west virginia department of environmental protection

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

Earl Ray Tomblin , Governor
Randy C. Huffman , Cabinet Secretary
www.dep.wv.gov

Tuesday, October 25, 2016
WELL WORK PERMIT
Vertical / Plugging

HG ENERGY, LLC
5260 DUPONT ROAD

PARKERSBURG, WV 26101

Re: Permit approval for 57
47-103-00992-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

Operator's Well Number: 57
Farm Name: HOYT, L. S.
U.S. WELL NUMBER: 47-103-00992-00-00
Vertical / Plugging
Date Issued: 10/25/2016

103009928

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. 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.

10300992P

WW-4B
Rev. 2/01

1) Date September 13, 2016
2) Operator's Well No. LS Hoyt 57
3) API Well No. 47- 103 - 0992

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 X / Gas ____ / Liquid injection ____ / Waste disposal ____ /
(If "Gas, Production ____ or Underground storage ____) Deep ____ / Shallow X

5) Location: Elevation 1420' Watershed Barker Run
District Grant County Wetzel Quadrangle Pine Grove 7.5'

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

7) Designated Agent Diane White
Address 5260 Dupont Road
Parkersburg, WV 26101

8) Oil and Gas Inspector to be notified
Name Derek Haught
Address P. O. Box 85
Smithfield, WV 26178

9) Plugging Contractor
Name To Be Determined Upon Approval of Permit
Address

10) Work Order: The work order for the manner of plugging this well is as follows:

** See Attached Sheet **

Received
Office of Oil & Gas
SEP 26 2016

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

Work order approved by inspector _____ Date 9-19-16

10300992P

WW-4B - Conti
Rev. 2/01

1) Date: September 13, 2016
2) Operator's Well Number
L. S. Hoyt 57
3) API Well No: 47 - 103 - 0992
State County Permit

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 x Gas ____ Liquid Injection ____ Waste Disposal ____
(If "Gas", Production ____ Underground Storage ____) Deep ____ Shallow x

5) LOCATION: Elevation: 1420' Watershed: Barker Run
District: Grant County: Wetzel Quadrangle Pine Grove 7.5'

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

7) DESIGNATED AGENT Diane White
Address 5260 Dupont Road
Parkersburg, WV 26101

8) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Derek Haught
Address PO Box 85
Smithfield, WV 26178

9) PLUGGING CONTRACTOR
Name To Be Determined Upon Approval of Permit
Address

10) WORK ORDER: The work order for the manner of plugging this well is as follows:

TD- 3,139'

Manners of plugging;
Pull all possible 5 3/16" and 6 5/8" casing. Perforate if present at plug locations.
Plug #1 - 3120' - 3020'
Located at TD
Plug # 2 - 2550' - 2275'
Located at 6 5/8" casing shoe, and top of 5 3/16" liner if present
Plug #3 - 1650' - 1350'
Located at 8 1/4" shoe and through elevation. Perforate 8 1/4" casing through elevation one shot every 10' from 1470' to 1370'
Plug #4 - 1125' - 1025'
Located through coal. Perforate 8 1/4" casing one shot every 10' from 1125' to 1025', and one shot per foot 1080' to 1070'.
Plug #5 - 725' - 625'
Located below fresh water and at anticipated top of 8 1/4" casing
Plug #6 - (200' to 0')
Located from 200' to surface. Perforate 6 5/8" one shot every ten feet if present, from 200' to 100'.

DMH
9-19-16

Recover all possible casing. If casing can not be recovered, perforate for plug placement.

Received
Office of Oil & Gas
SEP 26 2016

Monument -
6" minimum diameter metal pipe
30" above surface
10' in well below surface
Sealed with cement
API identification (1/2") height numbering

6% Gel between all plugs

103000992P

Well: L.S. Hoyt 57
API: 10-09255-1

Monument min. 6" dia.metal pipe, 30" above surface, 10' in well below surface, sealed with cement, API id.

Elevation 1420'

Casing Information		
Size	Depth	Weight
8 1/4"	675' -1572'	
6 5/8"	2322'	
5 3/16"	1186'	HW packer
5 3/16"	2485' - 3086'	

Freepoint Cut and Pull Casing	
Size	Approx. Depth
5 3/16"	1186'
6 5/8"	1575'

Pitts. Coal 1075'

Perforate 8" casing 1125' - 1025'

Perforate 8" casing 1470' - 1370'

Cement Plugs		
NO.	Bottom	Top
1	3120	3020
2	2550	2275
3	1650	1350
4	1125	1025
5	725	625
6	200	0

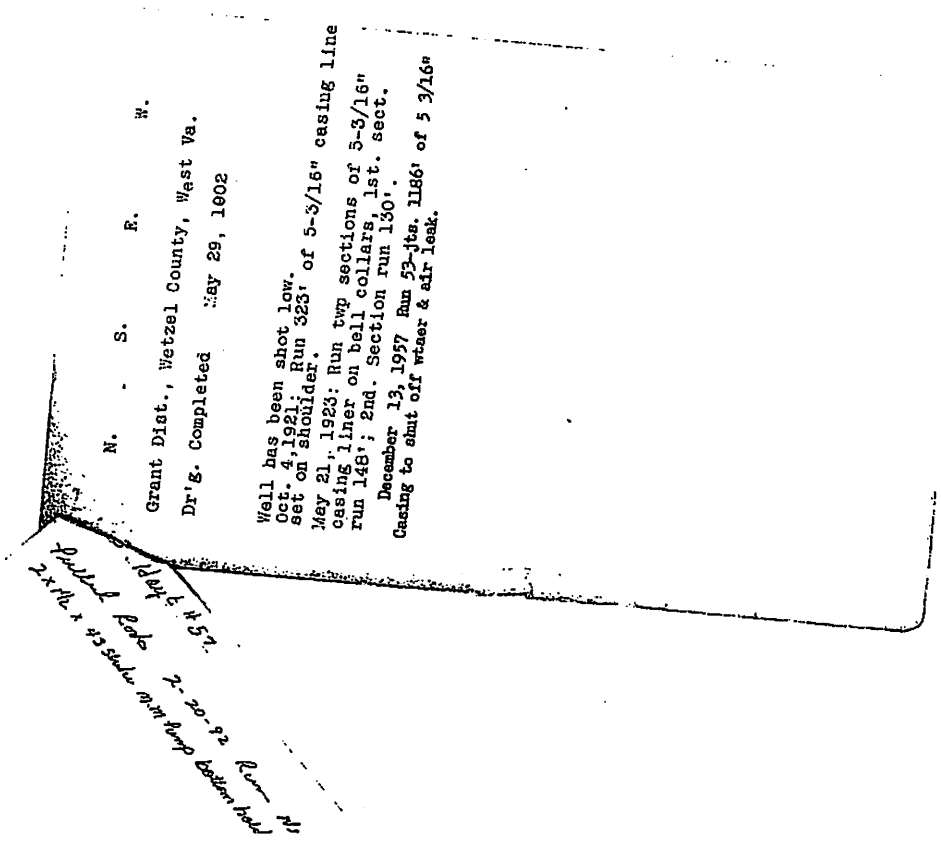
Note: 6% gel between all plugs

TD - 3139'

DMH
9-19-16

Received
Office of Oil & Gas
SEP 26 2016

10300992P



Received
Office of Oil & Gas
SEP 26 2016

10300992P

BC10-09255

PENNZOIL COMPANY – WELL RECORD

1100 ~

Lease Name Hoyt, L. S. (N-½ P.I.) 53465 Well No. 57 Compl. Date 5-20-02

District Grant County Wetzel State W.Va.

Producing Sand(s) 1) Gordon Top 3163 Bottom 3122 Ref 3110

2) _____ Top _____ Bottom _____ K.B.

Total Depth 3139 Plug-back Depth _____ Elevation _____ G.L. Perm. Datum _____ G.L.

COMPLETION HISTORY: All Measurements from Perm. Datum.

Casing: 1) Size 5 3/16 wt. _____ #/ft. GR _____ Thread 60 ft set @ 3086 No. Jts. _____ Cmt. Lines sks.

2) Size 7 in " wt. _____ #/ft. GR _____ Thread _____ set @ 1522 No. Jts. Sized 32 Cmt. to drawn sks.

3) Size 10 3/8 " wt. _____ #/ft. GR _____ Thread _____ set @ 232.2 No. Jts. _____ Cmt. _____ sks.

12-13-57 4) Size 5 3/16 " wt. _____ #/ft. GR _____ Thread _____ set @ 1186 No. Jts. _____ Cmt. _____ sks.

Open Hole Section – _____ Perforations _____ No. Holes _____ Size _____

Fracture: Acid _____ gal. of _____ ; Fluid _____ Amt. _____ Sand _____ Amt. _____

B.D.P. _____ Max. T.P. _____ Min. T.P. _____ Avg. T.P. _____ Avg. T.R. _____ BPM

ISIP _____ 5 min. SIP _____ 10 min. SIP _____ 15 min. SIP _____

PRODUCTION EQUIPMENT:

Tubing: Size _____ " wt. _____ #/ft. GR _____ Thread _____ No. Jts. _____

Length of Seating Nipple _____ Length of Anchor _____ Total Footage _____

Rods: Size _____ No. of Rods _____ Record of Pony Rods _____

Bottom Hole Pump: Make _____ Size _____ Length _____ Length of Stroke _____

Type Hold Down _____ Type Plunger _____ Plunger Length _____

Valves Type _____ Single _____ Double _____

Pumping Jack: Make _____ Size _____ Ser. # _____ Lg. of Stroke _____ SPM _____

Electric Motor: Type _____ Make _____ Phase _____ HP _____ Volts _____ Amps _____ RPM _____

Gasoline Motor: Make _____ Type _____ HP _____

Pulleys & Belts: Pumping Jack Pulley _____ " Motor Pulley _____ " Belts No. & Size _____

Received
Office of Oil & Gas
SEP 26 2016

Hoyt, L.S.	Well #57		Acres 1100	Lease No. 52265	
Pitts. Coal	1075			Casing Record	
Big Injun	2320	2550	Size	Put In Well	Pulled
Stray Sand	3069	3100	10 Parted 32	645	645
Hole Reduced	3086		8¼ jts.down	1572	
Gordon Sand	3103	3122	6-5/8	2322	
1st. Pay Oil	3110		5-3/16	323	
			5-3/16	278	
Total		3139		601	

Torpedo Record

Date	Qts.	Shell	Top Shot
5/31/02	30	--	--
10/2/03	60	--	--
10/5/07	100	--	--
5/7/13	120	--	--

Initial Prod.

Received
Office of Oil & Gas
SEP 26 2016

10300992P

10300992P

Received
Office of Oil & Gas
SEP 26 2016

10300992P

WW-4A
Revised 6-07

1) Date: September 13, 2016
2) Operator's Well Number
L. S. Hoyt 57

3) API Well No.: 47 - 103 - 0992

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name: Dallison Lumber, Inc.
Address: HC 79, Box 50
Jacksonburg, WV 26377

(b) Name:
Address:

(c) Name:
Address:

6) Inspector: Derek Haught
Address: P. O. Box 85
Smithville, WV 26178
Telephone: 304-206-7613

5) (a) Coal Operator
Name: NA
Address:

(b) Coal Owner(s) with Declaration
Name: NA
Address:

Name:
Address:

(c) Coal Lessee with Declaration
Name: NA
Address:

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: HG Energy, LLC
By: Diane White Diane White
Its: Agent
Address: 5260 Dupont Road
Parkersburg, WV 26101
Telephone: 304-420-1119

Received
Office of Oil & Gas
SEP 26 2016

OFFICIAL SEAL
NOTARY PUBLIC, STATE OF WEST VIRGINIA
MARK J SCHALL
H G Energy L L C
PO Box 5519, Vienna, WV 26105
My Commission Expires November 2, 2021

Subscribed and sworn before me this 13th day of September 2016
Notary Public
My Commission Expires NOV. 2, 2021

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 normal 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 deprivacyoffier@wv.gov.

10300992P

WW-9
(5/16)

API Number 47 - 103 - 0992
Operator's Well No. _____

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) Barker Run Quadrangle Pine Grove 7.5'

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

Will a pit be used? Yes ☐ No ☑

If so, please describe anticipated pit waste: _____

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

Proposed Disposal Method For Treated Pit Wastes:

_____ Land Application (if selected provide a completed form WW-9-GPP)
_____ Underground Injection (UIC Permit Number _____)
_____ Reuse (at API Number _____)
■ Off Site Disposal (Supply form WW-9 for disposal location)
_____ Other (Explain _____

Will closed loop system be used? If so, describe: NA

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

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

Additives to be used in drilling medium? NA

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

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

-Landfill or offsite name/permit number? _____

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

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, 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.

Received
Office of Oil & Gas
SEP 26 2016

Company Official Signature Diane White

Company Official (Typed Name) Diane White

Company Official Title Agent

Subscribed and sworn before me this 16th day of September, 20 16

Notary Public

My commission expires NOV. 2, 2021

OFFICIAL SEAL
NOTARY PUBLIC, STATE OF WEST VIRGINIA
MARK J SCHALL
H G Energy L L C
PO Box 5519, Vienna, WV 26105
My Commission Expires November 2, 2021

10300992P

Form WW-9

Operator's Well No. LS Hoyt 57

Proposed Revegetation Treatment: Acres Disturbed 1.0 acres Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch Straw 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

** Sediment Control Shall Be In Place At All Times **

Attach:
Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: _____

Comments: _____

Received
Office of Oil & Gas
SEP 26 2016

Title: Oil + Gas Inspector Date: 9-19-16

Field Reviewed? (✓) Yes ( ) No

10300992P

WW-9- GPP
Rev. 5/16

Page _____ of _____
API Number 47 - 103 - 0992
Operator's Well No. LS Hoyt 57

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

Operator Name: HG Energy, LLC

Watershed (HUC 10): Barker Run Quad: Pine Grove 7.5'

Farm Name: _____

1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

NA

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

NA

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

NA

4. Summarize all activities at your facility that are already regulated for groundwater protection.

NA

Received
Office of Oil & Gas
SEP 26 2016

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

10300992P

WW-9- GPP
Rev. 5/16

Page _____ of _____
API Number 47 - 103 - 0992
Operator's Well No. LS Hoyt 57

NA

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

NA

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

NA

8. Provide provisions and frequency for inspections of all GPP elements and equipment.

NA

Received
Office of Oil & Gas
SEP 26 2016

Signature: Diane White

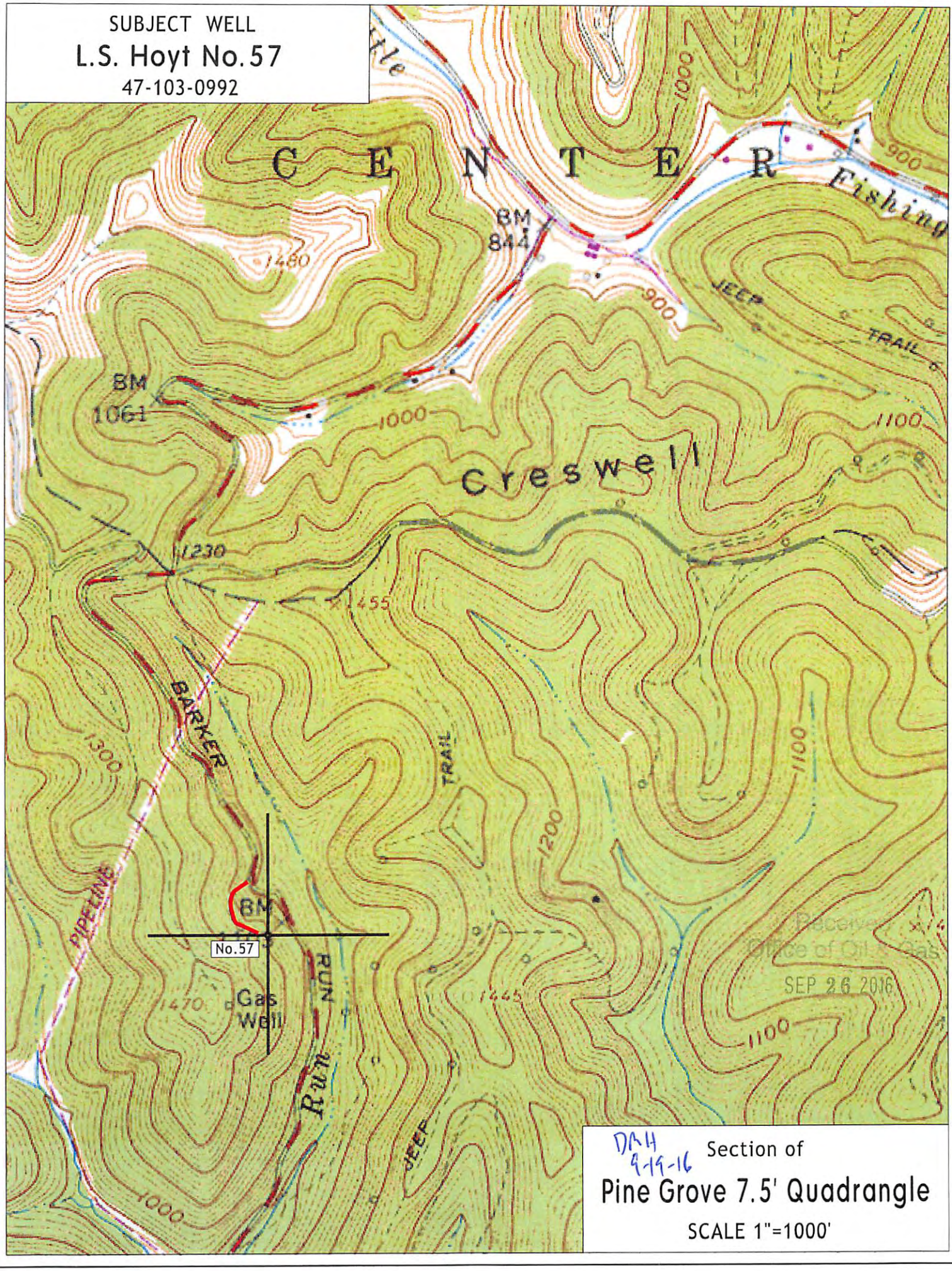
Date: 9-13-16

1030092P

SUBJECT WELL

L.S. Hoyt No. 57

47-103-0992



Received
Office of Oil & Gas
SEP 26 2016

DAH
9-19-16

Section of

Pine Grove 7.5' Quadrangle

SCALE 1"=1000'

10300992P

WW-7
5-02

West Virginia Department of Environmental Protection
Office of Oil & Gas
WELL LOCATION FORM: GPS

API: 47- 103 - 0992 **WELL NO:** 57

FARM NAME: L.S. Hoyt No.57

RESPONSIBLE PARTY NAME: H.G. Energy, LLC

COUNTY: Wetzel **DISTRICT:** Grant

QUADRANGLE: Pine Grove 7.5'

SURFACE OWNER: Dallison Lumber, Inc.

ROYALTY OWNER: Ascent Resources, Inc.

UTM GPS NORTHING: 4,383,704 (NAD 83)

UTM GPS EASTING: 529,221 (NAD 83) **GPS ELEVATION:** 1420 ft 373 m.

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit on the above well. The Office of Oil & Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone:17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) - meters.
2. Accuracy to Datum - 3.05 meters
3. Data Collection Method:

Survey Grade GPS	___	Post Processed Differential	___
		Real-Time Differential	___
Mapping Grade GPS	X	Post Processed Differential	X
		Real-Time Differential	___

Received
Office of Oil & Gas
SEP 26 2016

I the undersigned, hereby certify this data 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 Office of Oil and Gas.

Diane White Diane C. White — Designated Agent

Signature — Title

September 13, 2016

Date