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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

July 16, 2013

**WELL WORK PERMIT**

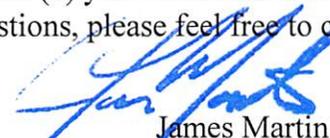
**Fracture**

This permit, API Well Number: 47-10301708, 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: L. S. HOYT 105  
Farm Name: DALLISON LUMBER , INC.  
**API Well Number: 47-10301708**  
**Permit Type: Fracture**  
Date Issued: 07/16/2013

**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

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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.



State of West Virginia  
 Division of Environmental Protection  
 Section of Oil and Gas

Well Operator's Report of Well Work

Well name: Dallison Lumber Co.

Operator Well No.: L.S. Hoyt #105

LOCATION: Elevation: 1,176.00

Quadrangle: Pine Grove

District: Grant

County: Wetzel

Latitude: 7,050 Feet south of

39 Deg 37 Min 30 Sec.

Longitude: 6,650 Feet west of

80 Deg 37 Min 0 Sec.

Company: PENNZOIL PRODUCTS COMPANY  
 P.O. BOX 5519  
 VIENNA, WV 26105-5519

Agent: PHILIP S. ONDRUSEK

Inspector: Randal Mick

Permit Issued: 8/20/96

Well work Commenced: 11/20/96

Well work Completed: 12/16/96

Perforal plugging

Perforation granted on:

Rotary  Cable  Rig

Total Depth (feet) 3208'

Fresh water depths (ft) NA

Alt water depths (ft) NA

Coal being mined in area (Y/N) N

Coal Depths (ft): NA

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8"	1078'	1078'	460 Sacks
4 1/2"	3154.05'	3154.05'	275 Sacks

RECEIVED  
 Office of Oil & Gas  
 Permitting  
 APR 09 2013  
 WV Department of  
 Environmental Protection

OPEN FLOW DATA \*Well was drilled as a waterflood injection well. No open flow data was obtained

Producing formation Gordon Pay zone depth (ft) 3,055'  
 Gas: Initial open flow \* MCF/d Oil: Initial open flow \* Bbl/d  
 Final open flow \* MCF/d Final open flow \* Bbl/d  
 Time of open flow between initial and final tests \* Hours  
 Static rock pressure \* psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)  
 Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  
 Final open flow MCF/d Final open flow Bbl/d  
 Time of open flow between initial and final tests Hours  
 Static rock pressure psig (surface pressure) after Hours

NOTE: ON BACK OF THIS FORM, PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Received

JUN 26 2013

For: PENNZOIL PRODUCTS COMPANY  
 By: [Signature]  
 Date: 3/17/98

Treatment :

Perforated Gordon sand with 16 holes from 3089'-3093' K.B. Fractured with 300 gals 15% HCL and 220 bbls gelled water and 10,600 lbs. 20/40 sand

Well Log :

All depth are relative to K.B.

0	952 Sand and Shale
952	1016 sand
1016	1196 <u>Shale</u>
1196	1232 sand
1232	1546 Shale
1546	1556 sand
1556	1700 Shale
1700	1758 sand
1758	2122 Shale
2122	2198 sand
2198	2342 Big Lime
2342	2492 Big Injun
2492	3043 Shale
3043	3055 Gordon Stray
3055	3072 Gordon
3072	3158 Shale

Received

JUN 26 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection



103-01708F



**CONSOL Energy Inc.**

Ohio Valley Operations  
6126 Energy Road  
Moundsville, WV 26041

phone: 304/843-3529

fax: 304/843-3546

e-mail: EricShereda@consolenergy.com

web: www.consolenergy.com

**J. ERIC SHEREDA**

Manager Engineering

July 2, 2013

Mr. James Martin  
West Virginia Department of Environmental Protection  
601 57<sup>th</sup> Street  
Office of Oil & Gas  
Charleston, West Virginia 25304

RE: HG Energy LLC Proposed L.S. HOYT 104, L.S. HOYT 105, L.S. HOYT 106, and  
L.S. HOYT 108 Wells

Dear Mr. Martin,

RESERVE COAL PROPERTIES COMPANY does not object to the proposed well work for the above referenced wells. Attached are the signed coal waiver forms WW-2A approving the well work of the above referenced wells. If you have any questions or require additional information, please contact me at 304-843-3529.

Sincerely,

  
J. Eric Shereda  
Manager Engineering

Received

JUL 8 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

County: Wetzel  
Operator: HG Energy LLC

Operator's Well #: L.S. HOYT 105

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

To the coal operator, owner, or lessee named on page WW2-A. You are hereby notified that any objection you wish to make or are required to make by Code 22-6-15, 16 or 17, must be filed with the Chief of the Office of Oil and Gas within fifteen (15) days after the receipt of this application by the Office.

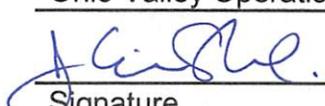
WAIVER

The undersigned coal operator \_\_\_\_ / owner X / lessee \_\_\_\_ / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

**RESERVE COAL PROPERTIES COMPANY approves and authorizes the well work represented by this well work application, provided that HG Energy LLC performs this work on the well located at the WV North NAD27 coordinates of North 404,715.579, East 1,676,369.632.**

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

		Company Name	RESERVE COAL PROPERTIES COMPANY	
Signature	Date	By	J. Eric Shereda	
		Its	Manager - Engineering	
			Ohio Valley Operations	
				
			Signature	7-2-2013 Date

Received

JUL 8 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

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 Betsy Run Quadrangle Pine Grove 7.5' 548  
Elevation 1176' County Wetzel 103 District Grant 04  
Description of anticipated Pit Waste: Fluids encountered in stimulating existing well.

Do you anticipate more than 5,000 bbls of water to complete the proposed well work? Yes        No X  
Will a synthetic liner be used in pit? Yes If so, what mil.? 20 Mil.

Proposed Disposal Method For Treated Pit Wastes:  
X Land Application  
       Underground Injection (UIC Permit Number       )  
       Reuse (at API Number       )  
       Off Site Disposal (Supply Form WW-9 for disposal location)  
       Other (Explain       )

Drilling medium anticipated for this well? Air, fresh water, oil based, etc. NA  
- If oilbased, what type? Synthetic, petroleum, etc.       

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, sawdust, 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.

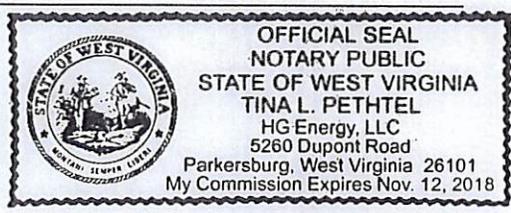
Company Official Signature Diane C. White  
Company Official (Typed Name) Diane C. White  
Company Official Title Accountant

Subscribed and sworn before me this 14 day of June 2013

Tina L. Pethel Notary Public

My commission expires Nov 12, 2018

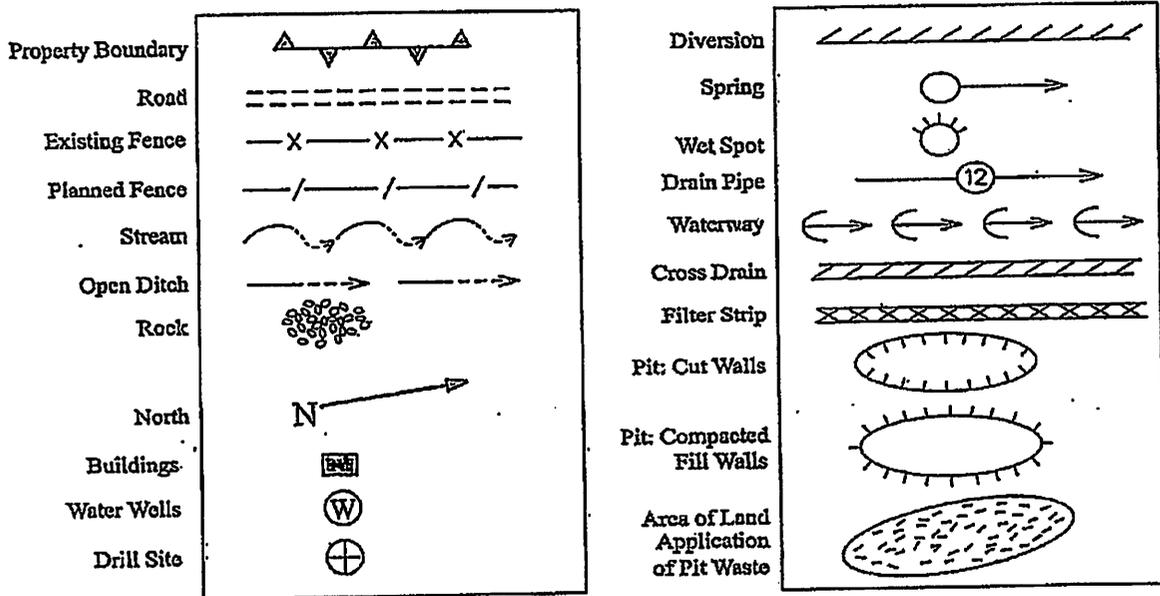
Form WW-9  
**Received**  
JUN 26 2013



Dmit  
6-23-13

WW9-Back

Legend



Proposed Revegetation Treatment: Acres Disturbed Area I Approx. 0.2 Ac. Prevegetation pH \_\_\_\_\_  
Area II Approx. 0.1 Ac.

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

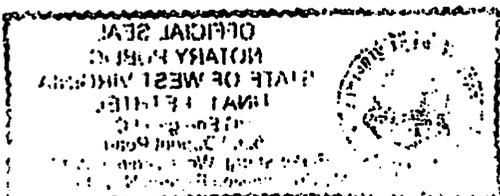
<u>Area I (Location)</u>		<u>Area II (Road)</u>	
Seed Type	Lbs./Ac.	Seed Type	Lbs./Ac.
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

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

Plan approved by: \_\_\_\_\_  
 Comments: \_\_\_\_\_

Title: Oil & Gas Inspector Date: 6-23-13

Field Reviewed? ( ) Yes (  ) No



**Received**

JUN 26 2013

Office of Oil and Gas  
 WV Dept. of Environmental Protection

# Reclamation Plan For: L.S. Hoyt No. 105

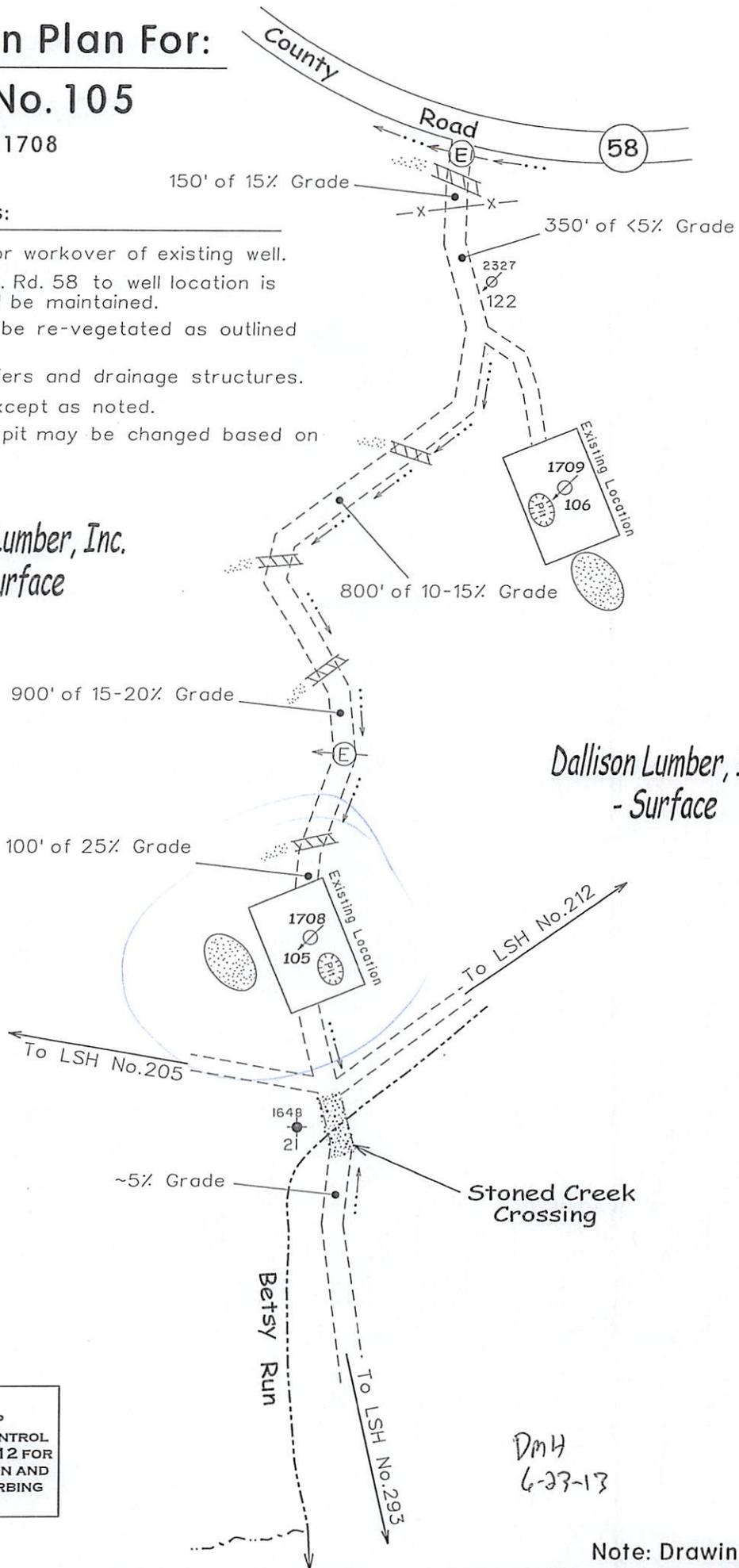
47-103-1708

**Notes:**

- Requested permit is for workover of existing well.
- Access road from Co. Rd. 58 to well location is existing. Structures will be maintained.
- 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 work-over pit may be changed based on as-built considerations.

*Dallison Lumber, Inc.  
- Surface*

*Dallison Lumber, Inc.  
- Surface*

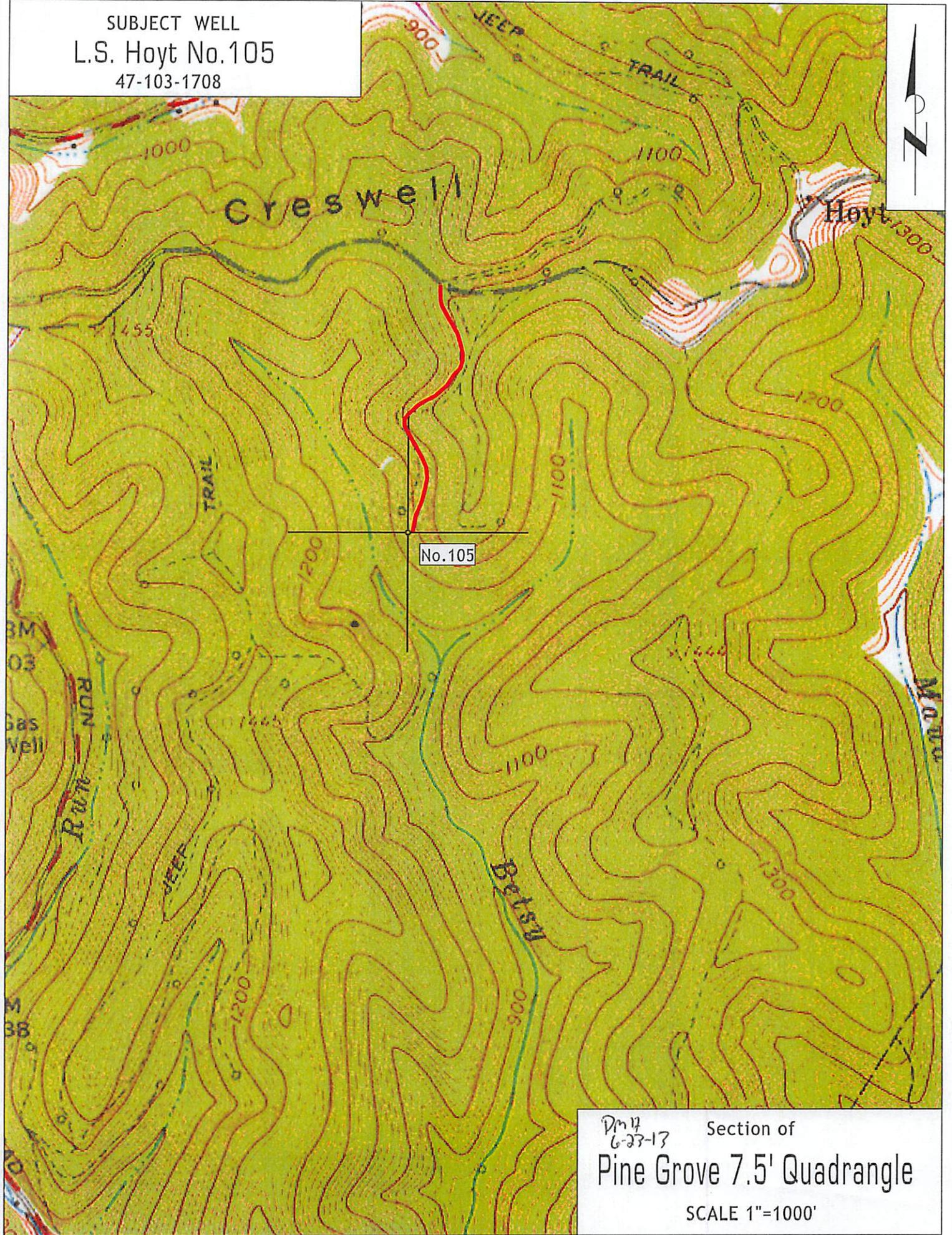


REFER TO THE WVDEP  
EROSION AND SEDIMENT CONTROL  
FIELD MANUAL VER. MAY 2012 FOR  
BMPs CONTROLLING EROSION AND  
SEDIMENT FROM SOIL-DISTURBING  
OPERATIONS.

DMH  
6-27-13

Note: Drawing not to Scale

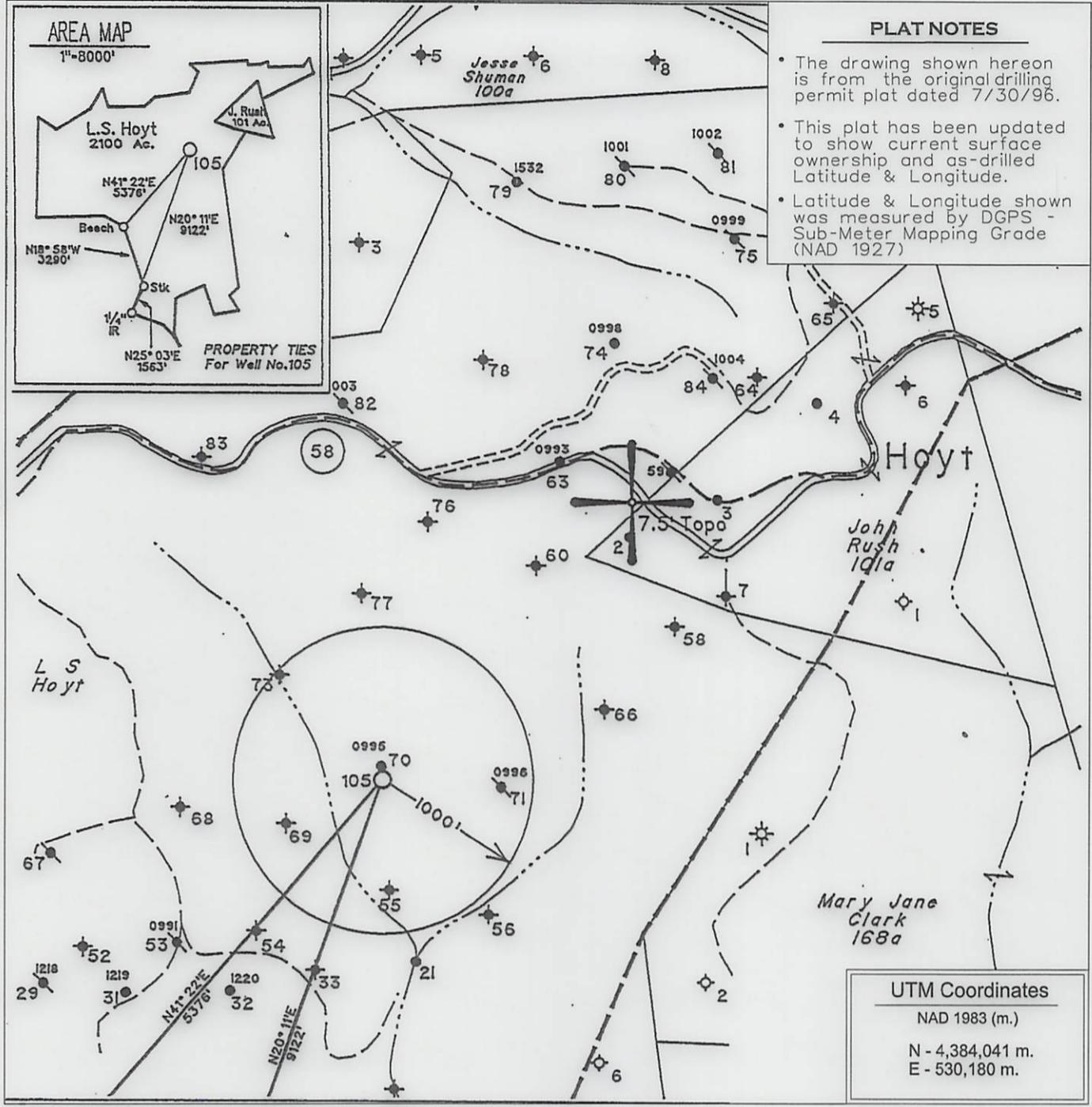
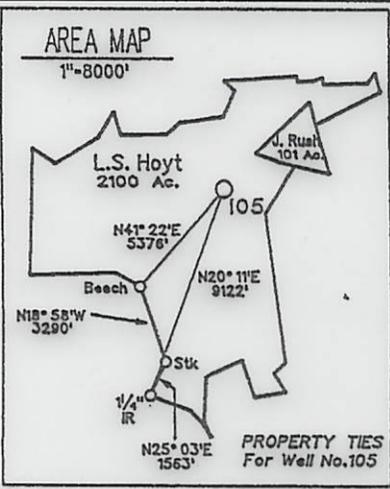
SUBJECT WELL  
L.S. Hoyt No.105  
47-103-1708



Dm 17  
6-23-13 Section of  
Pine Grove 7.5' Quadrangle  
SCALE 1"=1000'

PLAT NOTES

- The drawing shown hereon is from the original drilling permit plat dated 7/30/96.
- This plat has been updated to show current surface ownership and as-drilled Latitude & Longitude.
- Latitude & Longitude shown are measured by DGPS - Sub-Meter Mapping Grade (NAD 1927)



UTM Coordinates  
 NAD 1983 (m.)  
 N - 4,384,041 m.  
 E - 530,180 m.

✚ DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

FILE NO. \_\_\_\_\_  
 MAP NO. \_\_\_\_\_ N \_\_\_\_\_ S \_\_\_\_\_ E \_\_\_\_\_ W \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY Sub-Meter  
 PROVEN SOURCE OF ELEVATION WVDEP Records

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 MINES.

(SIGNED) *[Signature]*  
 TIMOTHY P. ROUSH PS 793

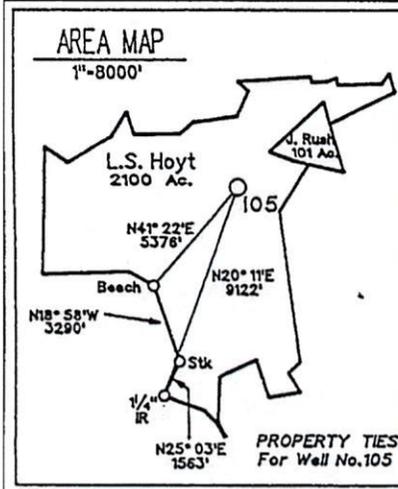


WEST VIRGINIA  
 Division of Environmental Protection  
 Office of Oil and Gas  
 601 57th Street  
 Charleston, West Virginia 25304



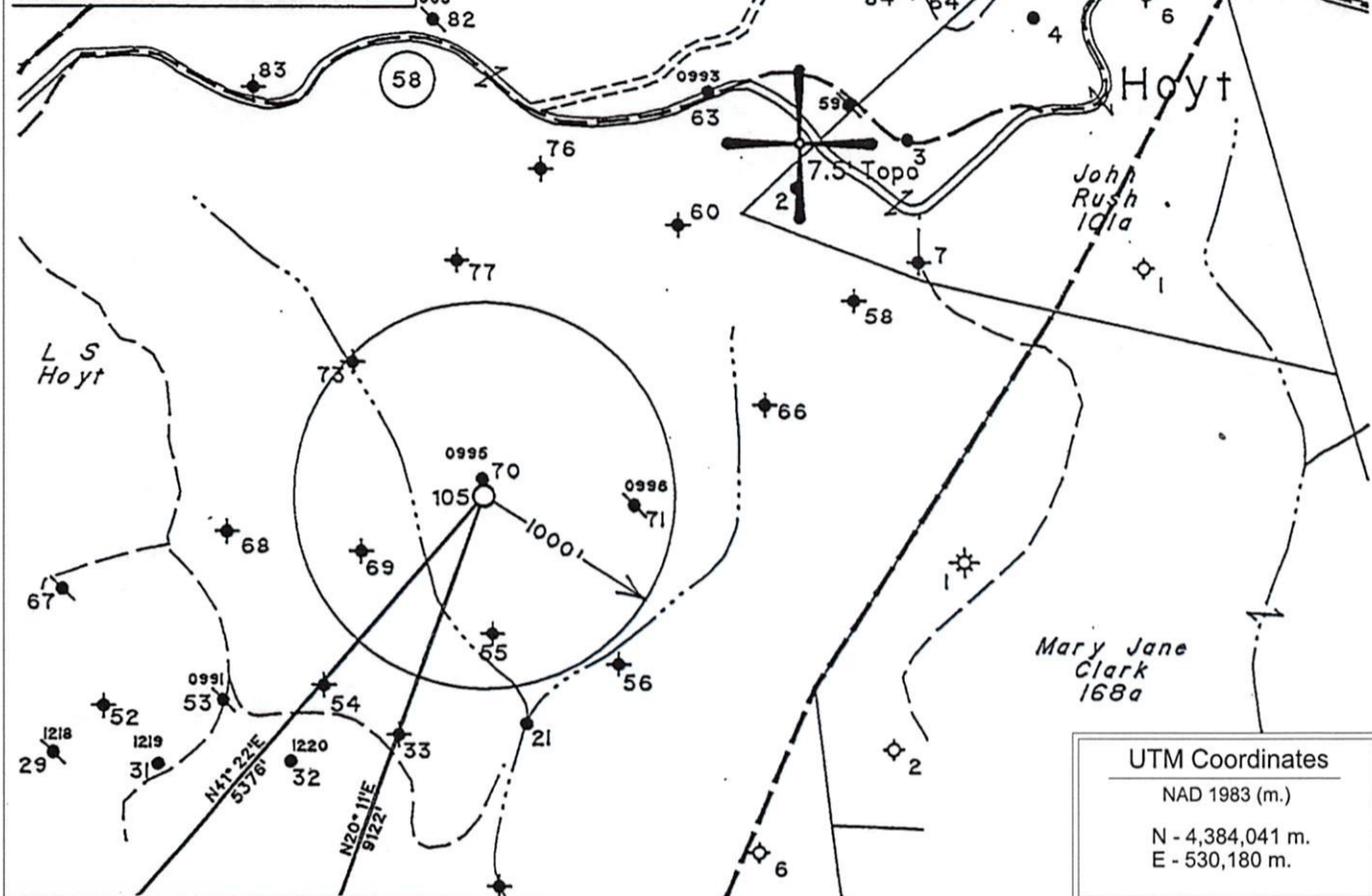
DATE June 5, 2013  
 FARM L.S. Hoyt No. 105  
 API WELL NO. 47-103-01708 F

WELL TYPE: OIL \_\_\_ GAS \_\_\_ LIQUID INJECTION  WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1,176' WATERSHED Betsy Run  
 DISTRICT Grant COUNTY Wetzzel  
 QUADRANGLE Pine Grove 7.5'  
 SURFACE OWNER Dallison Lumber, Inc. ACREAGE 2099.3 Ac.  
 OIL & GAS ROYALTY OWNER The Hoyt Foundation LEASE ACREAGE 2,100 Ac.  
 LEASE NO. 52265-50  
 PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Gordon ESTIMATED DEPTH 3,208'  
 WELL OPERATOR HG Energy, LLC DESIGNATED AGENT Mike Kirsch  
 ADDRESS 5260 Dupont Road ADDRESS 5260 Dupont Road  
 Parkersburg, WV 26101 Parkersburg, WV 26101



**PLAT NOTES**

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- This plat has been updated to show current surface ownership and as-drilled Latitude & Longitude.
- Latitude & Longitude shown was measured by DGPS - Sub-Meter Mapping Grade (NAD 1927)



**UTM Coordinates**  
 NAD 1983 (m.)  
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FILE NO. \_\_\_\_\_  
 MAP NO. \_\_\_\_\_ N \_\_\_\_\_ S \_\_\_\_\_ E \_\_\_\_\_ W \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY \_\_\_\_\_ Sub-Meter \_\_\_\_\_  
 PROVEN SOURCE OF ELEVATION WVDEP Records

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 MINES.

(SIGNED) *Timothy P. Roush*  
 TIMOTHY P. ROUSH PS 793



**WEST VIRGINIA**  
 Division of Environmental Protection  
 Office of Oil and Gas  
 601 57th Street  
 Charleston, West Virginia 25304



DATE June 5, 2013  
 FARM L.S. Hoyt No. 105  
 API WELL NO. 47-103-01708F

WELL TYPE: OIL \_\_\_ GAS \_\_\_ LIQUID INJECTION X WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1,176' WATERSHED Betsy Run  
 DISTRICT Grant COUNTY Wetzel  
 QUADRANGLE Pine Grove 7.5'  
 SURFACE OWNER Dallison Lumber, Inc. ACREAGE 2099.3 Ac.  
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 LEASE NO. 52265-50  
 PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR  
 STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW  
 FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Gordon ESTIMATED DEPTH 3,208'  
 WELL OPERATOR HG Energy, LLC DESIGNATED AGENT Mike Kirsch  
 ADDRESS 5260 Dupont Road Parkersburg, WV 26101 ADDRESS 5260 Dupont Road Parkersburg, WV 26101