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.

8510266

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 within 30 days of commencement of drilling.

8510266
$650.00
ck# 1193

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: Murvin & Meier Oil Co | 307980 Operator ID | Ritchie County | Murphy District | Smithville 7.5' Quadrangle

2) Operator's Well Number: Nathan Reed #3 3) Elevation: 1194

4) Well Type: (a) Oil X or Gas X

(b) If Gas: Production X / Underground Storage _____

Deep _____ / Shallow X

5) Proposed Target Formation(s): Warren thru Rhinestreet Proposed Target Depth: 6400 (6380 <TPW)
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	Fill -up (Cu. Ft.)
Conductor	16"		32	20'	20'	
Fresh Water	11 3/4"	AT-500	42	300	300	CTS
Coal						
Intermediate	8 5/8"	J-55	24	2060	2060	CTS
Production	4 1/2"	WT-65	10.5	6380	6380	550
Tubing						
Liners						

Packers: Kind: _____
Sizes: _____
Depths Set _____

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Office of Oil and Gas
OCT 16 2015
WV Department of
Environmental Protection
10-5-15

8510266

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

6) Inspector David Cowan
Address Route 1 Box 202
Harrisville WV 26362
Telephone 304-389-3509

5) (a) Coal Operator
Name n/a
Address
(b) Coal Owner(s) with Declaration
Name
Address
Name
Address
(c) Coal Lessee with Declaration
Name none
Address

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

___ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas

OR

X 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)
X 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: Kate M. Blackford
Its: Executive Vice-President
Address: P. O. Box 396
Olney IL 62450
Telephone: 618-395-4405
Email: katieb@murvinandmeier.com

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OCT 16 2015
WV Department of Environmental Protection

Subscribed and sworn before me this 30th day of September, 2015

Kellie Weems Notary Public

"OFFICIAL SEAL"
KELLIE WEEMS
Notary Public, State of Illinois
My Commission Expires 11-30-16

My Commission Expires 11/30/16

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov

8510266

WW-2A1
(Rev. 1/11)

Operator's Well Number Nathan Reed #3

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.

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OCT 16 2015
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Well Operator: Murvin & Meier Oil Co.
By: Its: Kate M. Blackford
Kate M. Blackford, Executive Vice-President

8510266

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 Labratories
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.

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Environmental Protection

8510266

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

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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: _____

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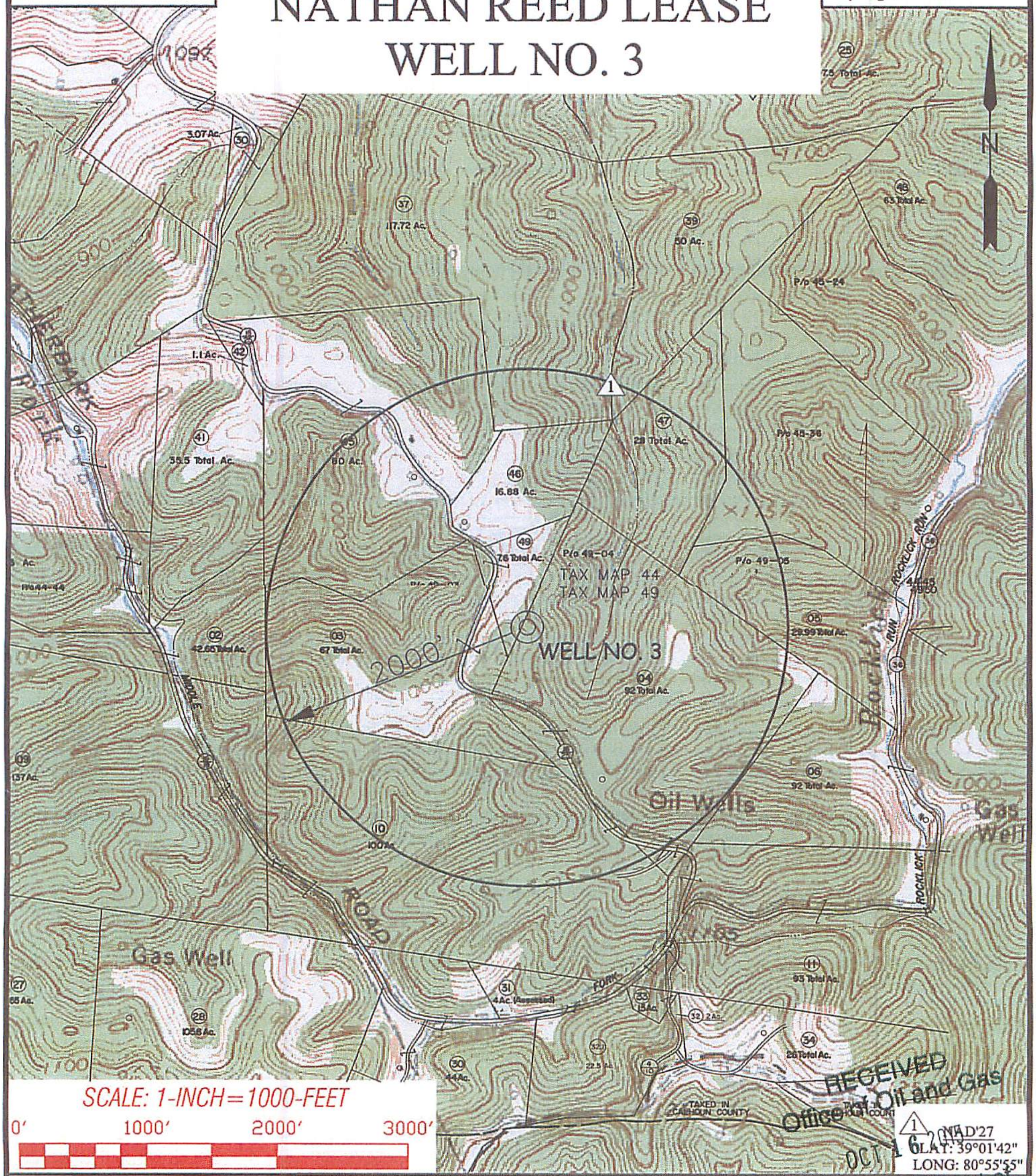
WATER SAMPLES

NATHAN REED LEASE
WELL NO. 3

page of



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OCT 16 2015

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Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING

SURVEYORS · PROJECT MGMT. · SLS · ENGINEERS · ENVIRONMENTAL

HONESTY, INTEGRITY, QUALITY

TOPO SECTION OF:
SMITHVILLE, WV 7.5' QUAD.

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

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

OPERATOR:
MURVIN & MEIER OIL CO.
P.O. BOX 396
OLNEY, IL 62450

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

Reliance LABORATORIES

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

GLENVILLE, WV 26351-

Tuesday, October 13, 2015

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

Parameter	Value	Units	Method	Date/Time Analyzed	Analyst	MRL	MCL
Analyte Group: Inorganics							
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
MCL - Maximum Contaminant Level, USEPA Regulated
ND = Not Detected at the MDL or MRL
MRL - Minimum Reporting Limit
[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.

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

4510266

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 Mil

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

- X 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 30th day of September, 2015

Kellie Weems Notary Public

My commission expires 11/30/16

"OFFICIAL SEAL"
KELLIE WEEMS
Notary Public, State of Illinois
My Commission Expires 11-30-16

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OCT 16 2015
WV Department of
Environmental Protection

8510266

Form WW-9

Operator's Well No. Nathan Reed #3

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
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 (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: David W Cawn

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

Title: oil & gas inspector Date: 10-5-15

Field Reviewed? (✓) Yes ( ) No

8510266

Form WW-9

Operator's Well No. Nathan Reed #3

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
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 (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Daniel W Cain

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

Title: oil & gas inspector Date: 10-5-15

Field Reviewed? (✓) Yes ( ) No

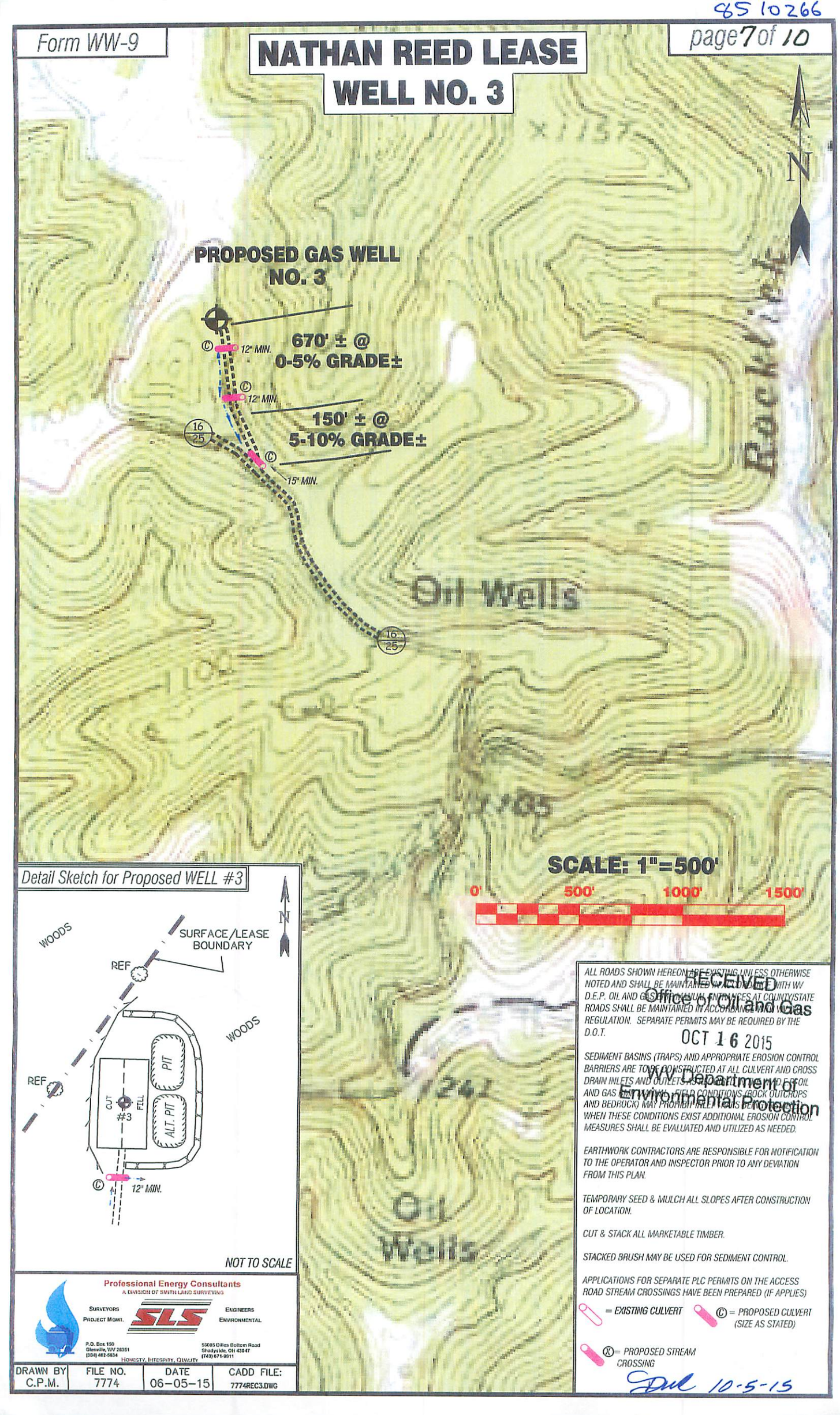
6510266

SITE # 1

85 10266

Form WW-9

NATHAN REED LEASE
WELL NO. 3



Detail Sketch for Proposed WELL #3

NOT TO SCALE

ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.E.P. OIL AND GAS EROSION AND SEDIMENT CONTROL ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH THIS 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 EXCEPT WHERE SOIL AND GAS EROSION AND SEDIMENT CONTROL FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT THEIR INSTALLATION. 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.

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

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

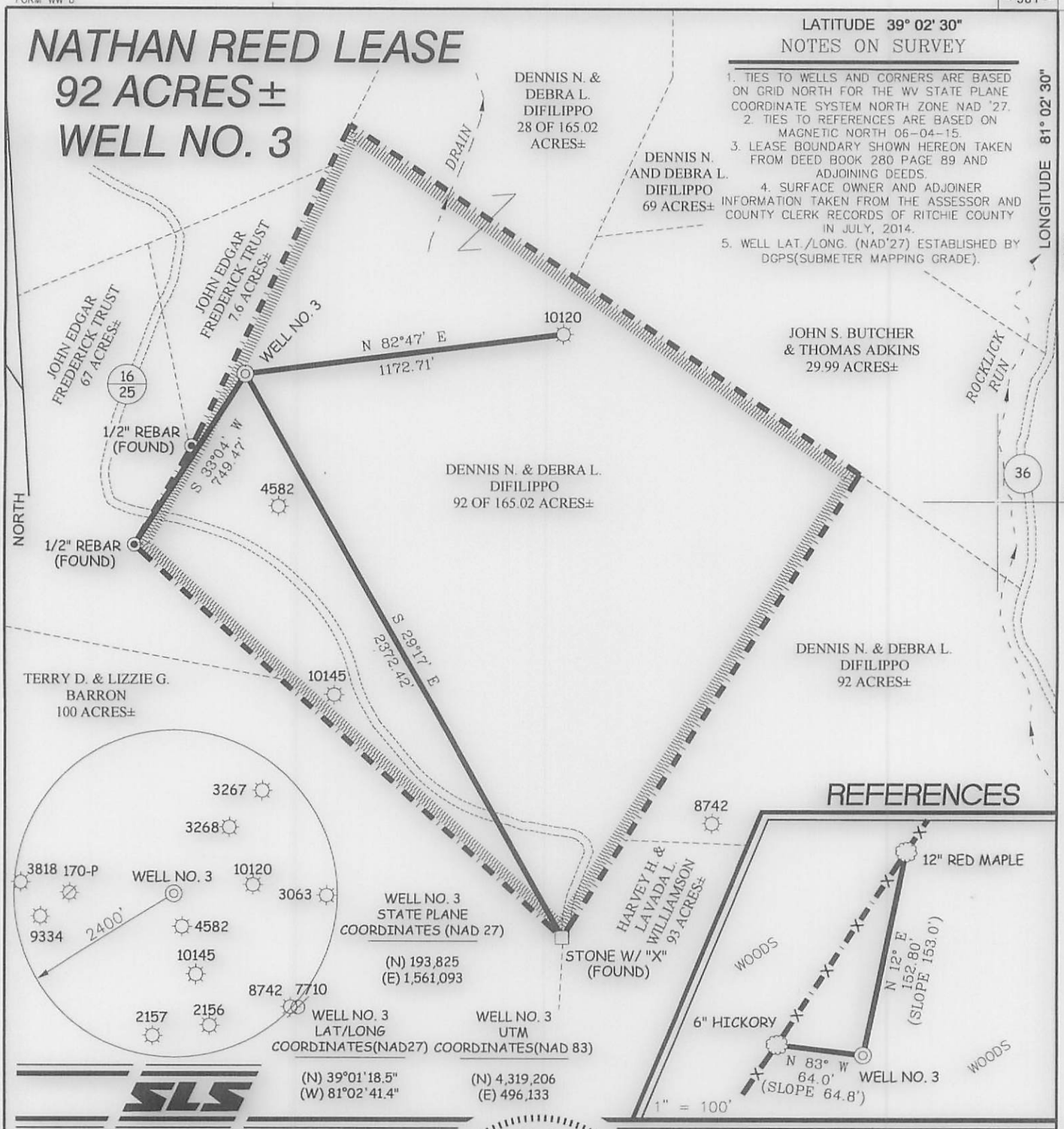
DJL 10-5-15

Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING
SURVEYORS PROJECT MGMT. SLS ENGINEERS ENVIRONMENTAL
P.O. Box 150 Glenville, WV 26351 (304) 462-5634
53085 Dilles Bottom Road Shadyside, OH 43947 (740) 671-3011
HONESTY, INTEGRITY, QUALITY

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

FORM WW 6

NATHAN REED LEASE
92 ACRES±
WELL NO. 3



SLS

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

GREGORY A. SMITH LICENSED No. 677 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

(+) 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

PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE)

FILE NO. 7774P3(512-55)

SCALE 1" = 500'

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 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±
PROPOSED WORK : LEASE NO. ___
DRILL X 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 RHINESTREET
ESTIMATED DEPTH 6,300'

COUNTY NAME
PERMIT

WELL OPERATOR MURVIN & MEIER OIL CO.
ADDRESS P.O. BOX 396
OLNEY, IL 62450

DESIGNATED AGENT P. NATHAN BOWLES, JR.
ADDRESS P.O. BOX 1237
CHARLESTON, WV 25325

SLS
12568