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**west virginia** department of environmental protection

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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

November 13, 2015

**WELL WORK PERMIT**

**Fracture**

This permit, API Well Number: 47-7302554, issued to BOWYER, DAVID, 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: NICKOLES 1  
Farm Name: NICKOLES, THOMAS W. & JOYC  
**API Well Number: 47-7302554**  
**Permit Type: Fracture**  
Date Issued: 11/13/2015

**Promoting a healthy environment.**

**11/13/2015**

## 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

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1. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code §22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR 4-19.1.c, if the operator is unable to sample and analyze any water well or spring with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. 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.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours
7. Well work activities shall not constitute a hazard to the safety of persons.
8. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced, drilling ceased, completion of any other permitted well work and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

9 BEFORE ANY LAND APPLICATION OF TREATED PIT FLUIDS APPROVAL MUST BE GIVEN BY THE OFFICE OF OIL & GAS INSPECTOR

WW - 2B  
(Rev. 8/10)

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

1) Well Operator: David E. Bowyer

308590	Pleasants	Union	Bens Run 7.5'
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Operator ID      County      District      Quadrangle

2) Operator's Well Number: Nickoles #1      3) Elevation: 1055'

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

*Michael Hoff*  
10-19-15

5) Proposed Target Formation(s): Devonian Shales Proposed Target Depth: 4900'

6) Proposed Total Depth: 5000' Feet Formation at Proposed Total Depth: Devonian Shales

7) Approximate fresh water strata depths: 48' By Permit 826

8) Approximate salt water depths: None by Permit 826

9) Approximate coal seam depths: 730' by Permit 826

10) Approximate void depths,(coal, Karst, other): None

11) Does land contain coal seams tributary to active mine? No

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)

Frac Benson at 1500'-1800', Ball Town at 3854'-4080', and Speechly at 3496'-3550' using 20-40 sand with 20,000 lbs. per stage and use a 20' lb cross link system for fluid (H2O). This well was perforated and acidized on 6/18/14. FROM 4716 TO 4726

*STG 1 FRAC BENSON + SHALES FROM 4716-4726 WITH 800,000 CF NITROGEN*  
*STG 2 FRAC SHALES FROM 3229 TO 4096 FT WITH 1,200,000 CF NITROGEN.*

**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	13-3/8"	A-500	48	36	36	CTS
Fresh Water	7"	J-55	20	800	800	CTS (120 Cu. Ft.)
Coal						
Intermediate						
Production	4-1/2"	J-55	9.5		4950	1500 of Fill
Tubing						
Liners						

*MAC*  
10-19-15

Packers: Kind: \_\_\_\_\_  
Sizes: \_\_\_\_\_  
Depths Set \_\_\_\_\_



WW-2B1  
(5-12)

Well No. Nickoles #1

West Virginia Department of Environmental Protection  
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Laboratory Name Reliance Labs  
Sampling Contractor Reliance Labs

Well Operator David E. Bowyer

Address 12088 Middle Island Rd.

Alma, WV 26320

Telephone 304-758-0672

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

Thomas Nickoles 86 Swetland Rd, Gettysburg, PA 17325-8646

Received

OCT 28 2015

Office of Oil and Gas  
WV Dept. of Environmental Protection

11/13/2015

7302554F MAC 10/19/15

WW-2A  
(Rev. 6-14)

1.) Date: 7/30/15  
2.) Operator's Well Number Nickoles #1  
State County Permit  
3.) API Well No.: 47- 73 - 02554

**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 Thomas Nickoles W Address 86 Sweetland Rd.  
Gettysburg, PA 17325  
(b) Name \_\_\_\_\_ Address \_\_\_\_\_  
(c) Name \_\_\_\_\_ Address \_\_\_\_\_  
5) (a) Coal Operator  
Name None Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name None Address \_\_\_\_\_  
(c) Coal Lessee with Declaration  
Name None Address \_\_\_\_\_  
6) Inspector Mike Goff  
Address P.O. Box 134  
Pullman, WV 26421  
Telephone 304-549-9823

**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 David E. Bowver  
By: David E. Bowver  
Its: Designated Agent  
Address: 12088 Middle Island Rd.  
Alma, WV 26320  
Telephone: 304-758-0672  
Email: Dbowver6928@gmail.com

Received  
OCT 28 2015

Subscribed and sworn before me this 25 day of October, 2015

Sue E Johnson Notary Public  
Office of Oil and Gas  
WV Dept. of Environmental Protection

My Commission Expires 4-4-22  
Oil and Gas Privacy Notice



WW-2A Surface Waiver

SURFACE OWNER WAIVER

County Pleasants

Operator David E. Bowyers

Operator well number Nickoles #1

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have FIFTEEN (15) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure a adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
2) The soil erosion and sediment control plan is not adequate or effective;
3) Damage would occur to publicly owned lands or resources;
4) The proposed well work fails to protect fresh water sources or supplies;
5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

List of Water Testing Laboratories. The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application for a Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through \_\_\_ including a work order on Form WW2-B, a survey plat, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Signature: Thomas W. Nickoles, Date: 9/15/15

Company Name: Received, By: OCT 28 2015, Date

Print Name: THOMAS W. NICKOLES

Signature: Office of Oil and Gas, Department of Environmental Protection, Date

**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
Thomas & Joyce Nickoles	Rockford Energy LLC	15%	286/619
Rockford Energy LLC	D&J Investments LLC		
D&J Investments LLC	Pleasants Energy Development 2013 Program		
Pleasants Energy Development 2013 Program	David Bowyer		Copy Included (1)


**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:

  
 \_\_\_\_\_  
 David E. Bowyer  
 Designated Agent

OCT 28 2015



Sue E Morgan  
PLEASANTS County 03:52:17 PM  
Instrument No 618168  
Date Recorded 09/08/2015  
Document Type ASSIGNMENT  
Pages Recorded 2  
Book-Page 306-45  
Recording Fee \$5.00  
Additional \$6.00

7302554F

### PARTIAL ASSIGNMENT OF OIL AND GAS INTEREST

KNOW ALL MEN BY THESE PRESENTS, that this assignment is made and entered into as of the 3rd day of Sept., 2015, by and between Pleasants Energy Development 2013 Drilling Program LP, a West Virginia Limited Liability Partnership, party of the first part, hereinafter referred to as "Assignor" and between David Bowyer, a Sole Proprietor, party of the second part, hereinafter referred to as "Assignee".

WHEREAS, Assignor represents that it is the present owner of certain oil and gas development rights and leasehold estates pursuant to a certain oil and gas lease dated June 5, 2012 from Thomas W. Nickoles and Joyce A. Nickoles, husband and wife, consisting of +/- One Hundred Fifteen (115) acres more or less, situated in Union District, Pleasants County, described in a Memorandum of Lease of record in the Office of the Clerk for the County Commission of Pleasants County, West Virginia in Deed Book 286 at Page 619.

WHEREAS, David Bowyer has agreed to take over operation of one well on said parcel under the terms and conditions of a Drilling and Completion Agreement with D&J Investments, LLC, general partner of Pleasants Energy Development 2013 Drilling Program LP.

WITNESSETH, that for good and valuable consideration, the receipt of which hereby is acknowledged, and in consideration of the covenants and conditions hereinafter to be kept and performed, Assignor does hereby transfer, sells, grant, convey and assigns to Assignee the borehole rights only to complete one well to a depth of the deepest completed formation no deeper than 300 feet above the Marcellus Shale formation.

This assignment is made subject to the following reservations and excepts:

- (a) Assignor reserves all rights and titles to the lease and only assigns to Assignee one well to a depth of the deepest completed formation no deeper than 300 feet above the Marcellus Shale formation.
- (b) Assignor covenants with Assignee, its heirs, successors, assigns, that the Assignor is the lawful owner of and has good title to the interest and properties, both real and personal, herein assigned, free and clear from any liens or encumbrance.
- (c) Once the well has been completed the Assignee shall execute an assignment returning all interest herein conveyed unto the Assignor.
- (d) If Assignee does not complete a producing oil and/or gas well by 6/01/16 then this Assignment shall be null and void and of no effect.

Received

OCT 28 2015



This assignment is made subject to all matters of record in the office of the Clerk of Pleasants County Commission.

Assignor warrants that it has full power and authority to enter into this assignment and the execution, delivery and consummation of this assignment has been duly and validly authorized by all necessary action.

This assignment shall be binding upon, and inure to the benefit of Assignor, Assignee, and their respective heirs, personal representatives, devisees, successors and assigns.

WITNESSETH the following signature:

*Jackson L. Smith*

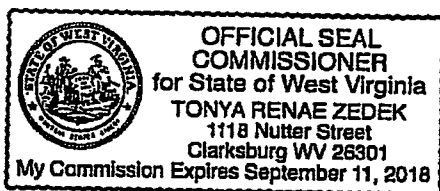
Pleasants Energy Development 2013 Drilling Program LP by  
D&J Investments LLC, its General Partner  
By Jackson L. Smith, Member

State of West Virginia  
County of Tyler, TO-WIT

The foregoing instrument was acknowledged before me this 3rd day of Sept, 2015 by Jackson L. Smith, Member of D&J Investments, LLC as General Partner of Pleasants Energy Development 2013 Drilling Program LP.

My commission expires September 11, 2018

*Tonya Renae Zedek*  
\_\_\_\_\_  
Notary Public



This Instrument was prepared by and return to:  
D&J Investments LLC  
12088 Middle Island Rd.  
Alma, WV 26320

Received

OCT 28 2015

WW-9  
(2/15)

API Number 47 - 73 - 02554

Operator's Well No. Nickolas #1

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name David E. Bowyer OP Code 30B590

Watershed (HUC 10) Big Run Quadrangle Bens Run 7.5'

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: Frac Flowback and Gel System

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? 20

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 \_\_\_\_\_ )

*MAG  
10/19/15*

Will closed loop system be used? If so, describe: No

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. No Drilling (Stimulation)

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

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.

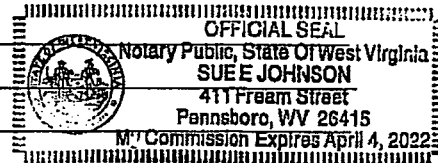
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations 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 *David E. Bowyer*

Company Official (Typed Name) David E. Bowyer

Company Official Title Designated Agent



Subscribed and sworn before me this 25 day of October, 20 15

*Sue E Johnson* Notary Public

My commission expires 4-4-22

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 \_\_\_\_\_ 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

Area I		Area II	
Seed Type	lbs/acre	Seed Type	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: Michael Goff

Comments: Preseed & Mulch any disturbed areas per WUDEP regulations, Maintain & upgrade E-n-s as necessary.

Title: Oil & Gas Inspector Date: 10-19-15

Field Reviewed?  Yes  No



## 47-073-2554

7302554F



### NICKOLES #1 REVISED 47-073-2554

## Mt Welcome Ch Cem

EXISTING CULVERT

7  
5

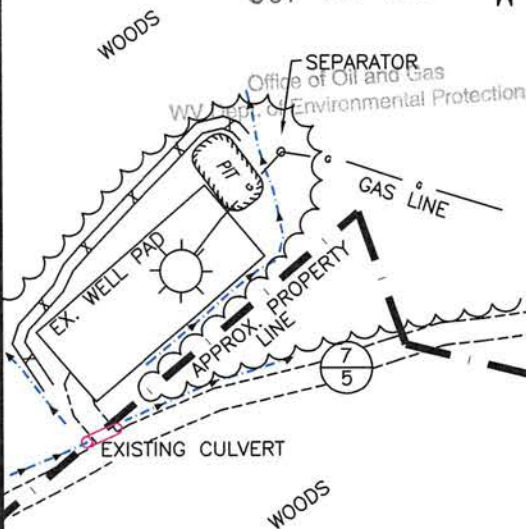
7  
5

## Craig

Detail Sketch for 47-073-2554

Received

OCT 28 2015



NOT TO SCALE

### SCALE: 1"=500'



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. REGULATION. 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.

11/13/2015

STACKED BRUSH MAY BE USED FOR SEDIMENT CONTROL.

APPLICATIONS FOR SEPARATE PLC PERMITS ON THE ACCESS ROAD STREAM CROSSINGS HAVE BEEN PREPARED (IF APPLIES)

= EXISTING CULVERT    = PROPOSED CULVERT (SIZE AS STATED)

= PROPOSED STREAM CROSSING

MAG 10-19-15



**Professional Energy Consultants**  
A DIVISION OF SMITH LAND SURVEYING

SURVEYORS PROJECT MGMT. **SLS** ENGINEERS ENVIRONMENTAL

P.O. Box 150  
Martinsburg, WV 26151  
(304) 462-5834

56065 Dikes Bottom Road  
Shady Side, OH 43067  
(740) 671-9911

HONESTY. INTEGRITY. QUALITY

DRAWN BY C.P.M.	FILE NO. 8475	DATE 10-08-15	CADD FILE: 8475REC2554.DWG
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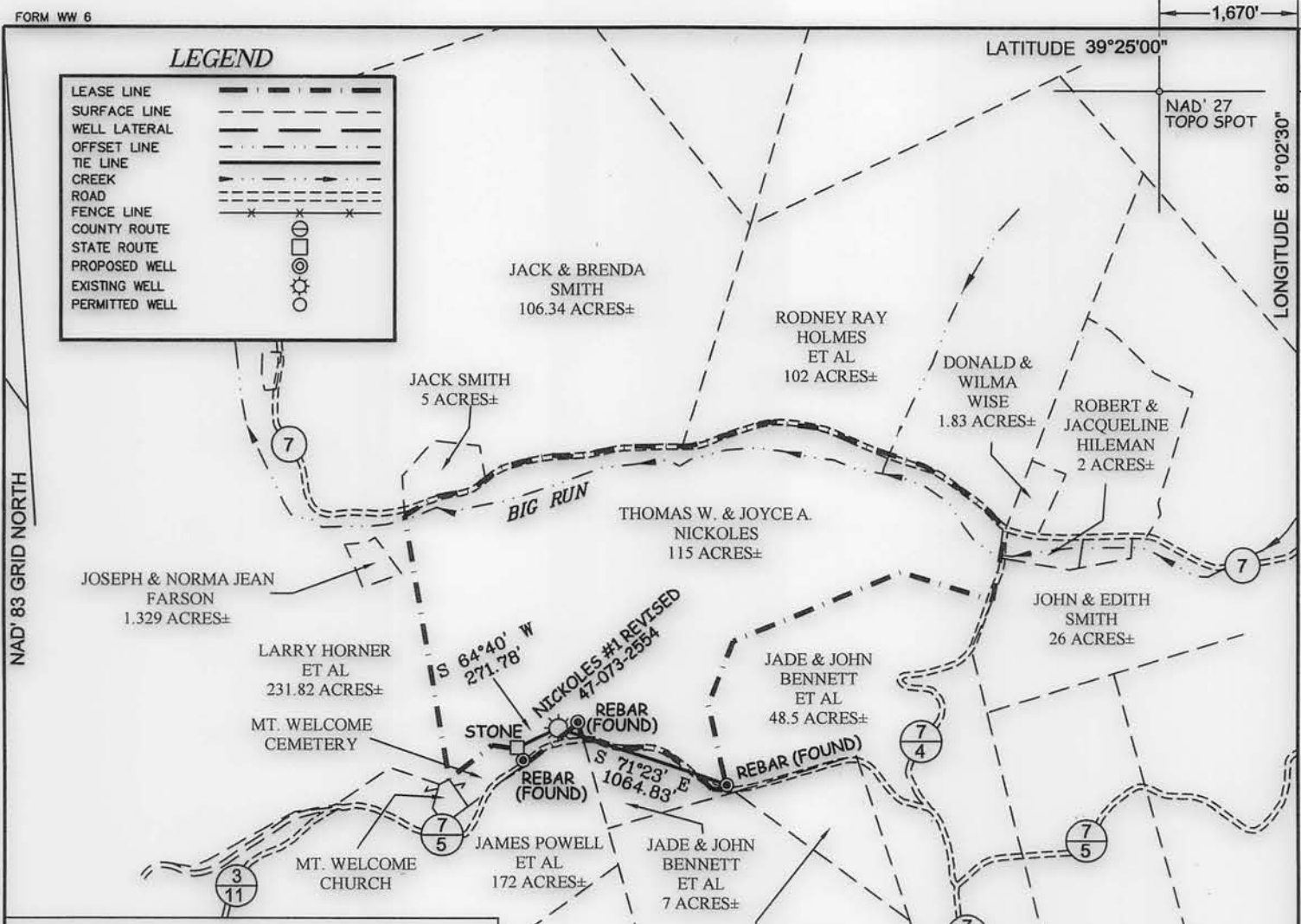
TOPO SECTION OF  
BENS RUN 7.5'  
USGS TOPO QUADRANGLE



**LEGEND**

LEASE LINE	
SURFACE LINE	
WELL LATERAL	
OFFSET LINE	
TIE LINE	
CREEK	
ROAD	
FENCE LINE	
COUNTY ROUTE	
STATE ROUTE	
PROPOSED WELL	
EXISTING WELL	
PERMITTED WELL	

NAD'83 GRID NORTH



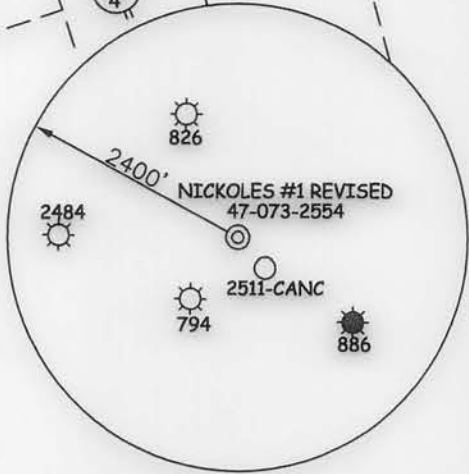
**NICKOLES  
WELL #1 REVISED  
47-073-2554**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'83 S.P.C.(FT) N. 336,924 E. 1,531,344  
 NAD'83 GEO. LAT-(N) 39.41470 LONG-(W) 81.04739  
 NAD'83 UTM (M) N. 4,362,799 E. 495,920

**NOTES ON SURVEY**

1. TIES TO CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '83.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM WELL PLAT 47-073-2554 SURVEYED BY JOSHUA E. MOODY P.S. #2020 DATED 03-26-14.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF RITCHIE COUNTY IN JULY, 2015.
4. WELL LAT./LONG. (NAD'83) ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).
5. BASED ON GPS OBSERVATION, NICKOLES #1 REVISED WELL WAS FOUND WITHIN 5 FEET OF PERMITTED COORDINATES AS SHOWN ON PLAT REFERENCED IN NOTE 2.



**Professional Energy Consultants**  
 A DIVISION OF SMITH LAND SURVEYING, INC.  
  
 SURVEYORS  
 ENGINEERS  
 ENVIRONMENTAL  
 PROJECT MGMT.  
 (304) 482-0634  
 WWW.SLSURVEYS.COM

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. C. Victor Moyers  
 849



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE OCTOBER 9, 20 15  
 REVISED \_\_\_\_\_, 20 \_\_\_\_  
 OPERATORS WELL NO. NO. 1 REVISED  
 API WELL NO. 47-073-02554 F  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 8475P2554.dwg  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (MAPPING GRADE TIE TO CORS NETWORK) SCALE 1" = 1000'

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

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

LOCATION:  
 ELEVATION 1038' WATERSHED BIG RUN OF MIDDLE ISLAND CREEK  
 DISTRICT UNION COUNTY PLEASANTS QUADRANGLE BENS RUN 7.5'

SURFACE OWNER THOMAS W. & JOYCE A. NICKOLES ACREAGE 115±  
 ROYALTY OWNER THOMAS W. & JOYCE A. NICKOLES ACREAGE 115±

PROPOSED WORK:  
 DRILL \_\_\_\_\_ CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ PLUG AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_ OTHER \_\_\_\_\_  
 PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 5000'

WELL OPERATOR DAVID BOWYER DESIGNATED AGENT DAVID BOWYER  
 ADDRESS 12088 MIDDLE ISLAND RD. ADDRESS 12088 MIDDLE ISLAND RD.  
 ALMA, WV 26320 ALMA, WV 26320

COUNTY NAME  
PERMIT

11/13/2015

I  
New

Operator: BOWYER, DAVID  
API: 7302554 F  
WELL No: NICKOLES 1  
Reviewed by: CPW Date: 11/12/2015  
15 Day End of Comment: 11/12/15

**CHECKLIST FOR FILING A PERMIT**

Fracture

CK# 9573  
\$650<sup>00</sup>

- WW-2B
- Inspector signature on WW-2B
- Completion / Well Records of Previous Work
- WW-2A (Notarized)
- Certified Mail Receipts, Waivers or Affidavits of Personal Service
- Surface Owner Waiver
- Coal Owner / Lessee /Operator Waiver
- WW-2A-1 (Signed) Showing Book/Page Number and Royalty Percentage
- WW-9 (Page 1 & 2) (Notarized)
- More than 5,000 bbls
- Inspector Signature on WW-9
- Reclamation plan
- Topographic Map of location of well
- Mylar Plat (Signed Sealed) (Surface owner on plat matches WW-2A)
- Bond
- Company is Registered with the SOS
- Worker's Compensation / Unemployment Insurance account is OK
- \$650.00 check (~~\$550.00~~ if no pit) *NOD sent/Phone call 11/09/15 Sue Johnson 11:20AM*  *Received 11/10/15*
- Mine Data
- Addendum
- Professional Engineer/Company has COA



7302554 F@k# Transfer Fee  
950.02  
9544

David E. Bowyer  
12088 Middle Island Road  
Alma, WV 26320-7211  
(304)758-0672  
DBowyer6928@gmail.com

October 25, 2015

WV Department of Oil and Gas  
Attn: Jeffrey McLaughlin  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

Dear Mr McLaughlin:

Please find attached the permit package for fracking the Nickoles #1 - API 47-73-02554. The original package has been sent by mail, you should receive by tomorrow. The well was drilled in 2014 and was not fracked at that time because we did not have an outlet for the gas. We now have a gas contract to sell the gas and would like to have the frack scheduled as soon as possible.

Thank you for your help in this matter. If you have any questions please give me a call.

Sincerely,



Sue E. Johnson

For David E. Bowyer

Enclosures

Received

OCT 28 2015

Office of Oil and Gas  
WV Dept. of Environmental Protection

11/13/2015

WW - 2B  
(Rev. 8/10)



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

1) Well Operator: David E. Bowyer      308590      Pleasants      Union      Bens Run 7.5'  
Operator ID      County      District      Quadrangle

2) Operator's Well Number: Nickoles #1      3) Elevation: 1055'

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

*Michael Gaff*  
*10-19-15*

5) Proposed Target Formation(s): Devonian Shales      Proposed Target Depth: 4900'  
6) Proposed Total Depth: 5000' Feet      Formation at Proposed Total Depth: Devonian Shales  
7) Approximate fresh water strata depths: 48' By Permit 826  
8) Approximate salt water depths: None by Permit 826

9) Approximate coal seam depths: 730' by Permit 826

10) Approximate void depths, (coal, Karst, other): None

11) Does land contain coal seams tributary to active mine? No

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)  
Frac Benson at 1500'-1800', Ball Town at 3854'-4080', and Speechly at 3496'-3550' using 20-40 sand with 20,000 lbs. per stage and use a 20 lb cross link system for fluid (H2O). This well was perforated and acidized on 6/18/14.

**13) CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE For Drilling	INTERVALS Left in Well	CEMENT Fill -up (Cu. Ft.)
	Size	Grade	Weight per ft			
Conductor	13-3/8"	A-500	48	36	36	CTS
Fresh Water	7"	J-55	20	800	800	CTS (120 Cu. Ft.)
Coal						
Intermediate						
Production	4-1/2"	J-55	9.5		4950	1500 of Fill
Tubing						
Liners						

*MAG*  
*10-19-15*

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OCT 28 2015

Packers: Kind: \_\_\_\_\_  
          Sizes: \_\_\_\_\_  
          Depths Set \_\_\_\_\_

WW-9  
(2/15)

API Number 47 - 73 - 02554  
Operator's Well No. Nickoles #1

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN



Operator Name David E. Bowyer OP Code 308590  
Watershed (HUC 10) Big Run Quadrangle Bens Run 7.5'

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: Frac Flowback and Gel System

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? 20

*MAG  
10/19/15*

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: No

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. No Drilling (Stimulation)

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

Additives to be used in drilling medium? N/A

Received

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

OCT 28 2015

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

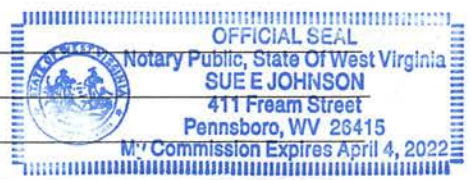
-Landfill or offsite name/permit number? \_\_\_\_\_

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 [Signature]  
Company Official (Typed Name) David E. Bowyer  
Company Official Title Designated Agent



Subscribed and sworn before me this 25 day of October, 20 15

[Signature] Notary Public

My commission expires 4-4-22





Operator's Well No. NICKOLES #1

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 \_\_\_\_\_ 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		

RECEIVED  
OFFICE OF OIL AND GAS

OCT 28 2015  
TPW

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Michael Gaff

Comments: Preseed & Mulch any disturbed areas per WUDEP regulations, Maintain & upgrade E-n-s as necessary.

Title: Oil & Gas Inspector Date: 10-19-15

Field Reviewed?  Yes  No