
1458
1479
1450
1040
No.132
1,000'
Lick Run
SALEM
WOLF SUMMIT
BM 1028
Denotes Potential Water Supply Source (From Aerial Photography)
Section of
Wolf Summit 7.5' Quadrangle
and Salem 7.5' Quadrangle
SCALE 1"=1000'

BOT. HL: LON:-80°29'40.6")

LON:-80°29'43.7" — 10515

LAT: 39°17'30"

MAP OF H.G. ENERGY, LLC -WATERFLOOD UNIT- T.J. CHAPLAIN 132

LON: 80°27'30" — 7860

LAT:39°16'12.3" (BOTTOM HOLE: LAT:39°16'12.9")

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).

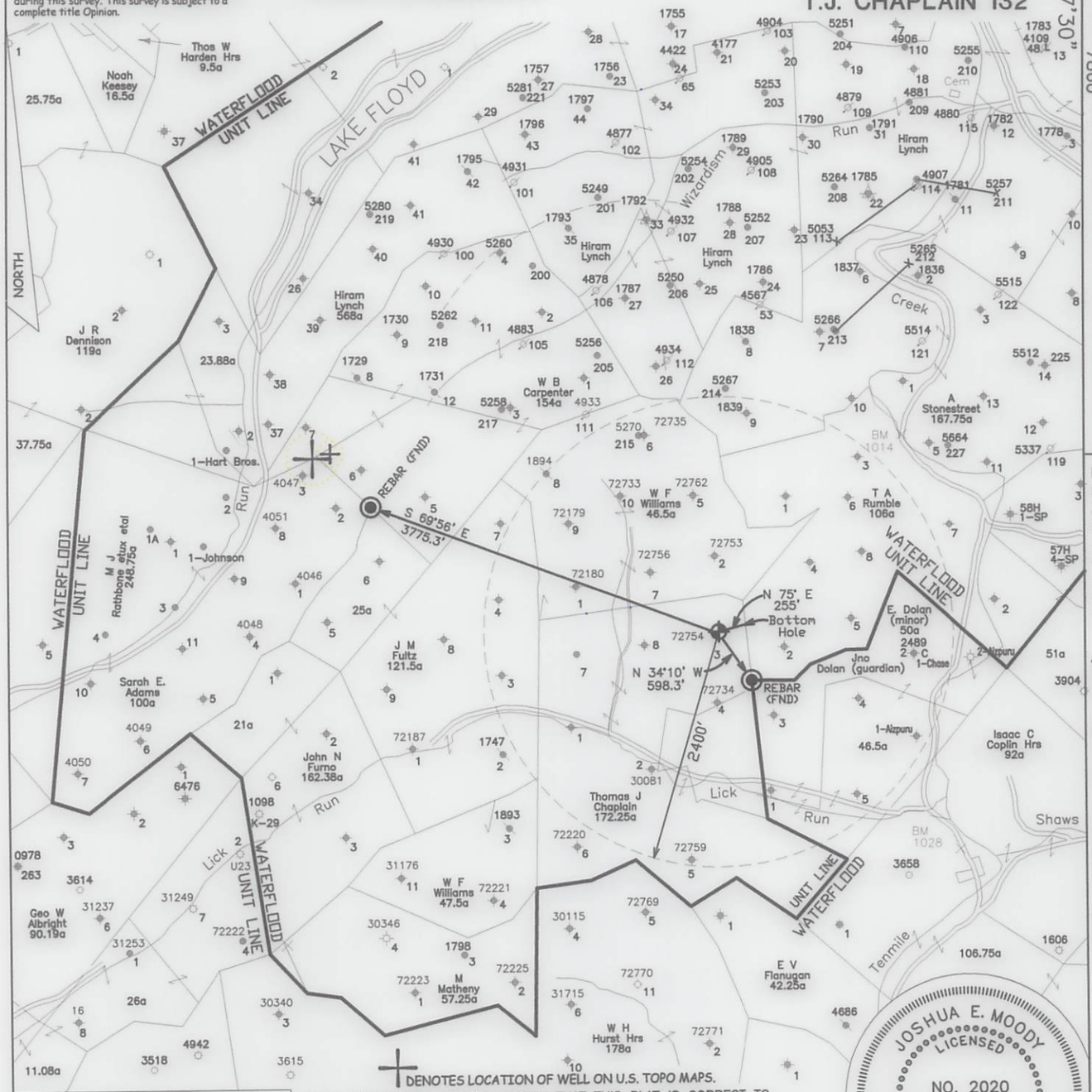
2 - Surface owners, adjoiners information, Lease names, & line mapping obtained from HGE GIS system. No survey was performed to determine lines within the Waterlood Unit-reference: HGE GIS system.

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)	
Surface	N-4,346,880m. E-543,537m.
Bottom Hole	N-4,346,900m. E-543,612m.

LOCATION REFERENCES

UTM 27
S 58°27'W 15.2' EX: WELL
N 18°09' W 128.1' 18" HICKORY
Brg. Direction is prop. well to the ref.



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 DEPTARTMENT OF ENVIRONMENTAL PROTECTION.

STATE OF WEST VIRGINIA — MONTANI SEMPER LIBERI

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

MOODY LAND SURVEYING, LLC
ST. MARYS, WV 26170

JOSHUA E. MOODY LICENSED NO. 2020 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

JOSHUA E. MOODY, P.S. 2020

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

DATE 4/19/13
OPERATOR'S WELL
T.J. CHAPLAIN # 132

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

API WELL # 47 - 033 - D57545
STATE COUNTY PERMIT

LOCATION: ELEVATION 1366' WATERSHED BRANCH OF LICK RUN
DISTRICT TEN MILE COUNTY HARRISON
QUADRANGLE WOLF SUMMIT 7.5'

SURFACE OWNER ORVILLE MYERS ET AL ACREAGE 115.03 ACRES +/-
OIL & GAS ROYALTY OWNER ORVILLE MYERS JR. ET AL LEASE ACREAGE 131 ACRES +/-
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___
OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WILL BE DRILLED DIRECTIONALLY (N 75° E 255')
PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
TARGET FORMATION 5TH SAND ESTIMATED DEPTH MD= 3,150'
WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT MIKE KIRSCH
ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

COUNTY NAME PERMIT

FORM WW-6

33057545

BOT. HL: LON:-80°29'40.6")

LON:-80°29'43.7" — 10515

SURVEY NOTES

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S 58°27'W 15.2' EX: WELL
N 18°09' W 128.1' 18" HICKORY
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LAT: 39°17'30"

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LON: 80°27'30"

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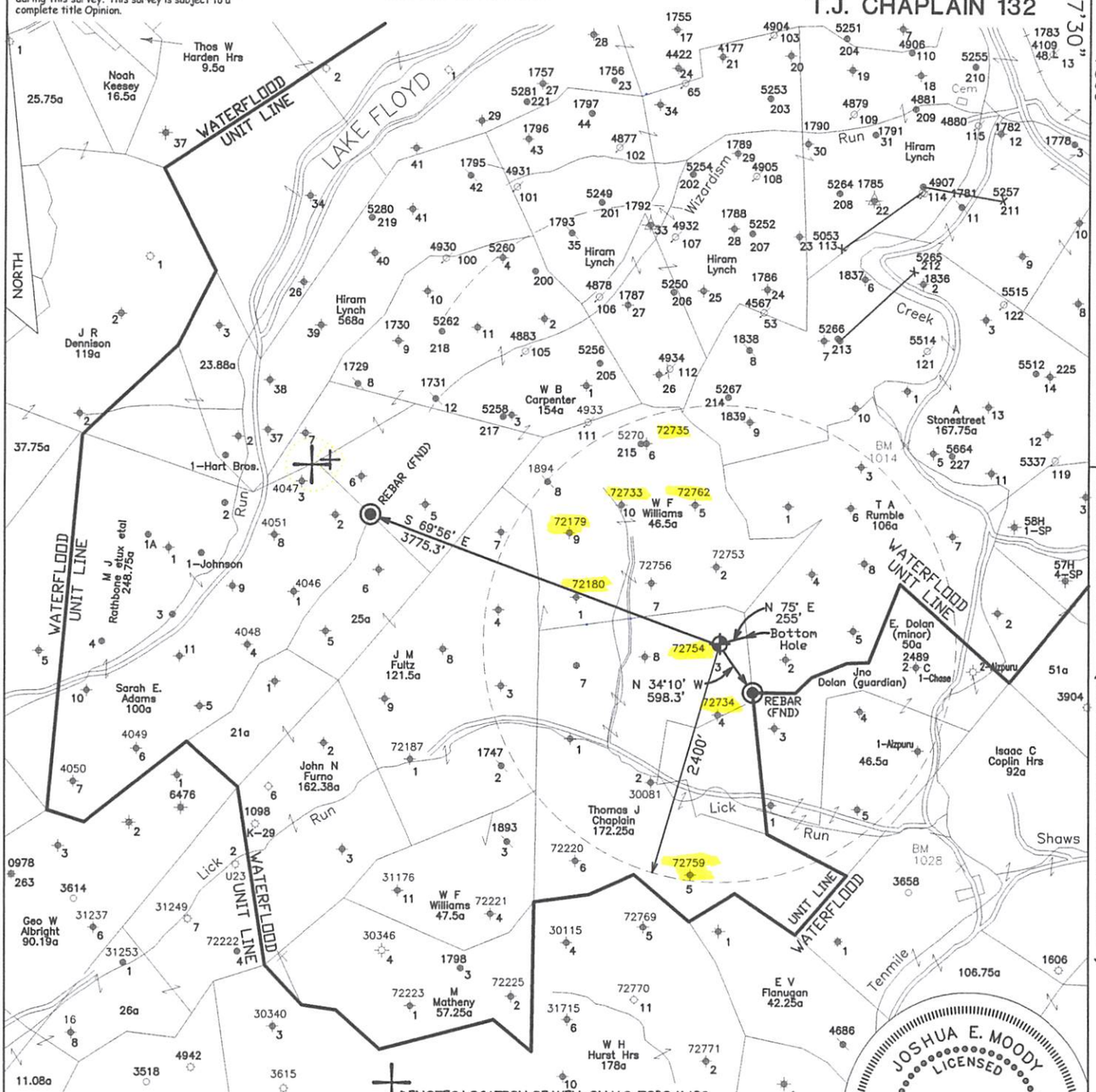
LAT:39°16'12.3" (BOTTOM HOLE: LAT:39°16'12.9")



JOB # 13-014
DRAWING # 13LAKEFLOYD FOLDER
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MINIMUM DEGREE OF ACCURACY 1/2500
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JOSHUA E. MOODY LICENSED NO. 2020 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

STATE OF WEST VIRGINIA — MONTANI SEMPER LIBERI

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 4/19/13
OPERATOR'S WELL
T.J. CHAPLAIN # 132

WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION X WASTE DISPOSAL ___ HORIZONTAL ___
(IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___
LOCATION: ELEVATION 1366' WATERSHED BRANCH OF LICK RUN
DISTRICT TEN MILE COUNTY HARRISON
QUADRANGLE WOLF SUMMIT 7.5'

API WELL # 47 - 033 - 057545
STATE COUNTY PERMIT

SURFACE OWNER ORVILLE MYERS ET AL ACREAGE 115.03 ACRES +/-
OIL & GAS ROYALTY OWNER ORVILLE MYERS JR. ET AL LEASE ACREAGE 131 ACRES +/-
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___
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WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT MIKE KIRSCH
ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

COUNTY NAME PERMIT

FORM WW-6

33057545

BOT. HL: LON:-80°29'40.6")

LON:-80°29'43.7" — 10515

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. No survey was performed to determine lines within the Waterlood Unit-reference: 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)	
Surface	N-4,346,880m. E-543,537m.
Bottom Hole	N-4,346,900m. E-543,612m.

LOCATION REFERENCES

UTM 27
S 58°27'W 15.2' EX: WELL
N 18°09' W 128.1' 18" HICKORY
Brg. Direction is prop. well to the ref.

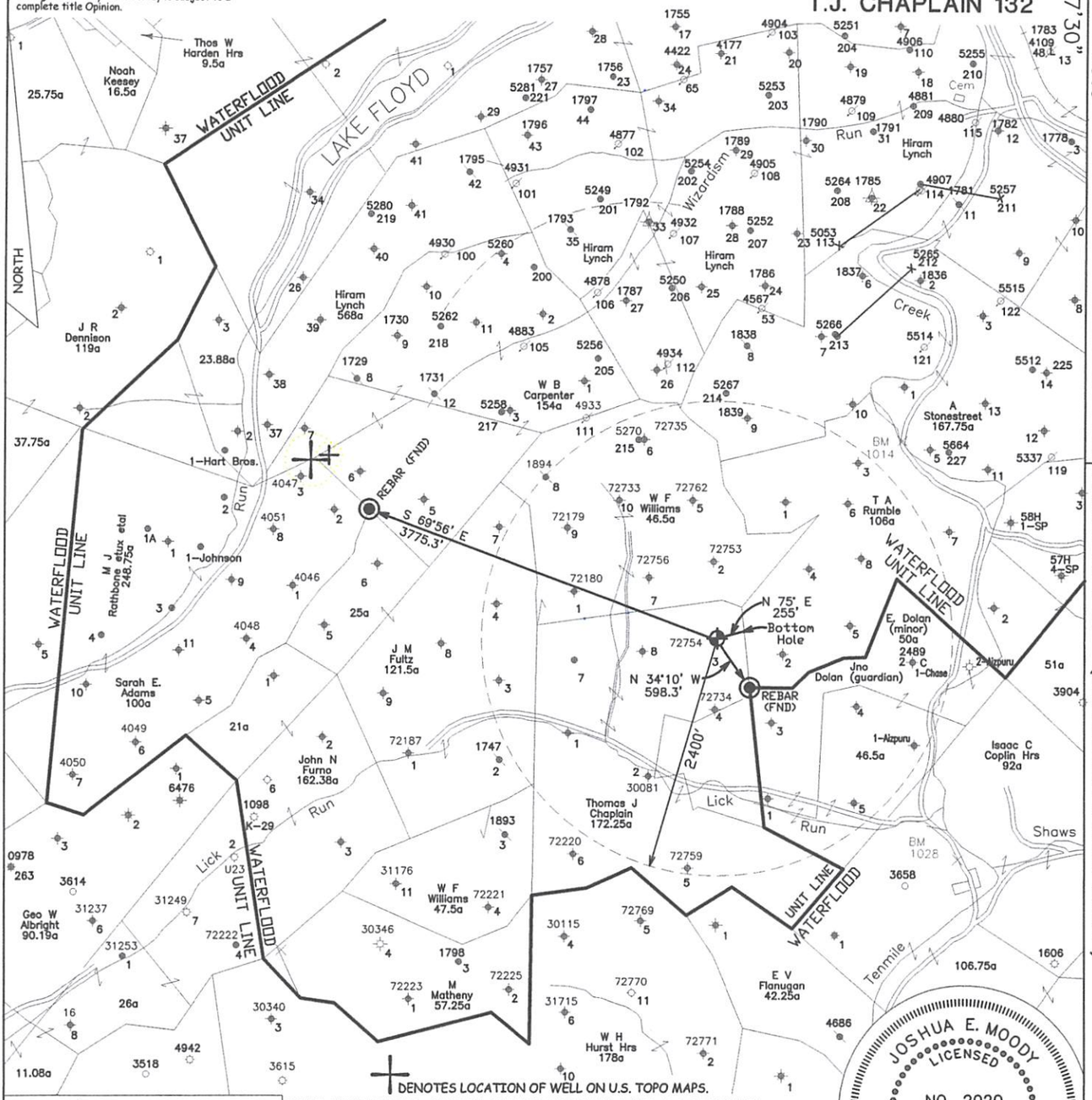
LAT: 39°17'30"

MAP OF H.G. ENERGY, LLC -WATERFLOOD UNIT- T.J. CHAPLAIN 132

LON: 80°27'30"

7860

LAT:39°16'12.3" (BOTTOM HOLE: LAT:39°16'12.9")



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 DEPTARTMENT OF ENVIRONMENTAL PROTECTION.

JOSHUA E. MOODY LICENSED NO. 2020 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

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 4/19/13
OPERATOR'S WELL
T.J. CHAPLAIN # 132

WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION X WASTE DISPOSAL ___ HORIZONTAL ___
(IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___
LOCATION: ELEVATION 1366' WATERSHED BRANCH OF LICK RUN
DISTRICT TEN MILE COUNTY HARRISON
QUADRANGLE WOLF SUMMIT 7.5'

API WELL # 47 - 033 - 057545
STATE COUNTY PERMIT

SURFACE OWNER ORVILLE MYERS ET AL ACREAGE 115.03 ACRES +/-
OIL & GAS ROYALTY OWNER ORVILLE MYERS JR. ET AL LEASE ACREAGE 131 ACRES +/-
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___
OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WILL BE DRILLED DIRECTIONALLY (N 75° E 255')
PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
TARGET FORMATION 5TH SAND ESTIMATED DEPTH MD= 3,150'
WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT MIKE KIRSCH
ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

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