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**west virginia** department of environmental protection

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

February 23, 2015

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-1900570, issued to CNX GAS COMPANY LLC, 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: 2  
Farm Name: WILSON, JEAN ANN  
**API Well Number: 47-1900570**  
**Permit Type: Plugging**  
Date Issued: 02/23/2015

**Promoting a healthy environment.**

**02/27/2015**

## PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

### CONDITIONS

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1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. 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.
3. Well work activities shall not constitute a hazard to the safety of persons.

19 00570 A

WW-4B  
Rev. 2/01

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Office of Oil & Gas  
NOV 25 2014

1) Date \_\_\_\_\_, 20\_\_\_\_  
2) Operator's  
Well No. Wilson 2  
3) API Well No. 47-019-00570

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 x or Underground storage \_\_\_\_ ) Deep \_\_\_\_/ Shallow x

5) Location: Elevation 990 ft. Watershed Kanawha  
District Valley County Fayette Quadrangle Gauley Bridge

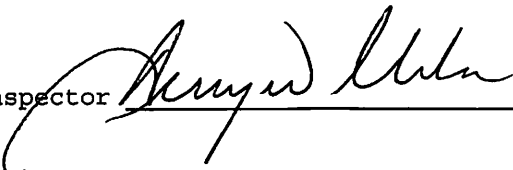
6) Well Operator CNX Gas Company LLC 7) Designated Agent Matthew Imrich  
Address 627 Claypool Hill Mall Road Address One Dominion Drive  
Cedar Bluff, VA 24609 Jane Lew, WV 26378

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Terry Urban Name L&D Well Services  
Address PO Box 1207 Address PO Box 1192  
Clendenin, WV 25045 Vansant, VA 24656

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

SEE PROS

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

Work order approved by inspector  Date 11-13-14

02/27/2015

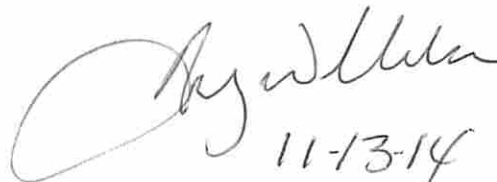
API 47-019-00570 Plugging ProcedureWilson 2

1. Verify total depth 2736'.
2. Run free-point survey on 4-1/2" casing.
3. Run tubing to TD. Set plug of Class A 3% CaCl cement from established TD to approximately 50' below free point, utilizing a 100' gel spacer at approximately the half-way point of the wellbore.
4. Cut 4-1/2" casing at free-point.
5. Cement through 4-1/2" csg. while pulling 4-1/2", from top of bottom plug to approximately 100' below the 8-5/8" casing shoe. (Approx. 1324') Pull remaining 4-1/2" out of well.
6. Run free-point survey on 8-5/8" casing.
7. Run tubing to previous cement top (1324'). Cement across the 8-5/8" shoe to a minimum of 50' above shoe, bringing cement top to approximately 50' below the 8-5/8" free-point or to surface, whichever is necessary.
8. If necessary, cut and pull free 8-5/8" casing.
9. Repeat free-point and cutting procedures for 16" if 8-5/8" is cut and pulled.
10. Cement from 50' below 16" shoe to surface.
11. Install 4-1/2" X 4' steel monument with API# and Date.

NOTE: A 100' gel spacer will be placed at approximately half the well depth.

Will Change prog. when plugging

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11-13-14

IF 8 5/8" IS CEMENTED TO SURFACE,  
THERE IS NO NEED TO PULL IT.  
JMM

02/27/2015



IV-35  
(Rev 8-81)



RECEIVED  
DEC 19 1985

State of West Virginia  
DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY  
Department of Mines  
Oil and Gas Division

Date December 17, 1985  
Operator's Well No. S-589  
Farm Jean Ann Wilson #2  
API No. 47 - 019 - 0570

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 990 Watershed Kanawha River  
District: Valley County Kanawha Quadrangle Gauley Bridge

COMPANY Scott Oil Company  
ADDRESS P. O. Box 112, Salem, WV 26426  
DESIGNATED AGENT Darrel Wright  
ADDRESS P. O. Box 112, Salem, WV 26426  
SURFACE OWNER Jean Ann Wilson  
ADDRESS Gauley Bridge, WV  
MINERAL RIGHTS OWNER Same as above  
ADDRESS \_\_\_\_\_  
OIL AND GAS INSPECTOR FOR THIS WORK Rodney  
Dillon ADDRESS Sophia, WV  
PERMIT ISSUED 10/11/85  
DRILLING COMMENCED 10/31/85  
DRILLING COMPLETED 11/9/85  
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.	30'		
13-10"			
9 5/8			
8 5/8		1224	to surface
7			
5 1/2			
4 1/2		2736	200 sks
3			
2			
Inners used			

GEOLOGICAL TARGET FORMATION Gordon Depth \_\_\_\_\_ feet  
Depth of completed well 2778 feet Rotary \_\_\_ / Cable Tools \_\_\_  
Water strata depth: Fresh 111 feet; Salt \_\_\_\_\_ feet  
Coal seam depths: 400-403, 776-780 Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Gordon Pay zone depth \_\_\_\_\_ feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 182 Mcf/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests 4 hours  
Static rock pressure 700 psig (surface measurement) after 72 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation \_\_\_\_\_ Pay zone depth \_\_\_\_\_ feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ Mcf/d Oil: Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ hours  
Static rock pressure \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in

(Continue on reverse side)

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FAVE 0570

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

Gordon Perfs 2562-2658 Sand 80/100 50 sks 270 bbl H<sub>2</sub>O  
20/40 150 sks

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fr and salt water, coal, oil and
Sand & Shale			0	400	
Coal			400	403	
Sand & Shale			403	575	
Sand			575	776	
Coal			776	780	
Sand			780	884	
Sand & Shale			884	945	
Sand			945	969	
Sand & Shale			969	1113	
Sand			1113	1245	
Red Rock & Shale			1245	1270	
Sand & Shale			1270	1521	
Sand			1521	1529	
Shale			1529	1557	
Sand			1557	1568	
Little Lime			1568	1610	
Shale			1610	1650	
Big Lime			1650	1899	
Red Rock			1899	1950	
Red Rock & Sand			1950	1983	
Shale			1983	2034	
Sand			2034	2145	
Sand & Shale			2145	2356	
Sand			2356	2417	
Sand & Shale			2417	2690	
Sand			2590	2630	
Sand & Shale			2630	2770	
Gamma Ray Log					
Maxton			1278	1328	
L. Maxton			1510	1543	
Little Lime			1554	1612	
Big Lime			1650	1883	
Injun			1885	1913	
Pocono			1913	1959	
Weir			2062	2082	
Berea			2354	2400	

(Attach separate sheets as necessary)

Gordon 2595 2628

Scott Oil Company  
Well Operator  
By: Daniel Wright  
Date: December 17, 1985

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  
minerals, encountered in the drilling of a well."

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1900570P

WW-4A  
Revised 6-07

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Office of Oil & Gas

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1) Date: \_\_\_\_\_  
2) Operator's Well Number Wilson 2  
3) API Well No.: 47 - 019 - 00570

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:	5) (a) Coal Operator
(a) Name <u>Jean Ann Wilson</u>	Name _____
Address <u>109 Grace Street</u>	Address _____
<u>Fayetteville, WV 25840-1409</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>same</u>
_____	Address <u>same</u>
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Terry Urban</u>	(c) Coal Lessee with Declaration
Address <u>PO Box 1207</u>	Name _____
<u>Clendenin, WV 25045</u>	Address _____
Telephone <u>304-549-5915</u>	_____

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-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (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 reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes 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 person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.



Well Operator CNX Gas Company LLC  
 By: Ed Hamming  
 Its: Attorney-in-Fact  
 Address 627 Claypool Hill Mall Road  
Cedar Bluff, VA 24609  
 Telephone 276-596-5075

Subscribed and sworn before me this 18 day of November, 2014  
Bethany Candice Elkins Notary Public  
 My Commission Expires 8/31/2015

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](mailto:depprivacyofficer@wv.gov).

02/27/2015





1900570A

WW-9  
Rev. 5/08

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Page \_\_\_\_\_ of \_\_\_\_\_  
API Number 47 - 019 - 00570  
Operator's Well No. Wilson 2

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

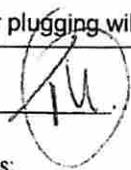
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM  
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name CNX Gas Company LLC OP Code 494458046

Watershed Kanawha River Quadrangle Gauley Bridge, WV

Elevation 990 ft. County Fayette District Valley

Description of anticipated Pit Waste: water for plugging will be contained in a flowback tank and properly disposed.

Will a synthetic liner be used in the pit? N/A 

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number 2D0550319 )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

Proposed Work For Which Pit Will Be Used:

- Drilling
- Swabbing
- Workover
- Plugging
- Other (Explain a pumper truck with flowback tank will be used in lieu of a pit.)

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) Ed Fanning

Company Official Title Supervisor Permitting

Subscribed and sworn before me this 18 day of November, 2014

Bethany Candice Elkins Notary Public

My commission expires 8/31/2015



1900570P

Form WW-9

Received  
Office of Oil & Gas

Operator's Well No. Wilson 2

NOV 25 2014

Property Boundary

Road

Existing Fence

Planned Fence

Stream

Open Ditch

Rock

North

Buildings

Water wells

Drill site

LEGEND

Diversion

Spring

Wet Spot

Drain Pipe with size in inches

Waterway

Cross Drain

Artificial Filter Strip

Pit: cut walls

Pit: compacted fill walls

Area for Land Application of Pit Waste

Proposed Revegetation Treatment: Acres Disturbed 1.5 Prevegetation pH 6.5  
 Lime based on pH Tons/acre or to correct to pH 7.0  
 Fertilizer (10-20-20 or equivalent) 550 lbs/acre (500 lbs minimum)  
 Mulch 2 Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre	Area II Seed Type	lbs/acre
Orchard grass	25	same as Area I	
Birdsfoot trefoil	15		
Lidino clover	10		

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:

Comments: \_\_\_\_\_

Title: Impacts Oil & Gas Date: 11-13-14

Field Reviewed?  Yes  No







1900570 A

WW-7  
8-30-06

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West Virginia Department of Environmental Protection  
Office of Oil and Gas

**WELL LOCATION FORM: GPS**

API: 47-019-00570 WELL NO.: Wilson 2

FARM NAME: Jean Ann Wilson

RESPONSIBLE PARTY NAME: CNX Gas Company LLC

COUNTY: Fayette DISTRICT: Valley 9

QUADRANGLE: Gauley Bridge, WV 361

SURFACE OWNER: Jean Ann Wilson

ROYALTY OWNER: Jean Ann Wilson

UTM GPS NORTHING: 482,237.52 m

UTM GPS EASTING: 4,224,121.41 m GPS ELEVATION: 293 m (961.0 FT)

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:

- Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
- Accuracy to Datum – 3.05 meters
- 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.

Bob Stanton  
Signature

Permit Agent  
Title

11-24-14  
Date

02/27/2015



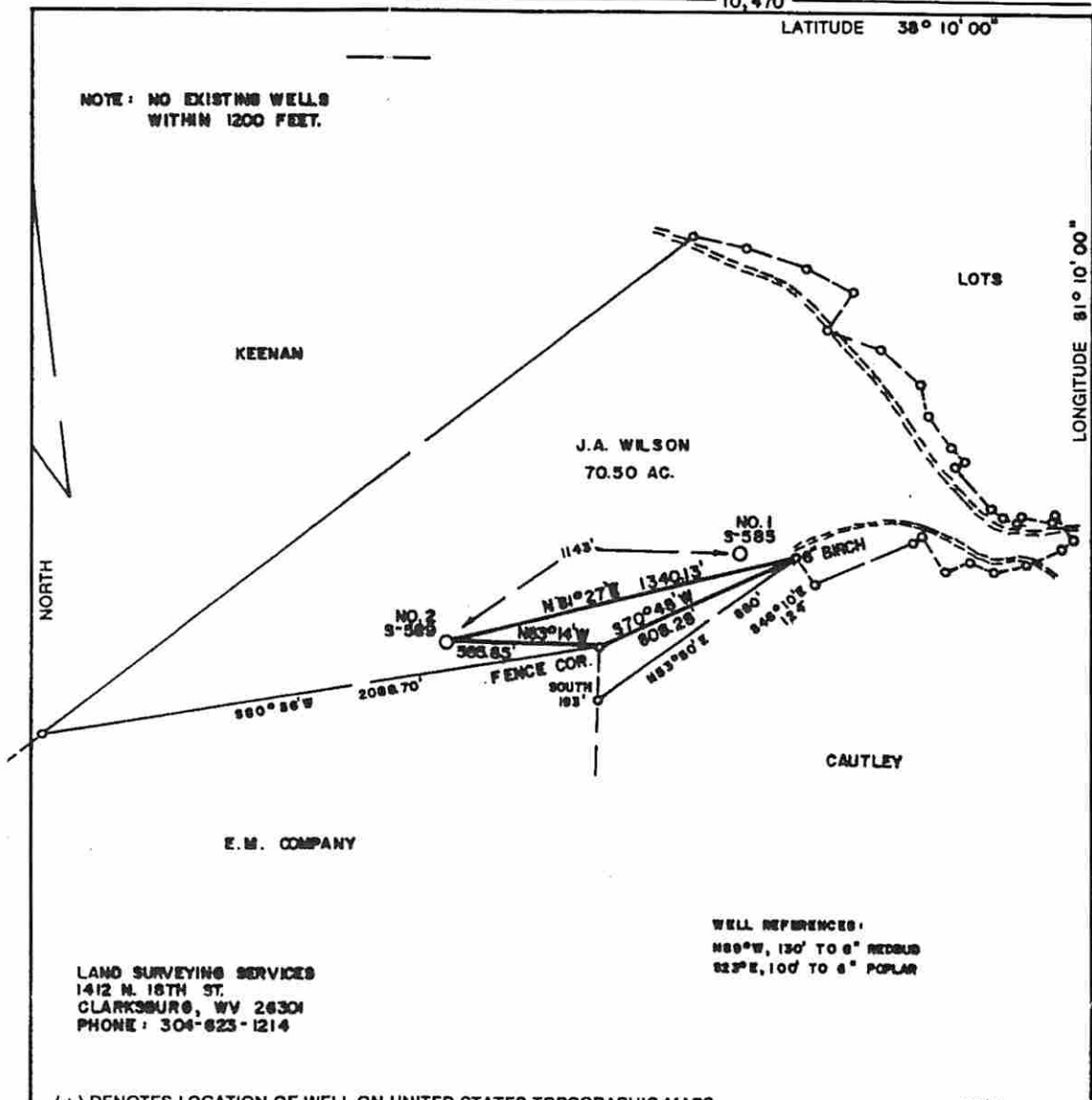
1900570P

10,470'

LATITUDE 38° 10' 00"

LONGITUDE 81° 10' 00"

NOTE: NO EXISTING WELLS WITHIN 1200 FEET.



LAND SURVEYING SERVICES  
 1412 N. 18TH ST.  
 CLARKSBURG, WV 26301  
 PHONE: 304-623-1214

WELL REFERENCES:  
 N89°W, 130' TO 6" REDDUB  
 S23°E, 100' TO 6" POPLAR

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

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 300'  
 MINIMUM DEGREE OF ACCURACY 1 in 2500  
 PROVEN SOURCE OF ELEVATION BM 1400 S.W. OF LOCATION  
 LOCATION ELEV. - 685

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) Stephen D. Losh  
 R.P.E. \_\_\_\_\_ L.L.S. 674  
**STEPHEN D. LOSH**



FORM IV-6 (8-78)  
H.T. HALL

<b>STATE OF WEST VIRGINIA</b> DEPARTMENT OF MINES <b>OIL AND GAS DIVISION</b>		DATE <u>JUNE 12</u> , 19 <u>88</u> OPERATOR'S WELL NO. <u>S-589</u> API WELL NO. <u>WILSON NO. 2</u> <u>47-019-0570</u> STATE COUNTY PERMIT	
WELL TYPE: OIL <input type="checkbox"/> GAS <input type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> (IF "GAS,") PRODUCTION <input type="checkbox"/> STORAGE <input type="checkbox"/> DEEP <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/>			
LOCATION: ELEVATION <u>880'</u> WATERSHED <u>KANAWHA RIVER</u> DISTRICT <u>VALLEY (GAULEY BRIDGE CORR)</u> COUNTY <u>FAYETTE</u> QUADRANGLE <u>GAULEY BRIDGE 7.8 min.</u>			
SURFACE OWNER <u>JEAN ANN WILSON</u> ACREAGE <u>70.50</u> OIL & GAS ROYALTY OWNER <u>JEAN ANN WILSON</u> LEASE ACREAGE <u>70.50</u> LEASE NO. <u>879</u>		COUNTY NAME _____ PERMIT _____	
PROPOSED WORK: DRILL <input checked="" type="checkbox"/> CONVERT <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/> OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____			
PLUG AND ABANDON <input type="checkbox"/> CLEAN OUT AND REPLUG <input type="checkbox"/> TARGET FORMATION <u>WEIR / INJUN</u> ESTIMATED DEPTH <u>210'</u> WELL OPERATOR <u>SCOTT OIL COMPANY</u> DESIGNATED AGENT <u>DARREL WRIGHT</u> ADDRESS <u>P.O. BOX 112</u> ADDRESS <u>P.O. BOX 112</u> <u>SALEM, WV 26426</u> <u>SALEM, WV 26426</u>			

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