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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

December 28, 2015

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-1303369, issued to RESERVE OIL & GAS, INC., 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: 1  
Farm Name: GROVES, AMMA  
**API Well Number: 47-1303369**  
**Permit Type: Plugging**  
Date Issued: 12/28/2015

**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

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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.

1303369P

WW-4B  
Rev. 2/01

1) Date \_\_\_\_\_, 20\_\_\_\_\_  
2) Operator's  
Well No. Amma Groves #1  
3) API Well No. 47-13 - 03369

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 760 Watershed West Fork Little Kanawha River  
District Washington County Calhoun Quadrangle Chloe
- 6) Well Operator Reserve Oil & Gas, Inc. 7) Designated Agent Doug Douglass  
Address 929 Charleston Road Address 929 Charleston Road  
Spencer, WV 25276 Spencer, WV 25276
- 8) Oil and Gas Inspector to be notified Name Joe Taylor  
Address 1478 Clay Lick Road  
Ripley, WV 25271
- 9) Plugging Contractor Name Contractor Services Inc. of WV  
Address 929 Charleston Road  
Spencer, WV 25276

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

Prep Location; Move in; Rig up  
Pull Rods, estimate 1860' of 1 1/2"  
Trip in Hole, cement string; set bottom hole plug. *SET CLASS A CEMENT PLUG ABOVE 1700'*  
Identify cement top; estimated top of cement on 3" is 1,000 feet.  
Cut and recover 3".  
Set cement plug. *ACROSS 3" CUT. (MINIMUM 100' CLASS A CEMENT)*  
Identify cement top of 5 1/2"; cut and recover 5 1/2"  
*SET CEMENT PLUG ACROSS 5 1/2" CUT. (MINIMUM OF 100' CLASS A CEMENT)*  
Set cement plug 200' to surface; 6% gel between plugs.  
*PLACE MONUMENT PER WV CODE.*  
*gwm*

Received  
Office of Oil & Gas  
NOV 19 2015

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

Work order approved by inspector  Date 11-17-15

RECEIVED  
SEP 25 1987



1303369P

WR-35

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

State of West Virginia  
DEPARTMENT OF ENERGY  
Oil and Gas Division

Date September 22, 1987  
Operator's Well No. 1  
Farm A. D. Groves  
API No. 47 - 013 - 3369  
FRA

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: 760 Watershed West Fork of Little Kanawha  
District: Washington County Calhoun Quadrangle Chloe 7.5

COMPANY Keith Crihfield  
ADDRESS P. O. Box 987, Spencer, WV  
DESIGNATED AGENT Keith Crihfield  
ADDRESS P. O. Box 987, Spencer, WV  
SURFACE OWNER Oliver Zwoll  
ADDRESS Orma, WV  
MINERAL RIGHTS OWNER Oliver Zwoll  
ADDRESS Orma, WV  
OIL AND GAS INSPECTOR FOR THIS WORK Deo  
Mace ADDRESS Sand Ridge, WV  
PERMIT ISSUED November 1981 2/9/82  
DRILLING COMMENCED NA 2/10/82  
DRILLING COMPLETED NA 2/10/82  
IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON    

Casing Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cond.			
13-10"		Received	
9 5/8		Office of Oil & Gas	
8 5/8		NOV 19 2015	
7			
5 1/2			
4 1/2			
3		1870	50SKS
2			
Liners used			

GEOLOGICAL TARGET FORMATION Big Injun Depth 1840 - 50 feet  
Depth of completed well 1,892 feet Rotary     / Cable Tools      
Water strata depth: Fresh     feet; Salt     feet  
Coal seam depths:     Is coal being mined in the area?    

OPEN FLOW DATA

Producing formation Big Injun Pay zone depth 1840 - 50 feet  
Gas: Initial open flow     Mcf/d Oil: Initial open flow NA Bbl/d  
Final open flow 80 Mcf/d Final open flow NA Bbl/d  
Time of open flow between initial and final tests 8 hours  
Static rock pressure 110 psig (surface measurement) after 12 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



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
Oil and Gas Division

WELL RECORD

Rotary \_\_\_\_\_ Oil \_\_\_\_\_  
Cable  Gas   
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind)

Quadrangle Chloe 715  
Tract No. 47-013-3369 FRAC

Company A. D. Groves #1  
Address Box 431, Spencer, WV  
Farm \_\_\_\_\_ Acres 20  
Location (waters) Left Fork of Little Kanawha  
Well No. 1 Elev. 760  
District Washington County Calhoun  
The surface of tract is owned in fee by \_\_\_\_\_  
Oliver Zwoil, Jr.  
Address Orma, WV  
Mineral rights are owned by Oliver Zwoil, Jr.  
Address Orma, WV  
Drilling Commenced 1933  
Drilling Completed 1933  
Initial open flow \_\_\_\_\_ cu. ft. \_\_\_\_\_ bbls.  
Final production \_\_\_\_\_ cu. ft. per day \_\_\_\_\_ bbls.  
Well open \_\_\_\_\_ hrs. before test \_\_\_\_\_ RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size			
20-16			
Cond.			
13-10"			
9 5/8			
8 5/8			
7			
5 1/2	1869	1869	None
4 1/2			
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Well was drilled in 1933 by Grant Fowler. Initially well was shot in big injun sand from 1796-1808 and 1912-24.

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Oil was encountered at N/A Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand \_\_\_\_\_ Depth \_\_\_\_\_

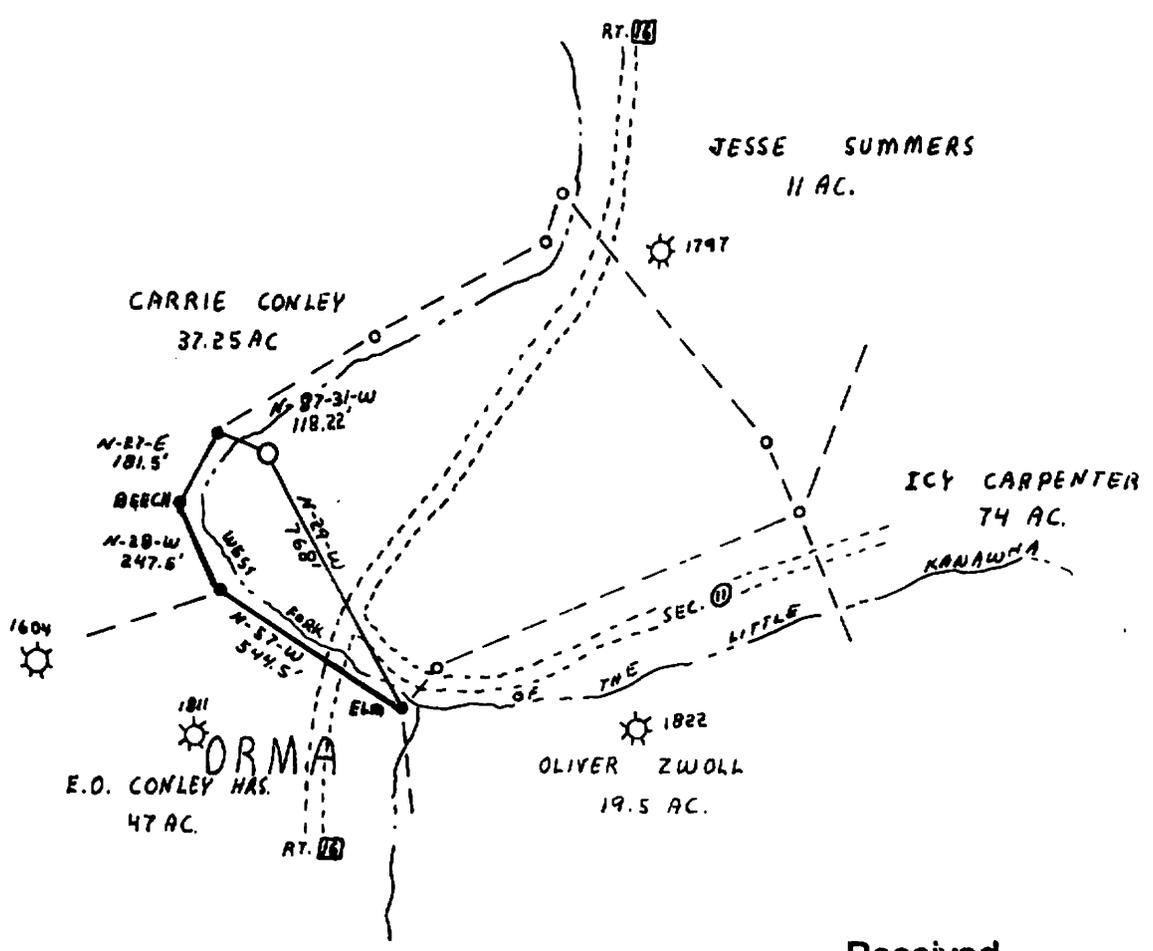
Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Not available			-0-	1,600		
Maxton			1,600	1,616		
Sand			1,616	1,640		
Little Lime			1,640	1,680		
Pencil Cave			1,680	1,698		
Big Lime			1,698	1,760		
Keener			1,760	1,798		
Break			1,798	1,802		
Big Injun			1,802	1,857	Gas	
Shale			1,857	1,869	TD.	

ENTERED JAN 0 4 1988

4,900'  
 LATITUDE 38° 45'  
 7.5 1303369P

LONGITUDE 81° 05'

NORTH



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FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 IN 200  
 PROVEN SOURCE OF ELEVATION AT RT. 16 BRIDGE OVER WEST FORK IN ORMA  
ELY = 767

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. 526

PLACE SEAL HERE

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



DATE 11-20, 19 81  
 OPERATOR'S WELL NO. one  
 API WELL NO. 47-013-3369-Frac.  
 STATE COUNTY PERMIT  
 GAS WELL

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
 LOCATION: ELEVATION 760 WATER SHED WEST FORK OF LITTLE KANAWHA RIVER  
 DISTRICT WASHINGTON COUNTY CALHOUN  
 QUADRANGLE CHLOE 7.5  
 SURFACE OWNER OLIVER ZWOLL, JR. ACREAGE 20  
 OIL & GAS ROYALTY OWNER A.O. Groves LEASE ACREAGE 20  
 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 THRU BIG INJUN ESTIMATED DEPTH 2,100  
 WELL OPERATOR W.H. Hildroth DESIGNATED AGENT KEITH CRIFIELD  
 ADDRESS P.O. Box 494 ADDRESS SAME PO Box 431  
SPENCER, W.V. 25276 SAME Spencer, WV 25276

4-88314x8L  
 1-88314x8L

1303369P

4,900'

LATITUDE

38°45'00"

TOPO  
LOC.

LONGITUDE  
81°05'00"

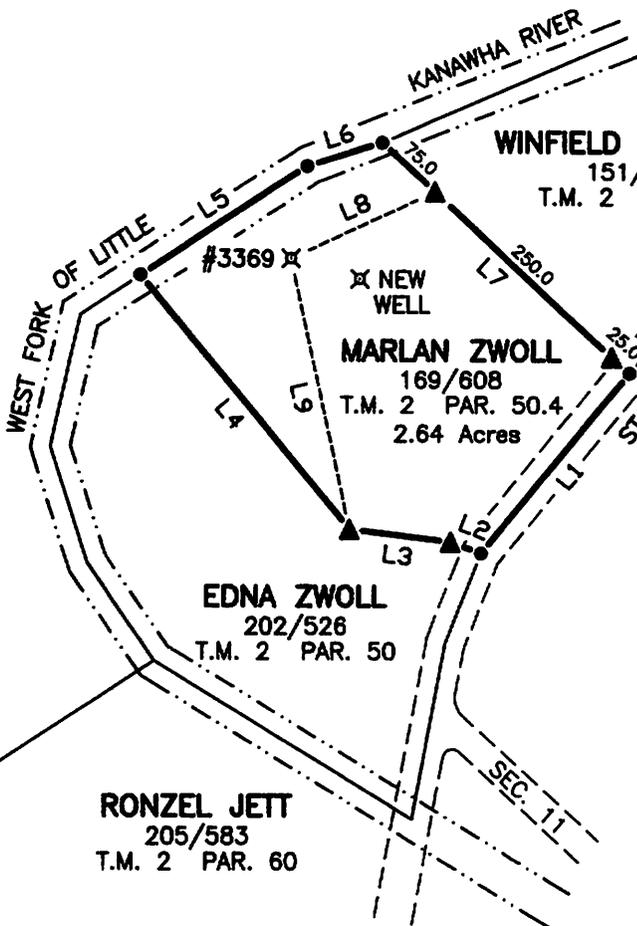
DAVID CONLEY  
79/321  
T.M. 2 PAR. 46

WINFIELD STARCHER  
151/138  
T.M. 2 PAR. 49

MARLAN ZWOLL  
169/608  
T.M. 2 PAR. 50.4  
2.64 Acres

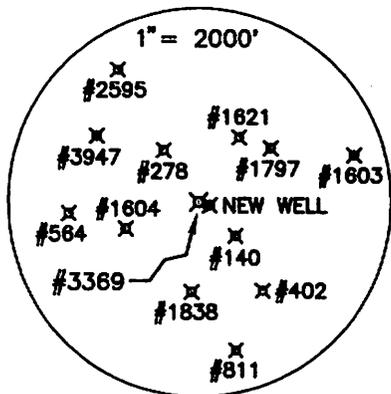
EDNA ZWOLL  
202/528  
T.M. 2 PAR. 50

RONZEL JETT  
205/583  
T.M. 2 PAR. 60



LINE	BEARING	DISTANCE
L1	S 39°24' W	241.08
L2	N 69°48' W	33.94
L3	N 83°02' W	106.77
L4	N 39°58' W	341.45
L5	N 57°13' E	205.74
L6	N 72°41' E	82.47
L7	S 47°36' E	350.00 (TOTAL)
(BOUNDARY TIE TO WELL)		
L8	S 65°45' W	165.05
L9	N 12°40' W	286.26

Received  
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NOV 19 2015



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

FILE NO. \_\_\_\_\_  
 DRAWING NO. 03-408-1  
 SCALE 1" = 200'  
 MINIMUM DEGREE OF ACCURACY 1 IN 200  
 PROVEN SOURCE OF ELEVATION AT RT. 16 BRIDGE OVER WEST FORK IN ORMA  
ELEV= 767

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) *[Signature]*  
 R.P.E. \_\_\_\_\_ L.L.S. 851

LEGEND

- ▲ IRON ROD FOUND
- CALCULATED POINT

RICHARD J. PRINE  
 LICENSED  
 NO. 851  
 STATE OF  
 WEST VIRGINIA  
 LAND SURVEYOR  
 PLACE SEAL HERE

STATE OF WEST VIRGINIA  
 Division of Environmental Protection  
 OFFICE OF OIL AND GAS

DATE 12-31, 2003  
 OPERATOR'S WELL NO. #1  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS") PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
 STATE 47 COUNTY 013 PERMIT 3369-PLUG

LOCATION: ELEVATION 760 WATER SHED WEST FORK OF LITTLE KANAWHA RIVER  
 DISTRICT WASHINGTON COUNTY CALHOUN  
 QUADRANGLE CHLOE 7.5

SURFACE OWNER MARLAN ZWOLL ACREAGE 20  
 OIL & GAS ROYALTY OWNER A. D. GROVES LEASE ACREAGE 20  
 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 THRU BIG INJUN ESTIMATED DEPTH 2,100'  
 WELL OPERATOR RESERVE OIL & GAS DESIGNATED AGENT J. SCOTT FRESHWATER  
 ADDRESS 929 CHARLESTON ROAD ADDRESS 929 CHARLESTON ROAD  
SPENCER, WV 25276 SPENCER, WV 25276

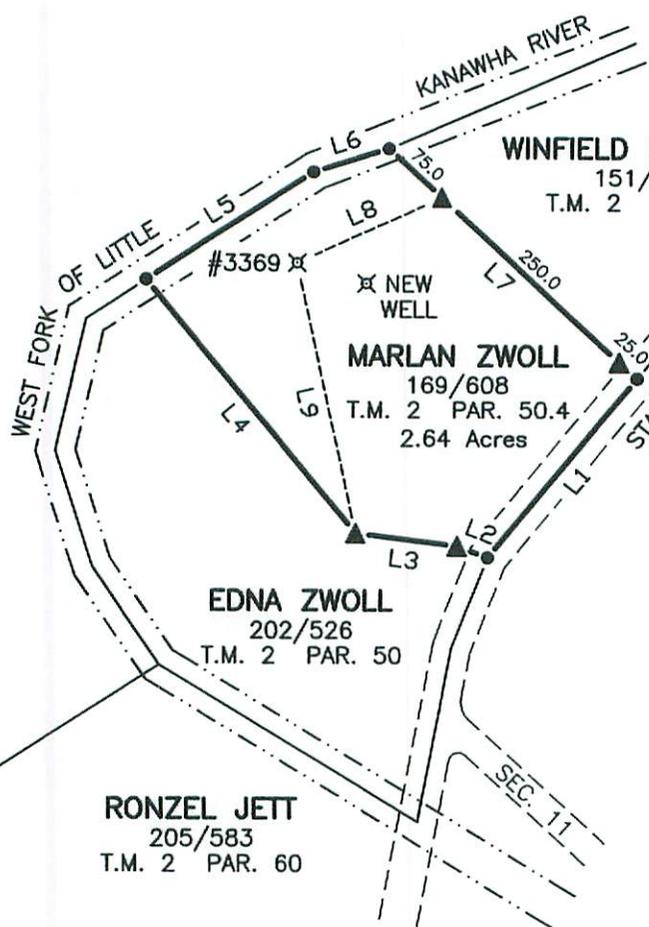
DAVID CONLEY  
79/321  
T.M. 2 PAR. 46

WINFIELD STARCHER  
151/138  
T.M. 2 PAR. 49

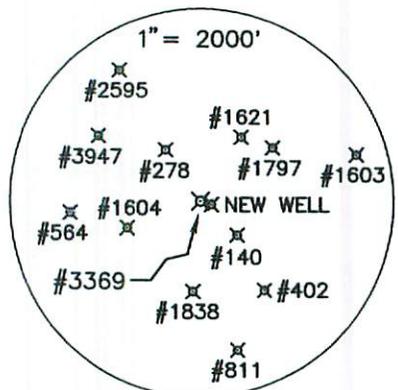
MARLAN ZWOLL  
169/608  
T.M. 2 PAR. 50.4  
2.64 Acres

EDNA ZWOLL  
202/526  
T.M. 2 PAR. 50

RONZEL JETT  
205/583  
T.M. 2 PAR. 60



LINE	BEARING	DISTANCE
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(BOUNDARY TIE TO WELL)		
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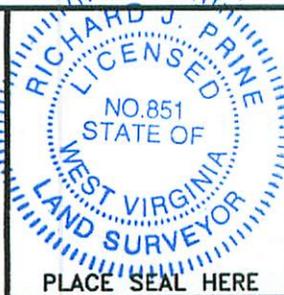
Received  
Office of Oil & Gas  
NOV 19 2015

LEGEND  
▲ IRON ROD FOUND  
● CALCULATED POINT

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

FILE NO. \_\_\_\_\_  
DRAWING NO. 03-408-1  
SCALE 1" = 200'  
MINIMUM DEGREE OF ACCURACY 1 IN 200  
PROVEN SOURCE OF ELEVATION AT RT. 16 BRIDGE  
OVER WEST FORK IN ORMA  
ELEV = 767

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) *[Signature]*  
R.P.E. \_\_\_\_\_ L.L.S. 851



STATE OF WEST VIRGINIA  
Division of Environmental Protection  
OFFICE OF OIL AND GAS

DATE 12-31, 2003  
OPERATOR'S WELL NO. #1  
API WELL NO. \_\_\_\_\_

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

LOCATION: ELEVATION 760 WATER SHED WEST FORK OF LITTLE KANAWHA RIVER  
DISTRICT WASHINGTON COUNTY CALHOUN  
QUADRANGLE CHLOE 7.5

SURFACE OWNER MARLAN ZWOLL ACREAGE 20  
OIL & GAS ROYALTY OWNER A. D. GROVES LEASE ACREAGE 20  
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 THRU BIG INJUN ESTIMATED DEPTH 2,100'  
WELL OPERATOR RESERVE OIL & GAS DESIGNATED AGENT J. SCOTT FRESHWATER  
ADDRESS 929 CHARLESTON ROAD ADDRESS 929 CHARLESTON ROAD  
SPENCER, WV 25276 SPENCER, WV 25276

1303369P

WW-4A  
Revised 6-07

1) Date: \_\_\_\_\_  
2) Operator's Well Number \_\_\_\_\_  
*Ammon* ~~400~~ Groves #1 \_\_\_\_\_  
3) API Well No.: 47 - 13 - 03369

**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>Marian Zwoil</u> <i>W</i> ✓	Name _____
Address <u>17708 South Calhoun Highway</u>	Address _____
<u>Orma, WV 25268</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Joe Taylor</u>	(c) Coal Lessee with Declaration
Address <u>1478 Claylick Road</u>	Name _____
<u>Ripley, WV 25271</u> <i>JT</i>	Address _____
Telephone <u>304-380-7469</u>	_____

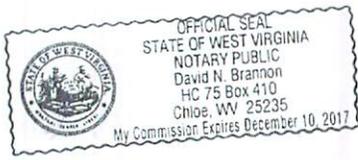
**TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:**

- (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	<u>Reserve Oil &amp; Gas, Inc.</u>	<b>Received</b> <b>Office of Oil &amp; Gas</b> <b>NOV 19 2015</b>
By:	<i>[Signature]</i>	
Its:	<u>Vice President</u>	
Address	<u>929 Charleston Road</u>	
Telephone	<u>304-927-5228</u>	



Subscribed and sworn before me this 18<sup>th</sup> day of November 2015  
David N. Brannon Notary Public  
My Commission Expires December 10, 2017

**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).

**SURFACE OWNER WAIVER**

Operator's Well  
Number

Amma  
~~AD~~. Groves #1

**INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A**

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.  
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

**Time Limits and methods for filing comments.** The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

**Comments must be in writing.** Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

**If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.**

**VOLUNTARY STATEMENT OF NO OBJECTION**

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON  
ETC.

FOR EXECUTION BY A CORPORATION,

  
Signature

Date 11/09/15

Name \_\_\_\_\_  
By \_\_\_\_\_  
Its \_\_\_\_\_

Signature

Date

Received  
Office of Oil & Gas  
NOV 19 2015

1303369P

WW-4B

API No. 47-13-03369  
Farm Name Groves  
Well No. Amv AD. Groves #1

**INSTRUCTIONS TO COAL OPERATORS  
OWNERS AND LESSEE**

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

**WAIVER**

The undersigned coal operator \_\_\_\_/ owner \_\_\_\_/ lessee \_\_\_\_/ of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Its \_\_\_\_\_

Received  
Office of Oil & Gas  
NOV 19 2015

*No known operator, owner, or lessee  
of workable coalbed/seam on this tract.*

1303369P

WW-9  
(2/15)

API Number 47 - 13 - 03369  
Operator's Well No. AD-Groves #1

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

*ASMA*

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Reserve Oil & Gas, Inc. OP Code \_\_\_\_\_

Watershed (HUC 10) West Fork Little Kanawha River Quadrangle Chloe

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  *Steel above ground pit*

If so, please describe anticipated pit waste: salt water

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? 20

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: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. N/A **Received**  
*-If oil based, what type? Synthetic, petroleum, etc.* **Office of Oil & Gas**

Additives to be used in drilling medium? \_\_\_\_\_ **NOV 19 2015**

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

*-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 *[Signature]*

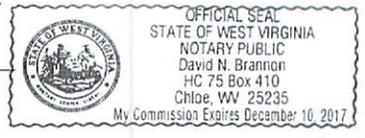
Company Official (Typed Name) Scott Freshwater

Company Official Title Vice President

Subscribed and sworn before me this 18<sup>th</sup> day of November, 2015

*[Signature]* Notary Public

My commission expires December 10, 2017



Reserve Oil & Gas, Inc.

Proposed Revegetation Treatment: Acres Disturbed 1.5 Prevegetation pH 5.5

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type \_\_\_\_\_

Fertilizer amount 0.25 lbs/acre

Mulch Hay 2 Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

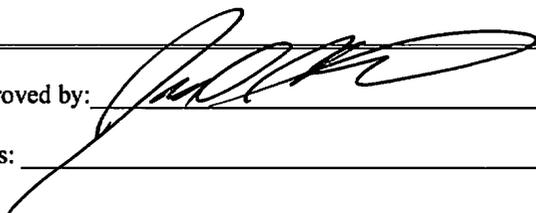
Seed Type	lbs/acre
Orchard Grass	25
Red Top Clover	15

Seed Type	lbs/acre
Ladino Clover	5
KY 31	40

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.

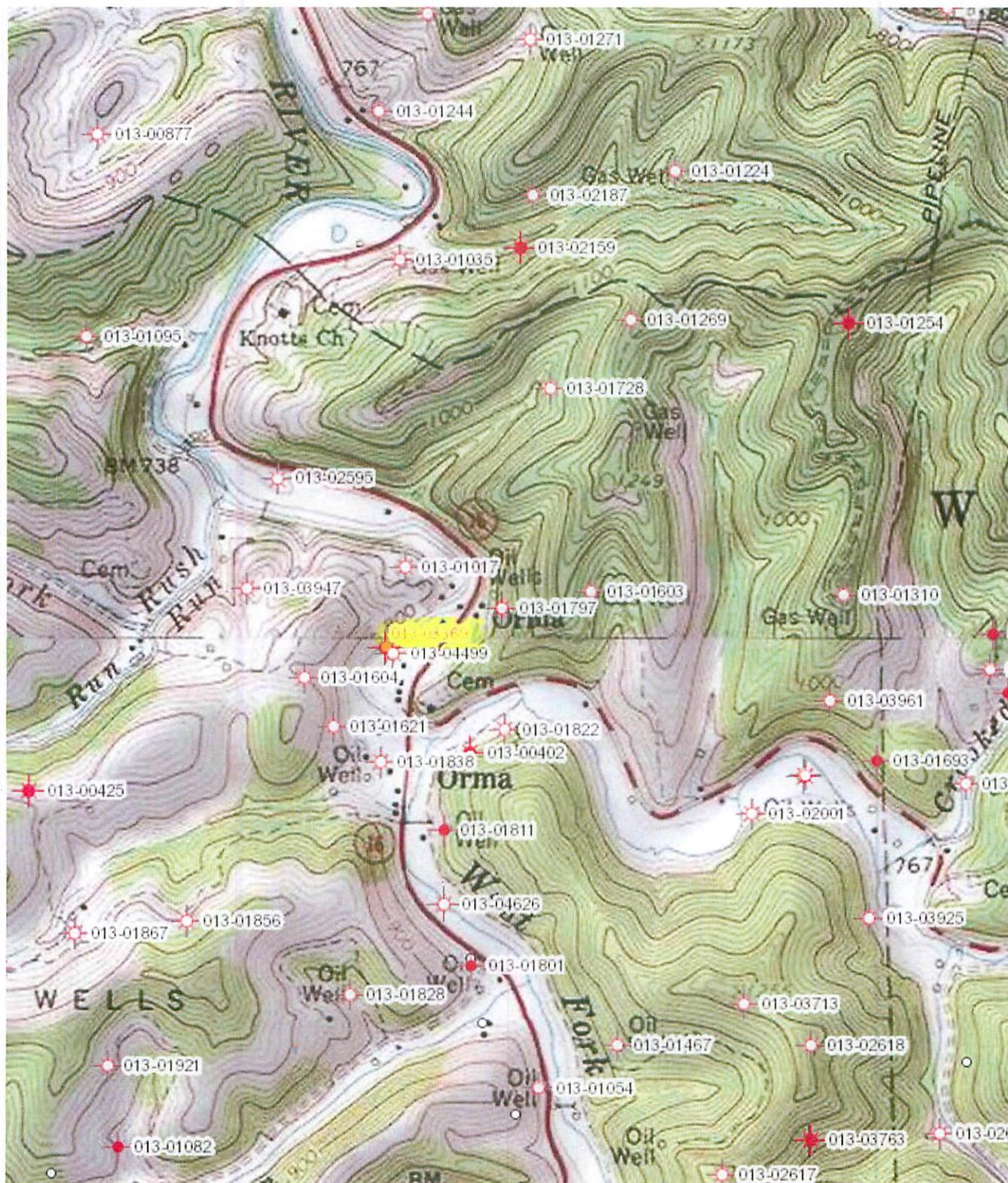
Plan Approved by: 

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

Received  
Office of Oil & Gas  
NOV 19 2015

Title: OOB Inspector Date: 11-17-15

Field Reviewed? ( ) Yes ( X ) No



WW-7  
8-30-06



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

API: 47-013-3369 WELL NO.: A.D. Groves #1

FARM NAME: Amma Groves

RESPONSIBLE PARTY NAME: Reserve Oil & Gas, Inc.

COUNTY: Calhoun DISTRICT: Washington

QUADRANGLE: Chloe

SURFACE OWNER: Marlan Zvoll

ROYALTY OWNER: Marlan Zvoll

UTM GPS NORTHING: 428901 7.0

UTM GPS EASTING: 491277 GPS ELEVATION: 760

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.

Log. Doyle Land Manager 10/27/15  
Signature Title Date

Received  
Office of Oil & Gas

NOV 19 2015