

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

August 28, 2013

WELL WORK PERMIT

Secondary Recovery Well

This permit, API Well Number: 47-10302804, 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 293

Farm Name: DALLISON LUMBER INC.

API Well Number: 47-10302804

Permit Type: Secondary Recovery Well

Date Issued: 08/28/2013

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. 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-3B 10/07



| 1) Date | June 25, 2013 | | | | |
|--------------------|-----------------------|---|----------|------|--------|
| 2) Operator's Well | II No. L. S. Hoyt 293 | | | | |
| 3) API Well No. | 47 | - | 103 | 2804 | |
| | State | | County | | Permit |
| 4) UIC Permit No. | | U | IIC2R103 | 04AP | |

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 | d Injection | X | | Gas Inject | tion (not store | age) | Waste Di | sposal | | |
|------|-----------------|------------|-------------|--------------|---------|-------------|--|-----------------|----------|------------------|---|-----------------|-----------|
| 6) | LOCATION: | | Elevation | 979 | | | V | Vatershed | Betsy | Run | | | |
| -/ | | District | | Grant | 04 | Cou | nty W | etzel /03 | | Quadrangle | Pin | ne Grove 7.5' | 548 |
| 7) | WELL OPERA | TOR. | HG Ener | rev LLC | | 4944979 | 48 8) | DESIGNATE | ED AGENT | : Mike | e Kirso | h | |
| ., | , and of Little | | | pont Road | | 1011010 | - , ", | ~~~ | | | 110100000000000000000000000000000000000 | nt Road | |
| | | | | ourg, WV | | | = | | | Parl | ersbu | rg, WV 26101 | |
| 9) | OIL & GAS IN | SPECTO | OR TO BE | NOTIFIE | ED: | | |) DRILLING | CONTRAC | CTOR: | | | |
| - / | erman amendan | | Derek H | | | | | | Name | | ed Upo | n Permit Appro | val |
| | | Address | PO Box 8 | | | | | | Address | 3 | | | |
| | | | Smithvil | le, WV 26 | 178 | | | | | | | | |
| 11) | PROPOSED W | ELL WO | ORK: | Drill | | | Drill Deep | per | Redril | I Stir | nulate | | |
| | | | | | | ld Format | | | New Form | nation | | Convert | X |
| | | | | Other | Physic | al Change | in Well (speci | ify) | | | | | |
| 12) | Geological targ | get forma | ation | | Gordo | n | De | epth | 2,860 | Ft. (Top) to | | 2,880 Ft. (| Bottom) |
| 13) | Estimated dep | th of con | npleted we | ell (or actu | al dept | h of existi | ng well) | | 3020' | Ft. | | | |
| 14) | Approximate w | vater str | ata depth | s: | Fresh | | 50 | Ft. | | Salt | 1,15 | 60 Ft. | |
| 15) | Approximate c | oal seam | depths: | | | | 700 | Ft. | | | | | DAH |
| 16) | Is coal being m | ined in t | the area? | | | Ye | s | X | No | | | | 6-27 |
| 17) | Virgin reservoi | ir pressu | ıre in targ | et formati | on: | | 60 | | psig. | Source | | Estimated | |
| 18) | Estimated rese | ervoir fra | acture pre | ssure: | | | 1200 | | psig. | | | | |
| 19) | MAXIMUM PE | ROPOSE | D INJEC | TION OPI | ERATIO | ONS: | Volume per ho | our 25 bbl/l | ir | Bottom Hole Pre | essure | 2400 p | osi |
| 20) | DETAILED ID | ENTIFI | CATION | OF MATE | RIALS | TO BE IN | JECTED INC | CLUDING AI | DDITIVES | Fresh water | produ | ced water, bac | torioidas |
| / | and other chen | | | | | | the second secon | | | Fresh water, | produ | ceu water, bat | tericides |
| 21) | FILTERS (IF A | ANY) | | Cartridge | filters | and/or coa | al bed filters | | | | | | |
| 22) | SPECIFICATION | | CATHOL | DIC PROT | ECTIO | N AND O | THER CORRO | OSION CONT | TROL | | | | |
| / | 512101111 | 02,12,02, | | | 72572 | | | | | - | | | |
| 23) | CASING AND | TUBING | G PROGR | AM | | | | | | | | | |
| CAS | ING OR | | CDECI | FICATION | JQ. | | FOOTAGE | INTERVAL | Q | CEMENT FILE | IIID | PACKE | RS |
| | ING OIL | Size | Grade | Weight | New | Used | For Drilling | | n Well | OR SACKS (CU | 2.2.2.4 | 1110111 | |
| | luctor | 2200 | 0,24,0 | 7, 0.8.0 | | | | | - | | | Kinds | |
| _ | h Water | 7" | L.S. | 17# | X | | 966' | 96 | 6' | Use Existing Cas | _ | Tension | |
| Coal | | | | | | | | | | | | Sizes | |
| Inte | rmediate | | | | 1111 | | | | | | | 2.375" X 4.5" | |
| Prod | uction | 4 1/2" | J-55 | 10.5# | X | | 2976' | 29 | 76' | Use Existing Cas | ing | Depths Set | |
| Tubi | ng | 2 3/8" | J-55 | 4.6# | X | | 2760' | 27 | 60' | | | 2650' | |
| Line | | | | | | | | | | | | Perforations | |
| | | | | | | | | | | | | Top Botto | om |
| | | | | | | | | | | Prop | | | |
| | | | 1 | | | | | | | 160 | 20 | OILIO | |
| 24) | APPLICANTS | OPERA' | TING RIG | HTS were | acquir | ed from | LS Hoy | t et al. | | . 6.6 | | OIVU | U |
| | by Deed | | Lease | X | Ot | her Contra | act | Dated | Januar | y 06, 1902 | | of record in th | 1e |
| | | | Wetzel | | County | y Clerk's C | Office in | Lease | Book | 76 at Pa | ge | 800 2013 | |
| | | | | | | | | | | | | 0 2010 | |

07/10/2012 47-103-02804 103028045

State of West Virginia **Division of Environmental Protection** Section of Oil and Gas Well Operator's Report of Well Work



Farm name:

DALLISON LUMBER INC.

Operator Well No.: L.S. HOYT 293

LOCATION:

Elevation:

979'

Quadrangle:

PINE GROVE 7.5'

District:

GRANT

County: WETZEL

Latitude: Longitude:

9,400 Feet south of 6,525 Feet west of

39 Deg 37 Min 30 80 Deg 37 Min

Sec.

Sec.

| Company Address: | HG Energy PO Box 5519 Vienna, WV 26105 | | Casing & Tubing | Used in Drilling | Left in Well | Cement Fill Up Cu. Ft. |
|---------------------|--|------------|--------------------|---------------------|-----------------|---------------------------|
| Inspector: | Derek H | aught | | | | |
| Date Permit Issu | ed: 07. | /10/2012 | 7 | | | |
| Date Well Work | Commenced: | 07/30/2012 | | | | 7 |
| Date Well Work | Completed: | 08/10/2012 | | | | |
| Verbal Plugging | : | | | | | |
| Date Permission | Granted On: | | | | | 1 |
| Rotary X Ca | 7" | 966' | 966' | 250 sks | | |
| Total vertical De | epth (ft): | 3020' | | | | |
| Total Measured | Depth (ft): | 3020' | | | | |
| Fresh Water Dep | oth (ft): | 50' | 4 1/2" | 2976.35' | 2976.35' | 150 sks |
| Salt Water Deptl | n (ft): | none | | | -374 | |
| Is Coal being mi | ned in ares (Y/N)? | No | | | | |
| Coal Depths (ft): | : x 70 | 00'-710' | | | | |
| | ered (Y/N) depth(s): NONE | | | | | |

| ĺ | 1 | P | F | N | FI | (| KIC | 1 | 1 | 1 | ГА | |
|---|---|---|---|---|----|---|-----|---|---|----------|----|--|
| ١ | | | | | | | | | | \vdash | | |

* Waterflood Producer

| Produ | cing formation | Gordo | on | Pay zo: | ne depth (| 2865'- ft) 2876'- | |
|--------|---------------------------|---------|----------|-------------------|------------|----------------------|-------|
| Gas: | Initial open flow | * | MCF/d | Oil: Initial open | flow | * | Bbl/d |
| | Final open flow | | MCF/d | Final open f | | * | Bbl/d |
| | Time of open flow between | initial | and fina | al tests | * | Hours | - |
| Static | rock pressure | * | psig (su | urface pressure) | after | * | Hours |
| Secon | d producing formation | | | | ne depth (| ft) | |
| Gas: | Initial open flow | | MCF/d | Oil: Initial open | flow | | Bbl/d |
| | Final open flow | | MCF/d | Final open f | low | | Bbl/d |
| | Time of open flow between | initial | and fina | al tests | | Hours | - 100 |
| Statio | rock pressure | | | urface pressure) | after | Strategie of the | Hours |

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the 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.

WV Dept. of Environmental Protection

WW-3A 10/07



| 1) Date: | | June 25, 2 | 2013 | | |
|------------------|--------|------------|-------|--------|--|
| 2) Operator's We | ll No. | L. S. Hoyt | 293 | | |
| 3) API Well No. | 47 | 103 | | 2804 | |
| Carl Carl | State | County | | Permit | |
| 4) UIC Permit N | 0. | UIC2R103 | 304AP | | |

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) Surface Owner(s) To Be Served | 7 (a) Coal Operator |
|---|---|
| (a) Name Dallison Lumber, Inc. | Name NA |
| Address HC 79, Box 50 | Address |
| Jacksonburg, WV 26377 | |
| (b) Name | 7 (b) Coal Owner(s) With Declaration Of Record |
| Address | Name NA |
| | Address |
| (c) Name | |
| Address | Name NA |
| | Address |
| 6) Inspector Derek Haught | 7(c) Coal Lessee With Declaration Of Record |
| Address PO Box 85 | CONSOL |
| Smithville, WV 26178 | 6126 Energy Road |
| Telephone 206-7613 | Moundsville, WV 26041 |
| | should have received this form and the following document |
| The date proposed for the first injection or waste THE REASON YOU RECEIVED THESE DOCUMEN WHICH ARE SUMMARIZED IN THE "INSTRUCTIO ARE NOT REQUIRED TO TAKE ANY ACTION AT A Take notice that under Chapter 22-6 of the West Virginia Cor Application and accompanying documents for a Well Work Penvironmental Protection, with respect to a well at the location WW-6. Copies of this Notice, the Application, the plat, and the | S IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION NS" ON FORM WW-3(A) DESIGNATED TO YOU. HOWEVER YOU |
| The person signing this documen | shall make the following certification: |
| "I certify under penalty of law that I have personally examine | l and am Well Operator HG Energy, LLC |
| familiar with the information submitted in this document an | all attachments Address 5260 Dupont Road |
| and that, based on my inquiry of those individuals immediate | y responsible Parkersburg, WV 26101 |
| for obtaining the information, I believe that the information i | |
| and complete. I am aware that there are significant penalties | |
| false information, including the possibility of fine and impris | nment. Its. Accountant |
| | received |
| | Signature Diane C Charles |
| Oil and Gas Privacy Notice | |
| | , such as name, address and phone number, as a part of our regulatory duties. |

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 att/V Dept. of deppersonal information. Protection

Form WW-9 Rev. 10/94

| | Page | 3 | \mathbf{of} | 3 |
|---------------------|----------|------|---------------|------|
| API Nui | mber 47- | 103 | - | 2804 |
| Operator's Well No. | L.S. | Hoyt | 293 | |

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 | | OI | P Code 494497 | 948 |
|----------------|--|--|--|---|-----------------------|--|
| Watershed | Betsy Run | | | Quadrangle | Pine Grove 7.5' | |
| Elevation | 979' | County | Wetzel | District_ | Grant | |
| Description of | of anticipated Pit Waste: | Fluids encountered | d in converting exis | ting well. | | |
| Do you antic | ipate more than 5,000 bbls of | water to complete t | he proposed well work | Yes | No X | |
| Will a synthe | etic liner be used in pit? | Yes If | so, what mil.? | 20 Mil. | | |
| Proposed Dis | sposal Method For Treated Pi | t Wastes: | | | | |
| | XLand Applicat | | 102.1.2. | | | 15.1 |
| | Underground Reuse (at API | Injection (UIC Perm | it Number | | | |
| | | Company of the Compan | W-9 for disposal locati | on) | | |
| | | Explain | • | | |) pint |
| Drilling medi | ium anticipated for this well? | Air, fresh water, oi | l based, etc. | NA | | (-27-1) |
| | - If oilbased, what type? Syr | | | | | |
| Additives to l | | | | | | |
| | disposal method? Leave in | | The second secon | 1 . M | ., ., | 11/10/2005 |
| | If left in pit and plan to soli Landfill or offsite name/per | | will be used? Cement, | lime, sawdust N | ative soil, sawdust, | lime |
| | - Danum of onsite name/per | internameer: | | | | |
| this applicati | w or regulation can lead to en I certify under penalty of law on form and all attachments the information, I believe the submitting false information, | that I have persons thereto and that, bas at the information is including the possib | sed on my inquiry of t true, accurate and con pility of fine or impriso | hose individuals im mplete. I am aware onment. | mediately responsible | |
| Company O | fficial Signature | | ione C le | Shite | | |
| Company O | fficial (Typed Name) | Dia | ne C. White | | | |
| Company O | fficial Title | Acco | ountant | | | |
| Subscribed a | and sworn before me this | 25_day | of June | 2013 | | 0 |
| | |) me | 210 |) No | otary Public | |
| My commiss | sion expires | OU. 12. 7 | 2018 | | | |
| Form WW-9 | | | | | He | ceived |
| | | | | OFFICIAL S NOTARY PU STATE OF WEST TINA L. PETH HG Energy, L 5260 Dupont F arkersburg, West Vir Commission Expires | VIRGINIA | 5 2013 of Oil and Gas invironmental Protection |

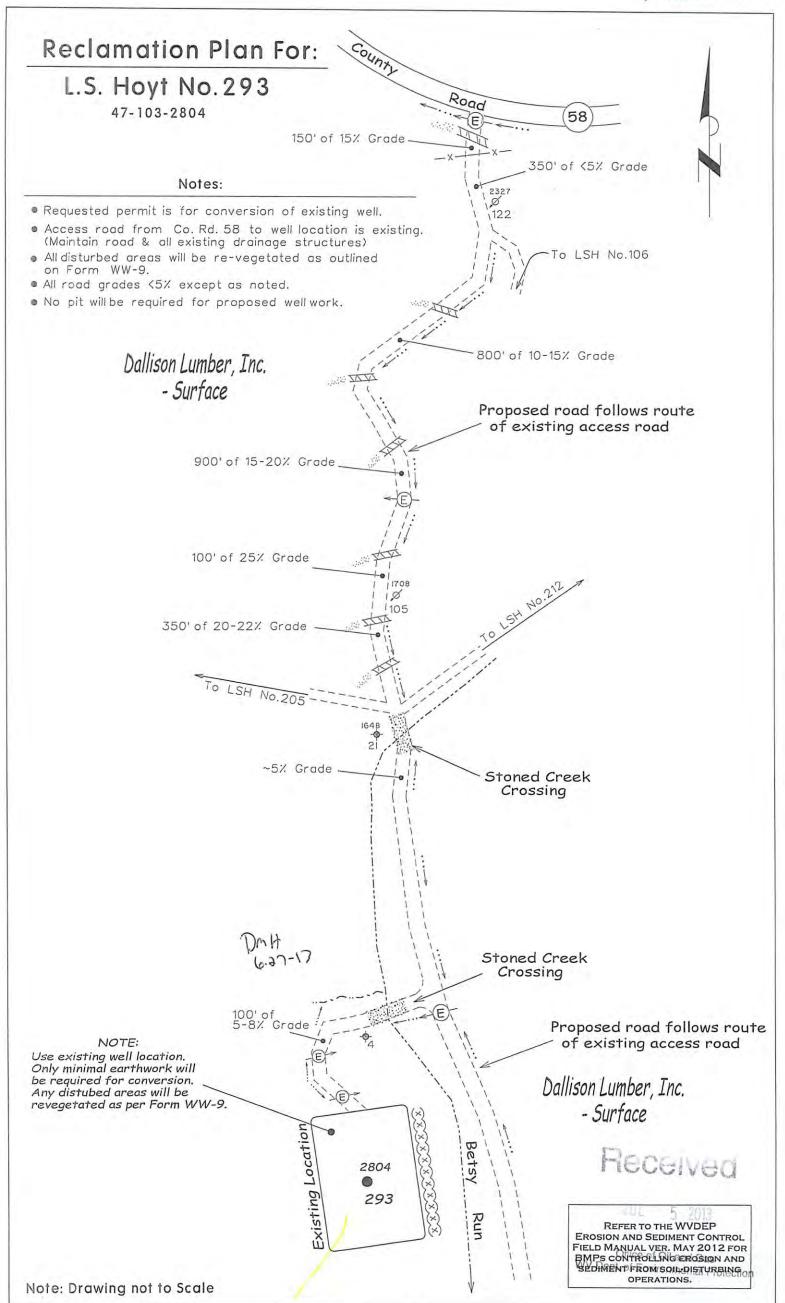
WW9-Back

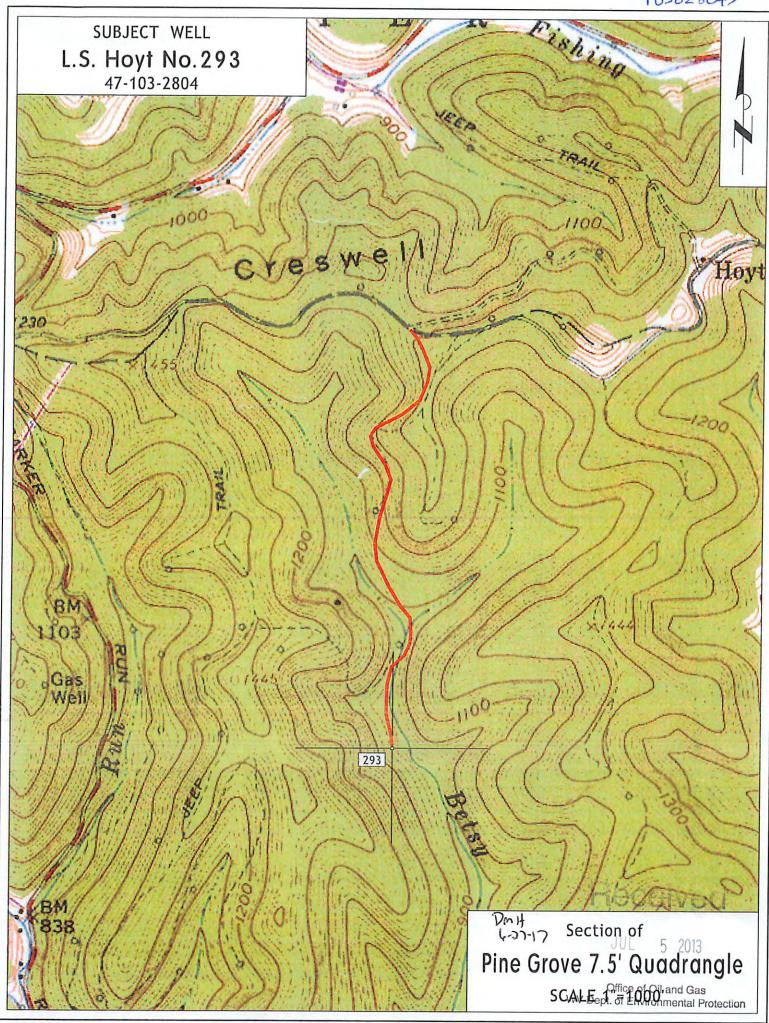
Legend

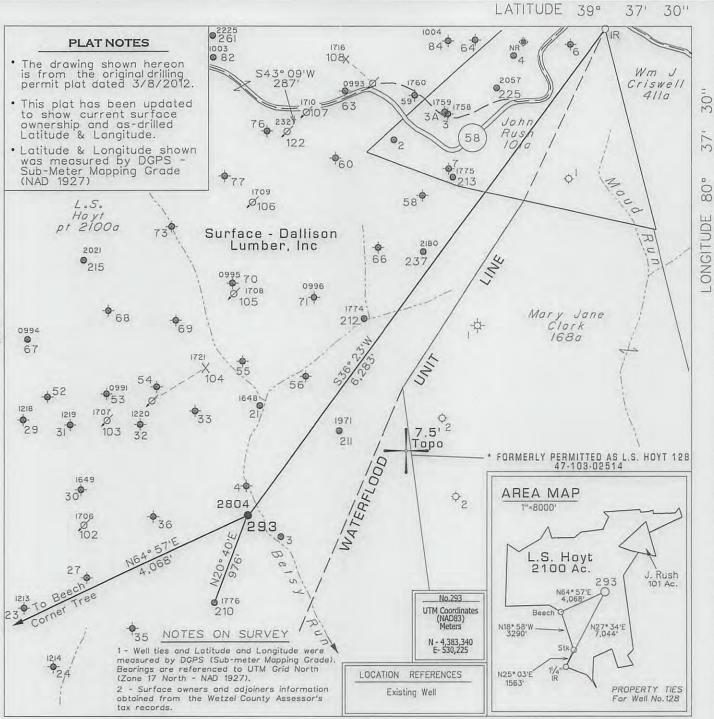
| Property Boundary | A | Diversion | |
|--|--|-------------------------------------|--|
| Road | | Spring | |
| Existing Fence | xxx | Wet Spot | 상 |
| Planned Fence | //_ | Drain Pipe | —————————————————————————————————————— |
| Stream | | Waterway | ←> ←> ←> |
| | > | Cross Drain | |
| Open Ditch Rock | 30 m | Filter Strip | XXXXXXXXXX |
| Ruck | 2000 | Pit: Cut Walls | |
| North | N | | · |
| Buildings | | Pit: Compacted Fill Walls | |
| Hater Wells | (W) | Area of Land | |
| | | Application | |
| Drill Site | Ψ . | of Pit Waste | |
| • | | | |
| | Areant: Acres Disturbed Approx. | | evegetation pH |
| Proposed Revegetation Treatm | ent: Acres Disturbed Approx. | | |
| | Approx. | 0.1 Ac | |
| | 4 | prect to pH 6.5 | • |
| Lime | 2 Tons/Acre or Cozer (10-20-20 or Equivalent) 50 | | lbs. Minimum) |
| remir Mulch | Zer (10-20-20 or 24m-24) | | |
| • | SEED MI | YTURES | |
| | See M | ATORES | |
| Are | a I (Location) | | Area II (Road) Lbs/Ac. |
| | X X (Doctoon) | A 100 | |
| Seed Type | Lbs/Ac. | Seed Type | 40 |
| Tall Fescue | Lbs/Ac. 40 | Seed Type Tall Fescue Ladino Clover | |
| | Lbs/Ac. | Tall Fescue | 40 |
| Tall Fescue | Lbs/Ac. 40 | Tall Fescue | 40 |
| Tall Fescue | Lbs/Ac. 40 | Tall Fescue | 40 |
| Tall Fescue Ladino Clover | Lbs/Ac. 40 5 | Tali Fescue Ladino Clover | 40 |
| Tall Fescue Ladino Clover Attach: | Lbs/Ac. 40 5 pit and proposed area for land application | Tali Fescue Ladino Clover | 40 |
| Tall Fescue Ladino Clover | Lbs/Ac. 40 5 pit and proposed area for land application | Tali Fescue Ladino Clover | 40 |
| Tall Fescue Ladino Clover Attach: Drawing(s) of road, location, Photocopied section of involve | Lbs/Ac. 40 5 pit and proposed area for land application | Tali Fescue Ladino Clover | 40 |
| Tall Fescue Ladino Clover Attach: Drawing(s) of road, location, Photocopied section of involvence of the section of the sec | Lbs/Ac. 40 5 pit and proposed area for land application | Tali Fescue Ladino Clover | 40 |
| Tall Fescue Ladino Clover Attach: Drawing(s) of road, location, Photocopied section of involve | Lbs/Ac. 40 5 pit and proposed area for land applicationed 7.5' topographic sheet. | Tali Fescue Ladino Clover | 40 5 |
| Tall Fescue Ladino Clover Attach: Drawing(s) of road, location, Photocopied section of involvence of the section of the sec | Lbs/Ac. 40 5 pit and proposed area for land application | Tali Fescue Ladino Clover | 40 |

Received

JUL 5 2013







- DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

◆ - DENOTES A POSSIBLE WATER SUPPLY SOURCE LOCATED FROM CIRCA 2003 AERIAL PHOTOGRAPHY - NOT BY SURVEY. OTHER SOURCES MAY BE PRESENT.

1046-31 FILE NO .. MAP NO ._ 1" = 1000" SCALE _ MINIMUM DEGREE OF ACCURACY ___Sub-Meter PROVEN SOURCE OF DGPS Survey ELEVATION (Sub-Meter Mapping Grade)

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 REGU-LATIONS ISSUED AND PRESCRIBED BY THE DEPART

MENT OF MINES. (SIGNED) P. ROUSH TIMOTHY

PS 793



WEST VIRGINIA

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



March 8, 2012 DATE L.S. Hoyt No.293 FARM API WELL NO.

| /ELL TYPE: OIL GAS LIQUID INJECTION X WASTE D (IF "GAS") PRODUCTION STORAGE DEEP_ LOCATION: ELEVATION 979' WATERSHED Bets | |
|---|------------------|
| | TYWetzel |
| SURFACE OWNER Dallison Lumber Inc. | ACREAGE2099.3 Ac |
| OIL & GAS ROYALTY OWNER The Hoyt Foundation | |
| LEASE NO99324-00 | |

CONVERT_X DRILL DEEPER ___ REDRILL _ PROPOSED WORK: DRILL _ STIMULATE __ PLUG OFF OLD FORMATION __ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Convert to Liquid Injection

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG_ TARGET FORMATION __Gordon ESTIMATED DEPTH_ WELL OPERATOR HG Energy, LLC. DESIGNATED AGENT Mike Kirsch P. O. Box 5519 P. O. Box 5519 **ADDRESS ADDRESS** Vienna, W.Va. 26105 Vienna, W.Va. 26105