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**west virginia** department of environmental protection

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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

April 10, 2014

**WELL WORK PERMIT**

**Vertical Well**

This permit, API Well Number: 47-8510092, issued to HAUGHT ENERGY CORPORATION, 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: W 1648  
Farm Name: HAUGHT, IRA M.  
**API Well Number: 47-8510092**  
**Permit Type: Vertical Well**  
Date Issued: 04/10/2014

**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

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1. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR § 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR § 4-19.1.c, if the operator is unable to sample and analyze any water well or spring within one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours.
7. Well work activities shall not constitute a hazard to the safety of persons.

8510092

WW - 2B  
(Rev. 8/10)

OK 4005  
650<sup>00</sup>

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

1) Well Operator: Haught Energy Corporation      494494463      Ritchie      Union      Harrisville  
Operator ID      County      District      Quadrangle

2) Operator's Well Number: W-1648      3) Elevation: 1080'

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

5) Proposed Target Formation(s): Lower Devonian/Marcellus      Proposed Target Depth: 6000'

6) Proposed Total Depth: 6050' Feet      Formation at Proposed Total Depth: Onandoga Lime

7) Approximate fresh water strata depths: 114'

8) Approximate salt water depths: 1344'

9) Approximate coal seam depths: None Noted in Offset Wells

10) Approximate void depths, (coal, Karst, other): None Noted in Offset Wells

11) Does land contain coal seams tributary to active mine? No

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)  
Drill new Oil & Gas Well. Stimulate with Nitrogen and/or Slick Water fracturing methods including approximately 700,000 SCF Nitrogen Per Stage and/or approximately 9500 Barrels water. (Fraq pit not to exceed 5,000 Bbls, will supplement with tanks for additional water capacity)

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	13-3/8"	R-2	43.6#	30'	30'	Grout to Surface
Fresh Water	9-5/8"	R-3	26#	300'	300'	To Surface
Coal	NA	NA	NA	NA	NA	NA
Intermediate	7"	R-3	17#	2100'	2100'	To Surface
Production	4-1/2"	R-3	10.5#	6050'	6050'	250 Sacks, 2000' Fillup
Tubing	NA	NA	NA	NA	NA	NA
Liners	NA	NA	NA	NA	NA	NA

Packers: Kind: NA  
Sizes: NA  
Depths Set NA

*Handwritten signature*  
3-11-14

Per WVDEP Guidelines, it is the intention of Haught Energy Corporation to drill no further than twenty feet into the Onandoga Limestone during the drilling of this well.

*Handwritten signature*

RECEIVED  
Office of Oil and Gas

APR 10 2014

WV Department of  
Environmental Protection



WW-70  
Rev. 7/01

**Affidavit of Personal Service**

State Of West Virginia

County Of Ritchie

The undersigned, being first duly sworn, says that the undersigned served a true and complete copy of all sides of--

- (1) Notice on Form WW-2(A)\_\_\_/ WW-3(A)\_\_\_/ WW-4(A)\_\_\_/ WW-5(A)\_\_\_/ WW-6(A)\_\_\_
- (2) Application on Form WW-2(B)\_\_\_/ WW-3(B)\_\_\_/ WW-4(B)\_\_\_/ WW-5(B)\_\_\_/ WW-6(B)\_\_\_
- (3) Plat showing the well location on Form WW-6, and
- (4) Construction and Reclamation Plan on Form WW-9

--all with respect to operator's Well No. W-1648 located in Union District, Ritchie County, West Virginia, upon the person or organization named--

Ira M. Haught

--by delivering the same in Ritchie County, State of West Virginia on the 17<sup>th</sup> day of March, 2014 in the manner specified below.

[COMPLETE THE APPROPRIATE SECTION]

For an individual:

Handing it to him\_\_\_/ her\_\_\_/ or, because he\_\_\_/ she\_\_\_/ refused to take it when offered it, by leaving it in his\_\_\_/ her\_\_\_/ presence.

Handing it to a member of his or her family above the age of 16 years named \_\_\_\_\_ who resides at the usual place of abode of the person to be served, and asking the family member to give it to the person to be served as soon as possible.

For a partnership:

Handing it to \_\_\_\_\_, a partner of the partnership or, because the partner refused to take it when I handed it over, by leaving it in the presence of the partner.

For a limited partnership:

Handing it to the general partner, named \_\_\_\_\_, or, because the general partner refused to take it when I tried to hand it over, by leaving it in the presence of the general partner.

For a corporation:

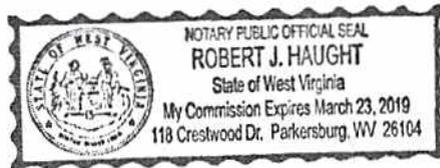
Handing it to the corporation's employee\_\_\_/ officer\_\_\_/ director\_\_\_/ attorney in fact\_\_\_/ named\_\_\_\_\_.

[Signature]  
(Signature of person executing service)

Taken, subscribed and sworn before me this 17<sup>th</sup> day of MARCH 2014.  
My commission expires MARCH 23, 2019.

[Signature]  
Notary Public

(AFFIX SEAL IF NOTARIZED OUTSIDE THE STATE)



WW-2A Surface Waiver

SURFACE OWNER WAIVER

County Ritchie

Operator Haught Energy Corporation

Operator well number W-1648

**INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A**

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

**WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

**Time Limits and methods for filing comments.** The law requires these materials to be served on or before the date the operator files his Application. You have **FIFTEEN (15) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure a adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

**Comments must be in writing.** Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

**If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.**

**List of Water Testing Laboratories.** The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

**VOLUNTARY STATEMENT OF NO OBJECTION**

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application for a Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through \_\_\_ including a work order on Form WW2-B, a survey plat, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

  
Signature

Date 3/17/14

Company Name \_\_\_\_\_  
By \_\_\_\_\_  
Its \_\_\_\_\_ Date \_\_\_\_\_

Eric M. Hovest  
Print Name

Signature \_\_\_\_\_ Date \_\_\_\_\_

WW-2A1  
(Rev. 1/11)

Operator's Well Number W-1648

**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
Ira M. Haught	Whittle Corporation	1/8	270/325

Whittle Corporation is a wholly owned subsidiary of Haught Energy Corporation and as owner of Whittle Corporation, Haught Energy Corporation has full right to drill and complete an oil and gas well on the above property with leases taken and agreements put into place by Whittle Corporation. (Agreement 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

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Office of Oil and Gas

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.

Well Operator: Haught Energy Corporation  
 By: Its: Warren R. Haught  
 Agent

MAR 19 2014  
WV Department of  
Environmental Protection

AGREEMENT

THIS AGREEMENT , Made this 1st day of December, 2010, by and between Whittle Corporation, HC 68 Box 14, Smithville, WV 26178 as party of the First part and Haught Energy Corporation, HC 68 Box 14, Smithville, WV 26178 as Party of the second part.

WHEREAS:

Haught Energy Corporation is the parent company of Whittle Corporation.

WITNESSETH:

Whittle Corporation gives Haught Energy Corporation the right to operate and develop any leases that are owned by Whittle Corporation within the State of West Virginia.

IN WITNESS WHEREOF, the Parties have caused this Assignment to be properly executed the day and year first above written.

Whittle Corporation

*Warren R. Haught*

Name: Warren R. Haught

Title: President

Haught Energy Corporation

*B. Douglas Haught*

Name: B. Douglas Haught

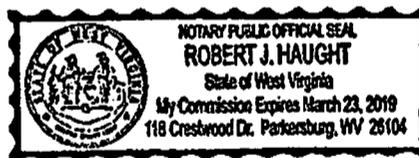
Title: President

STATE OF WEST VIRGINIA

COUNTY OF RITCHIE

BE IT KNOWN, that on this 1st day of December, 2010, before me, the undersigned authority, personally came and appeared WARREN R. HAUGHT appearing herein in his capacity as the PRESIDENT of WHITTLE CORPORATION, to me personally know to be the identical person whose name is subscribed to the foregoing instrument as the said officer of said corporation, and declared and acknowledged to me, Notary, that he executed the same on behalf of said corporation, and that the said instrument is the free act and deed of the said corporation and was executed for the uses, purposes and benefits therein expressed.

*[Signature]*  
\_\_\_\_\_  
NOTARY PUBLIC

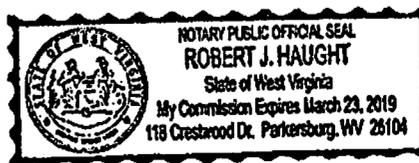


STATE OF WEST VIRGINIA

COUNTY OF RITCHIE

BE IT KNOWN, that on this 1st day of December, 2010, before me, the undersigned authority, personally came and appeared B. DOUGLAS HAUGHT appearing herein in his capacity as PRESIDENT of HAUGHT ENERGY CORPORATION, to me personally know to be the identical person whose name is subscribed to the foregoing instrument as the said officer of said corporation, and declared and acknowledged to me, Notary, that he executed the same on behalf of said corporation, and that the said instrument is the free act and deed of the said corporation and was executed for the uses, purposes and benefits therein expressed.

*[Signature]*  
\_\_\_\_\_  
NOTARY PUBLIC



This Document Prepared by:

Whittle Corporation  
HC 68 Box 14  
Smithville, WV 26178

WW-2B1  
(5-12)

Well No. W-1647

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 Microbac Laboratories  
Sampling Contractor 158 Starlight Dr, Marietta, OH 45750

Well Operator Haught Energy Corporation  
Address 12864 Staunton TPKE  
Smithville, WV 26178  
Telephone 304-477-3333

**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.

No water wells within 1000 feet of proposed location, will sample water source within 2,000 feet of proposed site. **RECEIVED**

Surfaces owners Contacted:

Ira M. Haught  
210 E Main Street  
Harrisville, WV 26362

**Office of Oil and Gas**  
MAR 19 2014  
WV Department of  
Environmental Protection

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Haught Energy Corporation OP Code 494494463

Watershed (HUC 10) Back Run Quadrangle Harrisville

Elevation 1133' County Ritchie District Union

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

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

If so, please describe anticipated pit waste: Drilling Water/ Fluid - Flow Back

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number UIC2D0859721 )
- \_\_\_\_\_ 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

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

Additives to be used in drilling medium? TD 200 Drilling Soap (If Necessary)

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Leave in Pit / Landfill Marcellus Cuttings)

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

-Landfill or offsite name/permit number? SWF1025

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 Warren R. Haught  
Company Official (Typed Name) Warren Haught  
Company Official Title Agent

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Office of Oil and Gas  
Office of Oil and Gas  
MAR 19 2014  
MAR 19 2014

Subscribed and sworn before me this 13<sup>th</sup> day of MARCH, 2014

[Signature]

Notary Public  
Notary Public Seal  
ROBERT J. HAUGHT  
State of West Virginia  
My Commission Expires March 23, 2019  
118 Crestwood Dr. Parkersburg, WV 26104

My commission expires MARCH 23, 2019

Form WW-9

Operator's Well No. W-1648

Proposed Revegetation Treatment: Acres Disturbed 2.5 AC Prevegetation pH 5.5

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 600 lbs/acre (500 lbs minimum)

Mulch 90 bales Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
<u>Pasture Mix</u>	<u>100</u>	<u>Pasture Mix</u>	<u>100</u>
<u>(Orchard Grass, Rye Grass, Timothy, Clover)</u>		<u>(Orchard Grass, Rye Grass, Timothy, Clover)</u>	

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: Reused & mulch all cut area no less than 200 lbs per acre maintain all C&S during operation

Title: oil & gas impactor Date: 3-17-14

Field Reviewed?  Yes  No

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Office of Oil and Gas  
MAR 19 2014  
WV Department of  
Environmental Protection

Addendum to WW-9  
W-1648  
Haught Energy Corporation

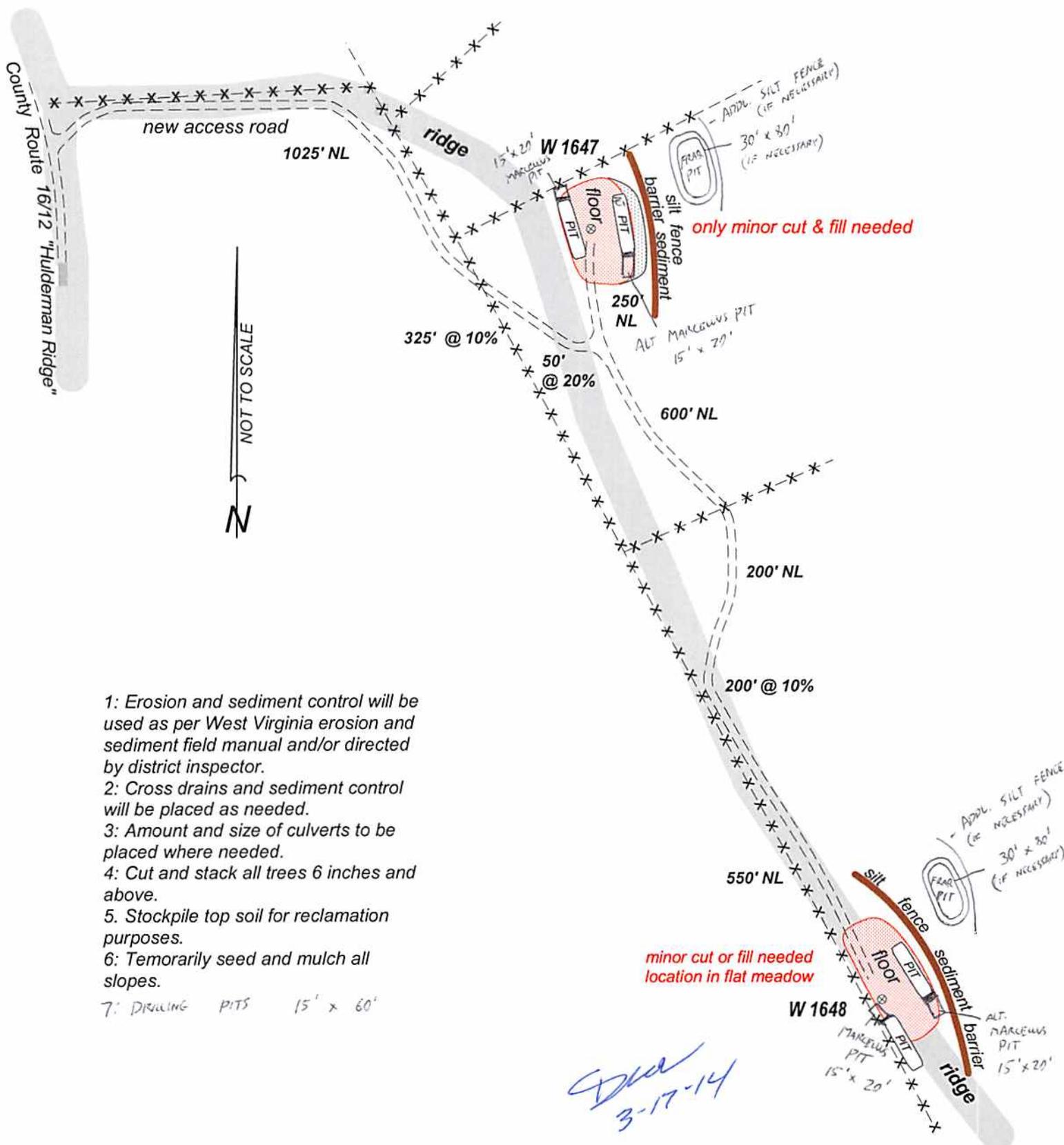
It is the intention of Haught Energy Corporation to build a pit capable of holding 5,000 BBL of fresh water to be used in the fracturing of well W-1648. This pit will be built separate of the drilling pit and will be used in a temporary manner. The walls will be compacted as needed to ensure a stable structure and a liner will be used in the pit. The pit will be built and filled with fresh water then used as expeditiously as possible to fracture the well. Following fracturing the well, the flowback will be completed and once the flowback has been completed, all flowback water shall be hauled from this pit to an injection facility for disposal. Once the pit has been dried out, reclamation will ensue. It is the Intention of Haught Energy to use this pit as a temporary structure and not a long standing impoundment.

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Office of Oil and Gas

APR 10 2014

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Environmental Protection

**Haught Energy, Inc.**  
**Well: W 1647 & W 1648**  
**Haught Family Trust, et al 168.44 Acre Lease**  
**Union District Ritchie County West Virginia**

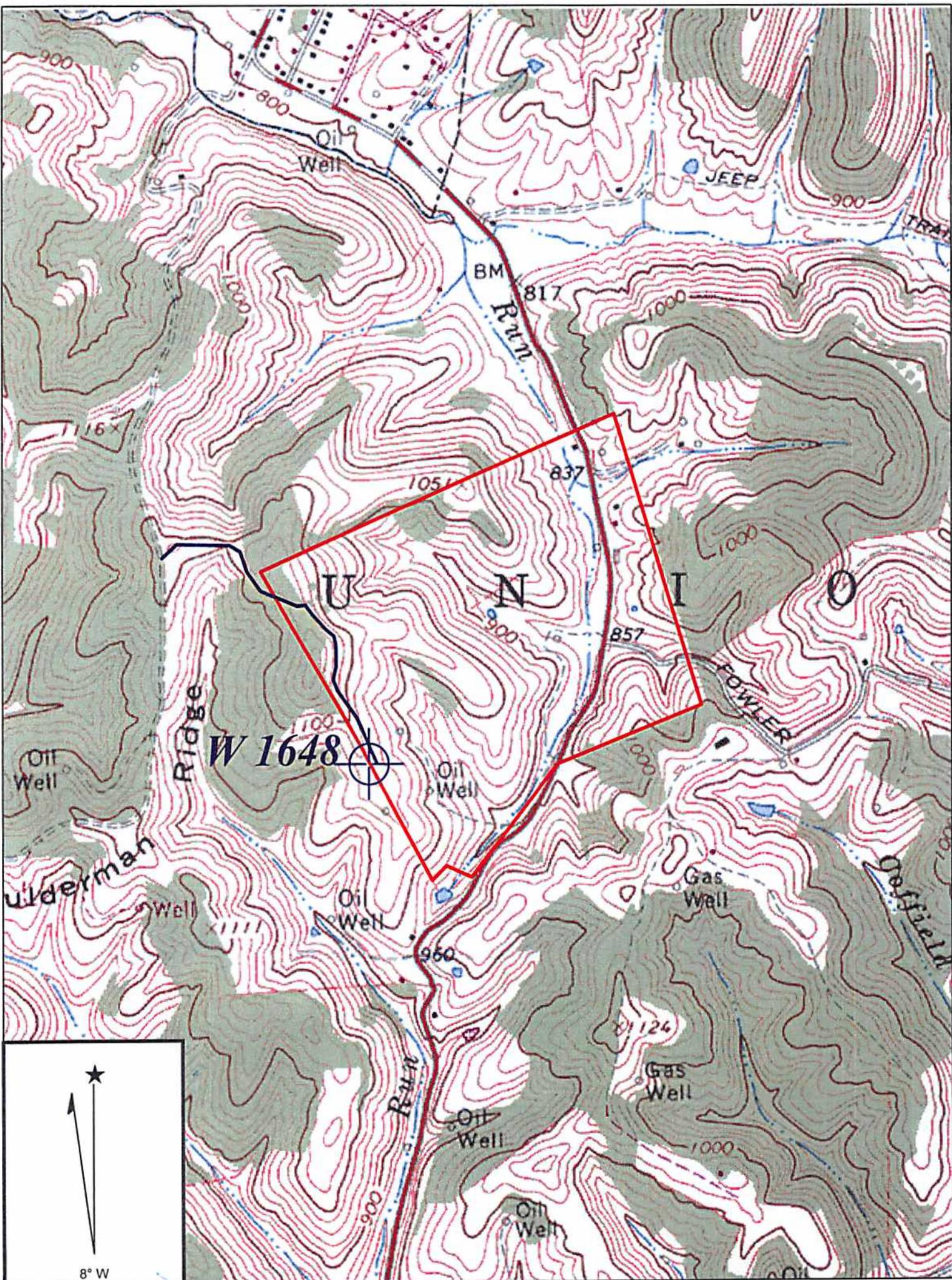


NOT TO SCALE  
 N

- 1: Erosion and sediment control will be used as per West Virginia erosion and sediment field manual and/or directed by district inspector.
- 2: Cross drains and sediment control will be placed as needed.
- 3: Amount and size of culverts to be placed where needed.
- 4: Cut and stack all trees 6 inches and above.
- 5: Stockpile top soil for reclamation purposes.
- 6: Temporarily seed and mulch all slopes.

7: DRILLING PITS 15' x 60'

*Handwritten signature*  
 3-17-14



Copyright (C) 1997, Maptech, Inc.

**HARRISVILLE QUADRANGLE**

*Dud*  
*3-17-14*

SCALE 1" = 1000'

**HAUGHT ENERGY, INC.**

WELL: W 1648  
HAUGHT FAMILY TRUST, ET AL 168.44 ACRE LEASE

UNION DISTRICT    RITCHIE COUNTY    WEST VIRGINIA

# HAUGHT FAMILY TRUST, ET AL

## 168.44 ACRE LEASE

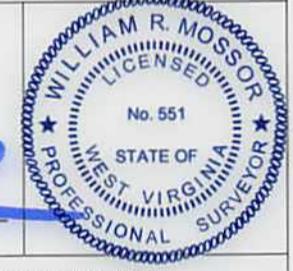


UTM NAD 83  
N: 4337889  
E: 496001

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1:200  
PROVEN SOURCE OF ELEVATION GPS  
OBSERVATION

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 ENERGY.

(SIGNED) \_\_\_\_\_  
PROFESSIONAL SURVEYOR: 551



**STATE OF WEST VIRGINIA**  
DEPARTMENT OF ENERGY  
DIVISION OF OIL AND GAS

DATE MARCH 10TH, 2014  
OPERATORS WELL NO. W 1648

**API 47 - 085 - 10092**  
STATE COUNTY PERMIT

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

LOATION: ELEVATION 1080' WATER SHED BACK RUN  
DISTRICT \_\_\_ UNION \_\_\_ COUNTY RITCHIE QUADRANGLE HARRISVILLE

SURFACE OWNER IRA M. HAUGHT ACREAGE 98.13  
OIL & GAS ROYALTY HAUGHT FAMILY TRUST, ET AL LEASE AC. 168.44

PROPOSED WORK: DRILL  CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_  
FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_  
PERFORATE NEW FORMATION \_\_\_  
OTHER PHYSICAL CHANGE IN WELL \_\_\_  
PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_

TARGET FORMATION LOWER DEVONIAN/ MARCELLUS ESTIMATED DEPTH 6000' +

WELL OPERATOR HAUGHT ENERGY CORP. DESIGNATED AGENT WARREN HAUGHT  
ADDRESS HC 68, BOX 14 ADDRESS HC 68, BOX 14  
SMITHVILLE, WV 26178 SMITHVILLE, WV 26178

FORM WW - 6

COUNTY NAME  
PREMIT