



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

December 10, 2014

WELL WORK PERMIT

Re-Work

This permit, API Well Number: 47-3904549, issued to VIKING ENERGY CORPORATION, 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: LEMMA REALTY 1
Farm Name: LEMMA REALTY CO., INC.
API Well Number: 47-3904549
Permit Type: Re-Work
Date Issued: 12/10/2014

Promoting a healthy environment.

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 on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

3904549W

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: Viking Energy Corporation 51440 039 Union (9) St Albans (594)
Operator ID County District Quadrangle

2) Operator's Well Number: Lemma Realty #1 DD 3) Elevation: 689

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

5) Proposed Target Formation(s): Marcellus Shale Proposed Target Depth: 4,900'

6) Proposed Total Depth: 4,900' Feet Formation at Proposed Total Depth: Marcellus Shale

7) Approximate fresh water strata depths: 140'

8) Approximate salt water depths: 1,600'

9) Approximate coal seam depths: N/A Received
Office of Oil & Gas

10) Approximate void depths,(coal, Karst, other): N/A NOV 17 2014

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)
Pull 2" tubing, remove bridge plug and drill to 4,900' and Frac Marcellus Shale

August 13, 2014
11-13-14

13) **CASING AND TUBING PROGRAM**

| TYPE | SPECIFICATIONS | | | FOOTAGE INTERVALS | | CEMENT |
|--------------|----------------|-------|---------------|-------------------|--------------|----------------------------------|
| | Size | Grade | Weight per ft | For Drilling | Left in Well | |
| Conductor | | | | | | |
| Fresh Water | 9 5/8" | | | 236' | 236' | to surface 70 CF (existing) |
| Coal | | | | | | |
| Intermediate | | | | | | |
| Production | 7" | | | 1,741.25' | 1,741.25' | 156 CF (existing) |
| Tubing | 4 1/2" | | 10.5 lbs | 4,900' | 4,900' | Cement to 2,500' Leston Followay |
| Liners | | | | | | |

Packers: Kind: _____
Sizes: _____
Depths Set _____



IV-35
(Rev 8-81)

Date March 15, 1988
Operator's
Well No. 1
Farm Lemma Realty
API No. 47-039-4549

RECEIVED State of West Virginia
Department of Mines
Oil and Gas Division
MAR 24 1988

DIVISION OF OIL & GAS WELL OPERATOR'S REPORT
DEPARTMENT OF ENERGY OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___
(If "Gas," Production ___ / Underground Storage ___ / Deep ___ / Shallow X /)

LOCATION: Elevation: 698' Watershed Armour Creek
District: Union County Kanawa Quadrangle St. Albans 7 1/2'

COMPANY Viking Energy, Inc.
ADDRESS P.O. Box 13366, Sissonville, WV 25360
DESIGNATED AGENT Michael S. Pinkerton
ADDRESS same
SURFACE OWNER Lemma Realty Co., Inc.
ADDRESS same
MINERAL RIGHTS OWNER Lemma Realty Co., Inc.
ADDRESS same
OIL AND GAS INSPECTOR FOR THIS WORK Carlos Hively ADDRESS _____
PERMIT ISSUED 10-22-87
DRILLING COMMENCED 12-8-87
DRILLING COMPLETED 12-18-87
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON _____

| Casing Tubing | Used in Drilling | Left in Well | Cement fill up Cu. ft. |
|------------------|------------------|---------------------|------------------------|
| Size 20-16 Cond. | | | |
| 13-10" | | | |
| 9 5/8 | 236' | 236' | 70 CF |
| 8 5/8 | | | |
| 7 | 1741.25' | 1741.25' | 156 CF |
| 5 1/2 | | | |
| 4 1/2 | | | |
| 3 | | | |
| 2 | | 1610' | |
| Liners used | | Bridge Plug @ 1642' | |

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 4000' feet
Depth of completed well 3916' feet Rotary X / Cable Tools _____
Water strata depth: Fresh _____ feet; Salt _____ feet
Coal seam depths: None reported Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3300 - 3916 feet
Gas: Initial open flow odor Mcf/d Oil: Initial open flow — Bbl/d
Final open flow 150 Mcf/d Oil: Final open flow — Bbl/d
Time of open flow between initial and final tests 2 hours
Static rock pressure 710 psig (surface measurement) after 168 hours shut in
(If applicable due to multiple completion--)
Second producing formation Big Lime Pay zone depth 1543 - 1620 feet
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow — Bbl/d
Final open flow est 80 Mcf/d Oil: Final open flow — Bbl/d
Time of open flow between initial and final tests _____ hours
Static rock pressure 600 psig (surface measurement) after _____ hours shut in

(Continue on reverse side)

KAN. 4549

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Devonian Shale - Shot 12-19-87 3300' - 3916' (Young Wireline)

Big Lime - Acidization 2-23-88 1543 - 1620' 12 holes
4000 gal 15% HCl Gelled Acid Job, BKDN 2200 psi, ATP 1800 - 2400 psi, AIR
5 BPM, ISI 1800 psi

WELL LOG

| FORMATION | COLOR | HARD OR SOFT | TOP FEET | BOTTOM FEET | REMARKS Including indication of all fresh and salt water, coal, oil and gas |
|--|-------|--------------|----------|-------------|--|
| No record | | | 0 | 800 | |
| Formation depths taken from Gamma Ray Log: | | | | | |
| shale | | | 800 | 906 | |
| sand | | | 906 | 968 | |
| shale | | | 968 | 980 | |
| sand | | | 980 | 995 | |
| shale | | | 995 | 1011 | |
| sand | | | 1011 | 1158 | |
| Salt Sand | | | 1158 | 1443 | 3" stream salt water in Salt Sand |
| shale | | | 1443 | 1452 | |
| Little Lime | | | 1452 | 1474 | |
| Big Lime | | | 1474 | 1630 | |
| Big Injun | | | 1630 | 1704 | increased to 4" stream @ 1680' |
| silt and shale | | | 1704 | 1867 | |
| shale | | | 1867 | 2112 | |
| coffee shale | | | 2112 | 2132 | |
| Berea | | | 2132 | 2145 | |
| shale | | | 2145 | 3332 | |
| Brown Shale | | | 3332 | 3370 | |
| shale | | | 3370 | 3642 | |
| Brown shale | | | 3642 | 3813 | |
| shale | | | 3813 | — | |
| Total depth | | | — | 3916 | |
| Well Logged by Young Wireline | | | | | |

RECEIVED
MAR 24 1988

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

Viking Energy, Inc.

Well Operator

By: W. Thomas W. P. - consultant

Date: _____

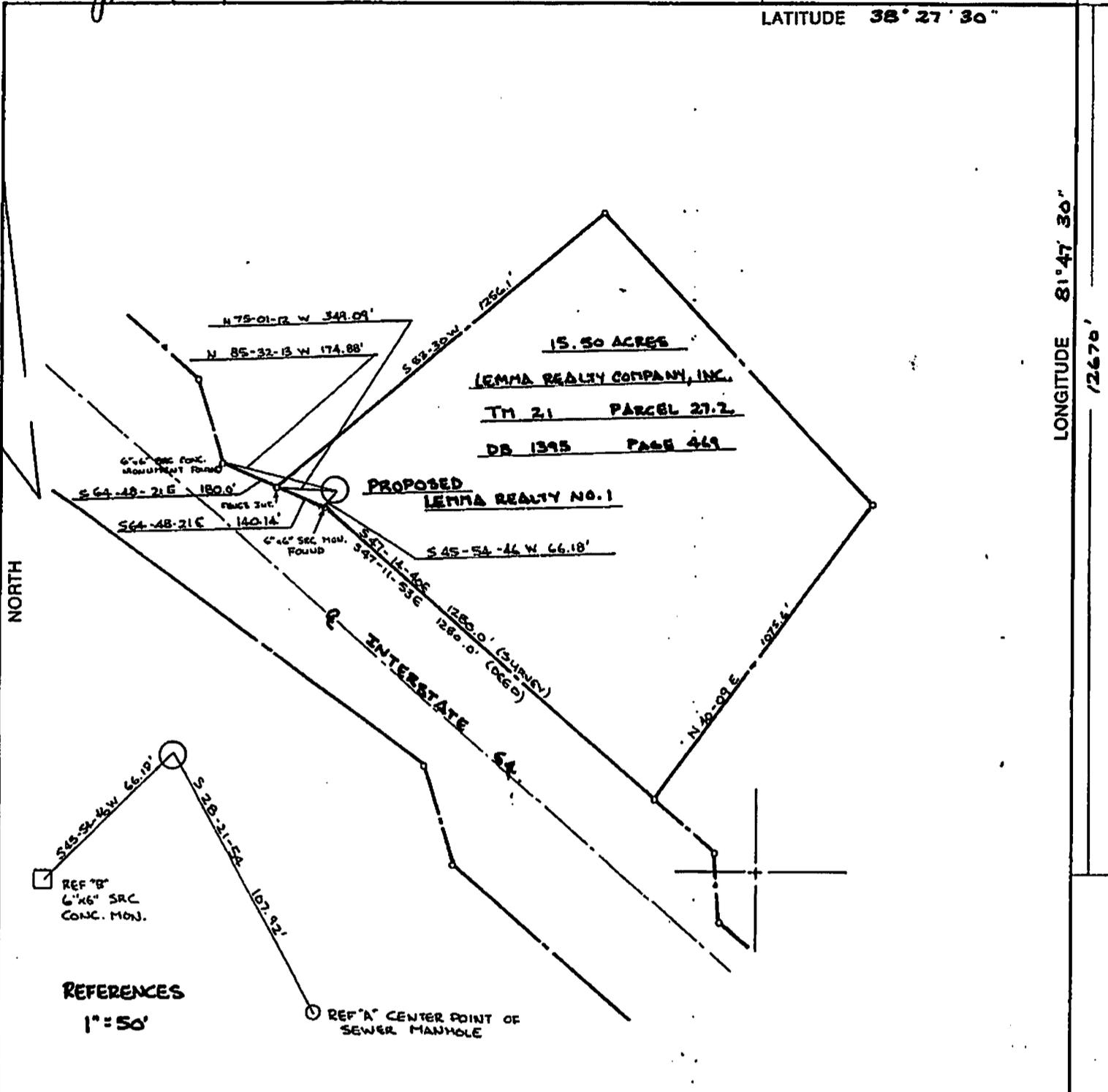
Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."
Log

PROVIDED BY OOG

3904549W

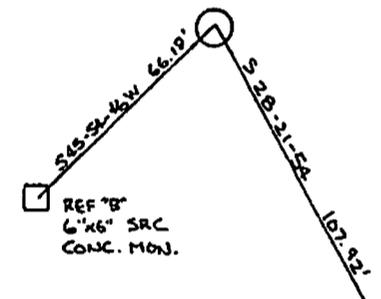
10/22/87

4600'
LATITUDE 38° 27' 30"



LONGITUDE 81° 47' 30" (2676')

NORTH



REFERENCES
1" = 50'

REF A CENTER POINT OF SEWER MANHOLE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. VE-039-001
 DRAWING NO. _____
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1 IN 10000
 PROVEN SOURCE OF ELEVATION BH ± 1700' EAST OF LOCATION (665' MSL)

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.
 (SIGNED) Ray James Capper
 R.P.E. 9656 L.L.S. _____



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION

DATE 24 SEPTEMBER 19 87
 OPERATOR'S WELL NO. LEMMA REALTY NO. 1
 API WELL NO. _____

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

LOCATION: ELEVATION 698' WATERSHED ARMOUR CREEK
 DISTRICT _____ UNION _____ COUNTY KANAWHA
 QUADRANGLE SAINT ALBANS 7.5'

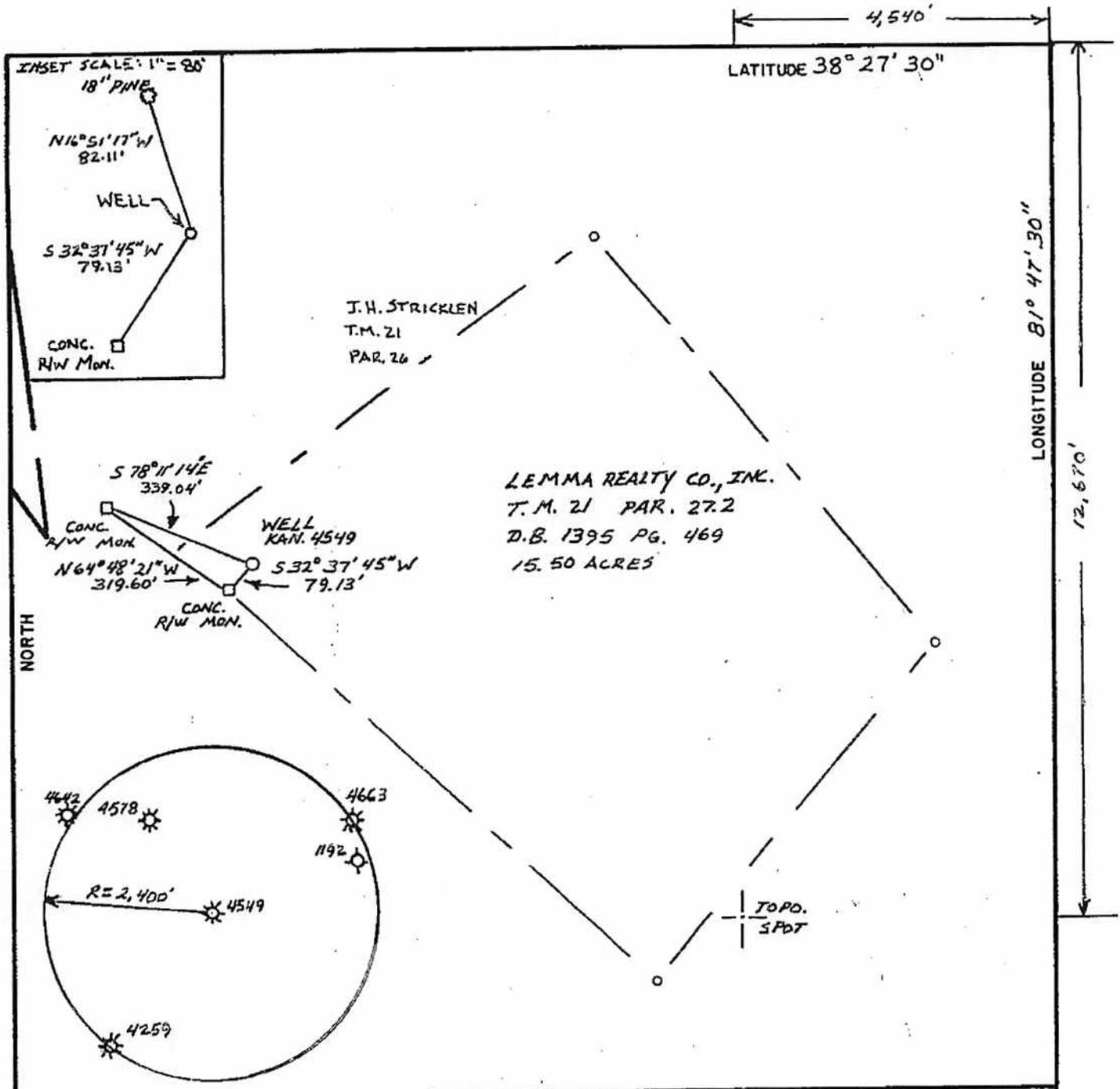
SURFACE OWNER LEMMA REALTY COMPANY, INC. ACREAGE 15.50
 OIL & GAS ROYALTY OWNER SAME LEASE ACREAGE 18 ACRES (MORE OR LESS)
 LEASE NO. _____

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION DENONIAN SHALE ESTIMATED DEPTH 4000'
 WELL OPERATOR VIKING ENERGY, INC. DESIGNATED AGENT MICHAEL PINKERTON
 ADDRESS P.O. BOX 13366 ADDRESS P.O. BOX 13366
SISSONSVILLE, WEST VIRGINIA 25360 SISSONSVILLE, WV 25360

COUNTY NAME PERMIT



FILE NO. C:W08-02
 DRAWING NO. _____
 SCALE 1" = 300'
 MINIMUM DEGREE OF ACCURACY 1' IN 200'
 PROVEN SOURCE OF ELEVATION OPERATORS RECORDS

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.
 (SIGNED) [Signature]
 R.P.E. _____ L.L.S. 1423

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6
 (8-78)



Division of Environmental Protection
 Office of Oil & Gas

DATE MARCH 17, 2008
 OPERATOR'S WELL NO. LEMMA REALTY
 API WELL NO. 47-039-04549D
 STATE COUNTY PERMIT
CANCELLED

WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW X)
 LOCATION: ELEVATION 698' WATER SHED ARMOUR CREEK
 DISTRICT UNION COUNTY KANAWHA
 QUADRANGLE SAINT ALBANS 7.5
 SURFACE OWNER LEMMA REALTY COMPANY, INC. ACREAGE _____
 OIL & GAS ROYALTY OWNER SAME AS SURFACE LEASE ACREAGE 15.5ac
 LEASE NO. _____
 PROPOSED WORK: DRILL _____ CONVERT _____ DRILL DEEPER X REDRILL _____ FRACTURE OR STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION Marcellus Shale ESTIMATED DEPTH 4,900'
 WELL OPERATOR VIKING ENERGY, INC. DESIGNATED AGENT MICHAEL PINKERTON
 ADDRESS P.O. BOX 13366 ADDRESS SAME AS OPERATOR
SISSONVILLE, WV 25360

CHARLESTON BLUEPRINT 092941

WW-2A
(Rev. 6-07)

1.) Date: October 14, 2014
2.) Operator's Well Number Lemma Realty #1 DD
State 47- County 039 Permit 04549DD
3.) API Well No.:

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: | 5) (a) Coal Operator |
| (a) Name <u>Leston Followay & Teresa Ray</u> | Name <u>Coal not operated</u> |
| Address <u>Rt 1 Box 1459</u> | Address _____ |
| <u>Wayne, WV 25570</u> | _____ |
| (b) Name <u>Same</u> | (b) Coal Owner(s) with Declaration |
| Address <u>20 Dickson Dam Rd.</u> | Name <u>Same as surface owner</u> |
| <u>Lavalette, WV 25535</u> | Address _____ |
| _____ | _____ |
| (c) Name _____ | Name _____ |
| Address _____ | Address _____ |
| _____ | _____ |
| 6) Inspector <u>Terry Urban</u> | (c) Coal Lessee with Declaration |
| Address <u>P O Box 1207</u> | Name <u>N/A</u> |
| <u>Clendenin, WV 25045</u> | Address _____ |
| Telephone <u>304-549-5915</u> | _____ |

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.

Received
Office of Oil & Gas
NOV 17 2014

| | |
|---------------|---|
| Well Operator | <u>Viking Energy Corporation</u> |
| By: | <u>Michael Pinkerton</u> <i>Michael Pinkerton</i> |
| Its: | <u>President</u> |
| Address | <u>P O Box 13366</u> |
| | <u>Sissonville, WV 25360</u> |
| Telephone | <u>304-988-1161</u> |

Subscribed and sworn before me this 14 day of October, 2014

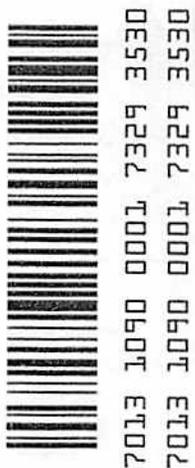
Michael Pinkerton

Notary Public

My Commission Expires 9-8-1019

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



7013 1090 0001 7329 3530
7013 1090 0001 7329 3530

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| | |
|---|----------------|
| Postage | \$ 1.40 |
| Certified Fee | 3.30 |
| Return Receipt Fee (Endorsement Required) | 2.70 |
| Restricted Delivery Fee (Endorsement Required) | |
| Total Postage & Fees | \$ 7.40 |



Sent To
Leston Followay
Street, Apt. No.,
or PO Box No. 20 Dickson Dam Rd.
City, State, ZIP+4
Lava Lette WV 25535 ✓
PS Form 3800, August 2006 See Reverse for Instructions

Lava Lette, WV 25535

and Teresa Ray
road

CK 2496
6500

Received
Office of Oil & Gas
OCT 23 2014

0
0
W 25360

COMPLETE THIS SECTION

A. Signature Agent Addressee **X**

B. Received by (Printed Name) _____
C. Date of Delivery _____

D. Is delivery address different from item 1? Yes No
If YES, enter delivery address below: _____

3. Service Type
 Certified Mail™
 Priority Mail Express™
 Registered
 Return Receipt for Merchandise
 Insured Mail
 Collect on Delivery

4. Restricted Delivery? (Extra Fee) Yes No

Number _____
 (Enter from service label)
 7013 1090 0001 7329 3530
 Domestic Return Receipt

Addressed to:
 Followay and Teresa Ray
 Dickson Dam Road
 Lava Lette, WV 25535

COMPLETE THIS SECTION

State items 1, 2, and 3. Also complete
 your name and address on the reverse.
 We can return the card to you.
 the front if space permits.

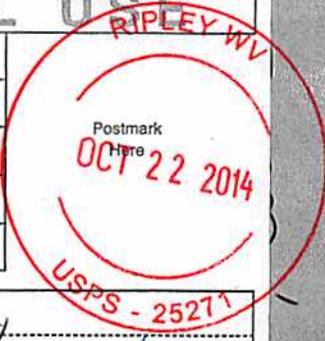
7013 1090 0001 7329 3523
 7013 1090 0001 7329 3523

**U.S. Postal Service™
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For delivery information visit our website at www.usps.com

OFFICIAL USE

| | |
|---|---------------|
| Postage | \$ 140 |
| Certified Fee | 330 |
| Return Receipt Fee (Endorsement Required) | 270 |
| Restricted Delivery Fee (Endorsement Required) | |
| Total Postage & Fees | \$ 740 |



Sent To
 Lerton Followway
 Street, Apt. No.,
 or PO Box No. Rt 1 Box 1459
 City, State, ZIP+4
 Wayne WV 25570

PS Form 3800, August 2006 See Reverse for Instructions

Received
 Office of Oil & Gas
 OCT 23 2014

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
 Lerton Followway and Teresa Ray
 Rt. 1 Box 1459
 Wayne, WV
 25570

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent Addressee X

B. Received by (Printed Name) _____

C. Date of Delivery _____

D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below: _____

3. Service Type
 Certified Mail™
 Priority Mail Express™
 Registered
 Insured Mail
 Collect on Delivery

4. Restricted Delivery? (Extra Fee) Yes No

2. Article Number
 7013 1090 0001 7329 3523
 (Transfer from service label)

**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 |
|-----------------------|---------------------------|------------|-----------|
| Lemma Realty Co. Inc. | Michael Pinkerton | 1/8 | 234/1002 |
| Michael Pinkerton | Viking Energy Corporation | Assignment | 116/197 |

**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

Received
Office of Oil & Gas
NOV 17 2014

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: _____
 Viking Energy Corporation
 Michael Pinkerton Michael Pinkerton
 President

39 04549W

WW-9
(5/13)

Page _____ of _____
API Number 47 - 039 - 04549
Operator's Well No. Lemma Realty #1 DD

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Viking Energy Corporation OP Code 51440

Watershed (HUC 10) Armors Creek Quadrangle St Alabns

Elevation 689' County Kanawha (039) District Union (9)

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

Will a pit be used for drill cuttings? Yes X No _____

If so, please describe anticipated pit waste: Frac water

Will a synthetic liner be used in the pit? Yes X No _____ If so, what ml.? 30 ml

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? No

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Air

-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. leave in pit

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

-Landfill or offsite name/permit number? N/A

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature _____

Company Official (Typed Name) Michael Pinkerton *Michael Pinkerton*

Company Official Title President

Subscribed and sworn before me this 14 day of October, 2014

Notary Signature



My commission expires 09/08/2019

3904549W

Form WW-9

Operator's Well No. Lemma Realty #1 DD

Proposed Revegetation Treatment: Acres Disturbed 1ac Prevegetation pH N/A

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 500 lbs lbs/acre (500 lbs minimum)

Mulch 2 tons hay mulch Tons/acre

Seed Mixtures

| Seed Type | Area I | lbs/acre | Seed Type | Area II | lbs/acre |
|----------------|--------|----------|----------------|---------|----------|
| KY 31 Fescue | | 40# | | | |
| Perennial Rye | | 40# | Same as area 1 | | |
| Landine Clover | | 40# | | | |

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Benny W. Miller*

Comments: _____

Title: *Inspect well & logs* Date: *11-13-14*

Field Reviewed? Yes No

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Office of Oil & Gas
NOV 17 2014

4553

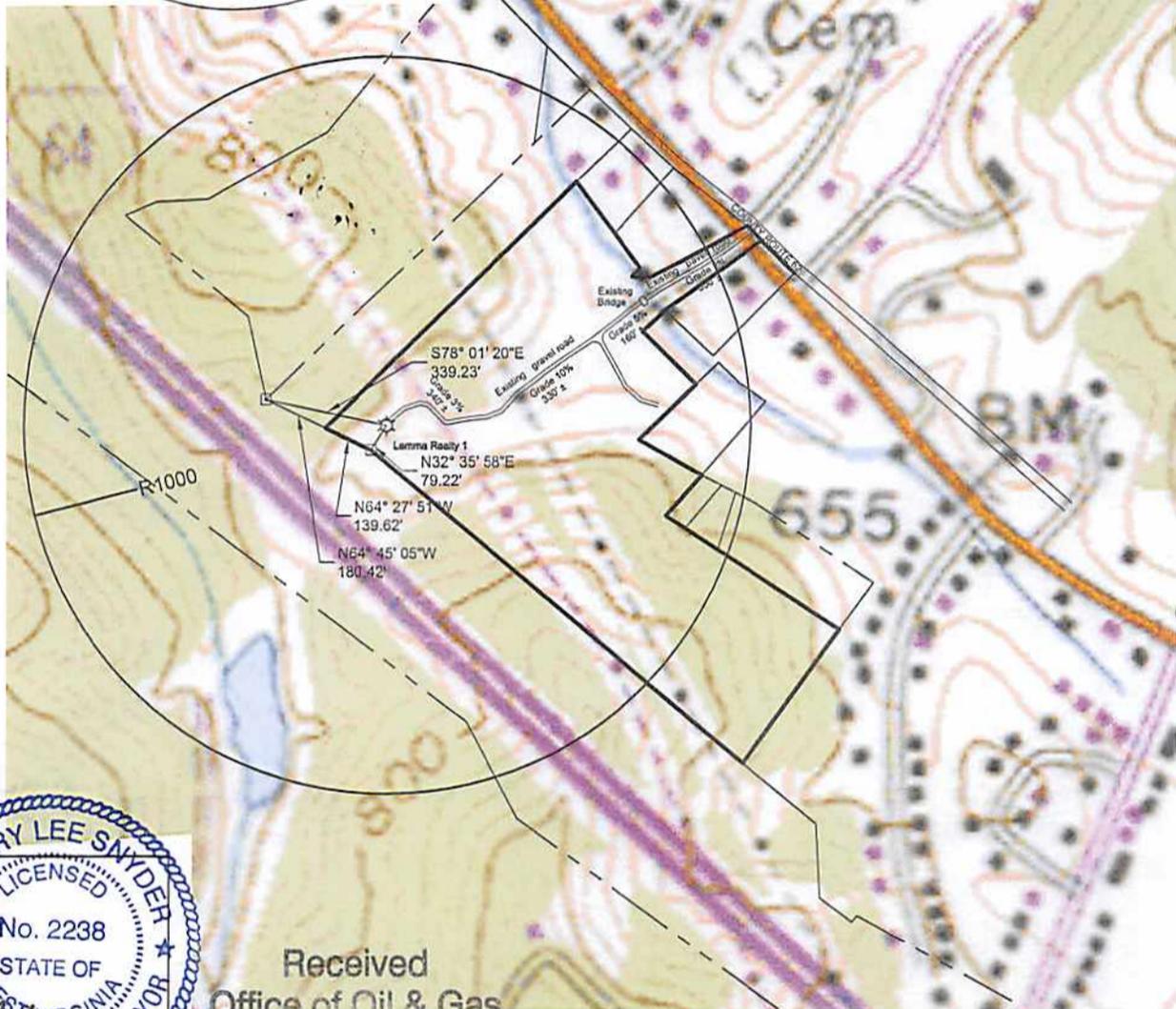
LATITUDE 38°27'30"

LONGITUDE 81°47'30"

12670

| | |
|----------------|-----------------|
| GEO. NAD 27 | LAT. 38.423525 |
| GEO. NAD 27 | LONG. 81.807562 |
| GEO. NAD 83 | LAT. 38.423618 |
| GEO. NAD 83 | LONG. 81.807414 |
| STATE PLANE 27 | N 519355.637 |
| STATE PLANE 27 | E 1768646.930 |
| STATE PLANE 83 | N 519400.47 |
| STATE PLANE 83 | E 1737195.46 |
| UTM -27 | N 4252909.825 m |
| UTM -27 | E 429505.594 m |
| UTM -83 | N 4253126.666 m |
| UTM -83 | E 429520.382 m |

WV SOUTH ZONE
GRID SOUTH



Received
Office of Oil & Gas

NOV 17 2014

JEFFERY L. SNYDER PS 2238

(+) DENOTES LOCATION OF WELL
ON UNITED STATES TOPOGRAPHIC MAPS

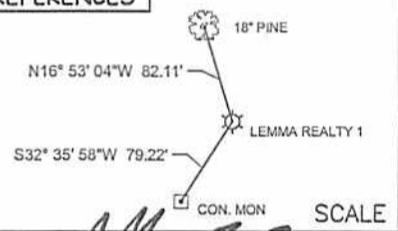
I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT
TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE
INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND
PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



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

White Brothers Consulting LLC
447 call road suite 216
Charleston, WV 25312

REFERENCES



Jeffery L. Snyder PS #2238

DATE 7-24-14
OPERATOR'S WELL # LEMMA REALTY 1
API WELL # 47 - 39 - 04549 W
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 689 WATERSHED ARMOUR CREEK DISTRICT Union COUNTY Kanawha
QUADRANGLE SAINT ALBANS 7.5'

SURFACE OWNER LESTON FOLLOWAY ACREAGE 15.5 ACRES +/-
OIL & GAS ROYALTY OWNER LESTON FOLLOWAY LEASE ACREAGE 15.5 ACRES +/-
PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER X REDRILL ___ FRACTURE OR STIMULATE ___
STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG & ABANDON ___
CLEAN OUT & REPLUG OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ___
TARGET FORMATION MARCELLUS SHALE ESTIMATED DEPTH 4,900
WELL OPERATOR Viking Energy, Corporation DESIGNATED AGENT Michael Pinkerton
ADDRESS P.O. Box 13366 ADDRESS P.O. Box 13366
Sissonville, WV 25360 Sissonville, WV 25360

COUNTY NAME PERMIT

4553

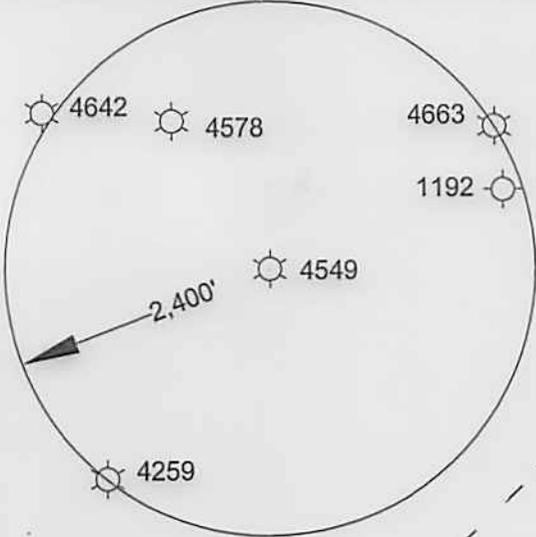
LATITUDE 38°27'30"

LONGITUDE 81°47'30"

12670

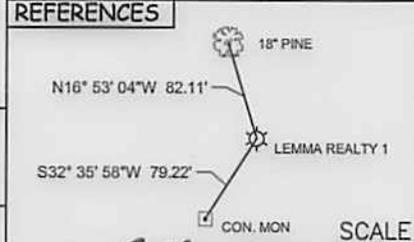
| |
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WV SOUTH ZONE
GRID SOUTH



JEFFERY L. SNYDER PS 2238

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS



Jeffery L. Snyder PS #2238

DATE 7-24-14
 OPERATOR'S WELL# LEMMA REALTY 1
 API WELL # 47 - 39 - 04549 W
 STATE COUNTY PERMIT

JOB # 14-500-41-Lemma
 DRAWING # 14-500-41
 SCALE 1" = 300'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
 White Brothers Consulting LLC
 447 call road suite 216
 Charleston, WV 25312

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 689 WATERSHED ARMOUR CREEK DISTRICT Union COUNTY Kanawha
 QUADRANGLE SAINT ALBANS 7.5'

SURFACE OWNER LESTON FOLLOWAY ACREAGE 15.5 ACRES +/-
 OIL & GAS ROYALTY OWNER LESTON FOLLOWAY LEASE ACREAGE 15.5 ACRES +/-
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 TARGET FORMATION MARCELLUS SHALE ESTIMATED DEPTH 4,900
 WELL OPERATOR Viking Energy, Corporation DESIGNATED AGENT Michael Pinkerton
 ADDRESS P.O. Box 13366 ADDRESS P.O. Box 13366
Sissonville, WV 25360 Sissonville, WV 25360

COUNTY NAME PERMIT

4553

LATITUDE 38°27'30"

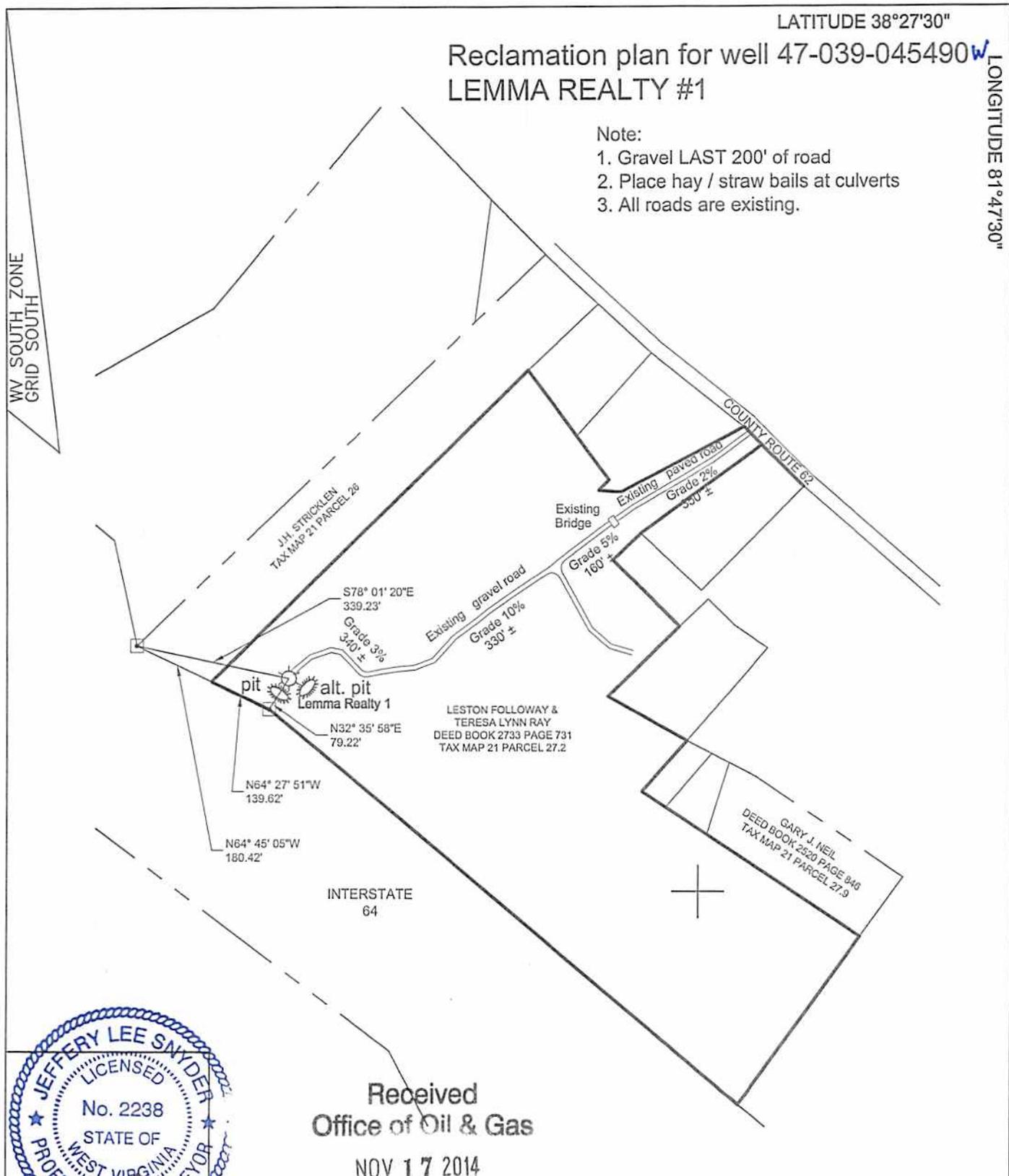
Reclamation plan for well 47-039-045490W LEMMA REALTY #1

LONGITUDE 81°47'30"

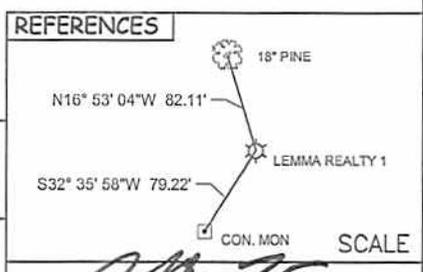
- Note:
1. Gravel LAST 200' of road
 2. Place hay / straw bails at culverts
 3. All roads are existing.

WV SOUTH ZONE
GRID SOUTH

12670



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Office of Oil & Gas
NOV 17 2014



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(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

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DRAWING # 14-500-41
SCALE 1" = 300'
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PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
White Brothers Consulting LLC
447 call road suite 216
Charleston, WV 25312

Jeffery L. Snyder PS #2238

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

DATE 7-24-14
OPERATOR'S WELL # LEMMA REALTY 1
API WELL # 47 - 39 - 04549 W

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW
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ADDRESS P.O. Box 13366 ADDRESS P.O. Box 13366
Sissonville, WV 25360 Sissonville, WV 25360

COUNTY NAME PERMIT

3904549W

WW-2B1
(5-12)

Well No. Lemma Realty #1 DD

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 Strum Environmental, Inc.
Sampling Contractor Mark T. Wine

Well Operator Viking Energy Corporation
Address P O Box 13366
Sissonville, WV 25360
Telephone 304-988-1161

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.

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Office of Oil & Gas
NOV 17 2014