



---

**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

November 03, 2015

**WELL WORK PERMIT**

**Vertical Well**

This permit, API Well Number: 47-8510266, issued to MURVIN & MEIER OIL CO., 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: NATHAN REED #3  
Farm Name: DIFILIPPO, DENNIS N. & DEBRA  
**API Well Number: 47-8510266**  
**Permit Type: Vertical Well**  
Date Issued: 11/03/2015

**Promoting a healthy environment.**

**11/06/2015**

## 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

---

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](mailto:DEPOOGNotify@wv.gov) within 30 days of commencement of drilling.



8510266  
\$650<sup>00</sup>  
OK#1193

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

- 1) Well Operator: Murvin & Meier Oil Co 307980 Ritchie Murphy Smithville 7.5'  
Operator ID County District Quadrangle
- 2) Operator's Well Number: Nathan Reed #3 3) Elevation: 1194
- 4) Well Type: (a) Oil  or Gas   
(b) If Gas: Production  / Underground Storage \_\_\_\_\_  
Deep \_\_\_\_\_ / Shallow
- 5) Proposed Target Formation(s): Warren thru Rhinestreet Proposed Target Depth: 6380 TFW  
6) Proposed Total Depth: 6400 Feet Formation at Proposed Total Depth: Shale  
7) Approximate fresh water strata depths: 50' damp (#10120) 48' damp (#10145)  
8) Approximate salt water depths: 1261' damp (#10120) None (#10145)
- 9) Approximate coal seam depths: None
- 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)  
Drill and Complete New Well

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	
Conductor	16"		32	20'	20'	
Fresh Water Coal	11 3/4"	AF-500	42	300	300	CTS
Intermediate	8 5/8"	J-55	24	2060	2060	CTS
Production	4 1/2"	WT-65	10.5	6380	6380	550
Tubing						
Liners						

RECEIVED  
Office of Oil and Gas

OCT 16 2015

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

Department of  
Environmental Protection  
10-5-17/06/2015



WW-2A  
(Rev. 6-14)

1.) Date: October 6, 2015  
2.) Operator's Well Number Nathan Reed #3  
State County Permit  
3.) API Well No.: 47- 085 -

**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 Dennis and Debra Difilippo ✓  
Address 4924 MacCorkle Ave SW  
Charleston WV 25309-1216  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
5) (a) Coal Operator Name n/a  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Coal Lessee with Declaration  
Name none  
Address \_\_\_\_\_  
6) Inspector David Cowan  
Address Route 1 Box 202  
Harrisville WV 26362  
Telephone 304-389-3509

**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 10 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 Murvin & Meier Oil Co.  
By: Katib Black  
Its: Executive Vice-President  
Address: P. O. Box 396  
Olney IL 62450  
Telephone: 618-395-4405  
Email: katieb@murvinandmeier.com

Subscribed and sworn before me this 30<sup>th</sup> day of September, 2015

Kellie Weems  
My Commission Expires 11/30/16  
Oil and Gas Privacy Notice

RECEIVED  
Office of Oil and Gas  
Notary Public "OFFICIAL SEAL 2015"  
KELLIE WEEMS  
Notary Public, State of Illinois  
My Commission Expires 11-30-16  
WV Department of Environmental Protection

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of its 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](mailto:depprivacyofficer@wv.gov)

11/06/2015



**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
Nathan Reed etux	South Penn Oil Co.	1/8th	33 / 523
South Penn Oil Co.	Skyles Oil Corp.	Assignment	87 / 197
Skyles Oil Corp.	Bowser Gas and Oil Co.	Assignment	99 / 309
Bowser Gas and Oil Co.	Megan Oil & Gas Co., Inc.	Assignment	191 / 546
Megan Oil & Gas Co., Inc.	Murvin & Meier Oil Co.	Farmout	254 / 147

**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:

Murvin & Meier Oil Co.  
  
 Kate M. Blackford, Executive Vice-President

RECEIVED  
Office of Oil and Gas

OCT 16 2015

WV Department of  
Environmental Protection

WW-2B1  
(5-12)

Well No. Nathan Reed #3

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 Laboratories  
Sampling Contractor Smith Land Surveying, Inc.

Well Operator Murvin & Meier Oil Co.  
Address P.O. Box 396  
Olney, IL 62450  
Telephone 618-395-4405

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.

There appears to be one+/- (1) potable water sources within 1500', therefore tests will be offered and samples taken as required.

RECEIVED  
Office of Oil and Gas

OCT 16 2015

WV Department of  
Environmental Protection  
11/06/2015



SMITH LAND SURVEYING, INC.

P.O. BOX 150, GLENVILLE, WV 26351

(304) 462-5634 • FAX 462-5656

## WELL INFORMATION AND POTENTIAL WATER WELL SAMPLE DATA SHEET

**OPERATOR:** Murvin & Meier Oil Company  
**LEASE NAME AND NUMBER:** Nathan Reed #2

### COMMENTS

The initial field and/or mapping review of the area surrounding the proposed well site revealed the below listed surface owner(s) that were potentially utilizing groundwater (potable) for Human Consumption or other purposes within 2000' of the proposed well site. (For location of each site see attached area map.)

### INDIVIDUAL CONTACTED OR NOTIFIED

\* Site: 1 Spacing 1990' Owner/Occupant: Murvin and Meier  
 Address: 1102 North East Street P. O. Box 396 Olney, Illinois 62450 Ph: (618)-395-4405  
 Field Contact Date: 05/02/2015 Sampled: Yes Date Sampled: 05/02/2015 Source: Creek  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 05/02/2015 2nd N/A Certified (3rd) 10/05/2015  
 Comments: Murvin and Meier gas company is not the land owner but request that the creek be sampled.  
LAT : 39.0142  
LONG : 80.5555

Site: 2 Spacing \_\_\_\_\_ Owner/Occupant: John E. Frederick Trust  
 Address: 2969 lindale Dr. Akron, OH 44312 Ph: \_\_\_\_\_  
 Field Contact Date: N/A Sampled: No Date Sampled: N/A Source: Unknown  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 05/02/2015 2nd N/A Certified (3rd) 10/05/2015  
 Comments: Tax Map 49, Parcel 3; Tax Map 45, Parcels 45, 46 and 49  
No response to certified letter as of 10/13/2015

Site: 3 Spacing \_\_\_\_\_ Owner/Occupant: Dennis and Debra Difilippo  
 Address: 4924 Maccorkle Ave. SW. South Charleston, WV 25309 Ph: \_\_\_\_\_  
 Field Contact Date: N/A Sampled: No Date Sampled: N/A Source: Unknown  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 05/02/2015 2nd N/A Certified (3rd) 10/05/2015  
 Comments: Tax Map 49, Parcel 4 ; Tax Map 45, Parcels 36, 37, 39, and 47  
No response to certified letter as of 10/13/2015

Site: 4 Spacing \_\_\_\_\_ Owner/Occupant: John S. Butcher  
 Address: 11 Bogus Alley Logan, WV 25601 Ph: \_\_\_\_\_  
 Field Contact Date: N/A Sampled: No Date Sampled: N/A Source: Unknown  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 05/02/2015 2nd N/A Certified (3rd) 10/05/2015  
 Comments: Tax Map 49, Parcel 5  
No response to certified letter as of 10/13/2015

**RECEIVED**  
Office of Oil and Gas

OCT 16 2015

Site: 5 Spacing \_\_\_\_\_ Owner/Occupant: Terry and Lizzie Barron  
 Address: Box 4383 Charleston, WV 25304 Ph: \_\_\_\_\_  
 Field Contact Date: N/A Sampled: No Date Sampled: N/A Source: Unknown  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 10/02/2015 2nd N/A Certified (3rd) 10/05/2015  
 Comments: Tax Map 49, Parcel 10  
No response to certified letter as of 10/13/2015

Site: 6 Spacing \_\_\_\_\_ Owner/Occupant: \_\_\_\_\_  
 Address: \_\_\_\_\_ Ph: \_\_\_\_\_  
 Field Contact Date: \_\_\_\_\_ Sampled: \_\_\_\_\_ Date Sampled: \_\_\_\_\_ Source: \_\_\_\_\_  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st N/A 2nd N/A Certified (3rd) \_\_\_\_\_  
 Comments: \_\_\_\_\_

Site: 7 Spacing \_\_\_\_\_ Owner/Occupant: \_\_\_\_\_  
 Address: \_\_\_\_\_ Ph: \_\_\_\_\_  
 Field Contact Date: \_\_\_\_\_ Sampled: \_\_\_\_\_ Date Sampled: \_\_\_\_\_ Source: \_\_\_\_\_  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st \_\_\_\_\_ 2nd \_\_\_\_\_ Certified (3rd) \_\_\_\_\_  
 Comments: \_\_\_\_\_

Site: 8 Spacing \_\_\_\_\_ Owner/Occupant: \_\_\_\_\_  
 Address: \_\_\_\_\_ Ph: \_\_\_\_\_  
 Field Contact Date: \_\_\_\_\_ Sampled: \_\_\_\_\_ Date Sampled: \_\_\_\_\_ Source: \_\_\_\_\_  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st \_\_\_\_\_ 2nd \_\_\_\_\_ Certified (3rd) \_\_\_\_\_  
 Comments: \_\_\_\_\_

Site: 9 Spacing \_\_\_\_\_ Owner/Occupant: \_\_\_\_\_  
 Address: \_\_\_\_\_ Ph: \_\_\_\_\_  
 Field Contact Date: \_\_\_\_\_ Sampled: \_\_\_\_\_ Date Sampled: \_\_\_\_\_ Source: \_\_\_\_\_  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st \_\_\_\_\_ 2nd \_\_\_\_\_ Certified (3rd) \_\_\_\_\_  
 Comments: \_\_\_\_\_

Site: 10 Spacing \_\_\_\_\_ Owner/Occupant: \_\_\_\_\_  
 Address: \_\_\_\_\_ Ph: \_\_\_\_\_  
 Field Contact Date: \_\_\_\_\_ Sampled: \_\_\_\_\_ Date Sampled: \_\_\_\_\_ Source: \_\_\_\_\_  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st \_\_\_\_\_ 2nd \_\_\_\_\_ Certified (3rd) \_\_\_\_\_  
 Comments: \_\_\_\_\_

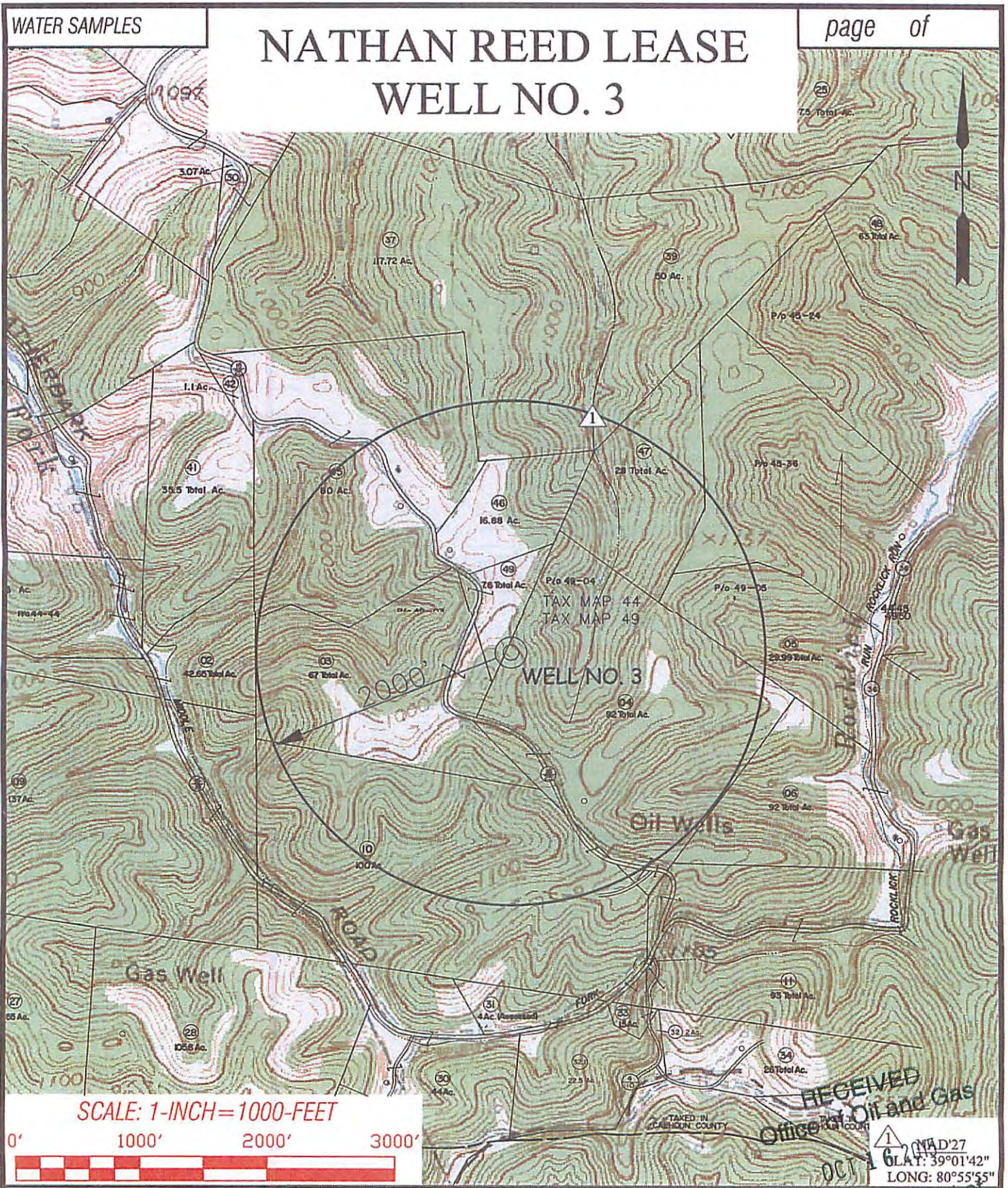
**RECEIVED**  
**Office of Oil and Gas**  
**OCT 16 2015**  
**WV Department of**  
**Environmental Protection**



WATER SAMPLES

# NATHAN REED LEASE WELL NO. 3

page of



SCALE: 1-INCH=1000-FEET



RECEIVED  
Office of Oil and Gas  
OCT 16 2015  
LAT: 39°01'42"  
LONG: 80°55'55"

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

Surveyors  
Project Manager  
Engineers  
Environmental

P.O. Box 150  
Clarksburg, WV 26301  
(206) 463-3634

Survey Office: Bottom Road  
Smithville, OH 43087  
(614) 873-9911

PROFESSIONAL SURVEYING QUALITY

DRAWN BY: K.D.W.  
FILE NO.: 7774  
DATE: 10-05-15  
CADD FILE: 7774WS3.DWG

TOPO SECTION OF:  
SMITHVILLE, WV 7.5' QUAD.

DISTRICT	COUNTY	TAX MAP-PARCEL NO.
MURPHY	RITCHIE	49-4

OPERATOR:  
MURVIN & MURPHY  
P.O. BOX 306  
OLNEY, IL 62450

WV Department of Environmental Protection

11/06/2015



8510266



**Reliance Laboratories, Inc.**  
 2044 Meadowbrook Road | P.O. Box 4657  
 Bridgeport, WV 26330  
 Phone: 304.842.5285 | Fax: 304.842.5351

**Martinsburg Laboratory**  
 Ridgefield Business Center | 25 Crimson Circle  
 Martinsburg, WV 25403  
 Phone: 304.596.2084 | Fax: 304.596.2086

Certifications: WV Department of Health #: 00354, 00443 | WV Department of Environmental Protection #: 158, 181  
 MD Department of Environment #: 336, 337 | US Environmental Protection Agency #: WV00042, WV00901

SMITH LAND SURVEYING, INC.  
 P.O. BOX 150

Tuesday, October 13, 2015  
 Page 2 of 2

GLENVILLE, WV 26351-

Lab Number: 238171-2015-DW Sample ID: (7774) CREEK

Parameter	Value	Units	Method	Date/Time Analyzed	Analyst	MRL	MCL
<b>Analyte Group: Inorganics</b>							
E. coli (Chromogenic)	PRESENT		SM9223B-97	10/2/2015	15:50	CP	
Total Coliform (Chromogenic)	PRESENT		SM9223B-97	10/2/2015	15:50	CP	
pH	# 7.03	S.U.	SM4500H+B-00	10/6/2015	12:22	KV	
Total Alkalinity	32.9	mg CaCO3/l	SM2320B-97	10/6/2015	12:22	KV	2
Total Chloride	4.07	mg/l	EPA 300.0 R2.1	10/6/2015	21:01	MC	0.15 [250]
Total Dissolved Solids	42	mg/l	SM2540C-97	10/6/2015	9:25	KV	10 [500]
Total Organic Carbon	1.92	mg/l	SM5310C-00	10/9/2015	8:25	MC	0.2
Total Surfactant	ND	mg/l	SM5540C-00	10/2/2015	15:00	CH	0.2 [0.5]
Turbidity	552	N.T.U.	SM2130B-01	10/2/2015	16:00	JL	0.22
Total Aluminum	1.85	mg/l	EPA 200.7 R4.4	10/7/2015	13:37	TH	0.04 [0.05]
Total Barium	0.55	mg/l	EPA 200.7 R4.4	10/7/2015	13:37	TH	0.05 2.0
Total Iron	7.76	mg/l	EPA 200.7 R4.4	10/7/2015	13:37	TH	0.01 [0.3]
Total Manganese	3.41	mg/l	EPA 200.7 R4.4	10/7/2015	13:37	TH	0.01 [0.05]

Remarks: #Holding time exceeded for this analysis.

Date Sample Collected: 10/2/2015 11:58  
 Sample Submitted By: D MCKEE  
 Date Sample Received: 10/2/2015 13:45  
 Sample temp. upon receipt: 16.8 Deg C  
 MDL - Minimum Detectable Limit ND = Not Detected at the MDL or MRL  
 MRL - Minimum Reporting Limit  
 MCL - Maximum Contaminant Level, USEPA Regulated [MCL] = Maximum Contaminant Level, Non-Regulated

\*Method Code: STANDARD METHODS ONLINE ED; US EPA METHODS FOR THE CHEMICAL ANALYSIS OF WATER AND WASTES, Rev. 83; US EPA METHODS FOR THE DETERMINATION OF METALS IN ENVIRONMENTAL SAMPLES, May 1994; TEST METHODS FOR EVALUATING SOLID WASTE, SW-846, 3rd ED; USEPA Manual for Certification of Laboratories Analyzing Drinking Water, 5th ED. In accordance with EPA Regulations, all reports, including raw data and quality control data, are maintained by the laboratory for a minimum of 5 years.

NOTE: This sample does not meet standards set for Total Coliform and E Coli by the State of West Virginia, 64-3-10, Code of State Regulations, adopted July 1, 2002 by the Bureau For Public Health. Sample Analyzed by Certified Laboratory #00354CM and #0044  
 NOTE: ND or Not Detected indicates that the analytical value obtained is below the minimum reportable limit (MRL) which is equivalent to the lowest standard utilized in preparation of the method calibration curve  
 NOTE: Sample temperature upon receipt exceeds 10 degrees C.

RECEIVED  
 Office of Oil and Gas

OCT 16 2015  
 RLI 001

WV Department of Environmental Protection  
 11/06/2015



WW-9  
(2/15)

API Number 47 - 085 - \_\_\_\_\_  
Operator's Well No. Nathan Reed #3

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Murvin & Meier Oil Co. OP Code 307980

Watershed (HUC 10) tributary of Leatherbark Creek Quadrangle Smithville 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: drill water, formation cuttings, frac blow back

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? 10 TPC

Proposed Disposal Method For Treated Pit Wastes: All pits must be lined with a minimum of 20 mil thickness synthetic liner. TPC

- 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. Air

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

Additives to be used in drilling medium? Soap

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. leave in pit

-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 Kate M. Blackford

Company Official (Typed Name) Kate M. Blackford

Company Official Title Executive Vice-President

Subscribed and sworn before me this 30<sup>th</sup> day of September, 20 15

Keele Weems  
Notary Public

My commission expires 11/30/16



RECEIVED  
Office of Oil and Gas

OCT 16 2015

11/06/2015  
WV Department of  
Environmental Protection



Proposed Revegetation Treatment: Acres Disturbed 1 ACRE ± Prevegetation pH 6.0

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 1/3 TON lbs/acre

Mulch Hay/Straw 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
<u>KY-31</u>	<u>40</u>	<u>Orchard Grass</u>	<u>15</u>
<u>Alsike Clover</u>	<u>5</u>	<u>Alsike Clover</u>	<u>5</u>
<u>Annual Rye</u>	<u>15</u>		

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: Daniel Wilson

Comments: preserve mulch all cut area no less than 2 ton per acre. maintain all C&S during operation

Title: ad gas inspector Date: 10-5-15

Field Reviewed?  Yes  No



Proposed Revegetation Treatment: Acres Disturbed 1 ACRE ± Prevegetation pH 6.0

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 1/3 TON Tons/acre

Mulch Hay/Straw 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
<u>KY-31</u>	<u>40</u>	<u>Orchard Grass</u>	<u>15</u>
<u>Alsike Clover</u>	<u>5</u>	<u>Alsike Clover</u>	<u>5</u>
<u>Annual Rye</u>	<u>15</u>		

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: Daniel Wilson

Comments: prescribed mulch all cut area no less than 2  
ton per acre. maintain all CIS during operation

Title: adviser inspector Date: 10-5-15

Field Reviewed?  Yes  No



6510266



SITF # 1

11/06/2015

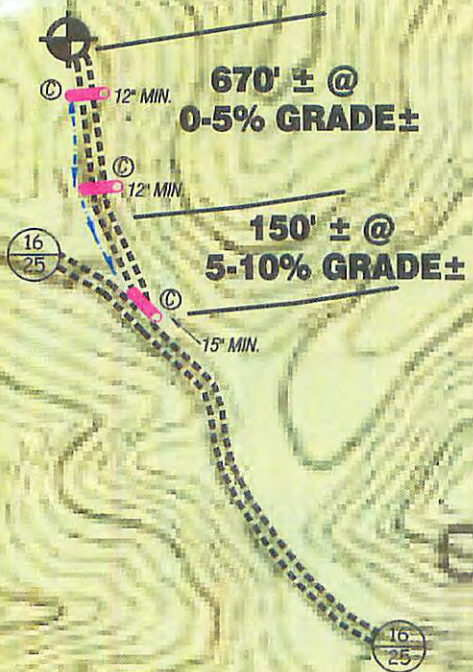


# NATHAN REED LEASE

## WELL NO. 3



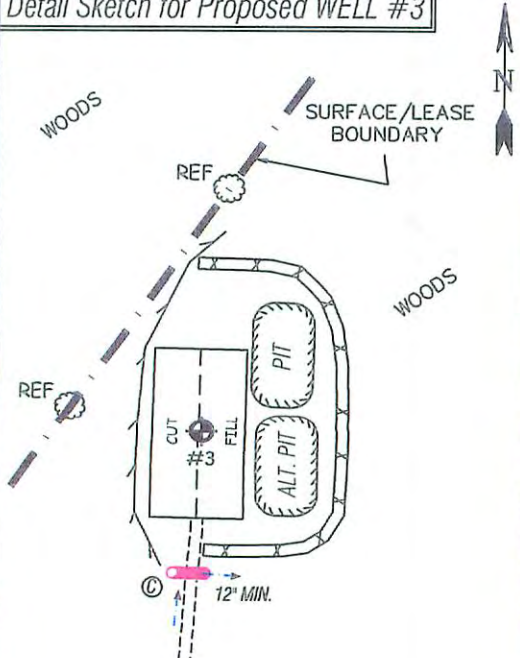
### PROPOSED GAS WELL NO. 3



**SCALE: 1"=500'**



### Detail Sketch for Proposed WELL #3



NOT TO SCALE

ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED WITH WV D.E.P. OIL AND GAS FIELD ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH REGULATION. SEPARATE PERMITS MAY BE REQUIRED BY THE D.O.T.

OCT 16 2015

SEDIMENT BASINS (TRAPS) AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS. FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT FIELD 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.

11/06/2015

CUT & STACK ALL MARKETABLE TIMBER.

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

*DM 10-5-15*



**Professional Energy Consultants**  
A DIVISION OF SMITHLAND SURVEYING

SURVEYORS  
PROJECT MGMT.



ENGINEERS  
ENVIRONMENTAL

P.O. Box 150  
Glenville, WV 26031  
(304) 462-6634

53065 Diles Bottom Road  
Shadyside, OH 43047  
(743) 671-9911

HONESTY, INTEGRITY, QUALITY

DRAWN BY C.P.M.	FILE NO. 7774	DATE 06-05-15	CADD FILE: 7774REC3.DWG
--------------------	------------------	------------------	----------------------------



# NATHAN REED LEASE

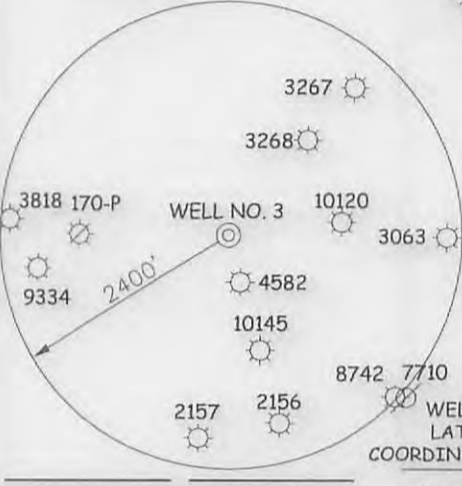
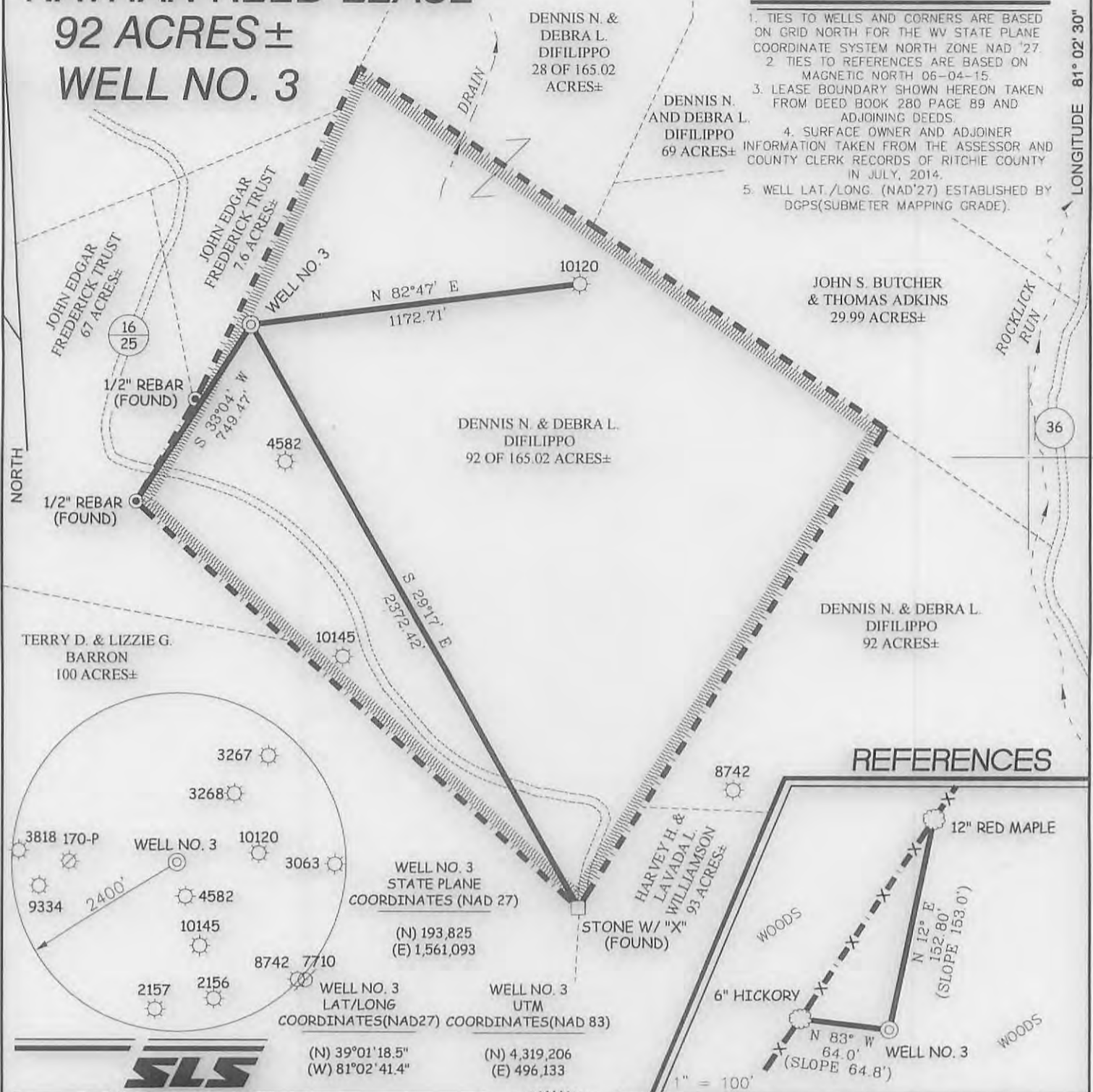
## 92 ACRES±

### WELL NO. 3

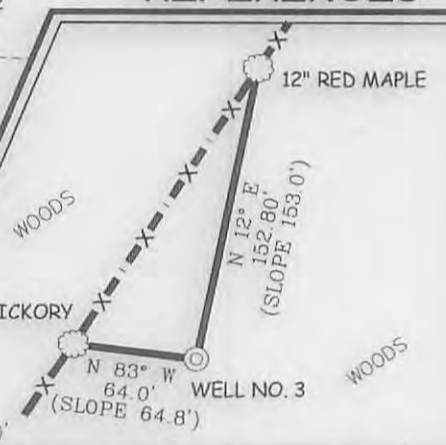
LATITUDE 39° 02' 30"  
NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 06-04-15.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 280 PAGE 89 AND ADJOINING DEEDS.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF RITCHIE COUNTY IN JULY, 2014.
5. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

LONGITUDE 81° 02' 30"  
7,236'



### REFERENCES



WELL NO. 3  
STATE PLANE  
COORDINATES (NAD 27)  
(N) 193,825  
(E) 1,561,093

WELL NO. 3  
LAT/LONG  
COORDINATES (NAD27)  
(N) 39°01'18.5"  
(W) 81°02'41.4"

WELL NO. 3  
UTM  
COORDINATES (NAD 83)  
(N) 4,319,206  
(E) 496,133



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. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
DATE JUNE 8, 20 15  
OPERATORS WELL NO. NATHAN REED #3  
API WELL NO. 47 85 10266  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 7774P3(512-55)  
PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 500'

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

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

LOCATION: ELEVATION 1,194' WATERSHED TRIBUTARY TO LEATHERBARK CREEK  
DISTRICT MURPHY COUNTY RITCHIE QUADRANGLE SMITHVILLE 7.5'

SURFACE OWNER DENNIS N. & DEBRA L. DIFILIPPO ACREAGE 92 OF 165.02±  
ROYALTY OWNER NATHAN REED HEIRS OR ASSIGNS, ET AL LEASE ACREAGE 92± **11/06/2015**

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD   
FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER   
PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION RHINESTREET  
ESTIMATED DEPTH 6,300'

WELL OPERATOR MURVIN & MEIER OIL CO. DESIGNATED AGENT P. NATHAN BOWLES, JR.  
ADDRESS P.O. BOX 396 ADDRESS P.O. BOX 1237  
OLNEY, IL 62450 CHARLESTON, WV 25325

COUNTY NAME  
PERMIT