



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

Jim Justice , Governor
Austin Caperton , Cabinet Secretary
www.dep.wv.gov

Friday, May 12, 2017
WELL WORK PERMIT
Vertical / Plugging

ROSS AND WHARTON GAS COMPANY, INC. (A)
RT. 5, BOX 29

BUCKHANNON, WV 262010000

Re: Permit approval for 3-S-245
47-007-01733-00-00

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: 3-S-245
Farm Name: WHITE, ROGER & CHERYL
U.S. WELL NUMBER: 47-007-01733-00-00
Vertical / Plugging
Date Issued: 5/12/2017

Promoting a healthy environment.

05/12/2017

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.

701733P

WW-4B
Rev. 2/01

1) Date February 16, 2017
2) Operator's
Well No. Duffield, Lovey
3) API Well No. 47-007 - 01733

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 966 Watershed Plantation Fork of Steer Creek
District Birch County Braxton Quadrangle Rosedale

6) Well Operator Ross & Wharton 7) Designated Agent Mike Ross
Address Route 5 Box 29 Address PO Box 219
Buckhannon, WV 26201 Coalton, WV 26257

8) Oil and Gas Inspector to be notified Name Danny Mullins
Address 220 Jack Acres Road
Buckhannon, WV 26201
9) Plugging Contractor Name Unknown
Address _____

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

2154 - TD *Check TD 2154 set Plug from 2154 to 1830*
Run 6% Gel between each plug
2140 - 1830 Set Cement Plug *ABOVE PERFORATIONS.*
1450 - 1350 Set Cement Plug *FREEPOINT, CUT & POOH WITH 4 1/2" CASING.*
1020 - 920 Set Cement Plug *SET 100' CLASS A CEMENT PLUG ACROSS CASING CUT.*
~~220 - 0~~ *cover seat at 196*
220 - 0
Set Monument with API Number

Free piping and pull all casing

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

Work order approved by inspector *Danny Mullins* Date *3-1-17*
RECEIVED
Office of Oil and Gas
MAR 06 2017
WV Department of Environmental Protection

05/12/2017



IV-35 (Rev 8-81)

JUN - 9 1983

Date: December 7, 1982
Operator's Well No. 3-S-245
Farm Lovey Duffield
API No. 47 - 007 - 1733

C... & GAS DIVISION
DEPT. OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production X / Underground Storage ___ / Deep ___ / Shallow ___ /)

LOCATION: Elevation: 966 Watershed Plantation Fork of Steer Creek
District: Birch County Braxton Quadrangle Rosedale

COMPANY Stonestreet Lands Company
ADDRESS P.O. Box 350 Spencer, W.Va. 25276
DESIGNATED AGENT O.V. Stonestreet
ADDRESS P.O. Box 350 Spencer, W.Va. 25276
SURFACE OWNER Anna J. Williams etal
ADDRESS Sutton, W.Va.
MINERAL RIGHTS OWNER Anna J. Williams etal
ADDRESS Sutton, W.Va.
OIL AND GAS INSPECTOR FOR THIS WORK Robert Bates
ADDRESS 109 Minnich St. Weston, WV
PERMIT ISSUED Sept. 28, 1981
DRILLING COMMENCED 2-3-82
DRILLING COMPLETED 2-9-82

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	196	196	60 sks
7			
5 1/2			
4 1/2		2154	70 sks rft
3			
2			
Liners used			

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON

GEOLOGICAL TARGET FORMATION Big Injun Depth 2106 feet
Depth of completed well 2184 feet Rotary X / Cable Tools
Water strata depth: Fresh 55 feet; Salt _____ feet
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation Big Injun Pay zone depth 1914 feet
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 290 Mcf/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 7 hours
Static rock pressure 510 psig (surface measurement) after 48 hours shut in
(If applicable due to multiple completion--)
Production test co-mingled
Second producing formation Blue Monday Pay zone depth _____ feet
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 290 Mcf/d Oil: Final open flow 0 Bbl/d
Time of open flow between initial and final tests 7 hours
Static rock pressure 510 psig (surface measurement) after 48 hours shut in

Beak - 1733

(Continue on reverse side)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforation Intervals 1886-1914

Well Treatment

J-266 350 lbs. 20/40 sand 30,000 lbs. W-22 Anti sludging 36 gals.
L-53 Clay control agent 20 gals. F-78 Ezevlo surfactant 8 gals.
15% Acid HCL 2000 gals. 500 bbls. water A-200 Inhibitor 4 gals.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Clay			0	18	
Shale & Sand			18	80	
Sandy Shale			80	165	
Shaley Sand			165	205	
Red Rock			205	255	
Slate & Shale			255	380	
Red Rock			380	510	
Slate & Shale			510	595	
Red Rock			595	735	
Slate & Shale			735	810	
Sand & Shale			810	960	
Slate & Shale			960	1000	
Sand & Shale			1000	1314	
Shale			1314	1344	
Sand & Shale			1344	1368	
Shale			1368	1402	
Sand & Shale			1402	1440	
Shale			1440	1452	
Salt sand			1452	1508	
Shale			1508	1544	
Salt sand			1544	1578	
Shale			1578	1622	
Salt sand			1622	1690	
Shale			1690	1838	
Little Lime			1838	1862	
Blue Monday			1862	1914	
Big Lime			1914	2000	
Big Injun			2000	2106	
Shale			2106	2184	TD

(Attach separate sheets as necessary)

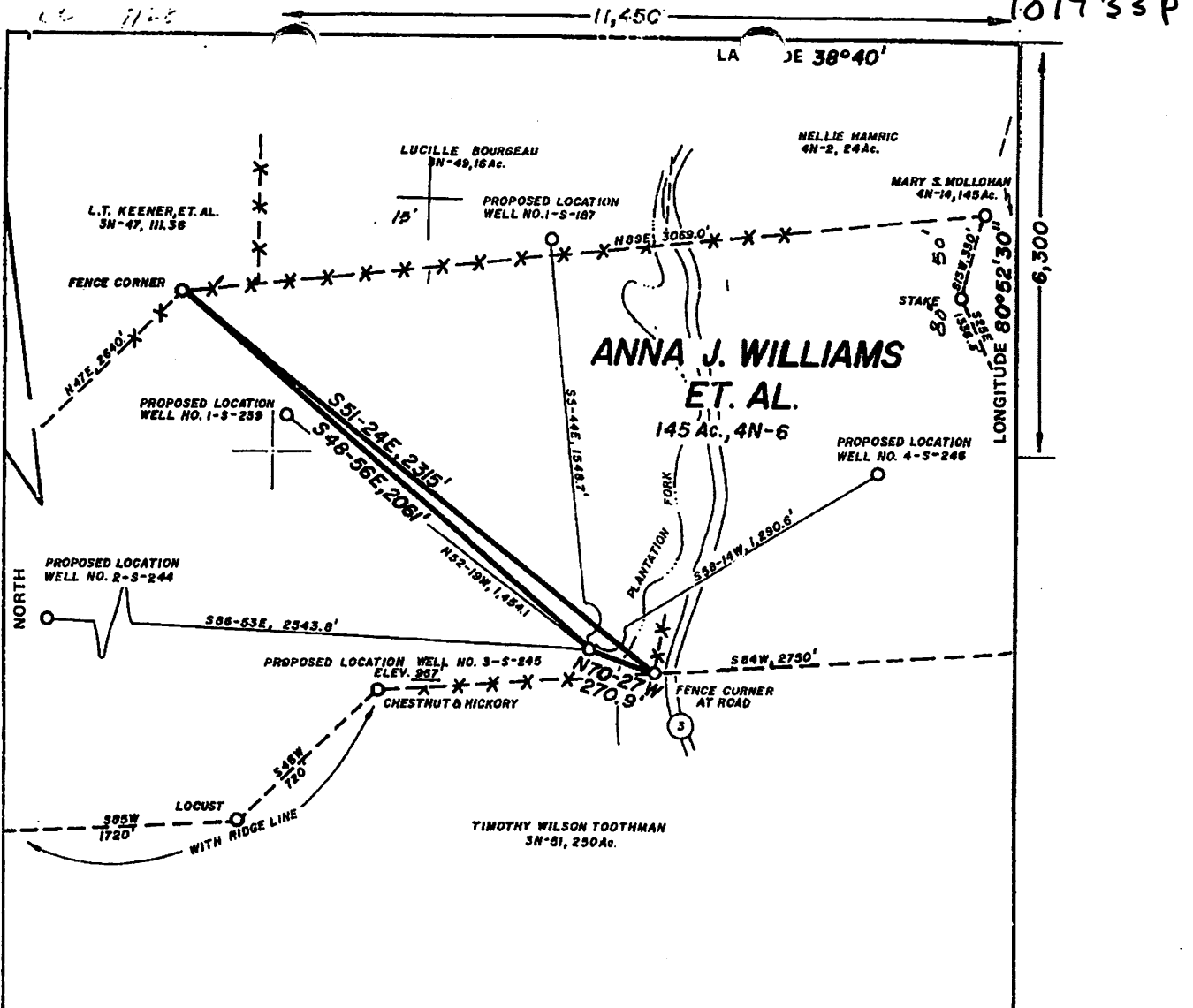
Stonestreet Lands Company

Well Operator

By: [Signature] General Manager

Date: December 20, 1968

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including ..., encountered in the drilling of a well."



FILE NO. DUFFIELD NO. 3
 DRAWING NO. _____
 SCALE 1" = 600'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION ROAD INTERSECTION AT DESSIE. ELEV. = 812'

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) Cliff Wilkie
 R.P.E. _____ L.L.S. 717

PLACE SEAL HERE

(4) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE MAY 29 19 81
 OPERATOR'S WELL NO. 3-S-245
 API WELL NO. _____
47 - 007 - 1733
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 888.9' WATER SHED PLANTATION FORK OF STEER CREEK
 DISTRICT BIRCH COUNTY BRAXTON
 QUADRANGLE ROSDALE 7.5'
 SURFACE OWNER ANNA J. WILLIAMS, ET AL. ACREAGE 145 Ac.
 OIL & GAS ROYALTY OWNER ANNA J. WILLIAMS, ET AL. LEASE ACREAGE 145 Ac.
 LEASE NO. _____
 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 BIG INJUN ESTIMATED DEPTH 3,015.9'
 WELL OPERATOR STONESTREET LANDS CO. DESIGNATED AGENT O.V. STONESTREET
 ADDRESS SPENCER, WV. ADDRESS SPENCER, WV.

05/12/2017

7017 33 P

WW-4A
Revised 6-07

1) Date: February 16, 2017
2) Operator's Well Number
Duffield, Lovey 3-S-245
3) API Well No.: 47 - 007 - 01733

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

4) Surface Owner(s) to be served: (a) Name Roger White &/or Cheryl, Address HC 84 Box 18, Frametown, WV 26623. (b) Name, Address. (c) Name, Address. 5) (a) Coal Operator Name N/A, Address. (b) Coal Owner(s) with Declaration Name N/A, Address. (c) Coal Lessee with Declaration Name N/A, Address. 6) Inspector Danny Mullins, Address 220 Jack Acres Road, Buckhannon, WV 26201, Telephone 304-932-6844.

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

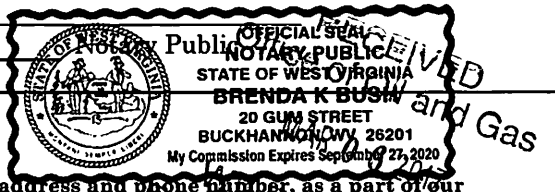
- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

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 Ross & Wharton (Mike Ross Inc.)
By: Mike Ross
Its: President
Address PO Box 219, Coalton, WV 26257
Telephone 304-472-4289

Subscribed and sworn before me this 16th day of February, 2017
My Commission Expires September 27, 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 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.

05/12/2017

7017 33 P

Mike Ross Inc.

(304) 472-4289 (Office) Box 219 Coalton, WV 26257 (304) 472-7405 (Fax)

February 15, 2017

Roger &/ or Cheryl White
HC 84 Box 18
Frametown, WV 26623

Re: Duffield, Lovey 1-S-239; Duffield, Lovey 2-S-244; Duffield, Lovey 3-S-245;
Duffield, Lovey 4-S-246 Plugging Permits

Dear Roger &/or Cheryl:

Mike Ross Inc. is in the process of applying for a permit to plug the above referenced well. Enclosed are copies of the Notice and Application for well plugging permits and the location plats.

Please note the instructions on the surface owner waiver. If you have no objection to the plugging being done, please sign the waiver and return it to our office.

If you have any questions, please do not hesitate to contact this office.

Thank you,

Mike Ross

Mike Ross Inc.

RECEIVED
Office of Oil and Gas
MAR 06 2017
WV Department of
Environmental Protection

7016 2140 0001 1545 5512

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at www.usps.com ®.	
OFFICIAL USE	
Certified Mail Fee \$ 3.35	RECEIVED Office of Oil and Gas MAR 06 2017 WV Department of Environmental Protection Roger &/or Cheryl White HC 84 Box 18 Frametown, WV 26623
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy) \$ _____	
<input type="checkbox"/> Return Receipt (electronic) \$ _____	
<input type="checkbox"/> Certified Mail Restricted Delivery \$ _____ <input type="checkbox"/> Adult Signature Required \$ _____ <input type="checkbox"/> Adult Signature Restricted Delivery \$ _____	
Postage \$ 3.57	Postmark Here \$ 9.67 3/2/17
Total Postage and Fees \$ 9.67	
PS Form 3800, April 2015 PSN 7630-02-000-9047 See Reverse for Instructions	

05/12/2017

701733P

WW-9
Rev. 5/08

Page _____ of _____
API Number 47 - 007 - 01733
Operator's Well No. Duffield, Lovey 3-S-245

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 Ross & Wharton (Mike Ross Inc.) OP Code 305680

Watershed Plantation Fork of Steer Creek Quadrangle Rosedale

Elevation 966 County Braxton District Birch

Description of anticipated Pit Waste: Plugging Fluid

Will a synthetic liner be used in the pit? ~~Yes~~ NO

NO PIT, TANKS WILL BE USED TO CONTAIN ANY WELL EFFLUENT AND IT WILL BE DISPOSED OF PROPERLY, OFFSITE.

Proposed Disposal Method For Treated Pit Wastes:

- NO Land Application
- _____ Underground Injection (UIC Permit Number _____)
- _____ Reuse (at API Number _____)
- _____ Off Site Disposal (Supply form WW-9 for disposal location)
- _____ Other (Explain _____)

Proposed Work For Which Pit Will Be Used:

- _____ Drilling
- _____ Workover
- _____ Other (Explain _____)
- _____ Swabbing
- X 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 *Mike Ross*

Company Official (Typed Name) Mike Ross

Company Official Title President

Subscribed and sworn before me this 16th day of February, 2017

Brenda K. Bush

Notary Public

My commission expires September 27, 2020

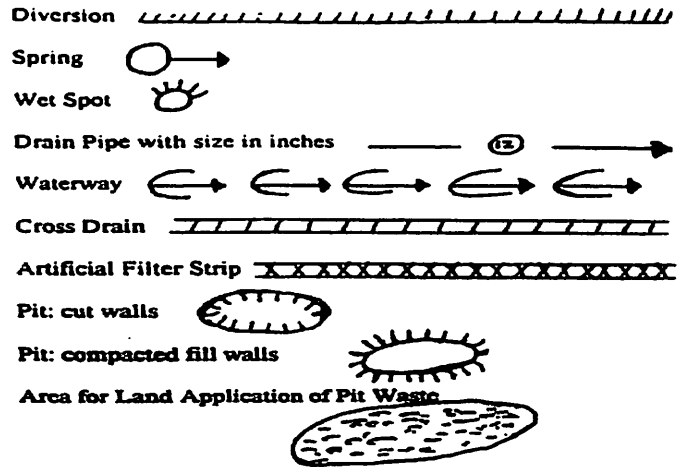
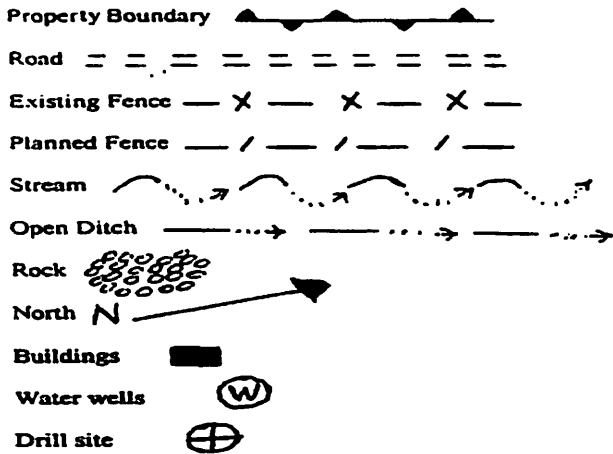


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Office of Oil and Gas
MAR 06 2017

WV Department of Environmental Protection

05/12/2017

LEGEND



Proposed Revegetation Treatment: Acres Disturbed 1 Acre Prevegetation pH 6.5
 Lime 2 Tons/acre or to correct to pH 6.5
 Fertilizer (10-20-20 or equivalent) 50% lbs/acre (500 lbs minimum)
 Mulch _____ Tons/acre

Seed Mixtures

Seed Type	Area I	Area II
	lbs/acre	lbs/acre
Fescue		
Contractors Mix		

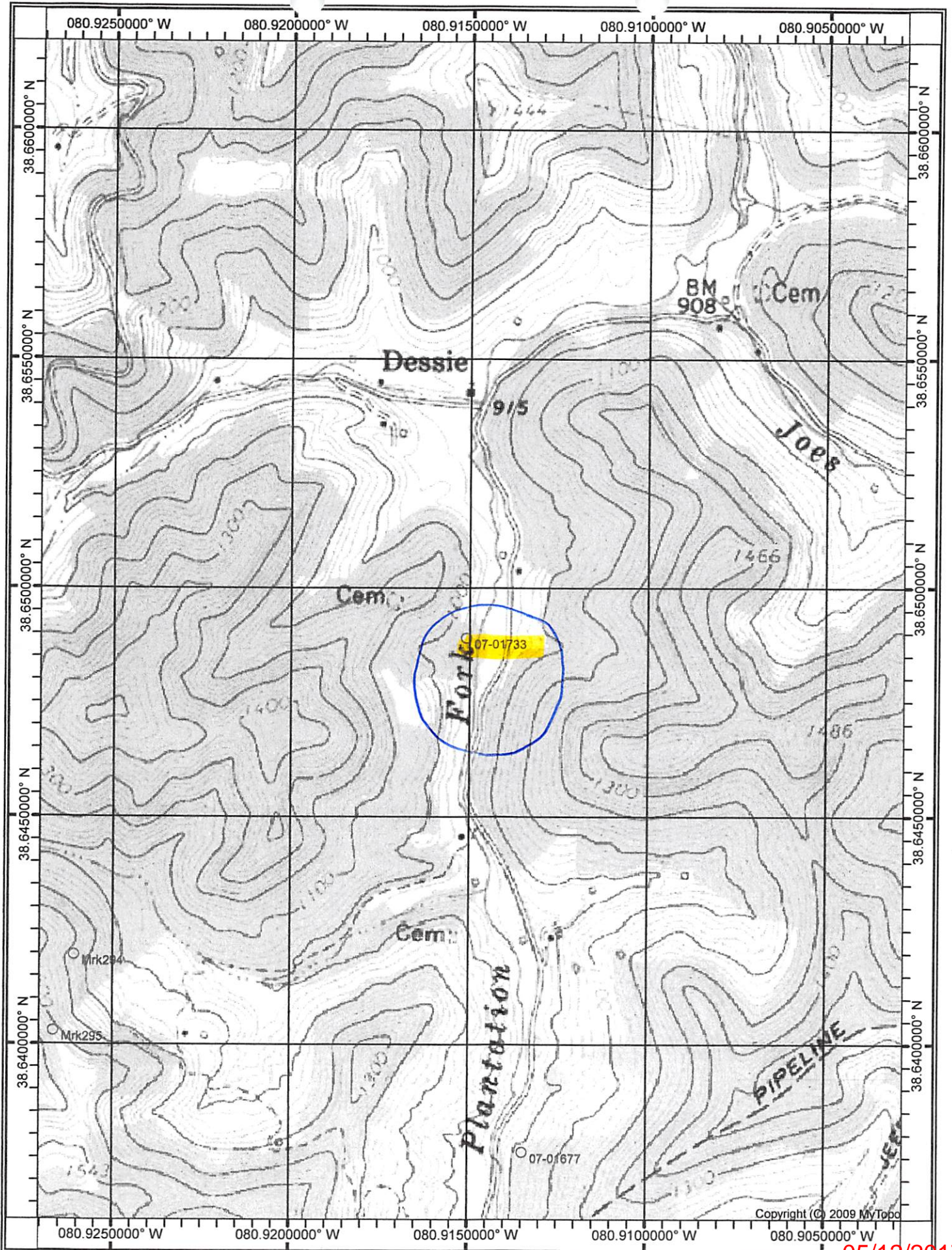
Attach:
 Drawing(s) of road, location, pit and proposed area for land application.
 Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: _____
 Comments: _____

Title: President Date: February 16, 2017
 Field Reviewed? () Yes () No

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 Office of Oil and Gas
 MAR 06 2017
 Department of
 Environmental Protection
 05/12/2017

701733P



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05/12/2017

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-007-01733 WELL NO.: 3-S-245
 FARM NAME: Duffield, Lovey
 RESPONSIBLE PARTY NAME: Mike Ross
 COUNTY: Braxton DISTRICT: Birch
 QUADRANGLE: Rosedale
 SURFACE OWNER: Roger White &/or Cheryl
 ROYALTY OWNER: Anna J. Williams Et. AL.
 UTM GPS NORTHING: 4277823.6
 UTM GPS EASTING: 507387.8 GPS ELEVATION: 966

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and 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 ____ : Post Processed Differential ____
 Real-Time Differential ____

4. **Letter size copy of the topography map showing the well location.**

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.

Mike Ross
Signature

President
Title

April 1, 2014
Date

05/12/2017