



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

August 21, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4103917, 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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin

Chief



Operator's Well No: J. R. JONES 1
Farm Name: U.S. ARMY CORP. OF ENG.

API Well Number: 47-4103917

Permit Type: Plugging

Date Issued: 08/21/2015

WW-4B
Rev. 2/01

1) Date July 28, 2015
2) Operator's Well No. J.R. Jones #1
3) API Well No. 47-41-03917

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil ___ / Gas X / Liquid injection ___ / Waste disposal ___
(If "Gas, Production ___ or Underground storage ___) Deep ___ / Shallow ___

5) Location: Elevation 1256' Watershed _____
District Skin Creek County Lewis Quadrangle Ronoke

6) Well Operator Murvin & Meier Oil Co. Designated Agent P. Nathan Boles, Jr.
Address P.O. Box 396 Address 500 Quarrier Street
Olney, ILL. 62450 Charleston, W.V. 25301

8) Oil and Gas Inspector to be notified Name Barry Stollings
Address 28 Conifer Drive
Bridgeport, WV. 26330
9) Plugging Contractor Name Duckworth Well service
Address P. O. Box 6872
Charleston, WV. 25362

10) Work Order: The work order for the manner of plugging this well is as follows:

- Cement 4334' - 4334'
- Cement 2100' - 2000' Est. 4 1/2 Casing Cut
- Cement 1386' - 1206' Elv.
- Cement 100' - 0'

Gel between all plugs.
Pull all free pipe.

Received

JUL 30 2015

Office of Oil and Gas
WV Dept. of Environmental Protection

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector Barry Stollings Date 7-30-15

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: U.S. ARMY CORP. OF ENG. Operator Well No.: J.R. JONES 1
LOCATION: Elevation: 1256.00 Quadrangle: ROANOKE
District: SKIN CREEK County: LEWIS
Latitude: 10540 Feet South of 38 Deg. 57Min. 30 Sec.
Longitude 11030 Feet West of 80 Deg. 22 Min. 30 Sec.

Company: MURVIN OIL CORP.
P. O. BOX 297
OLNEY, IL 62450-0000

Agent: P. NATHAN BOWLES, JR.

Inspector: STEVE CASEY
Permit Issued: 04/03/89
Well work Commenced: July 25, 1989
Well work Completed: _____
Verbal Plugging _____
Permission granted on: _____
Rotary Cable _____ Rig
Total Depth (feet) 4539
Fresh water depths (ft) 70', 320'
Salt water depths (ft) 1901

Is coal being mined in area (Y/N)? N
Coal Depths (ft): _____

| Casing & Tubing | Used in Drilling | Left in Well | Cement Fill Up Cu. Ft. |
|-----------------|------------------|--------------|------------------------|
| Size | | | |
| 9 5/8" | 737 | 737 | 306.8 |
| 4 1/2" | 4478 | 4478 | 174.2 |
| | | | |
| | | | |

RECEIVED
SEP 08 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4377' to 4384'
Gas: Initial open flow show _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 119 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 960 psig (surface pressure) after 48 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: Gary Hill
MURVIN OIL CORP.
By: _____ Vice-President
Date: September 6, 1989

LEG 317

Received

JUL 30 2015

Office of Oil and Gas
WV Dept. of Environmental Protection

8-22-89: Perforated Benson formation from 4377' to 4384' with 14 holes using hollow carrier gun.

8-29-89: Fractured Benson perms with 500 gals. 15% HCL, to 35 BBLS water, 76 MSCF N₂, and 40,000 lbs 20/40 sand.

WELL LOG

| <u>Formation</u> | <u>Top</u> | <u>Bottom</u> |
|------------------|------------|---------------|
| Top Soil | 0 | 10 |
| Red Rock | 10 | 20 |
| Shale | 20 | 60 |
| Sandy Shale | 60 | 110 |
| Shale | 110 | 170 |
| Sand | 170 | 190 |
| Shale | 190 | 210 |
| Sand | 210 | 235 |
| Shale | 235 | 255 |
| Red Rock | 255 | 260 |
| Shale | 260 | 425 |
| Red Rock | 425 | 430 |
| Shale | 430 | 640 |
| Sandy Shale | 640 | 660 |
| Shale | 660 | 720 |
| Sand | 720 | 737 |
| Shale | 737 | 780 |
| Sand | 780 | 884 |
| Shale | 884 | 1007 |
| Sandy Shale | 1007 | 1109 |
| Shale | 1109 | 1195 |
| Sand | 1195 | 1292 |

RECEIVED
SEP 08 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

WELL LOG (CONT.)

| <u>Formation</u> | <u>Top</u> | <u>Bottom</u> |
|------------------|------------|---------------|
| Shale | 1292 | 1386 |
| Sand | 1386 | 1410 |
| Shale | 1410 | 1524 |
| Sandy Shale | 1524 | 1607 |
| Shale | 1609 | 1638 |
| Big Lime | 1638 | 1754 |
| Injun | 1754 | 1830 |
| Shale | 1830 | 1923 |
| Gantz | 1923 | 2010 |
| Shale | 2010 | 2053 |
| 50 Foot Sand | 2053 | 2067 |
| Shale | 2067 | 2254 |
| 4th Sand | 2254 | 2288 |
| Shale | 2288 | 2384 |
| 5th Sand | 2384 | 2418 |
| Shale | 2418 | 2752 |
| Warren | 2752 | 2805 |
| Shale | 2805 | 3072 |
| Speechly | 3072 | 3097 |
| Shale | 3097 | 3394 |
| Balltown | 3394 | 3427 |
| Shale | 3427 | 4366 |
| Benson | 4366 | 4409 |
| Shale | 4409 | 4539 |

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SEP 08 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

LEW. 3917

TD

8457

0015 0373

08/21/2015

WW-4A
Revised 6-07

1) Date: 7 - 28 - 15
2) Operator: Well Service
J. P. Jones #1
3) API Well No.: 47 - 03917

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

4) Surface Owner(s) to be served:

| | | | |
|----------|---------------------------------|------------------------------------|-------|
| (a) Name | <u>U. S. ARMY CORP. of ENG.</u> | (b) (a) Coal Operator | _____ |
| Address | <u>Real Estate Division</u> | Name | _____ |
| | <u>1000 Liberty Avenue</u> | Address | _____ |
| (b) Name | <u>Pittsburgh, Pennsylvania</u> | (c) Coal Owner(s) with Declaration | _____ |
| Address | _____ | Name | _____ |
| | _____ | Address | _____ |
| (c) Name | _____ | Name | _____ |
| Address | _____ | Address | _____ |

5) Inspector

| | | | |
|-----------|--------------------------|----------------------------------|-------|
| Name | <u>Barry Stalling</u> | (c) Coal Lessee with Declaration | _____ |
| Address | <u>28 Conifer Drive</u> | Name | _____ |
| Telephone | <u>Bedford, WV 26330</u> | Address | _____ |

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-42 which sets out the parties involved in the work and describes the well to be plugged and abandoned.
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverse side. However, you are not required to take any action at all.

Take notice that under Chapter 33-6 of the West Virginia Code, the undersigned well operator has to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the persons named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

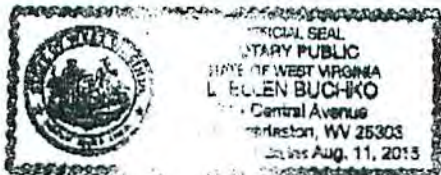
Well Operator Murphy Oil Co.
 By: [Signature]
 Its: P.O. Box 297
 Address: Olney, Ill.
 Telephone: 304-347-1113 - 343-5236

Subscribed and sworn before me this 29th day of July, 2015

My Commission Expires Aug 11, 2015 Notary Public

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 privacy@dep.gov.



Received

JUL 30 2015

Office of Oil and Gas
WV Dept. of Environmental Protection

08/21/2015

WW-9
(2/15)

API Number 47-41-03917

Operator's Well No. R. Jones 1

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

FLUIDS/CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Murvin & Miller, Oil Co. OP Code _____

Wellbore (HUC 10) _____ Quadrangle Roanoke

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: Water & Gel

Will a synthetic liner be used in the pit? Yes No If so, what rel? _____

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply Form WW-9 for disposal location)
- Other (Explain _____)

Will closed loop system be used? If so, describe: _____

Drilling medium anticipated for this well (vertical and horizontal) Oil, freshwater, oil based, etc. _____

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

Additives to be used in drilling medium? _____

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

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

-Landfill or offsite manifest number? _____

Permittee shall provide written notice to the Office of Oil and Gas of any load or 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 fines or imprisonment.

Company Official Signature P. Nathan Bowles Jr.

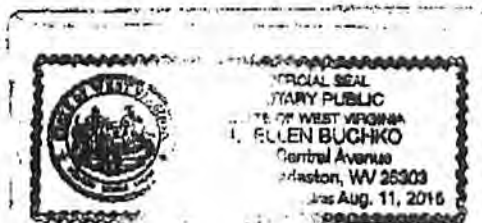
Company Official (Typed Name) P. Nathan Bowles Jr.

Company Official Title Resident Agent

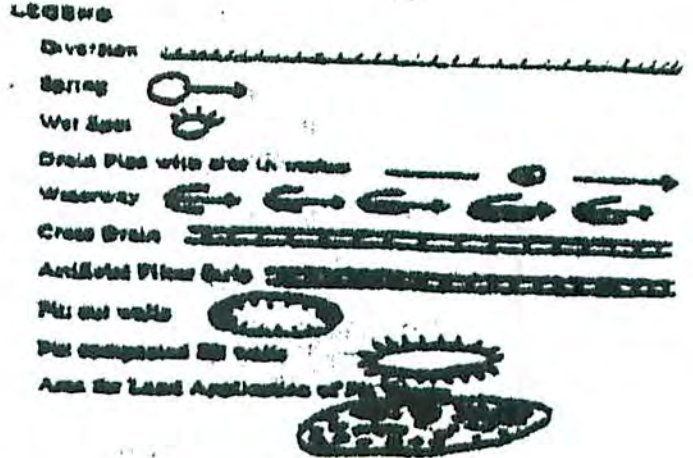
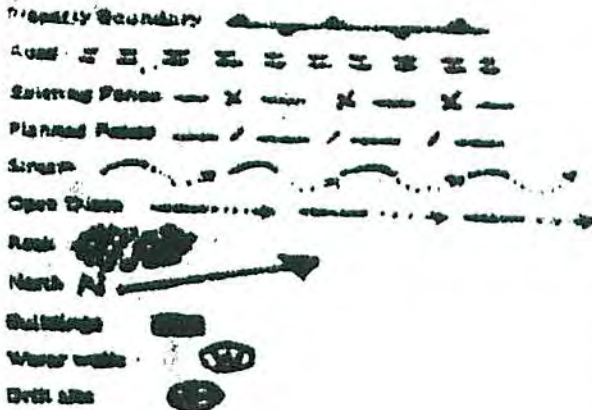
Subscribed and sworn before me this 29th day of July, 2015

[Signature] Notary Public

My commission expires Aug. 11, 2015



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Office of Oil and Gas
WV Dept. of Environmental Protection



Proposed Revegetation Treatment: Acres Disturbed 1 Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH _____

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

Mulch 2 Tons/acre

Seed Mixtures

| Seed Type | Area I | lbs/acre | Seed Type | Area II | lbs/acre |
|-----------|--------|----------|-----------|---------|----------|
| | | | | | |
| | | | | | |
| | | | | | |

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

Microcopied section of involved 7.5' topographic sheet

Plan Approved by: Barry Stith
Comments: _____

Title: inspector Date: 7-30-15

Field Reviewed? () Yes () No

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JUL 30 2015

Office of Oil and Gas
WV Dept. of Environmental Protection

08/21/2015

720 000
FEET

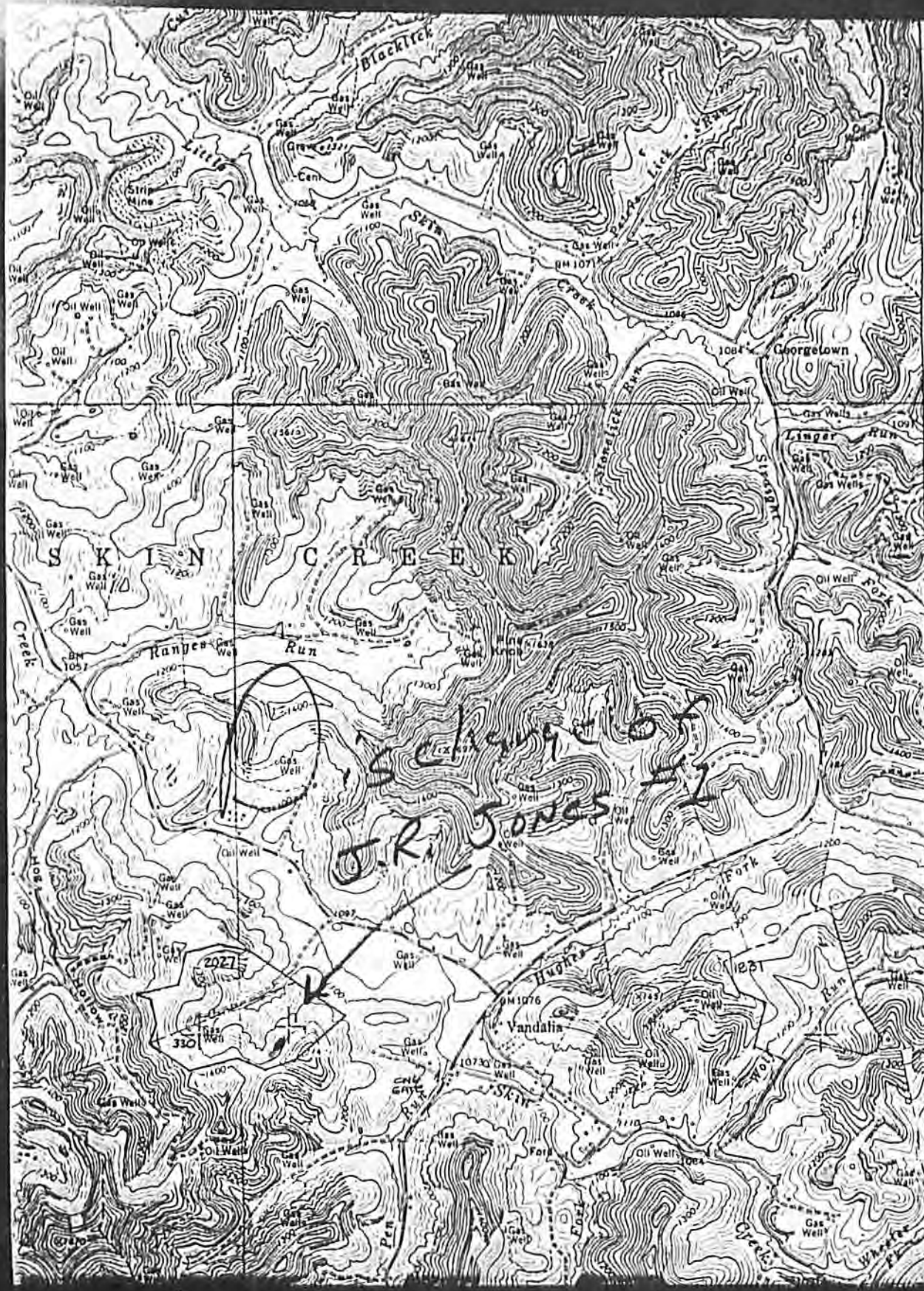
57° 30"

ADRIAN
4861 4 V NE

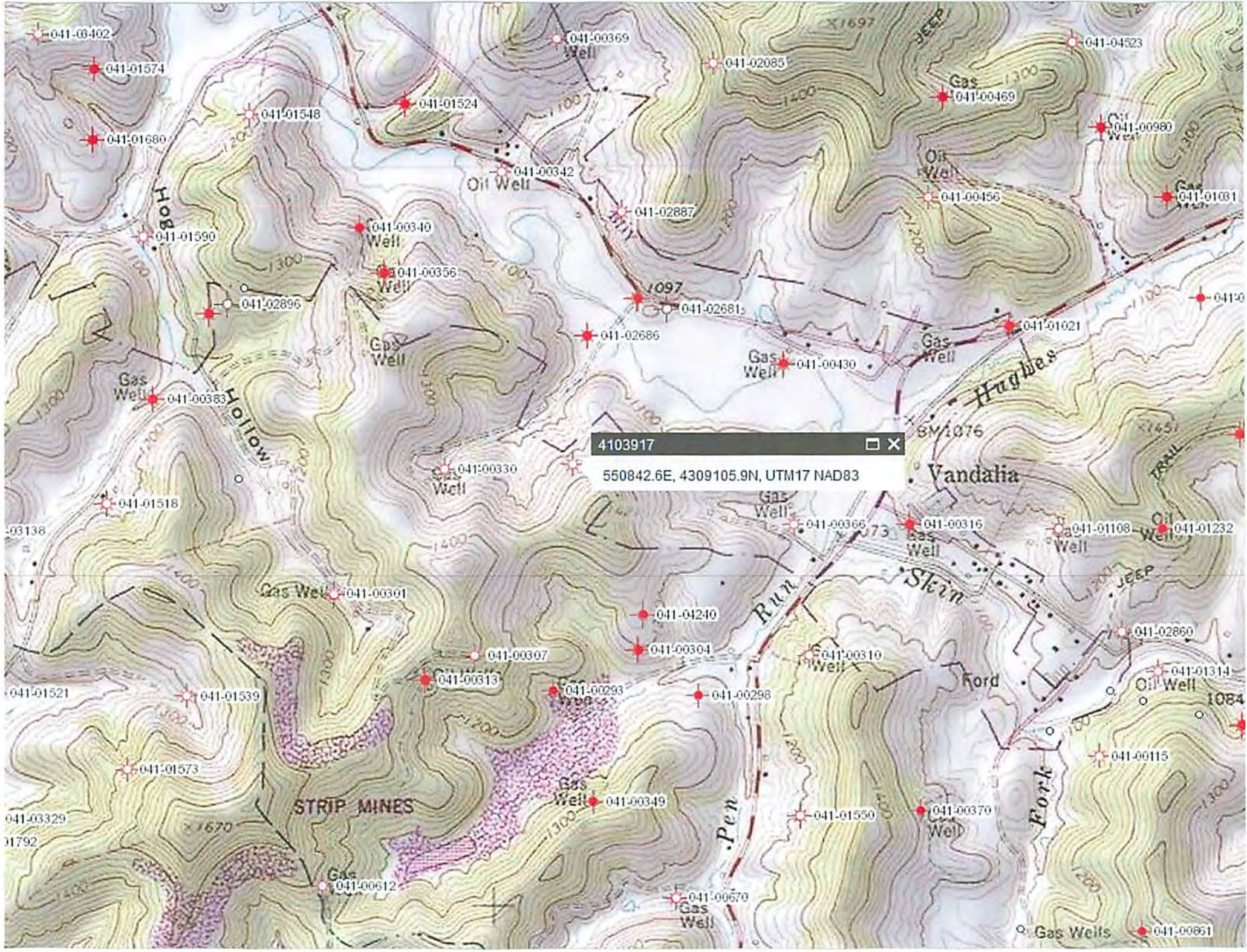
4309

4308

55'



0015 0377





Well
41-03917

Vandalia

Pine Knob

Hog Hollow

Received
JUL 27 2015

Office of Oil and Gas
WV Dept. of Environment

08/21/2015

West Virginia Secretary of State — Online Data Services

Business and Licensing

Online Data Services Help

Business & Licensing

Business Organization Search

Back To Top

Matching records found: 1. Please note that the results are broken into four results types: *Org Name*, *Doing Business As*, *Name Change* and *Name Registrations/Reservations*. You may use the following four links to see the results for each type.

| Organization Results | | | | | | | | |
|-----------------------------|--------|----------|----------------|------------------|------------------|--------------------|---------|--------|
| Organization Name | Org Id | Org Type | Effective Date | Established Date | Termination Date | Termination Reason | Charter | Class |
| MURVIN & MEIER OIL CO. | 145286 | C | 10/7/1992 | | | | Foreign | Profit |
| Organization Name | Org Id | Org Type | Effective Date | Established Date | Termination Date | Termination Reason | Charter | Class |

| DBA Results | | | | | | | | |
|--------------------|--------|----------|----------------|------------------|------------------|--------------------|---------|-------|
| Organization Name | Org Id | Org Type | Effective Date | Established Date | Termination Date | Termination Reason | Charter | Class |
| No results found. | | | | | | | | |
| Organization Name | Org Id | Org Type | Effective Date | Established Date | Termination Date | Termination Reason | Charter | Class |

| Name Change Results | | | | | | | | |
|----------------------------|--------|----------|----------------|------------------|------------------|--------------------|---------|-------|
| Organization Name | Org Id | Org Type | Effective Date | Established Date | Termination Date | Termination Reason | Charter | Class |
| No results found. | | | | | | | | |
| Organization Name | Org Id | Org Type | Effective Date | Established Date | Termination Date | Termination Reason | Charter | Class |

Registration/Reservation Results

| Organization Name | NRG/NRS Id | Org Type | Effective Date | Established Date | Termination Date | Termination Reason | Charter | Class |
|-------------------|------------|----------|----------------|------------------|------------------|--------------------|---------|-------|
| No results found. | | | | | | | | |
| Organization Name | NRG/NRS Id | Org Type | Effective Date | Established Date | Termination Date | Termination Reason | Charter | Class |

**NOTICE: The West Virginia Secretary of State's Office makes every reasonable effort to ensure the accuracy of information. However, we make no representation or warranty as to the correctness or completeness of the information.*

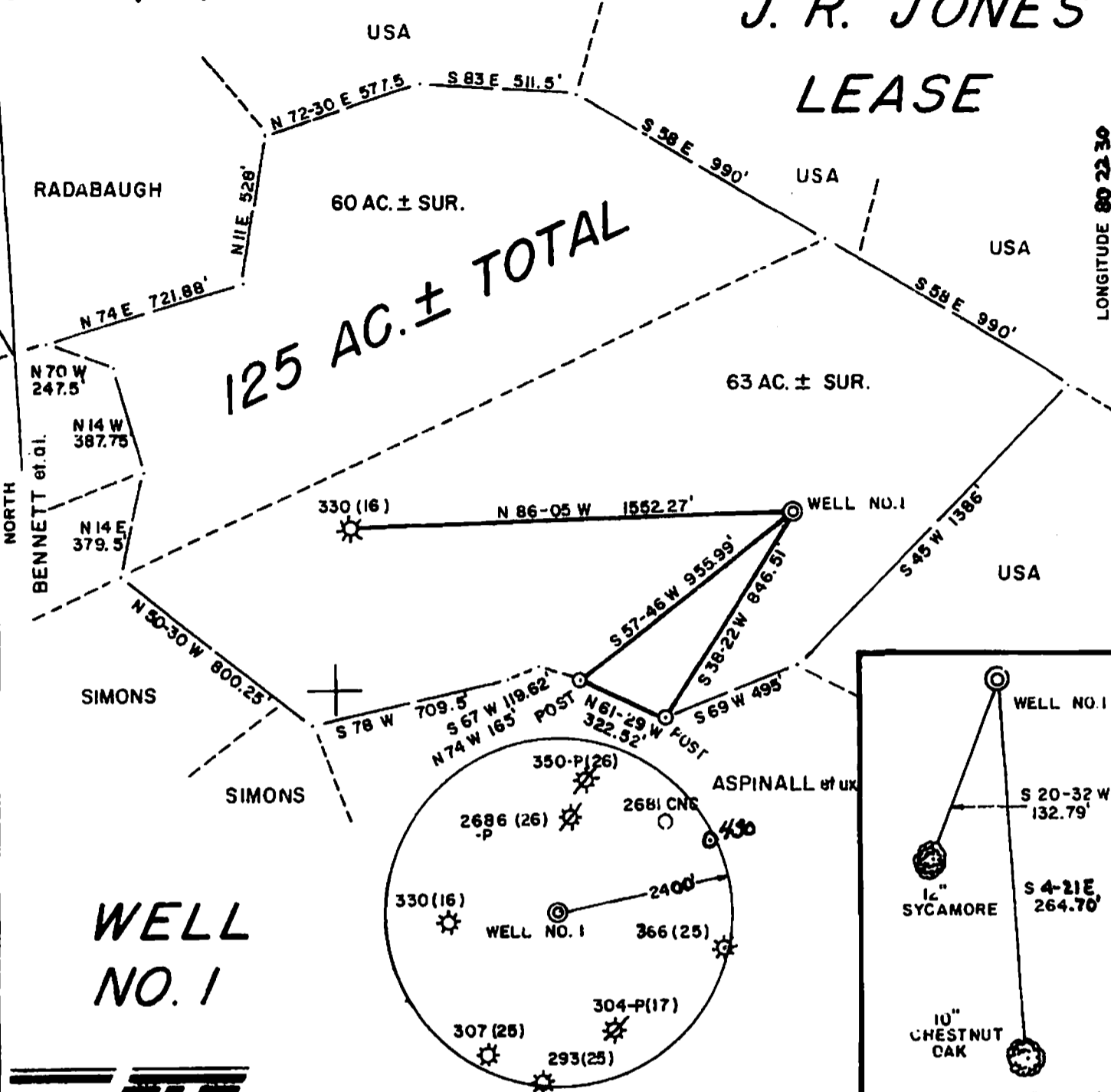
Friday, July 31, 2015 — 12:50 PM

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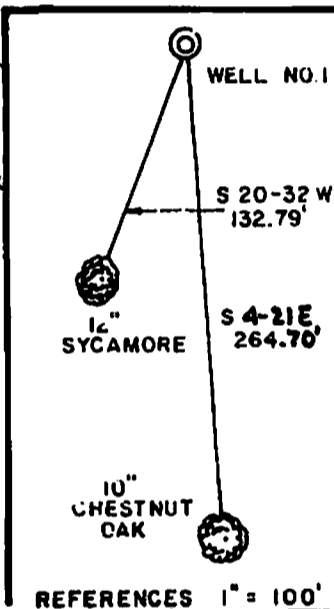
Done 3/22/89

LATITUDE 38 57 30

J. R. JONES LEASE

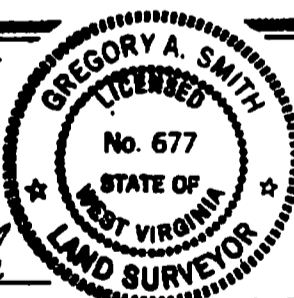


WELL NO. 1



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.

L.L.S. *Gregory A. Smith*
677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE MARCH 13, 1989
OPERATORS WELL NO. J. R. JONES NO. 1
API WELL NO. 47 - 044 - 3917
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 2027 (27-35)
PROVEN SOURCE OF ELEVATION TOP OF KNOB 1421' SCALE 1" = 500'

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

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

LOCATION:
ELEVATION 1256' WATERSHED SKIN CREEK
DISTRICT SKIN CREEK COUNTY LEWIS QUADRANGLE ROANOKE 7.5'
SURFACE OWNER USA (SJLP) ACREAGE 63
ROYALTY OWNER J.R. JONES LEASE ACREAGE 125 LEASE NO. 08/21/201

PROPOSED WORK:
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION BENSON
ESTIMATED DEPTH 4550'

WELL OPERATOR MURVIN OIL CORP. DESIGNATED AGENT R NATHAN BOWLES, JR.
ADDRESS PO BOX 173 MARIETTA, OHIO 45780 ADDRESS PO BOX 1286 CHARLESTON, WV 25325

COUNTY NAME LEWIS PERMIT 397

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47 - 41 - 03917 WELL NO.: J.R. Jones - 1
FARM NAME: US Army Corp. of Eng.
RESPONSIBLE PARTY NAME: Gary Hill
COUNTY: Lewis DISTRICT: Skin Creek
QUADRANGLE: Roanoke
SURFACE OWNER: US Army Corp. of Eng.
ROYALTY OWNER: J.R. Jones
UTM GPS NORTHING: 4309105.9
UTM GPS EASTING: 550842.6 GPS ELEVATION: 1256'

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

- 1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) - meters.
- 2. Accuracy to Datum - 3.05 meters
- 3. Data Collection Method:

Survey grade GPS ____: Post Processed Differential ____
Real-Time Differential ____

Mapping Grade GPS ____: Post Processed Differential ____
Real-Time Differential ____

- 4. Letter size copy of the topography map showing the well location.

I the undersigned, hereby certify this data 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 Office of Oil and Gas.

Steve Blackworth Contractor
Signature Title

7-30-15
Date

JUL 30 2015

Office of Oil and Gas
Dept. of Environmental Protection

08/21/2015