



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

May 09, 2016

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-5100573, issued to LEATHERWOOD, 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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.


James Martin
Chief

Operator's Well No: 1595
Farm Name: LOUGH, MABEL L.
API Well Number: 47-5100573
Permit Type: Plugging
Date Issued: 05/09/2016

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.

51005731

WW-4B
Rev. 2/01

1) Date _____, 2016
2) Operator's
Well No. Mabel L Lough 1595
3) API Well No. 47-051 - 00573

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 1227.02 Watershed Middle Grave Creek-Grave Creek
District Cameron County Marshall Quadrangle Cameron
- 6) Well Operator Leatherwood, Inc. 7) Designated Agent Seth Wilson
Address 1000 Consol Energy Drive Address 7000 Hampton Center, Suite K
Canonsburg, PA 15317 Morgantown, WV 26505
- 8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name James Nicholson Name Contractor Services Inc. (CSI)
Address PO Box 44 Address 929 Charleston Rd.
Moundsville, WV 26041 Spencer, WV 25776

10) Work Order: The work order for the manner of plugging this well is as follows:
Please see attached pages.

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

Work order approved by inspector James Nicholson Date APR 21 2016

RECEIVED
Office of Oil and Gas

WV Department of
Environmental Protection
05/13/2016

Mabel L Lough #1595

API 47-051-00573

Cameron District

Marshall County

Location: Cameron Northing: 491559.43 (Nad83 WVN)

Easting: 1680430.98 (Nad83 WVN)

Elevation: 1227.02'

Proposed Plug & Abandonment Procedure:

The work order for the manner of plugging this well is as follows:

The wellbore will be cleaned out to the total depth. An attempt to remove all casing shall be made by pulling a minimum of 150% of the casing string weight. From the total depth to the surface, casing will be removed so that only fully cemented casing strings will be left in the wellbore. Intact and uncemented casing as determined by electronic logging shall be perforated, ripped, or milled at no greater than 100 ft. intervals from total depth, to the top of the casing. A borehole survey will be conducted to determine the top and bottom of any mineable coal seam. In addition, starting at a point 5 ft. below through 5 ft. above any mineable coal seam, any casing shall be ripped, cut, or perforated on no greater than 5 ft. intervals. Circulation will have been established using gelled water to the clean out depth. Expanding cement will be placed from the total depth or attainable bottom to 100 ft. above any mineable coal seam. From that point to the surface, Class A cement with no more than 3% CaCl₂ and no other additives shall be used to fill the wellbore. A monument with the API number will be set on the wellbore at the surface. All plugging shall comply with WV Code Chapter 22 Article 6. The disturbed areas shall be graded, seeded and mulched as required. Site to be reclaimed as soon as possible.

John 4/13/16

1220' OF 8" LEFT IN WELL

1065' OF 6 5/8" LEFT IN WELL

4" SET ON 6 5/8" PACKER - IF PACKER WON'T RELEASE, CUT & PULL 4"

gurm

RECEIVED
Office of Oil and Gas

APR 21 2016

WV Department of
Environmental Protection

The M. L. & H. Company Company

Division.....

Record of Well No. 1595 on T. B. Lough Farm Acres
 Field Cameron District Cameron County Marshall State
 Rig Commenced April 4, 1913 19 Completed April 29, 1913 19
 Drilling Commenced May 1, 1913 19 Completed June 12, 1913 19
 Cost per Foot \$1.15 Contractor F. T. Burns Address
 Drillers' Names S. T. Best and William Richards

BOILER			ENGINE			RIG			
H. P.	No.	Name of Maker	H. P.	No.	Name of Maker	New	Old	Height	Name of Builder

CONDUCTOR AND CASING USED IN DRILLING										
Conductor	18 inch	10 inch	8 1/2 inch	6 1/2 inch	6 inch	5 1/2 inch	5 1/4 inch	5 inch	4 inch	
		205'	1220'	1865'						

CONDUCTOR AND CASING LEFT IN WELL										
Conductor	18 inch	10 inch	8 1/2 inch	6 1/2 inch	6 inch	5 1/2 inch	5 1/4 inch	5 inch	4 inch	3 inch
			1220'	1865'						

OIL WELL					GAS WELL					
When Shut	Size of Torpedo	1st Day's Production	Tubing	Rods	Tanks	Size of Packer	Depth Set	Packed with	1st Minute Pressure	Rock Press.

Initial Open Flow Production	Cubic Feet Per 24 Hours	Shut In Pressure	Cubic Feet Per 24 Hours

FORMATION	Top	Bottom	Thickness	REMARKS
Waynesburg Coal	487	492		1- day dig out to repair 6 1/2 casing
Mapletown Coal	680	685		5 . Rig and tur- up
Pittsburgh Coal	773	778		1- . Moving Tools.
Murphy Sand	8843	883		Test after clean out 2 3/4 water in 1 1/2
Little Dunkard Sand	1144	1159		line 10-13-16-18-20-22 Rock 78.
Big Dunkard Sand	1265	1310		Packed in soft sand with 1-6 1/2 x 4"
Gas Sand	1390	1450		anchor Packer set at 2546'
Salt Sand	1530	1570		Anchor 269'08- 18 joints
Little Lime	1695	1828		Above 2862'05 125=
Pencil Cave	1845	1855		2932'11" 143
Big Lime	1855	1860		All- 10thd Tubing
Big Injun	1860	1932		cage on first and 7th joint
Thirty Foot	1932	2178		Packer on 18th joint
Gordon Stray	2516	2569		Packer has 1- Truck load of red
Slate & Shells	2777	2812		mud.
Fifty Foot Gordon	2812	2912		Had very hard time opening out we.
Total Depth	2714	2750		Tons of sand down in hole
Well shot June 14, 1913 with 60 quarts in the Gordon Stray. Increased from 4/10" water in 6 5/8" to 10/10" water in 6 5/8".		2915		
Well tubed June 17, 1913 with 4" tubing and packed with one 6 5/8" x 4" Anchor Packer set in the 30 foot sand.				
Above packer	2541' 07"	----	123 joints	
Anchor	2862' 07"	----	19 "	
Total	2928' 02"	----	142 "	

Feb. 1937, W.O.C 9128 well Palled and cleaned out by Harry Jones & R.M. yoho

RECEIVED
 Office of Oil and Gas
 APR 21 2016
 W.V. Department of
 05/13/2016

5100573P

WW-4A
Revised 6-07

1) Date: _____
2) Operator's Well Number
Mabel L Lough 1595

3) API Well No.: 47 - 051 - 00573

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>Arden B Wood Et Ux</u> ✓	Name _____
Address <u>4589 Clouston Rd</u>	Address _____
<u>Cameron, WV 26033</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Consolidation Coal Company</u> ✓
_____	Address <u>1000 Consol Energy Drive</u>
_____	<u>Canonsburg, PA 15317</u>
(c) Name _____	Name <u>Ronald W. Kasserman</u> ✓
Address _____	Address <u>369 Pembroke Dr</u>
_____	<u>Triadelphia, WV 26059</u>
6) Inspector <u>James Nicholson</u> ✓	(c) Coal Lessee with Declaration
Address <u>PO Box 44</u>	Name _____
<u>Moundsville, WV 26041</u>	Address _____
Telephone <u>304-552-3874</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.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
 Christopher A. Rabbitt, Notary Public
 Cecil Twp., Washington County
 My Commission Expires Jan. 18, 2020
 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Well Operator Leatherwood, Inc.
 By: Gerald Ramsburg 
 Its: General Manager
 Address 1000 Consol Energy Drive
Canonsburg, PA 15317
 Telephone 1-724-485-4081

Subscribed and sworn before me this 10 day of February 2016
Christopher A. Rabbitt Notary Public APR 21 2016
 My Commission Expires 1/18/2020

RECEIVED
Office of Oil and Gas

WV Department of
Environmental Protection

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.

05/13/2016

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Leatherwood, Inc. OP Code 494476721

Watershed (HUC 10) Middle Grave Creek - Grave Creek Quadrangle Cameron

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste: N/A

Will a synthetic liner be used in the pit? Yes No If so, what ml.? N/A

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 _____)

Will closed loop system be used? If so, describe: Closed tanks will be used to capture any well effluent, and these fluids will be disposed of properly.
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. N/A

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

Additives to be used in drilling medium? N/A

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) _____

-Landfill or offsite name/permit number? _____

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

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.

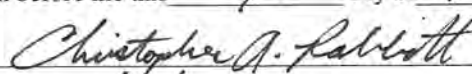
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is 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 

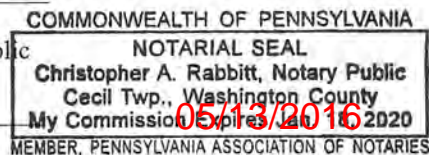
Company Official (Typed Name) Gerald Ramsburg

Company Official Title General Manager - Leatherwood, Inc.

Subscribed and sworn before me this 10 day of February, 2016

 Notary Public

My commission expires 2/18/2020



Leatherwood, Inc.

Proposed Revegetation Treatment: Acres Disturbed less than 1 acre Prevegetation pH _____

Lime 2-3 Tons/acre or to correct to pH _____

Fertilizer type 10-20-20 or equivalent

Fertilizer amount 500 lbs/acre

Mulch hay or straw 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type	lbs/acre
Tall Fescue	40
Landino Clover	5

Seed Type	lbs/acre
Tall Fescue	40
Landino Clover	5

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *John Trubel*

Comments: _____

Title: Oil & Gas Inspector

Date: 4/13/16

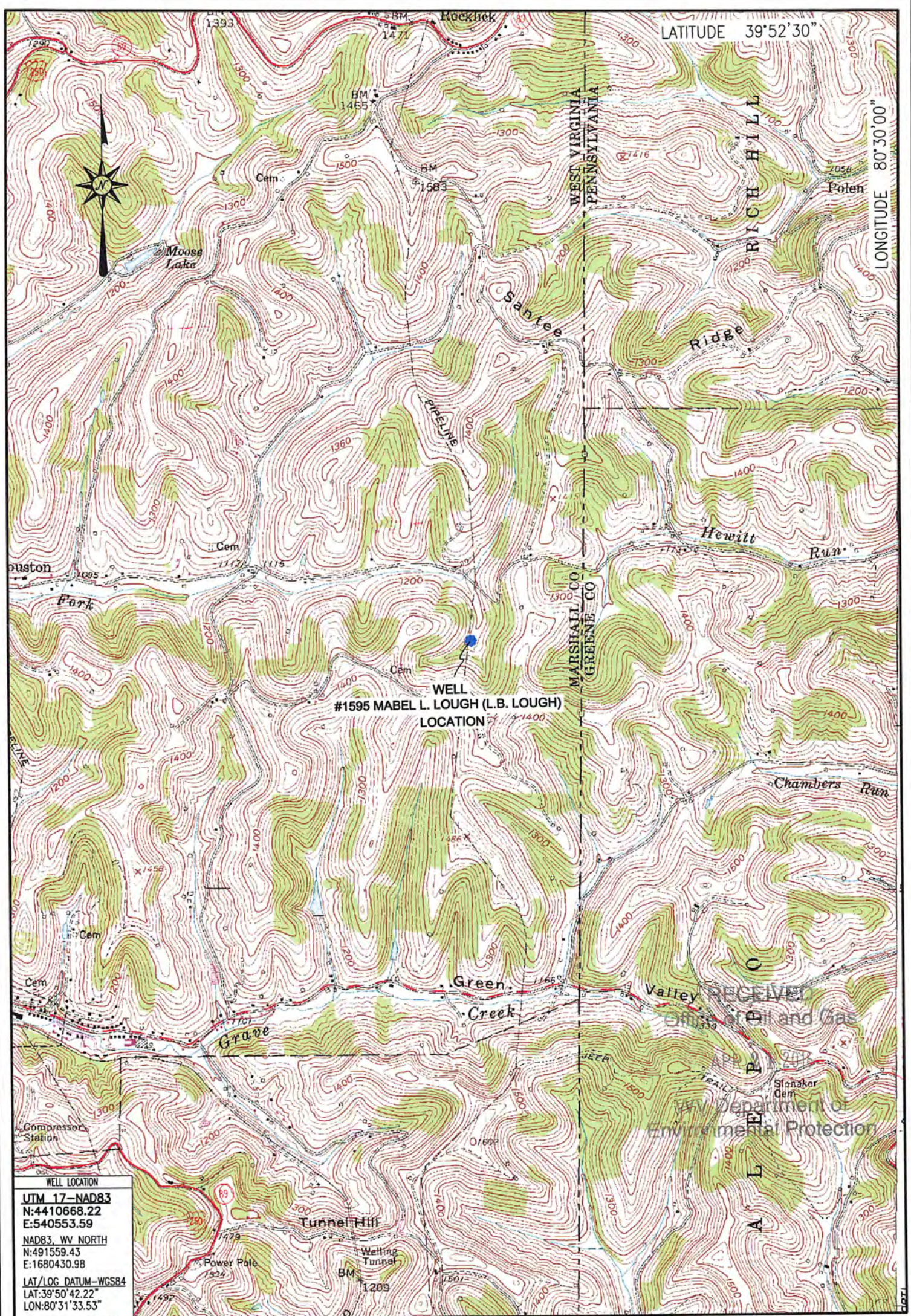
Field Reviewed? Yes No

RECEIVED
Office of Oil and Gas

APR 21 2016

WV Department of
Environmental Protection

05/13/2016



WELL LOCATION
 UTM 17-NAD83
 N:4410668.22
 E:540553.59
 NAD83, WV NORTH
 N:491559.43
 E:1680430.98
 LAT/LOG DATUM-WGS84
 LAT:39°50'42.22"
 LON:80°31'33.53"

05/13/2016

LOCATION MAP
FEBRUARY 5, 2016

Blue Mountain Inc.
 10125 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

#1595 MABEL L. LOUGH (L.B. LOUGH)
 CAMERON QUADRANGLE
 WEST VIRGINIA

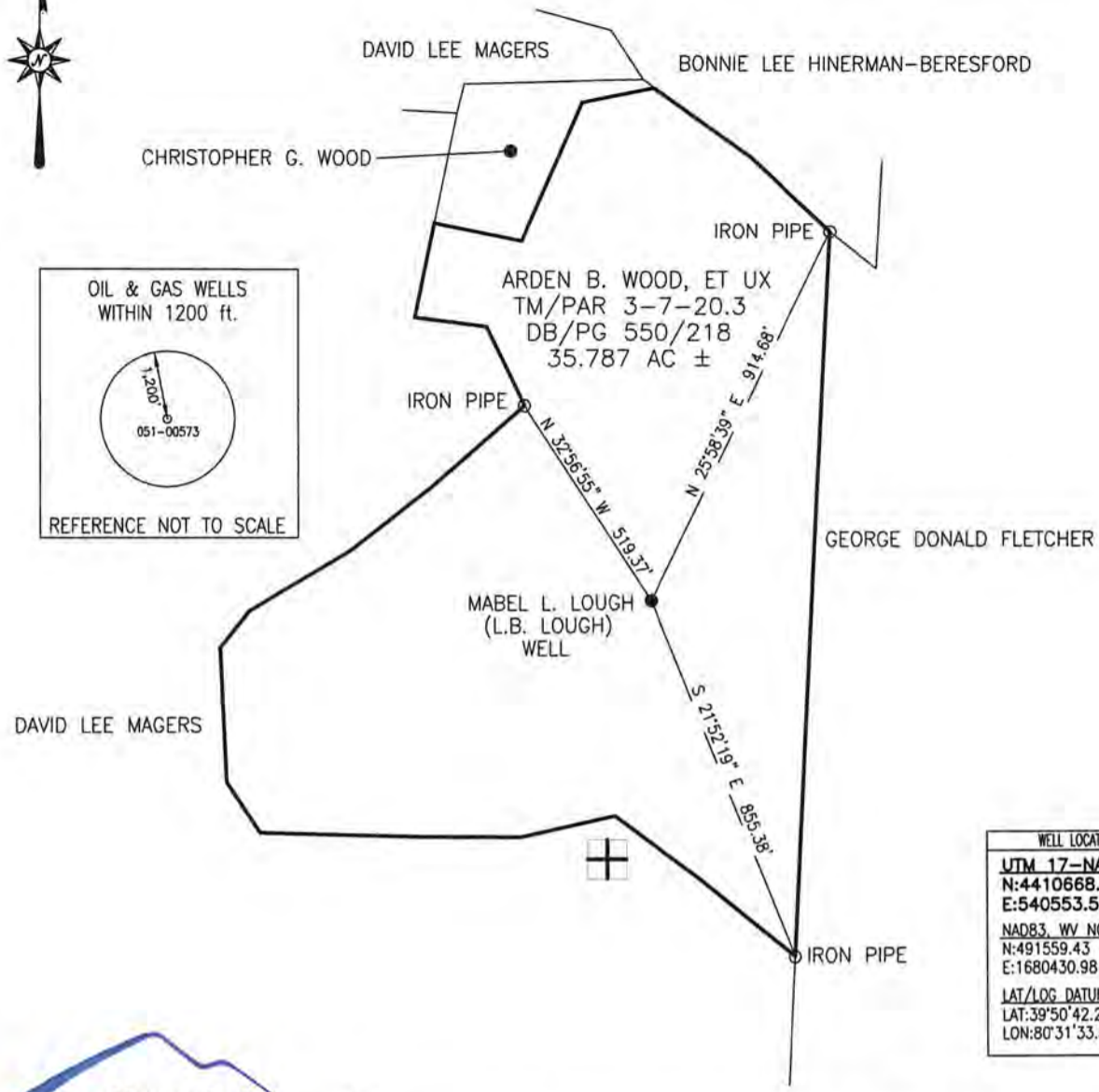
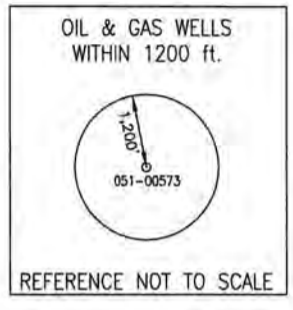
SCALE 1" = 2000'
 0' 2000' 4000' 6000'



5100573P

Well is located on topo map 10,906 feet south of Latitude: 39° 52' 30"

Well is located on topo map 7,294 feet west of Longitude: 80° 30' 00"



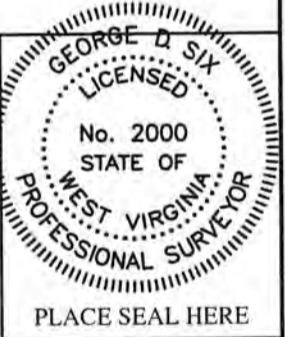
WELL LOCATION	
UTM 17-NAD83	
N:4410668.22	
E:540553.59	
NAD83, WV NORTH	
N:491559.43	
E:1680430.98	
LAT/LOG DATUM-WGS84	
LAT:39°50'42.22"	
LON:80°31'33.53"	

Blue Mountain Inc.
 10125 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

NOTE:
 It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

FILE #: WELL #1595
 MABEL L. LOUGH (L.B. LOUGH)
 DRAWING #: WELL #1595
 MABEL L. LOUGH (L.B. LOUGH)
 SCALE: 1" = 400'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 ENVIRONMENTAL PROTECTION.
 Signed: *[Signature]*
 R.P.E.: _____ L.L.S.: P.S. No. 2000



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304



DATE: FEBRUARY 8, 2016
 OPERATOR'S WELL #: WELL #1595
 MABEL L. LOUGH (L.B. LOUGH)
 API WELL #: 47 051 00573 P
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: MIDDLE GRAVE CREEK-GRAVE CREEK ELEVATION: WV Department of Environmental Protection 1227.02'
 COUNTY/DISTRICT: MARSHALL/CAMERON QUADRANGLE: CAMERON WA 75

SURFACE OWNER: ARDEN B. WOOD, ET UX ACREAGE: 35.787±
 OIL & GAS ROYALTY OWNER: _____ ACREAGE: _____

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

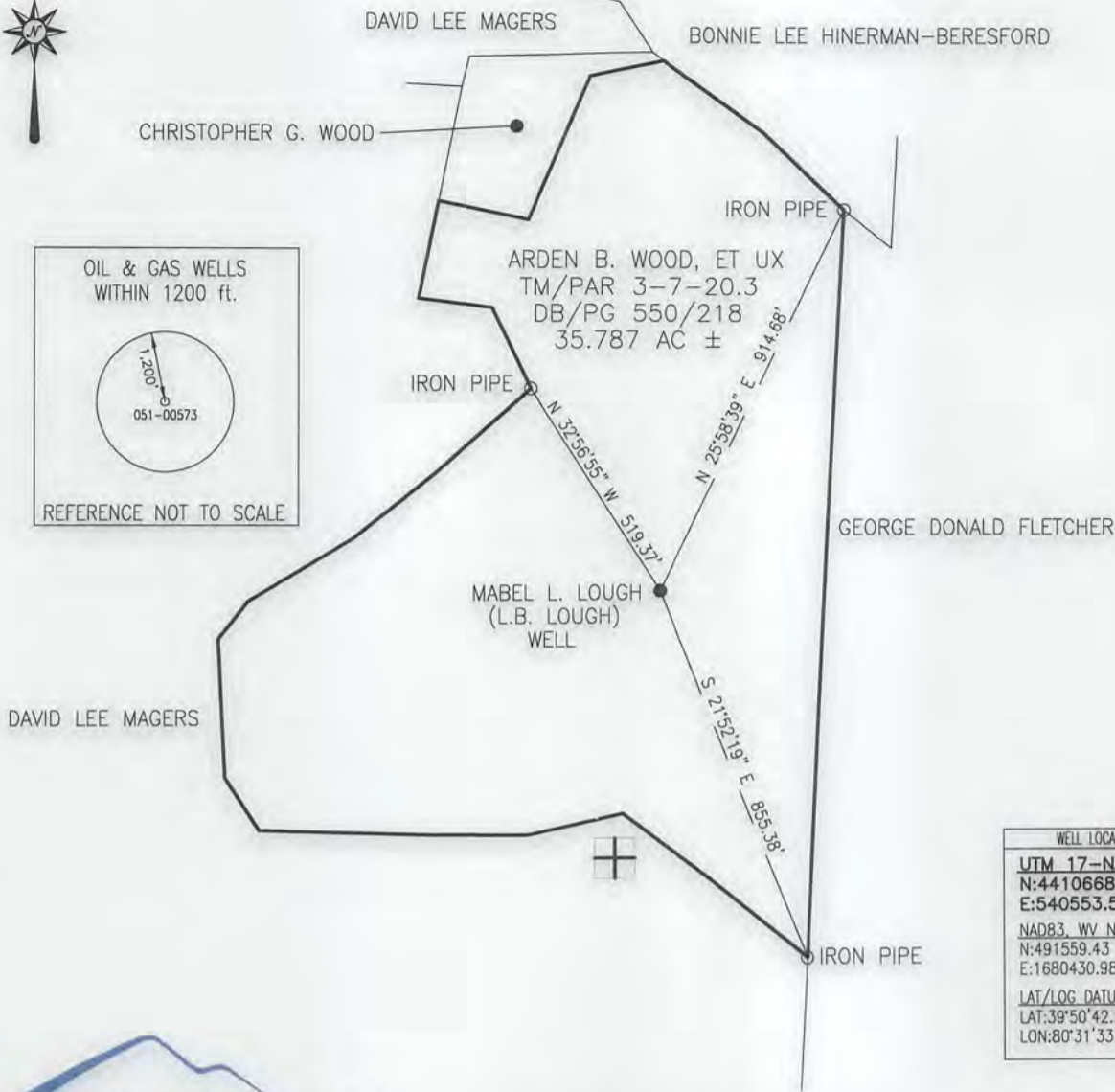
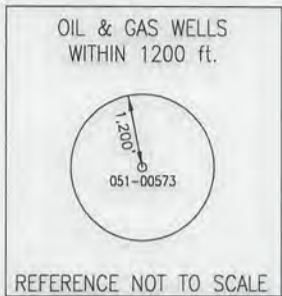
TARGET FORMATION: GORDON & FIFTY-FOOT ESTIMATED DEPTH: 2,912'±

WELL OPERATOR LEATHERWOOD, INC. DESIGNATED AGENT SETH WILSON
 Address 1000 CONSOL ENERGY DRIVE Address 7000 HAMPTON CENTER, SUITE K
 City CANONSBURG State PA Zip Code 15317 City MORGANTOWN State WV Zip Code 26505

RECEIVED
 APR 21 2016
 05/13/2016

Well is located on topo map 10,906 feet south of Latitude: 39° 52' 30"

Well is located on topo map 7,294 feet west of Longitude: 80° 30' 00"



WELL LOCATION	
UTM 17-NAD83	
N:4410668.22	
E:540553.59	
NAD83_WV NORTH	
N:491559.43	
E:1680430.98	
LAT/LOG DATUM-WGS84	
LAT:39°50'42.22"	
LON:80°31'33.53"	

Blue Mountain Inc.
 10125 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

NOTE:

It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

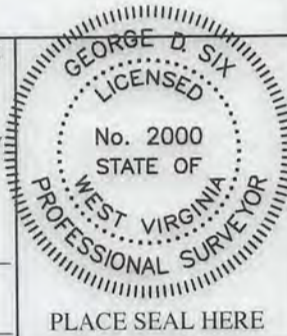
FILE #: WELL #1595
 MABEL L. LOUGH (L.B. LOUGH)
 DRAWING #: WELL #1595
 MABEL L. LOUGH (L.B. LOUGH)
 SCALE: 1" = 400'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 ENVIRONMENTAL PROTECTION.

Signed: *[Signature]*

R.P.E.:

L.L.S.: P.S. No. 2000



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304



DATE: FEBRUARY 8, 2016
 OPERATOR'S WELL #: WELL #1595
 MABEL L. LOUGH (L.B. LOUGH)
 API WELL #: 47 051 00573 P
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: MIDDLE GRAVE CREEK-GRAVE CREEK ELEVATION: 1227.02'

COUNTY/DISTRICT: MARSHALL/CAMERON QUADRANGLE: CAMERON, WV 7.5'

SURFACE OWNER: ARDEN B. WOOD, ET UX ACREAGE: 35.787±

OIL & GAS ROYALTY OWNER: ACREAGE:

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY):

TARGET FORMATION: GORDON & FIFTY-FOOT ESTIMATED DEPTH: 2,912'±

WELL OPERATOR LEATHERWOOD, INC. DESIGNATED AGENT SETH WILSON
 Address 1000 CONSOL ENERGY DRIVE Address 7000 HAMPTON CENTER, SUITE K
 City CANONSBURG State PA Zip Code 15317 City MORGANTOWN State WV Zip Code 26505

05/13/2016