



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, April 07, 2017
WELL WORK PERMIT
Vertical / Plugging

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

BUCKHANNON, WV 262010000

Re: Permit approval for 1
47-007-01351-00-00

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: 1
Farm Name: HART, RICHARD LEE
U.S. WELL NUMBER: 47-007-01351-00-00
Vertical / Plugging
Date Issued: 4/7/2017

Promoting a healthy environment.

04/07/2017

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.

701351P

WW-4B
Rev. 2/01

1) Date February 16, 2017
2) Operator's
Well No. Engel, Dana #1
3) API Well No. 47-007 - 01351

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 977 Watershed Left Fork Steer Creek
District Otter County Braxton Quadrangle Gassaway (7.5')

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:

2229 - TD

?? TD 5282 CIBP set at 2003

Run 6% Gel between each plug

2050 - 1900 Set Cement Plug -

1550 - 1450 Set Cement Plug

1050 - ⁸⁵⁰~~900~~ Set Cement Plug

100 - 0 Set Cement Plug

Set Monument with API Number

TOC of $4\frac{1}{2}$ " \approx 1500'

- FREE POINT, CUT & REMOVE $4\frac{1}{2}$ " CASING FROM \approx 1500' TO SURFACE.
- SET 100' CLASS A PLUG ACROSS CUT.

Free point AN PILL ALL CASING $8\frac{5}{8}$ " WAS CTS.

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

RECEIVED
Office of Oil and Gas

MAR 06 2017

Work order approved by inspector _____



WV Department of
Date 3-1-17
Environmental Protection

04/07/2017

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION

Date: February 17, 1979

701351A

FORM IV-35
(Obverse)

[08-78]

WELL OPERATOR'S REPORT of
OP

operator's
Well No. Dana S. Engel et al. #1

API Well No. 47-007-1351
State County Permit

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 X)

LOCATION: Elevation: 977.00 Watershed: Left Fork Steer Creek
District: Otter County: Braxton Quadrangle: Cassaway (7.5')

WELL OPERATOR Texas International Petroleum Corp. DESIGNATED AGENT James M. Blanton
Address Suite 300 - 3535 N.W. 58th Street Address Suite 740 - One Valley Square
Oklahoma City, Oklahoma 73112 Charleston, West Virginia 25301

PERMITTED WORK: Drill X / Convert ___ / Drill deeper ___ / Re-drill ___
Plug off old formation ___ / Perforate new formation ___
Other physical change in well (specify) _____

RECEIVED
FEB 7 1979

PERMIT ISSUED ON August 31, 1978

OIL & GAS DIVISION
DEPARTMENT OF MINES

(IF APPLICABLE: PLUGGING OF DRY HOLE OR
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
_____, 19___)

Name Robert Bates
Address Weston, West Virginia 26452

GEOLOGICAL TARGET FORMATION: Benson Depth 4454

Depth of completed well: 5282 feet Rotary X / Cable Tools ___

Water strata depth: Fresh, 25 feet; salt, None feet.

Coal seam depths: 249, 263, 665, 775, 840 Is coal being mined in the area? No

Work was commenced September 8, 1978, and completed September 16, 1978

CASING AND TUBING PROGRAM

| CASING OR TUBING TYPE | SPECIFICATIONS | | | | FOOTAGE INTERVALS | | CEMENT FILL-UP OR SACKS (Cubic feet) | REMARKS |
|-----------------------|----------------|-------|---------------|-----|-------------------|--------------|--------------------------------------|---------------------------|
| | Size | Grade | Weight per ft | New | Used | For drilling | | |
| Conductor | 11-3/4" | | 42 | X | | 42 | 42 | None |
| Fresh water | 8-5/8" | K-55 | 24 | X | | 922 | 922 | 237 Sacks Cement to surf. |
| Coal | | | | | | | | Sizes |
| Intermediate | | | | | | | | |
| Production Tubing | 4 1/2" | K-55 | 10.5 | X | | 2229 | 2229 | 125 Sacks Depth set |
| Liners | | | | | | | | Perforations: |
| | | | | | | | | Top Bottom |

OPEN FLOW DATA

Producing formation Big Injun Pay zone depth 1973 feet

Gas: Initial open flow, N/M Mcf/d Oil: Initial open flow, ___ bbl/d

Final open flow, 32 Mcf/d Final open flow, ___ bbl/d

Time of open flow between initial and final tests, 4 hours

Static rock pressure, 515 psig (surface measurement) after 336 hours shut in

[if applicable use to multiple completion--]

Second producing formation None Pay zone depth ___ feet

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 measurement) after ___ hours shut in

04/07/2017

[08-76]

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.
Perforated Squaw @ 2032-2035', 7 shots, and 2041-2045', 9 shots. Spotted 500 gallons 15% HCl. Loaded hole, broke Squaw w/900 PSI. Fraced with 562 bbls. gelled water, 15,000# 80/100 sand and 55,000# 20/40 sand. AIP - 1200 PSI, AIR - 24 BPM, ISIP - 600 PSI. Swabbed down. Recovered loaded water. Show oil and gas. Set CIBP @ 2003'. Perforated Big Injun @ 1973-1978', 21 shots. Spotted 500 gallons 15% HCl. Loaded hole. Broke Big Injun with 500 PSI. Fraced with 574 bbls. gelled water, 10,000# 80/100 sand, 40,000# 20/40 sand. AIP - 1050, AIR - 19 BPM, ISIP - 600 PSI.

WELL LOG

| FORMATION | Color | Hard or Soft | 4 | | Remarks Including indication of all fresh and salt water, coal, oil and gas |
|--------------|-------|--------------|----------|-------------|--|
| | | | Top Feet | Bottom Feet | |
| Top Soil | | | 0 | 5 | |
| Sand & Shale | | | 5 | 20 | |
| Sand | | | 20 | 45 | |
| R.R. | | | 45 | 50 | 1/2" stream water @ 25'. |
| Sand & Shale | | | 50 | 63 | |
| Sand | | | 63 | 84 | |
| Shale & R.R. | | | 84 | 124 | |
| Sand | | | 124 | 147 | |
| Sand & Shale | | | 147 | 191 | |
| Shale & R.R. | | | 191 | 249 | |
| Coal | | | 249 | 254 | |
| Sand & Shale | | | 254 | 263 | |
| Coal | | | 263 | 266 | |
| Shale & Sand | | | 266 | 312 | |
| Sand | | | 312 | 340 | |
| Shale & Sand | | | 340 | 363 | |
| Sand | | | 363 | 410 | |
| Shale | | | 410 | 414 | |
| Sand & Shale | | | 414 | 454 | |
| Sand | | | 454 | 519 | |
| Sand & Shale | | | 519 | 595 | |
| Sand | | | 595 | 665 | |
| Coal | | | 665 | 669 | |
| Sand | | | 669 | 775 | |
| Coal | | | 775 | 777 | |
| Sand | | | 777 | 840 | |
| Coal & Shale | | | 840 | 847 | |
| Sand | | | 847 | 861 | |
| Sand & Shale | | | 861 | 883 | |
| Sand | | | 883 | 1014 | |
| Sand & Shale | | | 1014 | 1067 | |
| Sand | | | 1067 | 1115 | |
| Shale | | | 1115 | 1123 | |
| Sand & Shale | | | 1123 | 1198 | Hole damp @ 1125'. |
| Sand & Shale | | | 1198 | 1397 | |
| Sand | | | 1397 | 1438 | |
| Sand & Shale | | | 1438 | 1580 | |
| Sand | | | 1580 | 1689 | |

(Attach separate sheets to complete as necessary)

Texas International Petroleum Corporation RECEIVED
 Well Operator
 James M. Blanton
 By James M. Blanton, Office of Oil and Gas
 Its Division Manager MAR 06 2017

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 coal, encountered in the drilling of a well."

WV Department of Environmental Protection

WELL LOG (Continued)

| <u>FORMATION</u> | <u>TOP FEET</u> | <u>BOTTOM FEET</u> |
|-------------------|-----------------|--------------------|
| Sand & Shale | 1689 | 1710 |
| Shale | 1710 | 1717 |
| Little Lime | 1717 | 1753 |
| Shale | 1753 | 1775 |
| Big Lime | 1775 | 1917 |
| Big Injun | 1917 | 2060 |
| Sand & Shale | 2060 | 2109 |
| Shale | 2109 | 2567 |
| Sand & Shale | 2567 | 2600 |
| Sand | 2600 | 2612 |
| Sand & Shale | 2612 | 4300 |
| Light Brown Shale | 4300 | 4330 |
| Sand & Shale | 4330 | 4410 |
| Light Brown Shale | 4410 | 4440 |
| Sand & Shale | 4440 | 4450 |
| Brown Sand | 4450 | 4470 |
| Sand & Shale | 4470 | 5282 |

T.D.

RECEIVED

FEB 23 1979

U.S. GAS DIVISION
DEPT. OF MINES

Pg 2
47-007-1351

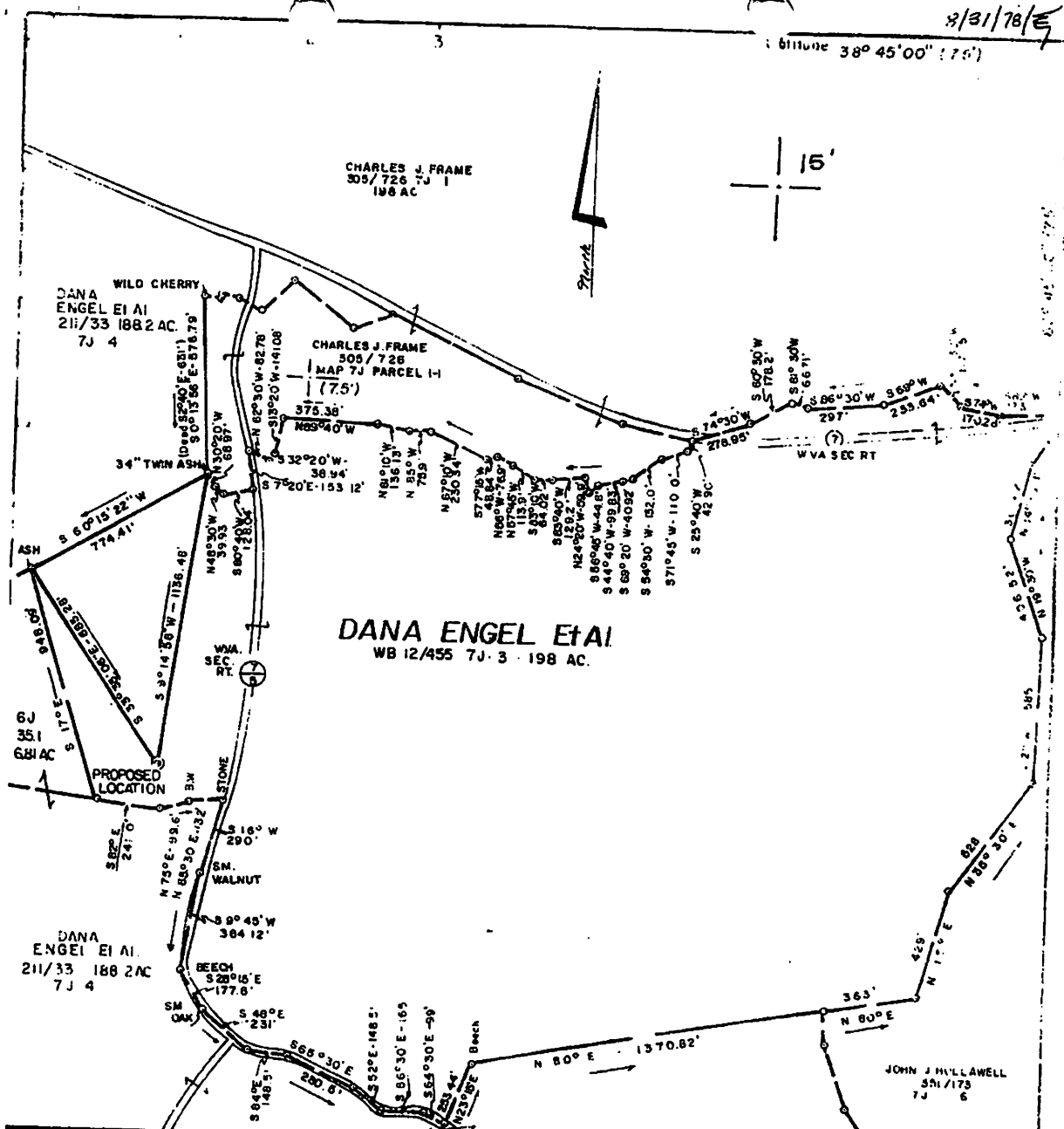
RECEIVED
Office of Oil and Gas

MAR 06 2017

WV Department of
Environmental Protection

701351A

8/31/78/E



Minimum Error of Closure 1" in 7919'
 Source of Elevation BM US DEPT OF INTERIOR GEOLOGICAL SURVEY
 JEA 1963 ELEV 10090

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 1 of the title and regulation and the oil and gas section of the mining laws of West Virginia.

TIPCO TEXAS INTERNATIONAL PETROLEUM COMPANY
 SUITE 740 VALLEY SQUARE
 CHARLESTON, WEST VIRGINIA
DANA ENGEL ET AL

TRACT ACRES 198 TOWN
 WELL (WELL) NO. SERIA. NO.
 ELEVATION (SPRIT LEVEL) 1770
 QUADRANGLE GASSAWAY (15), 15
 COUNTY BRAXTON DISTRICT OTTER
 ENGINEER Brockmitch E Skidmore, Inc. J. Brockmitch, R. H. P. L.
 ENGINEER'S REGISTRATION NO. 5994
 FILE NO. JOHN NO. 391
 DATE 8-9-78 SCALE 1" = 500'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. BRAX-1351

+ Denotes location of well in this graphic Maps. Some of the boundaries and latitude lines being represented by faded lines.

Denotes one inch spaces in border of map tracing

47-007

5300' 1501500'

04/07/2017

701351P

WW-4A
Revised 6-07

1) Date: February 16, 2017
2) Operator's Well Number
Engel, Dana #1
3) API Well No.: 47 - 007 - 01351

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: | 5) (a) Coal Operator |
| (a) Name <u>Richard Lee Hart</u> | Name <u>N/A</u> |
| Address <u>5252 Chapel Road</u> | Address _____ |
| <u>Gassaway, WV 26624</u> | _____ |
| (b) Name _____ | (b) Coal Owner(s) with Declaration |
| Address _____ | Name <u>N/A</u> |
| _____ | Address _____ |
| (c) Name _____ | Name _____ |
| Address _____ | Address _____ |
| _____ | _____ |
| 6) Inspector <u>Danny Mullins</u> | (c) Coal Lessee with Declaration |
| Address <u>220 Jack Acres Road</u> | Name <u>N/A</u> |
| <u>Buckhannon, WV 26201</u> | Address _____ |
| Telephone <u>304-932-6844</u> | _____ |

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.

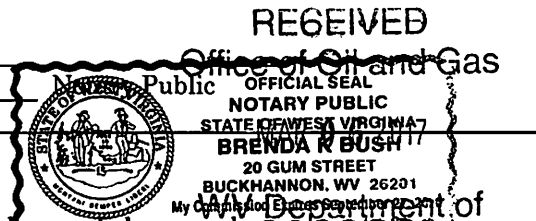
Well Operator Ross & Wharton (Mike Ross Inc.)
 By: *Mike Ross*
 Its: President
 Address PO Box 219
Coalton, WV 26257
 Telephone 304-472-4289

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

Brenda K Bush
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 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.



04/07/2017

701351P

Mike Ross Inc.

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

February 16, 2017

Richard Lee Hart
5252 Chapel Road
Gassaway, WV 26624

Re: Engel, Dana #1 Plugging Permit

Dear Richard:

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

| | |
|---|---|
| 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 Postmark Here MAR 06 2017 312 WV Department of Environmental Protection |
| Extra Services & Fees (check box, add fee as appropriate) | |
| <input checked="" type="checkbox"/> Return Receipt (hardcopy) \$ 2.15 | |
| <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 \$ 0.88 | |
| Total Postage and Fees \$ 6.98 | |
| Richard Lee Hart 5252 Chapel Road Gassaway, WV 26624 | |
| PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions | |

04/07/2017

701351 P

WW-9
Rev. 5/08

Page _____ of _____
API Number 47 - 007 - 01351
Operator's Well No. Engel, Dana #1

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 Left Fork Steer Creek Quadrangle Gassaway (7.5)

Elevation 977 County Braxton District Otter

Description of anticipated Pit Waste: Plugging Fluid

Will a synthetic liner be used in the pit? Yes

Any Well Effluent must be disposed of off-site, properly.

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 _____)

JRM

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain _____)
- Swabbing
- 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

RECEIVED
Office of Oil and Gas

Subscribed and sworn before me this 16th day of February, 2017 MAR 06 2017

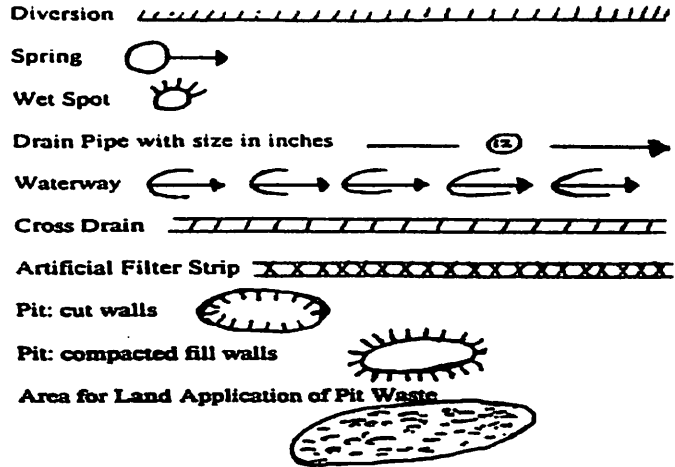
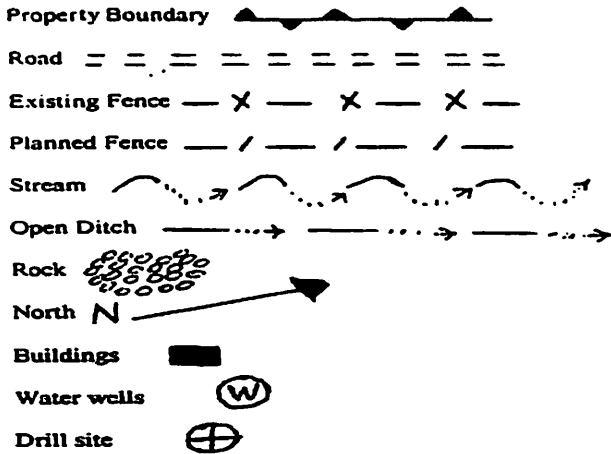
Brenda K Bush Notary Public

My commission expires September 27, 2020



04/07/2017

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 lbs/acre | Seed Type | Area II 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: _____

RECEIVED
Office of Oil and Gas

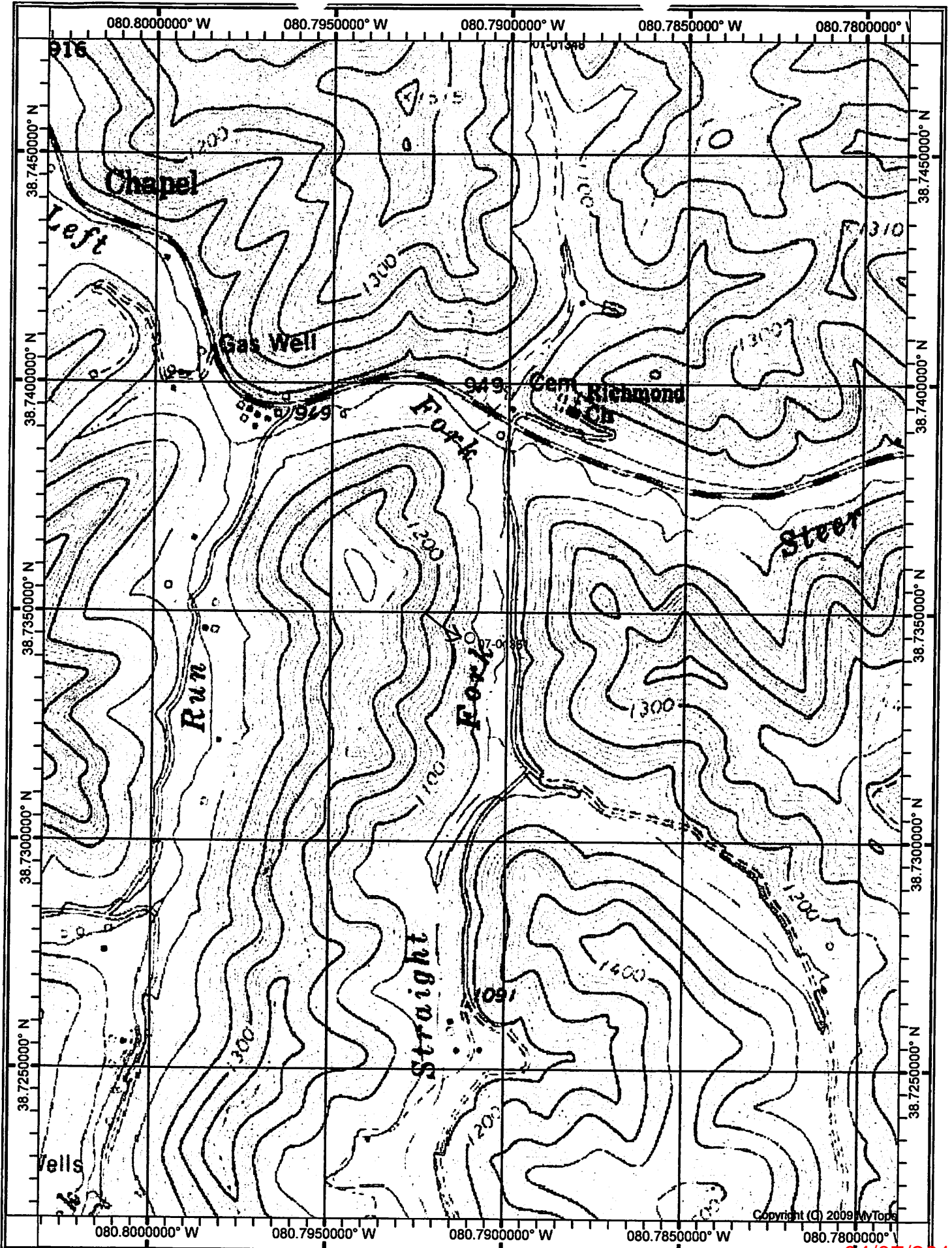
MAR 06 2017

Title: President

Date: February 16, 2017

Field Reviewed? () Yes () No

WV Department of
Environmental Protection



Copyright (C) 2009 MyTopo



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-007-01351 WELL NO.: 1

FARM NAME: Engel, Dana

RESPONSIBLE PARTY NAME: Mike Ross

COUNTY: Braxton DISTRICT: Otter

QUADRANGLE: Gassaway (7.5')

SURFACE OWNER: Richard Lee Hart

ROYALTY OWNER: Richard Lee Hart

UTM GPS NORTHING: 4287334

UTM GPS EASTING: 518153.8 GPS ELEVATION: 977

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

RECEIVED
Office of Oil and Gas

MAR 06 2017

West Virginia Department of
Environmental Protection