



**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

January 16, 2015

**WELL WORK PERMIT**

**Partial Plug**

This permit, API Well Number: 47-5101701, issued to GASTAR EXPLORATION INC., 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: BLAKE NO. 6H  
Farm Name: BUNGARD, WILBERT H., ET AL  
**API Well Number: 47-5101701**  
**Permit Type: Partial Plug**  
Date Issued: 01/16/2015

**Promoting a healthy environment.**

**01/16/2015**

## 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. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. 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.
3. Well work activities shall not constitute a hazard to the safety of persons.

WW-4B  
Rev. 2/01

1) Date October 28, 2014  
2) Operator's  
Well No. Blks No. 6H  
3) API Well No. 47-851 - 01701

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

- 4) Well Type: Oil \_\_\_ / Gas x / Liquid injection \_\_\_ / Waste disposal \_\_\_ /  
(If "Gas, Production x or Underground storage \_\_\_) Deep \_\_\_ / Shallow x
- 5) Location: Elevation 1326' Watershed French Creek - Ohio River (undefined)  
District Franklin County Marshall Quadrangle Powhatan Point 7.5'
- 6) Well Operator Gastar Exploration Inc. 7) Designated Agent Michael McCown  
Address 229 West Main St., Suite 301 Address 229 West Main St., Suite 301  
Clarksburg, WV 26301 Clarksburg, WV 26301
- 8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name James Nicholson Name Nomac Drilling  
Address P.O. Box 44 Address 171 Locust Ave.  
Moundsville, WV 26041 Mt. Morris, PA 15349

- 10) Work Order: The work order for the manner of plugging this well is as follows:  
TIH with drill pipe and a tubing cement string on the end to 6754'. Pumped at a slow rate till Baker arrived on site.  
NU Baker cement crew. Pumped 1st kick off plug from 6789' to 6360' w/11 bbl of ultraflush - 34bbl of 17 ppg slurry - 1bbl  
of ultraflush - displaced with 106bbl of SOBM. TOOH to 6310'. Circulate a bottoms up before we pumped second stage /  
NU cement crew again and pumped 29bbl of ultraflush, 59.8 bbl of 17 ppg slurry, 6.5 bbl of ultraflush and displaced with  
91bbl of SOBM. TOC calculated to be at 5700'. TOOH 14 ends of drillpipe to 5300'. Circulated a bottoms up then TOOH,  
ND, LD tubing and WOC.

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Verbal permission given for partial plug back per 35SCR8.5.1.i by inspector on Oct. 23, 2014

Work order approved by inspector

James Nicholson

Date

10/29/2014

RECEIVED  
Office of Oil and Gas

NOV 06 2014

WV Department of  
Environmental Protection

01/16/2015

1) Date: November 3, 2014  
 2) Operator's Well Number Blake 6H  
 3) API Well No.: 47 - 051 - 01701

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL**

|  |   |
|--|---|
| <p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Russell &amp; Mary Blake</u> ✓<br/>                 Address <u>3343 Burch Ridge Road</u><br/> <u>Proctor, WV 26055</u></p> <p>(b) Name <u>Wilbert H. &amp; Pamela June Bungard</u> ✓<br/>                 Address <u>243 Bandit Drive</u><br/> <u>Proctor, WV 26055</u></p> <p>(c) Name _____<br/>                 Address _____</p> <p>6) Inspector <u>Jim Nicholson</u><br/>                 Address <u>P.O. Box 44</u><br/> <u>Moundsville, WV 26041</u><br/>                 Telephone <u>304-552-3874</u></p> | <p>5) (a) Coal Operator</p> <p>Name <u>n/a</u><br/>                 Address _____</p> <p>(b) Coal Owner(s) with Declaration</p> <p>Name <u>CONSOL Energy Inc.</u><br/>                 Address <u>CNX Center</u> ✓<br/> <u>Engineering &amp; Operations Support-Coal</u><br/>                 Name <u>Attn: Analyst</u><br/>                 Address <u>1000 CONSOL Energy Drive</u><br/> <u>Canansburg, PA 15317</u></p> <p>(c) Coal Lessee with Declaration</p> <p>Name <u>n/a</u><br/>                 Address _____</p> |
|--|---|

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

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

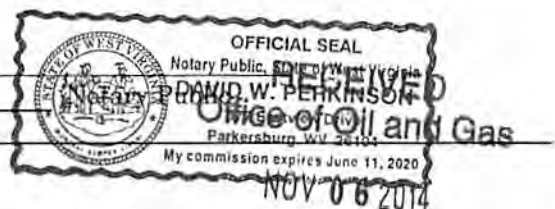
The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

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 permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat 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 mailing or delivery to the Chief.

Well Operator Gastar Exploration Inc.  
 By: Michael McCown *Michael McCown*  
 Its: Senior VP & COO  
 Address 229 West Main Street, Suite 301  
Clarksburg, WV 26301  
 Telephone 304/966-0362

Subscribed and sworn before me this 3rd day of November, 2014

My Commission Expires June 11, 2020



**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](mailto:depprivacyofficer@wv.gov).

7013 2250 0001 9020 0716

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| Total Postage & Fees                              | \$ |



Sent To: **Wilbert H. & Pamela June Bungard**

Street, Apt. No., or PO Box No.: **243 Bandit Drive**

City, State, ZIP+4: **Proctor, WV 26055**

PS Form 3800, August 2006 Reverse for Instructions

7013 2250 0001 9020 0723

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| Total Postage & Fees                              | \$ |



Sent To: **Russell & Mary Blake**

Street, Apt. No., or PO Box No.: **3343 Burch Ridge Road**

City, State, ZIP+4: **Proctor, WV 26055**

PS Form 3800, August 2006 Reverse for Instructions

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| Restricted Delivery Fee<br>(Endorsement Required) |    |
| Total Postage & Fees                              | \$ |



Sent To: **CONSOL Energy Inc.**

Street, Apt. No., or PO Box No.: **CNX Center**

City, State, ZIP+4: **Engineering & Operations Support-Coal  
Attn: Analyst  
1000 Consol Energy Drive  
Canonsburg, PA 15317**

PS Form 3800, August 2006 Reverse for Instructions

**RECEIVED**  
Office of Oil and Gas  
NOV 06 2014  
WV Department of  
Environmental Protection  
**01/16/2015**

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

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

Operator Name Gastar Exploration Inc. OP Code 494487685

Watershed French Creek - Ohio River (undefined) Quadrangle Powhatan Point 7.5'

Elevation 1326' County Marshall District Franklin

Description of anticipated Pit Waste: Fluids encountered in plugging subject well

Will a synthetic liner be used in the pit? n/a

*mu 11/2/14*

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 Wetzel County Sanitary Landfill (SWF-1021 / WV0109185))

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain \_\_\_\_\_)
- Swabbing
- Plugging

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 *Michael McCown*

Company Official (Typed Name) Michael McCown

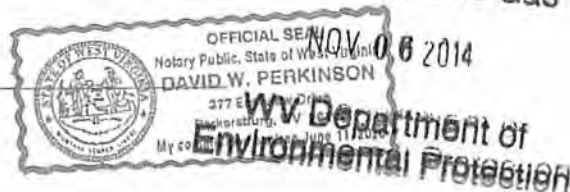
Company Official Title Senior VP & COO

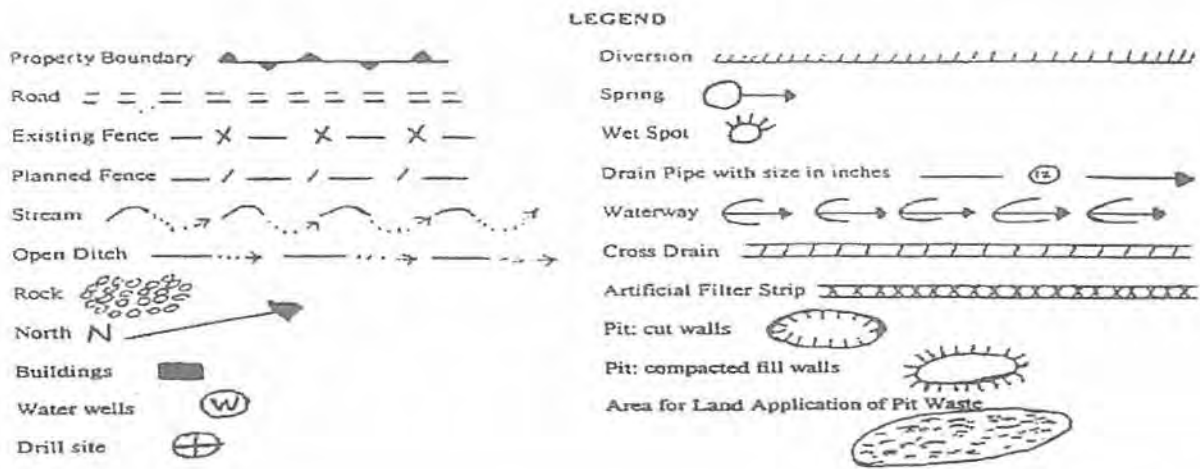
Subscribed and sworn before me this 3rd day of November, 2014

*David W. Perkinson* Notary Public

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Office of Oil and Gas

My commission expires June 11, 2020





Proposed Revegetation Treatment: Acres Disturbed 20.67 Prevegetation pH \_\_\_\_\_  
 Lime 3 Tons/acre or to correct to pH 6.5  
 Fertilizer (10-20-20 or equivalent) 10-20-20 lbs/acre (500 lbs minimum)  
 Mulch 1/3 Tons/acre

Seed Mixtures

| Area I          |          | Area II           |          |
|-----------------|----------|-------------------|----------|
| Seed Type       | lbs/acre | Seed Type         | lbs/acre |
| Annual Ryegrass | 40/acre  | Fox Tail / Grassy | 40/acre  |
|                 |          | Perennial Rye     | 30/acre  |
|                 |          | Crown Vetch       | 20/acre  |

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

Plan Approved by: Jane Melhorn  
 Comments: Verbal permission given for plug back and drill around on 10/23/14.  
 Title: O.I. & Gas Inspector Date: 11/3/2014  
 Field Reviewed?  Yes  No

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 WV Department of  
 Environmental Protection  
 01/16/2015

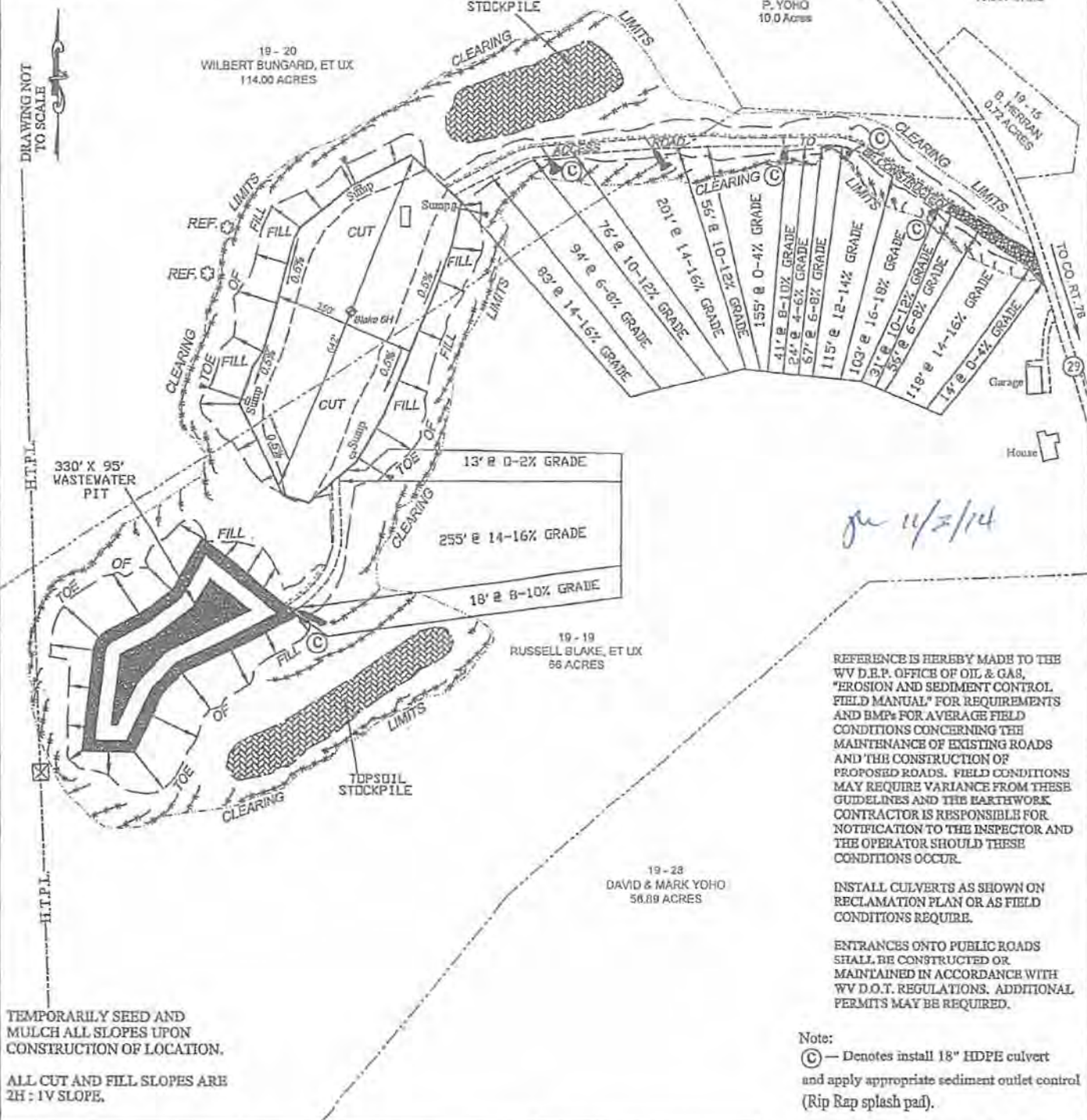
WW-9

# PROPOSED BLAKE WELL NO. 6H

SUPPLEMENT PG 1

ALL TREES 6-INCHES AND ABOVE ARE TO BE CUT AND STACKED. BRUSH SLASHINGS ARE TO UTILIZED DOWN SLOPE OF SITE AND STRUCTURES TO ACT AS A CONTROL BARRIER IF AVAILABLE.

DRAWING NOT TO SCALE



REFERENCE IS HEREBY MADE TO THE WV D.E.P. OFFICE OF OIL & GAS, "EROSION AND SEDIMENT CONTROL FIELD MANUAL" FOR REQUIREMENTS AND BMPs FOR AVERAGE FIELD CONDITIONS CONCERNING THE MAINTENANCE OF EXISTING ROADS AND THE CONSTRUCTION OF PROPOSED ROADS. FIELD CONDITIONS MAY REQUIRE VARIANCE FROM THESE GUIDELINES AND THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION TO THE INSPECTOR AND THE OPERATOR SHOULD THESE CONDITIONS OCCUR.

INSTALL CULVERTS AS SHOWN ON RECLAMATION PLAN OR AS FIELD CONDITIONS REQUIRE.

ENTRANCES ONTO PUBLIC ROADS SHALL BE CONSTRUCTED OR MAINTAINED IN ACCORDANCE WITH WV D.O.T. REGULATIONS. ADDITIONAL PERMITS MAY BE REQUIRED.

Note:  
 (C) — Denotes install 18" HDPE culvert and apply appropriate sediment outlet control (Rip Rap splash pad).

----- Silt Fence and or Sediment and Erosion Control Measure.

TEMPORARILY SEED AND MULCH ALL SLOPES UPON CONSTRUCTION OF LOCATION.

ALL CUT AND FILL SLOPES ARE 2H : 1V SLOPE.

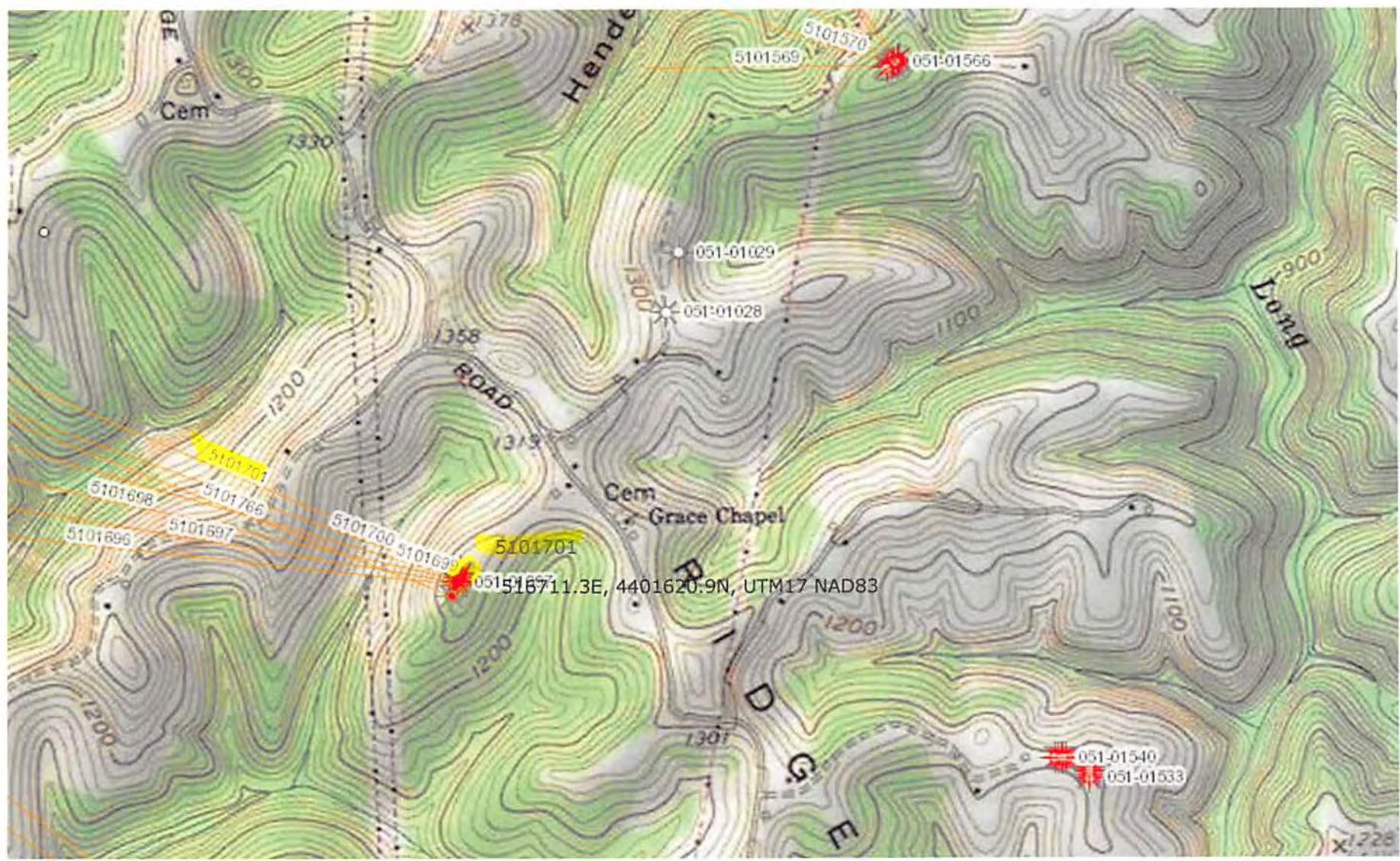
DATE: 09/13/13

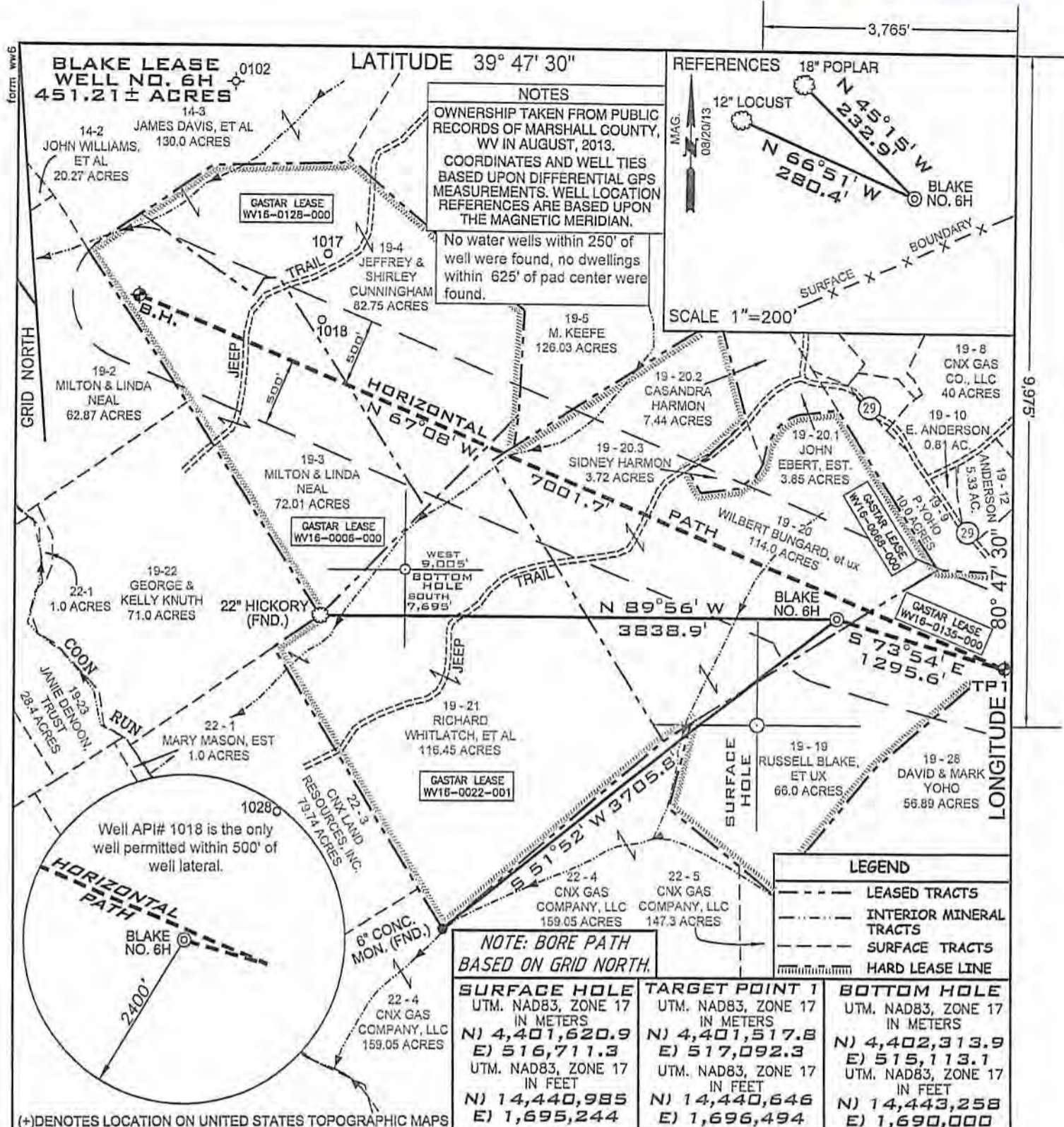
PROJECT NO: W0120321

DRAWN BY: J.N.W.

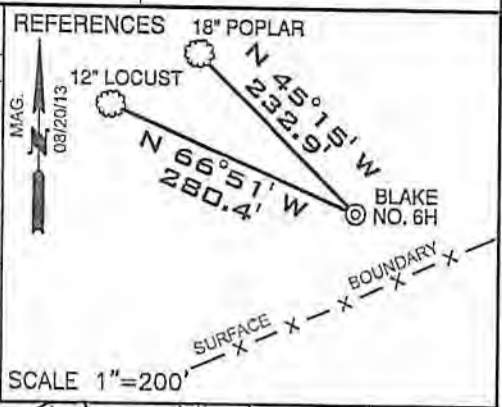


5101701P





**NOTES**  
 OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN AUGUST, 2013.  
 COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.  
 No water wells within 250' of well were found, no dwellings within 625' of pad center were found.



**LEGEND**

- LEASED TRACTS
- - - INTERIOR MINERAL TRACTS
- SURFACE TRACTS
- ===== HARD LEASE LINE

**NOTE: BORE PATH BASED ON GRID NORTH.**

| SURFACE HOLE   | TARGET POINT 1   | BOTTOM HOLE  |
|--|--|--|
| UTM. NAD83, ZONE 17<br>IN METERS<br>N) 4,401,620.9<br>E) 516,711.3 | UTM. NAD83, ZONE 17<br>IN METERS<br>N) 4,401,517.8<br>E) 517,092.3 | UTM. NAD83, ZONE 17<br>IN METERS<br>N) 4,402,313.9<br>E) 515,113.1 |
| UTM. NAD83, ZONE 17<br>IN FEET<br>N) 14,440,985<br>E) 1,695,244    | UTM. NAD83, ZONE 17<br>IN FEET<br>N) 14,440,646<br>E) 1,696,494    | UTM. NAD83, ZONE 17<br>IN FEET<br>N) 14,443,258<br>E) 1,690,000    |

FILE NUMBER W0120321 (WB1-70)

DRAWING NUMBER BLAKE\_WP\_6H

SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY 1/200

PROVEN SOURCE OF ELEVATION SUBMETER 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 PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

P.S. 2122 Jonathan N. White



WVDEP  
 OFFICE OF OIL & GAS  
 601 57TH STREET  
 CHARLESTON, WV 25304

DATE: AUGUST 23, 2013

OPERATORS WELL NO. BLAKE NO. 6H

API WELL NO. 47-051-01701 P

STATE CO COUNTY MA PERMIT

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

LOCATION ELEVATION 1326' WATERSHED (HUC 10) FRENCH CREEK - OHIO RIVER (UNDEFINED)

DISTRICT FRANKLIN COUNTY MARSHALL

QUADRANGLE POWHATAN POINT 7.5' LEASE NUMBER WV16-0022-001, WV16-0128-000, WV16-0135-000, WV16-0068-000, WV16-0006-000

SURFACE OWNER WIBERT H. BUNGARD, ET UX ACREAGE 114.0

OIL & GAS ROYALTY OWNER RUSSELL BLAKE, ET AL LEASE ACREAGE 451.21

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION   
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE (SPECIFY) \_\_\_\_\_

TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6521' + Horizontal Leg

WELL OPERATOR GASTAR EXPLORATION USA, INC. DESIGNATED AGENT MICHAEL McCOWN

ADDRESS 229 W MAIN STREET, SUITE 301 CLARKSBURG WV, 26301 ADDRESS 229 W MAIN STREET, SUITE 301 CLARKSBURG WV, 26301

01/16/2015

COUNTY NAME  
 PERMIT



November 5, 2014

WVDEP-Office of Oil & Gas  
Attn: Justin Nottingham  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

VIA: USPS

Re: Blake No. 6H Plug & Abandon Permit Application; (API # 051-01701)

Dear Justin:

Enclosed herein please find Plug & Abandon Permit Application for the above referenced Blake No. 6H well for your review and further handling. Please note that there was no pit constructed for this Partial Plug Back that Jim Nicholson gave a verbal approval back on October 23, 2014.

If you have any questions or need additional information, please feel free to contact me at 304/966-0362.

Sincerely,

DAVE PERKINSON  
Landman

Gastar Exploration LTD.  
229 West Main Street, Suite 301 · Clarksburg, WV 26301  
Phone: (304) 622-4796 · Fax: (304) 622-4824

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