



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

September 27, 2013

WELL WORK PERMIT

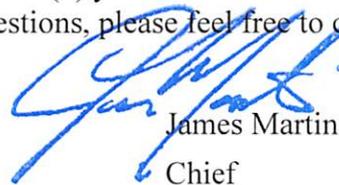
Re-Work

This permit, API Well Number: 47-3300599, issued to DOMINION TRANSMISSION 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: 11434
Farm Name: SMITH, PATRICIA BASSEL ,. ET A
API Well Number: 47-3300599
Permit Type: Re-Work
Date Issued: 09/27/2013

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.

3300599R

WW - 2B
(Rev. 8/10)

check # 17794
\$1950.00
(3 permits)

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

06 245

1) Well Operator: Dominion Transmission, Inc. Operator ID: 307048 County: Harrison District: Grant Quadrangle: Berlin 7.5'

2) Operator's Well Number: W-11434 33-0599 3) Elevation: 1,312'

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

5) Proposed Target Formation(s): Benson Proposed Target Depth: 4,600'
6) Proposed Total Depth: 4,700 Feet Formation at Proposed Total Depth: _____
7) Approximate fresh water strata depths: 550'
8) Approximate salt water depths: None

9) Approximate coal seam depths: None shown in well record, offset well data shows 541'

10) Approximate void depths, (coal, Karst, other): None listed in offset well data or well record

11) Does land contain coal seams tributary to active mine? None

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)
Drill deeper and frac Benson with Foam, Sand, Water, and Nitrogen, then squeeze three (3) zones; Balltown, Bayard, and 5th Sand with sand and water.

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						
Fresh Water	11"			Existing-see well record	329'	CTS
Coal						
Intermediate	7"			Existing-see well record	2474'	CTS
Production	4.5"	J-55	9.5#	4700'	4700'	300 sacks of Class-A
Tubing						
Liners						

SDW
8/30/2013

Received

SEP - 6 2013

Packers: Kind: _____
Sizes: _____
Depths Set _____

Office of Oil and Gas
WV Dept. of Environmental Protection

OG-10
Rev. - 9-71



RECEIVED
MAY 8 1972

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division
WELL RECORD

OIL & GAS DIVISION
DEPT. OF MINES

Rotary XX Oil _____
Cable _____ Gas XX _____
Recycling _____ Comb. G. HOLD _____
Water Flood _____ Storage _____
Disposal _____ (Kind) _____

Quadrangle WESTON
Permit No. HAR-599

Company Consolidated Gas Supply Corporation
Address Clarksburg, W. Va.
Farm Patricia B. Smith Acres 130
Location (waters) _____
Well No. 11/31 Elev. 1295'
District Grant County Harrison
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling Commenced 11-27-71
Drilling Completed 12-1-71
Initial open flow 37 M cu. ft. _____ bbls.
Final production 888 M cu. ft. per day _____ bbls.
Well open 1 hrs. before test 1000 RP.
Well treatment details:

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. <u>11"</u>	329	329	To surface
9 5/8			
8 5/8			
7	217 1/2	217 1/2	To surface
5 1/2			
4 1/2			
3			
2			
Liners Used			

Fractured 12-15-71 with 500 gal 15% acid, 600 bbl water, 15,000# sand and 2500 HHP
PERFORATED: 2360-2367' 21 Holes

Coal was encountered at None Feet _____ Inches _____
Fresh water 550' Feet _____ Salt Water None Feet _____
Producing Sand Bayard Depth 2360-2367'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Sand & Shale			0	910'	Water	550' Fresh
2nd Salt Sand			910	1060		
Shale & Red Rock			1060	1120		
Big Lime			1120	--		
Big Injur			--	1590		
Shale			1590	1890		
50' Sand			1890	1930		
Shale			1930	2080		
Gordon Sand			2080	2160		
Shale			2160	2280		
6th Sand			2280	2350		
Shale			2350	2512	Gas	2360-68'
Total Depth				2512'		

All measurements taken from K.R. 10' above G.L.

(over)

* Indicates Electric Log tops in the remarks section.

RECEIVED
Office of Oil and Gas
Environmental Protection
1763 ER01

WW-2A
(Rev. 6-07)

1). Date: _____
2.) Operator's Well Number W-11434
State County Permit
3.) API Well No.: 47- 33 - 00599

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

4) Surface Owner(s) to be served: (a) Name Patricia Bassel Smith, et al
Address P.O. Box 204
Lost Creek, WV 26385
(b) Name _____
Address _____
(c) Name _____
Address _____
5) (a) Coal Operator
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____
6) Inspector Sean Ward
Address P.O. Box 2327
Buckhannon, WV 26201
Telephone 304-389-7583

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

OR
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas

Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

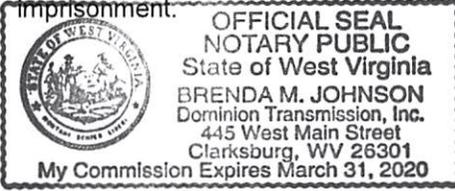
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through ___ on the above named parties by:

- _____ Personal Service (Affidavit attached)
- Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

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, 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 and imprisonment.



Well Operator: Dominion Transmission, Inc.
By: James D. Blasingame 8/19/13
Its: Designated Agent and Director of Storage
Address: 445 West Main Street
Clarksburg, WV 26301
Telephone: 304-669-4850

Subscribed and sworn before me this 19th day of August, 2013

Brenda M. Johnson Notary Public
My Commission Expires March 31, 2020

Received

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 depprivacyofficer@wv.gov

SEP - 6 2013

Office of Oil and Gas
Department of Environmental Protection

3300599R

WW-2A1
(Rev. 1/11)

Operator's Well Number W-11434

**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
Amanda E. & M.L. Smith	Hope Natural Gas Company	1/8	194/233
Hope Natural Gas Company	South Penn Oil Company	W.I. (Oil)	Not recorded, dated 5-19-11
Hope Natural Gas Company	Consolidated Gas Supply Corp.	W.I. (Gas)	996/672
	SEE BELOW		

Consolidated Gas Supply Corp. Agreement dated Corporation by Assignment dated 3-1-84 effective 1-1-84. is now CNG Transmission Corporation. As a result Amended Certificate of Authority with the State of	11-16-71. Recorded in Bk 996 at Pg 672. Consolidated Rec. Bk 1136 at Pg 250. By corporate name change of a merger, CNG Transmission Corporation became West Virginia dated 5-10-2000, filed in Harrison	Gas Supply Corporation to effective 1-1-88, Consolidated Dominion Transmission County, Deed Book 58,	Consolidated Gas Transmission Gas Transmission Corporation Inc., effective 4-11-2000. Page 362.
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**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

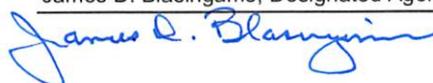
The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- 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

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:
By: Its:

Dominion Transmission, Inc.
James D. Blasingame, Designated Agent and Director of Storage

 8/19/13

Received
 SEP 6 2013

WV Dept. of Environment & Natural Resources
 Office of Oil and Gas
 Office of Storage

WW-9
(5/13)

Page _____ of _____
API Number 47 - _____ - _____
Operator's Well No. W-11434

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Dominion Transmission, Inc. OP Code 307048

Watershed (HUC 10) Tributary of Jesse Run of Hackers Creek Quadrangle Berlin 7.5'

Elevation 1,312' County Harrison District Grant

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

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

If so, please describe anticipated pit waste: Rock cuttings/drilled solids, drilling and completion fluids

Will a synthetic liner be used in the pit? Yes X No _____ If so, what ml.? 60

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 _____)

*SDW
8/30/2013*

Will closed loop system be used? Air drilling operations - no; Fluid drilling operations (if necessary) - yes

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Air, foam/soap, fresh water, water based polymer mud

-If oil based, what type? Synthetic, petroleum, etc. N/A

Additives to be used in drilling medium? Drilling Mud - sodium/calcium/potassium chloride(s), starch, xanthan gum, sodium bicarbonate, caustic soda, biocide

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Primary plan - Leave in pit; Alternate plan - Landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) Cement or lime, depending on product availability

-Landfill or offsite name/permit number? If necessary to landfill, Meadowfill Landfill: R30-MSWLGP2011-03300128

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 *James D. Blasingame*
Company Official (Typed Name) James D. Blasingame
Company Official Title Designated Agent and Director of Storage

Received
Received
SEP 6 2013

Subscribed and sworn before me this 19th day of August, 2013

Brenda M. Johnson



My commission expires March 31, 2020

LEGEND

- Property Boundary
- Road
- Existing Fence
- Planned Fence
- Stream
- Open Ditch
- Rock
- North
- Buildings
- Water wells
- Drill site
- Diversion
- Spring
- Wet Spot
- Drain Pipe with size-in inches
- Waterway
- Cross Drain
- Artificial Filter Strip
- Pit: cut walls
- Pit: compacted fill walls
- Area for Land Application of Pit Waste

Proposed Revegetation Treatment: Acres Disturbed 2.5 +/- Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 1/3 TON lbs/acre (500 lbs minimum)

Mulch HAY 2 Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre	Seed Type	Area II lbs/acre
KY-31	40	ORCHARD GRASS	15
ALSIKE CLOVER	5	ALSIKE CLOVER	5
ANNUAL RYE	15		

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: S. P. D. Warratt

Title: Oil Gas Inspector

Date: 8/30/2013

Field Reviewed? Yes

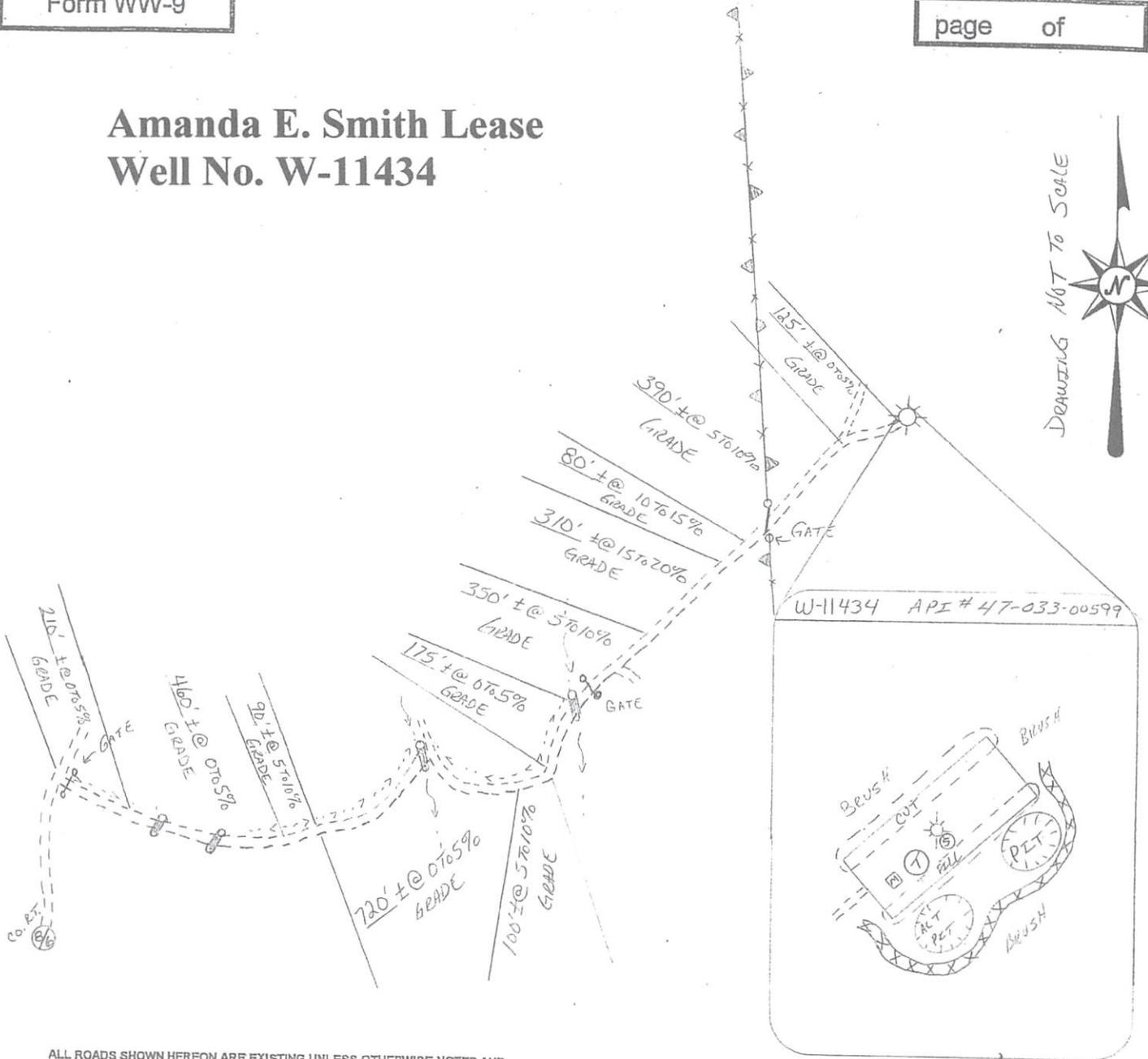
No Existing Well Pad

Received

SEP - 6 2013

Office of Oil and Gas
Dept. of Environmental Protection

Amanda E. Smith Lease Well No. W-11434



ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.E.P. OIL AND GAS BMP MANUAL ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.O.T. REGULATIONS. SEPARATE PERMITS MAY BE REQUIRED BY THE D.O.T.

SEDIMENT BASINS (TRAPS) AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE WV D.E.P. OIL AND GAS BMP MANUAL. FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFICATION TO THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

TEMPORARY SEED & MULCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

CUT & STACK ALL MARKETABLE TIMBER.

STACK BRUSH BELOW LOCATION FOR SEDIMENT CONTROL.

Upgrade ETS as necessary to WV DEP ETS manual. Pre-Seed mulch as soon as reasonably possible.

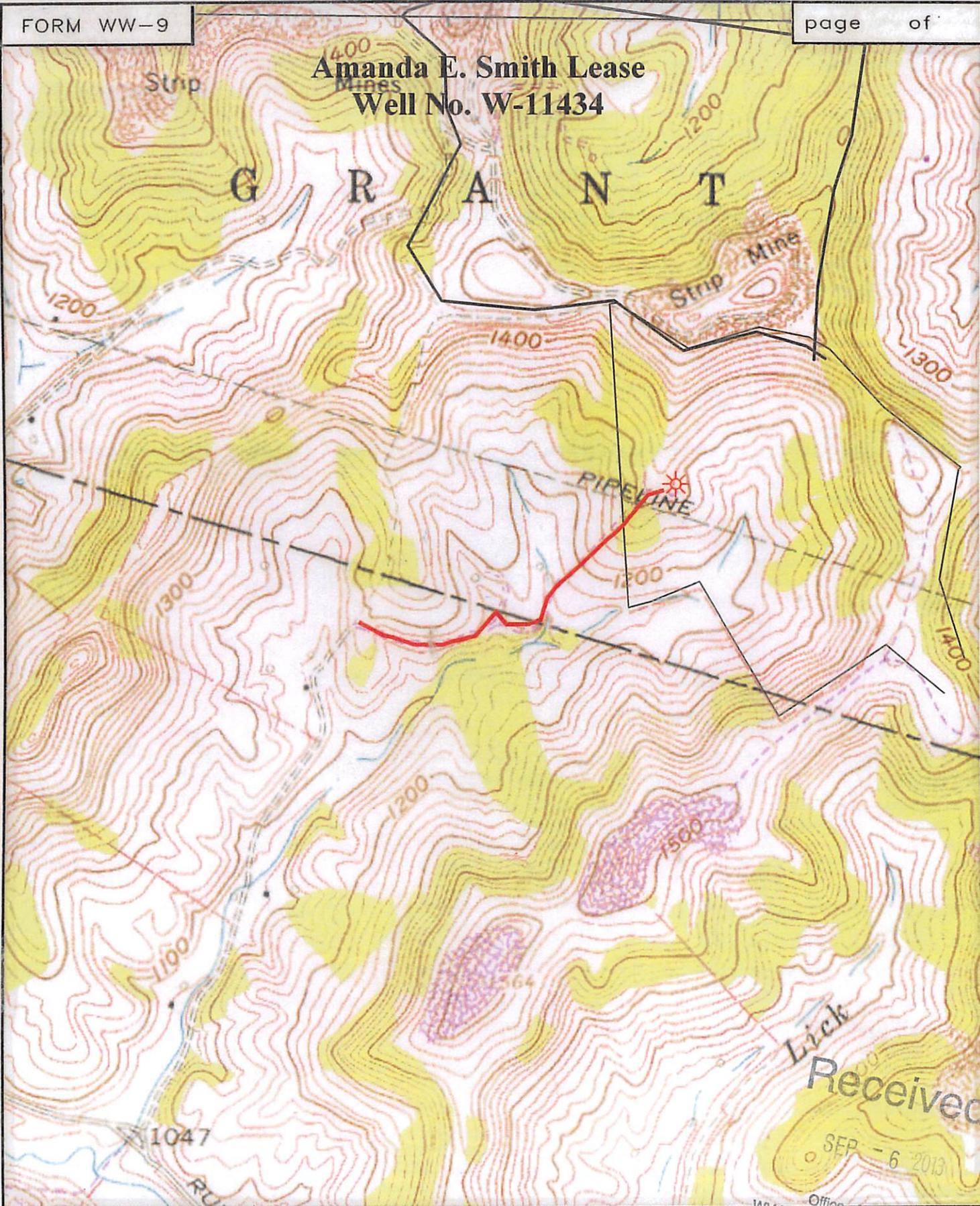
SDW
8/30/2013

	Phone: (304) 462-5634 Fax: 462-5656 email: sls@slssurveys.com
	DRAWN BY JAS DATE 5/22/13 FILE NO. 8036

P.O. BOX 150 GLENVILLE, WV. 26351

**Amanda E. Smith Lease
Well No. W-11434**

G R A N T



Lick
Received
SEP - 6 2013

Office of Oil and Gas
WV Dept. of Environmental Protection



SMITH LAND SURVEYING
P.O. BOX 150 GLENVILLE, WV. 26351

TOPO SECTION OF BERLIN 7.5'

FILE NO. 8036 DATE 6/25/13 SCALE 1"=1,000'

AMANDA E. SMITH LEASE 130 ACRES± WELL NO. W-11434 (47-033-00599)

DAVID HINKLE
ET AL
175.50 ACRES±

LATITUDE 39°05'00"

GEORGE DAWSON
ET AL
158.55 ACRES±

LONGITUDE 80°20'00"
3,570'

CATHERINE A.
MAURO
96.45 ACRES±

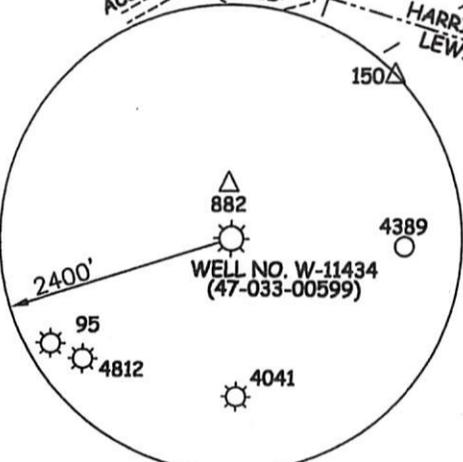
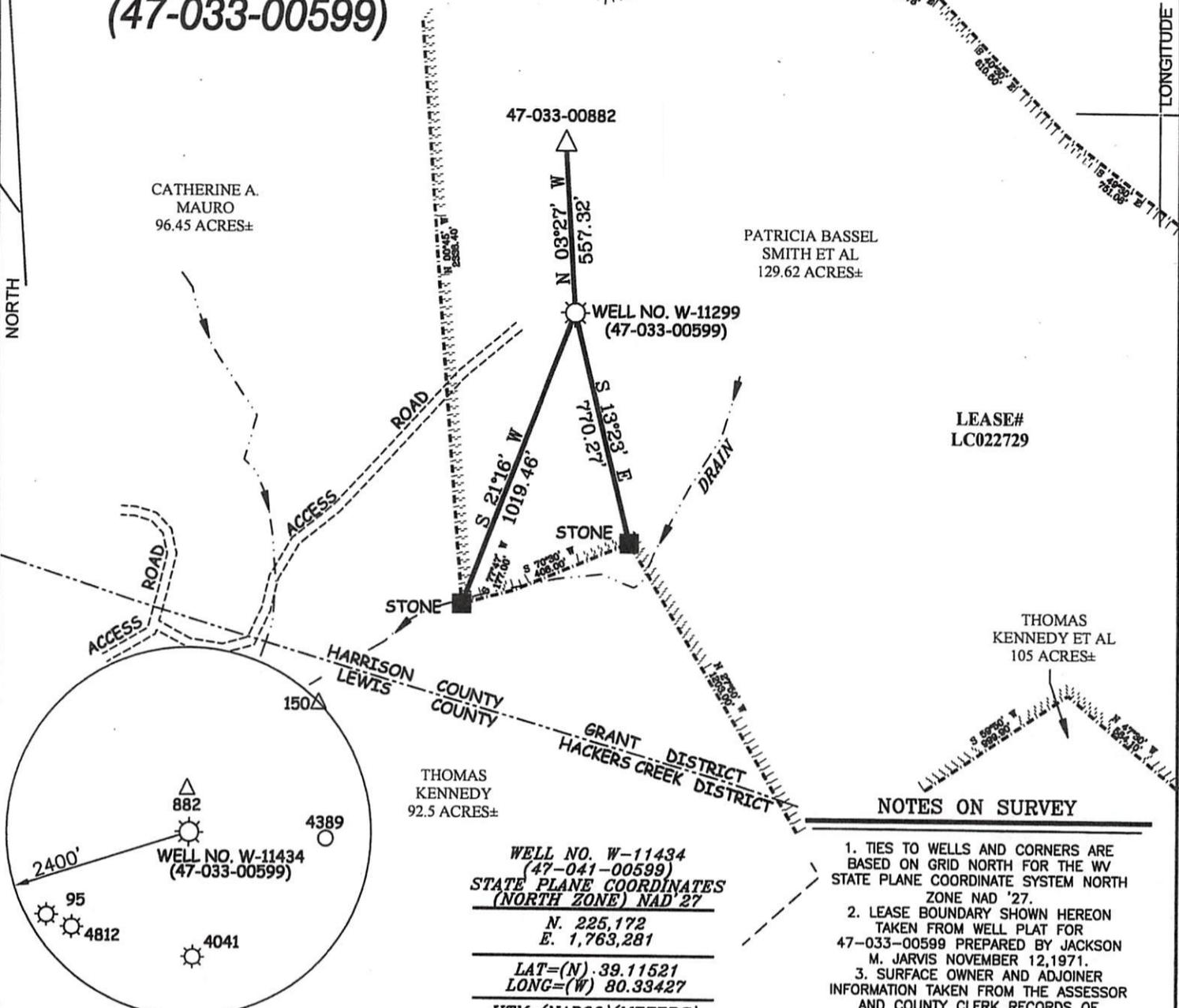
PATRICIA BASSEL
SMITH ET AL
129.62 ACRES±

LEASE#
LC022729

47-033-00882

WELL NO. W-11299
(47-033-00599)

NORTH



THOMAS
KENNEDY
92.5 ACRES±

THOMAS
KENNEDY ET AL
105 ACRES±

NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM WELL PLAT FOR 47-033-00599 PREPARED BY JACKSON M. JARVIS NOVEMBER 12, 1971.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF HARRISON COUNTY IN JULY, 2012.
4. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS (SUBFOOT MAPPING GRADE).

WELL NO. W-11434
(47-041-00599)
STATE PLANE COORDINATES
(NORTH ZONE) NAD 27

N. 225,172
E. 1,763,281

LAT=(N) .39.11521
LONG=(W) 80.33427

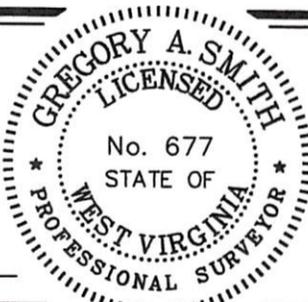
UTM (NAD83)(METERS)
N. 4,329,783
E. 557,569



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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S.
677

Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE MAY 23, 20 13

OPERATORS WELL NO. W-11434

API WELL NO. 47 - 033 - 00599R
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8036PW-11434(460-46)

PROVEN SOURCE OF ELEVATION DGPS (SUBFOOT MAPPING GRADE) SCALE 1" = 500'

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



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

LOCATION: ELEVATION 1312' WATERSHED TRIBUTARY OF JESSE RUN OF HACKERS CREEK

DISTRICT GRANT COUNTY HARRISON QUADRANGLE BERLIN 7.5'

SURFACE OWNER PATRICIA BASSEL SMITH ET AL ACREAGE 129.62±

ROYALTY OWNER PATRICIA BASSEL SMITH ET AL ACREAGE 130±

PROPOSED WORK: LEASE NO. 47-033-00599

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION BENSON

ESTIMATED DEPTH 4700'

WELL OPERATOR DOMINION TRANSMISSION INC. DESIGNATED AGENT JAMES BLASINGAME

ADDRESS 445 WEST MAIN STREET ADDRESS 445 WEST MAIN STREET

CLARKSBURG, WV 26301 CLARKSBURG, WV 26301

COUNTY NAME
PERMIT

Received

Office of Oil and Gas
WV Dept. of Environmental Protection

AMANDA E. SMITH LEASE 130 ACRES± WELL NO. W-11434 (47-033-00599)

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ET AL
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CATHERINE A.
MAURO
96.45 ACRES±

PATRICIA BASSEL
SMITH ET AL
129.62 ACRES±

LEASE#
LC022729

NORTH

47-033-00882

N 03°27' W
557.32'

WELL NO. W-11299
(47-033-00599)

ROAD

ACCESS

ROAD