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

June 23, 2016

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-9700601, issued to CONSOL GAS COMPANY, 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 penalities 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: 10216
Farm Name: ZICKAFOOSE, L.
API Well Number: 47-9700601
Permit Type: Plugging
Date Issued: 06/23/2016

9700601P

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.
4. This well is under a consent order and must be plugged under the terms of that agreement.

97006017

WW-4B
Rev. 2/01

1) Date _____, 2016
2) Operator's
Well No. Zickafoose #10266
3) API Well No. 47- 097 - 00601

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 1576.08 Watershed Buckhannon River
District Warren -5 County Upshur Quadrangle Century -257

6) Well Operator Consol Gas Company
Address 1000 Consol Energy Drive
Canonsburg, PA 15317

7) Designated Agent Anthony Kendziora
Address 1 Dominion Drive
Jane Lew, WV 26378

8) Oil and Gas Inspector to be notified
Name Bryan Harris
Address P.O. Box 157
Volga, WV 26238

9) Plugging Contractor
Name Contractor Services Inc. (CSI)
Address 929 Charleston Rd.
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 Bryan Harris Date 5-9-16

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Plugging Work Order for Permit 47-097-00601
CNX Gas - Well 10266

1. The wellbore will be cleaned out to the total depth. All plugging shall comply with WV Code Chapter 22 Article 6.
2. Verify 4-1/2" TD (~4385')
3. TIH w/ 2-3/8" EUE work string to TD and establish circulation
4. Pump cement plug from TD ~4385' to 3800' (Benson plug)
5. Displace cement with water to 3800'
6. TOH w/ 2-3/8" EUE work string
7. Wait on cement before pulling 4-1/2"
8. TIH with wireline, TD and verify bottom cement plug, bond log 4-1/2 casing to TOC
9. Cut 4-1/2" above old T.O.C. (est. ~3785'), pull up 2 feet
10. Through 4-1/2 casing, pump 60 bbl 6% gel spacer ahead, 100' Cement Plug across cut @ (~3785'), displace with 6% gel
11. Pull up to 2819'
12. Pump cement plug 2819' to 2719', 6% gel to 400' (cover gas show @ 2769')
13. TOH w/ 4-1/2" casing
14. TIH with wireline and "Split Shot" a 7" collar above the packer (~2182')
15. Attempt to pull all 7" casing above "split shot"
16. TOH w/ 7" casing
17. (If unable to Pull 7", perforate w/4 holes every 100' from 2175' to 375')
18. (cut top portion of 7" @ 350' and pull)
19. TIH w/ 2-3/8" EUE work string to 2010'
20. Pump cement plug from 2010' to 1910', 6% gel to 1627' (cover gas show @ 1960')
21. Pull up to 1627'
22. Pump cement plug from 1627' to 1527', (cover elevation @ 1577')
23. Pull up to 1500' circulate hole with 6% gel to surface
24. TOH w/2-3/8" EUE work string
25. Attempt to Pull all 10-3/4" casing 334'
26. TOH w/ 10-3/4" casing
27. (If unable to pull 10-3/4" casing, perf w 4/holes ea @ 300, 200, & 100')
28. TIH w/ 2-3/8" EUE work string to 400'
29. Pump cement plug from 400' to surface
30. TOH with 2-3/8" EUE, and top off cement to surface
31. Install 6" x 14' monument (10' below grade, 4' above grade) API 47-097-00601
32. The disturbed areas shall be graded, seeded and mulched as required. Site to be reclaimed as soon as possible.

COVER WATER SHOW @ 850 W/ 100' CEMENT PLUG FROM 900'- 800'. gnm.

Work Order approved by Inspector [signature] Date: 6-5-2016

Note: All cement will be Class A, no additives. All spacers between plugs will be 6% gel.

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OG-10

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 21

WELL RECORD

Quadrangle PHILLIPI

Permit No. UPS-601

Oil or Gas Well Gas (KIND)

Company Hope Natural Gas Company
Address Clarksburg, W. Va.
Farm Lona Zickafoose Acres 565
Location (waters)
Well No. 10266 Elev. 1577
District Warren County Upshur
The surface of tract is owned in fee by
Address
Mineral rights are owned by
Address
Drilling commenced 1-23-60
Drilling completed 4-20-60
Date Shot Not shot From To
With
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume 4½ M Cu. Ft.
Rock Pressure 1280# lbs. 14 hrs.
Oil None bbls., 1st 24 hrs.
WELL ACIDIZED No
WELL FRACTURED 4-25-60
RESULT AFTER TREATMENT 411 M
ROCK PRESSURE AFTER TREATMENT Same
Fresh Water 48, 850 Feet Salt Water 1968 Feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13	52	52	
10	334	334	Size of
8¼	1750	Pulled	
6⅝	2182	2182	Depth set
5 3/16			
4½"	4361	4361	Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date
4½" casing cemented with 55 bags cement
COAL WAS ENCOUNTERED AT 48 FEET 24 INCHES
FEET INCHES FEET INCHES
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Gravel			0	32			
Broken Lime			32	48	Water	48'	
Coal			48	50			
Slate			50	76			
Lime			76	83			
Slate			83	127			
Red Rock			127	145			
Slate			145	153			
Red Rock			153	165			
Slate			165	200			
Lime			200	215			
Slate & Shells			215	240			
Red Rock			240	245			
Slate & Shells			245	270			
Lime			270	292			
Red Rock			292	312			
Slate & Shells			312	341			
Lime			341	392			
Slate & Shells			392	422			
Red Rock			422	465			
Slate & Shells			465	510			
Lime			510	540			
Sand			540	560			
Slate			560	572			
Gritty Lime			572	607			
Sand			607	650			
Slate & Shells			650	667			
Sand			667	710			
Slate & Shells			710	833			
Sand			833	870	Water	850	Show

(over)

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Formation	Color	Hard or Soft	Top 2/	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate			870	875			
Lime			875	885			
Slate & Shells			885	913			
Sand			913	938			
Slate - Shells			938	955			
Lime Broken			955	981			
Sand			981	1,100			
Lime, Broken			1,100	1,115			
Slate - Shells			1,115	1,150			
Sand			1,150	1,190			
Slate & Shells			1,190	1,315			
Sand			1,315	1,430			
Red Rock			1,430	1,456			
Slate - Shells			1,456	1,525			
Red Rock			1,525	1,638			
Slate - Shells			1,638	1,655			
Lime			1,655	1,668			
Slate - Shells			1,668	1,703			
Red Rock			1,703	1,718			
Big Lime			1,718	1,925			
Slate			1,925	1,930			
Gritty Lime-Gantz			1,930	1,975	Gas	1960	Show
Lime			1,975	2,000	~~HARKARX~~ Water	1968'	Hole full
Sand - 50 ft.			2,000	2,060			
Lime			2,060	2,128			
Slate			2,128	2,136			
Lime Broken			2,136	2,160			
Red Lime			2,160	2,165			
Gritty Lime			2,165	2,178			
Lime			2,178	2,195			
Slate & Shells			2,195	2,210			
Red Lime			2,210	2,222			
Red Rock			2,222	2,460			
Sand, 5th			2,460	2,482			
Slate			2,482	2,486			
Red Lime			2,486	2,555			
Slate & Shells			2,555	2,768			
Sand			2,768	2,775	Gas - Est.	2769	Show
Slate & Shells			2,775	3,093			
Lime			3,093	3,163			
Slate & Shells			3,163	3,530			
Lime			3,530	4,085			
Slate & Shells			4,085	4,360			
Benson			4,360	4,381	Gas	4371-80'	
Slate & Shells			4,381				
Total Depth				4,385			

Date 6-14, 19 20

APPROVED Hope Natural Gas Co. Owner

By Jack Bailey (Title)

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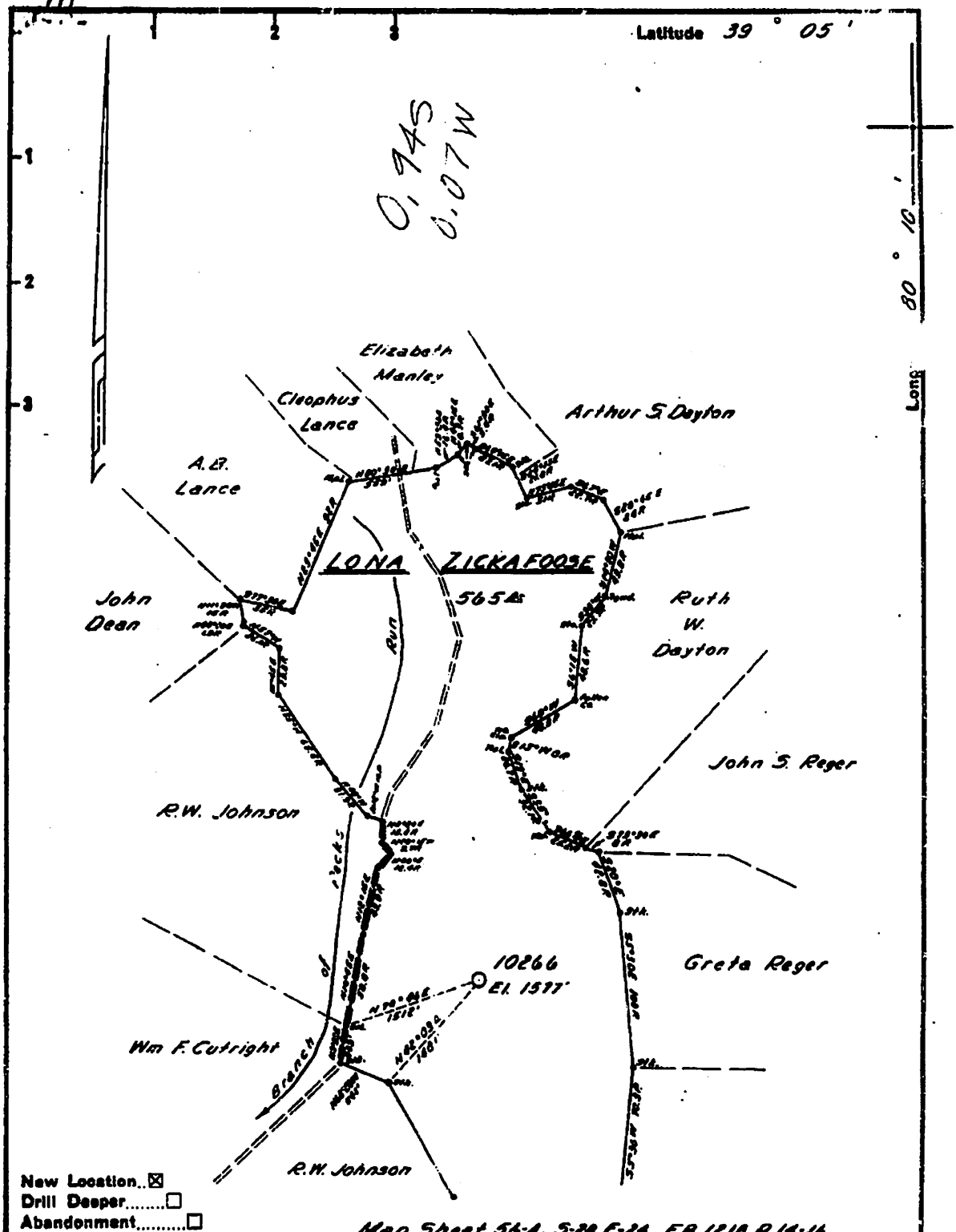

Map Sheet 56-A, S-28 E-24, F.B. 1218, P. 14-16

Company HOPE NATURAL GAS CO.
Address CLARKSBURG, W.VA.
Farm LONA ZICKAFOOSE
Tract ____ Acres 565 Lease No. 56676
Well (Farm) No. ____ Serial No. 10266
Elevation (Spirit Level) 1577'
Quadrangle PHILIPPI - SW
County UPSHUR District WARREN
Engineer Guy H. Bradley
Engineer's Registration No. 2425
File No. ____ Drawing No. ____
Date 1/5/60 Scale 1" = 80 POLES

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

WELL LOCATION MAP

FILE NO. UPS-601

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

— Denotes one inch spaces on border line of original tracing.

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WW-4A
Revised 6-07

1) Date:
2) Operator's Well Number
Zickafoose #10266

3) API Well No.: 47 - 097 - 00601

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name: Dominick & Joseph Larosa
Address: P.O. Box 34668
Bethesda, MD 20827

(b) Name:
Address:

(c) Name:
Address:

6) Inspector: Bryan Harris
Address: PO Box 157
Volga, WV 26238
Telephone: 304-553-6087

5) (a) Coal Operator
Name:
Address:

(b) Coal Owner(s) with Declaration
Name: Dominick & Joseph Larosa
Address: P.O. Box 34668
Bethesda, MD 20827

Name:
Address:

(c) Coal Lessee with Declaration
Name: Regal Coal Company c/o Virgil D Larosa
Address: P.O. Box 2198
Buckhannon, WV 26201

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
Lori L. Walker, Notary Public
Richhill Twp., Greene County
My Commission Expires Feb. 23, 2019
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Well Operator: Consol Gas Company
By: Craig Neal
Its: VP Operations E&P
Address: 1000 Consol Energy Drive
Canonsburg, PA 15317
Telephone: 1-724-485-3116

Subscribed and sworn before me this 29th day of April 2016
Lori L Walker Notary Public
My Commission Expires February 23, 2019

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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 depprivacyoffier@wv.gov.

9700601P

WW-9
(2/15)

API Number 47 - 097 - 00601
Operator's Well No. Zickafoose #10266

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Consol Gas Company OP Code 494495754

Watershed (HUC 10) Buckhannon River Quadrangle Century

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:

ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS & DISPOSED OF PROPERLY. (NO LAND APPLICATION) gwm

_____ 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: N/A

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 Craig Neal

Company Official (Typed Name) Craig Neal

Company Official Title VP Operations E&P, Consol Gas Company

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WV Department of Environmental Protection

Subscribed and sworn before me this 29th day of April, 20 16

Lori L Walker Notary Public

My commission expires February 23, 2019

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Lori L. Walker, Notary Public
Richhill Twp., Greene County
My Commission Expires Feb. 23, 2019
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

9700601P

Form WW-9

Operator's Well No. Zickafoose #10266

Consol Gas Company

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	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Landino Clover	5	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: Bryan Harris

Comments: _____

Title: Inspector Date: 5-9-16

Field Reviewed? (X) Yes ( ) No

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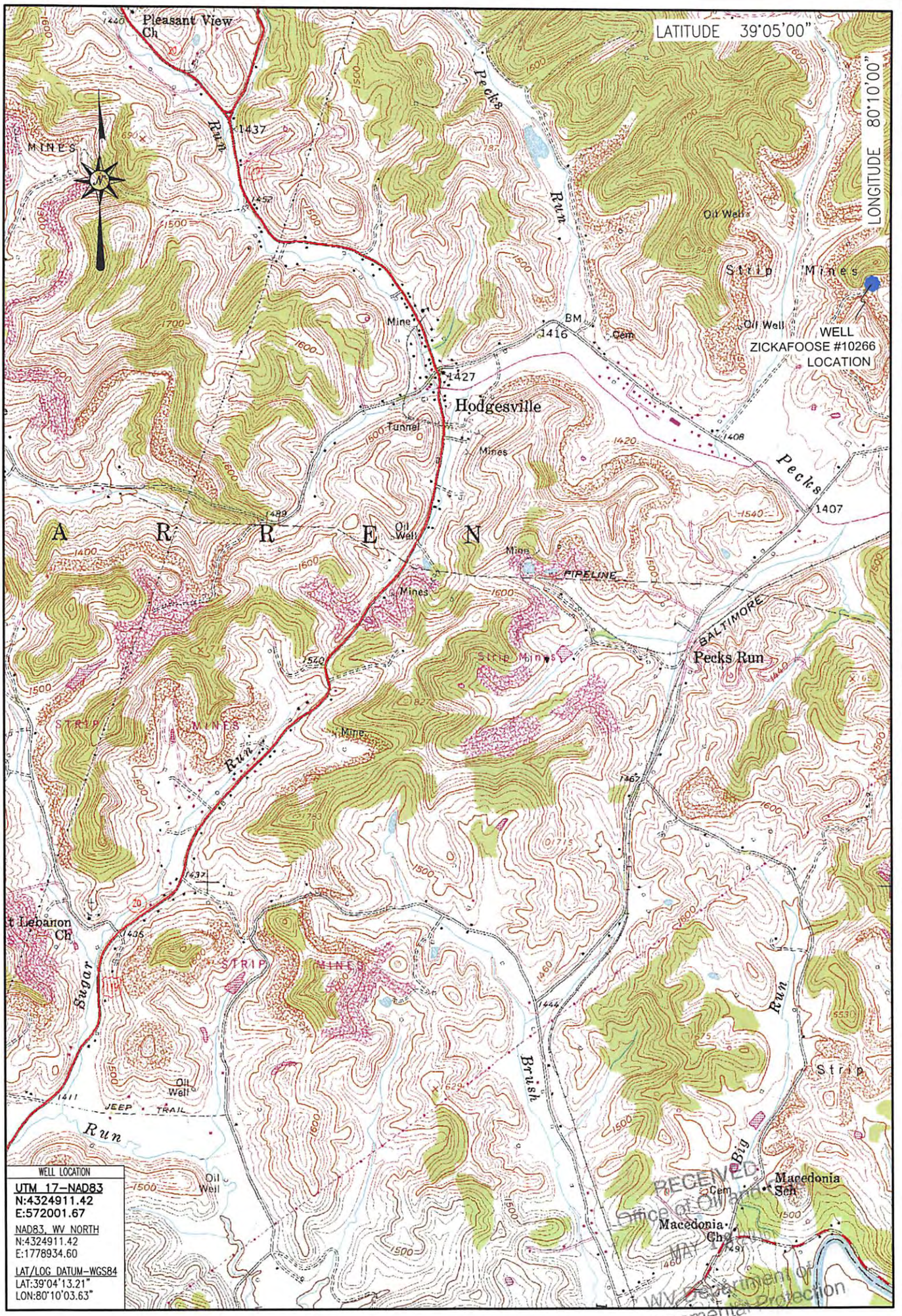

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LOCATION MAP
MARCH 28, 2016

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

ZICKAFOOSE #10266
CENTURY QUADRANGLE
WEST VIRGINIA

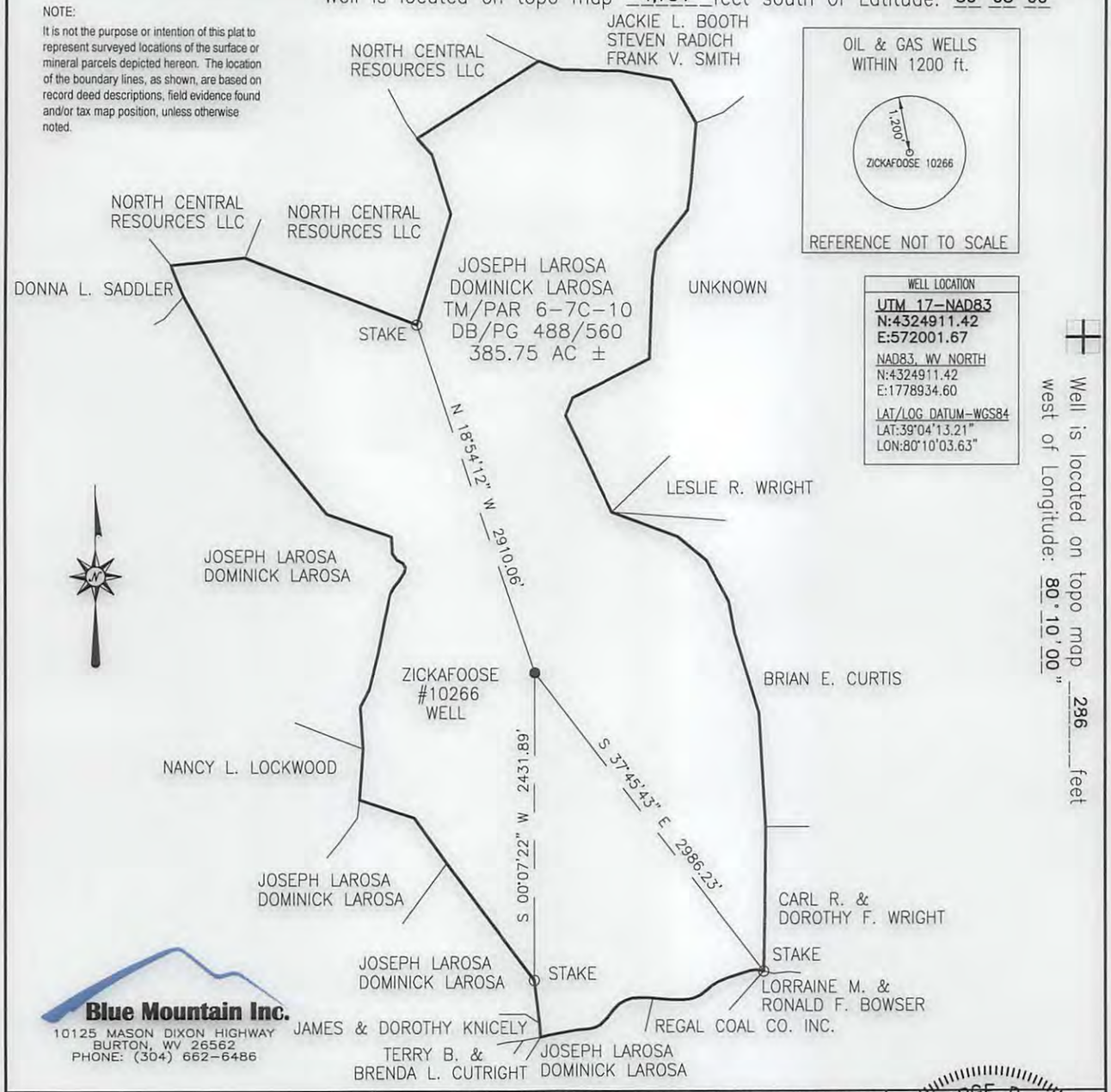
SCALE 1" = 2000'

0' 2000' 4000' 6000'

BLUE MOUNTAIN ENGINEERING

Well is located on topo map 4,734 feet south of Latitude: 39 ° 05 ' 00 "

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.



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

FILE #: ZICKAFOOSE 10266
DRAWING #: ZICKAFOOSE 10266
SCALE: 1" = 1200'
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: Anthony Kendziora
R.P.E.: _____ **L.L.S.:** P.S. No. 2000

GEORGE D. SIX LICENSED No. 2000 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR
PLACE SEAL HERE

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

DATE: MARCH 24, 2016
OPERATOR'S WELL #: ZICKAFOOSE 10266
API WELL #: 47 (STATE) 097 (COUNTY) 00601 P (PERMIT)

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

WATERSHED: BUCKHANNON RIVER **ELEVATION:** 1576.08'
COUNTY/DISTRICT: UPSHUR/WARREN **QUADRANGLE:** CENTURY, WV 7.5'
SURFACE OWNER: JOSEPH LAROSA & DOMINICK LAROSA **ACREAGE:** 385.75±
OIL & GAS ROYALTY OWNER: _____ **ACREAGE:** _____

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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: BENSON **ESTIMATED DEPTH:** 4,385'±

WELL OPERATOR CONSOL GAS COMPANY **DESIGNATED AGENT** ANTHONY KENDZIORA
Address 1000 CONSOL ENERGY DRIVE **Address** 1 DOMINION DRIVE
City CANONSBURG **State** PA **Zip Code** 15317 **City** JANE LEW **State** WV **Zip Code** 26378