



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

May 19, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-1502647, issued to REED 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: GOSHORN 11A
Farm Name: REED, JAMES W. JR., ETAL

API Well Number: 47-1502647

Permit Type: Plugging

Date Issued: 05/19/2015

Promoting a healthy environment.

05/22/2015

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

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.

Form WV DEP

WW-4A
Revised 8-07

1) Date: _____
2) Operator's Well Number
Goshorn 11A
3) API Well No.: 47 - 15 - 02647

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: James W Reed Jr et al Address: _____
 Address: 1314 Virginia St East
Charleston WV 25301

(b) Name: _____ Address: _____
 Address: _____

(c) Name: _____ Address: _____
 Address: _____

5) (a) Coal Operator Name: _____ Address: _____
 Address: _____

(b) Coal Owner(s) with Declaration Name: _____ Address: _____
 Address: _____

(c) Coal Lessee with Declaration Name: _____ Address: _____
 Address: _____

6) Inspector Name: Eddie Garner Address: P.O. Box 821
Spencer WV 25276 Telephone: _____

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

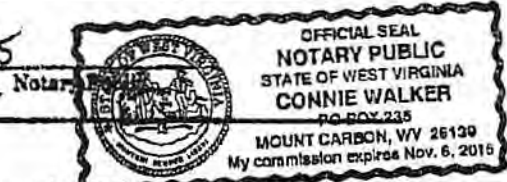
- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well to be plugged and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverse 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 persons named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator: Reed Gas
 By: [Signature]
 Title: Vice President
 Address: 1314 Virginia Street East
Charleston WV 25301
 Telephone: 304 345 4518

Subscribed and sworn before me this 20 day of April, 2015
 My Commission Expires 7/1/16 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 denriva@dep.state.wv.gov.

Received
APR 21 2015

Office of Oil and Gas
WV Dept. of Environmental Protection

05/22/2015

7014 1200 0000 4936 6355

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

CHARLESTON WV 25301

Postage	\$ 0.49
Certified Fee	\$3.30
Return Receipt Fee (Endorsement Required)	\$2.70
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$ 6.49



Sent To
Reed Brothers Inc
 Street, Apt. No.,
 or PO Box No. *1314 Virginia St East*
 City, State, ZIP+4
Charleston WV 25301

PS Form 3800, August 2006 See Reverse for Instructions



Received

APR 21 2015

Office of Oil and Gas
WV Dept. of Environmental Protection

WW-4B
Rev. 2/01

1) Date 4-6-15, 2015
2) Operator's Well No. Goshorn 11A
3) API Well No. 47-15-02647

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 1059' Watershed Wade Fork
District Union County Clay ~~Quadrangle~~ Elkhurst

6) Well Operator Reed Gas 7) Designated Agent _____
Address 1314 Virginia Street Address _____
Charleston WV

8) Oil and Gas Inspector to be notified
Name Eddie Gainer
Address P.O. Box 821
Spencer WV 25276

9) Plugging Contractor
Name Duckworth Well Service
Address P.O. Box 6871
Charleston WV 25362

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

- Cement 2250' - 2050.1350'
- Cement 1300' - 1200'
- Cement 800' - 700'
- Cement 100' - Surface

Erect monument with API numbers.
G&I between all plugs/

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

Work order approved by inspector _____



Received
Date 4/21/15
APR 21 2015

Office of Oil and Gas
WV Dept. of Environmental Protection

05/22/2015

WR - 35
Rev (5-01)

Date: 03/28/03
API # 47-15-02647

65

State of West Virginia
Department of Environmental Protection
Office of Oil & Gas
Well Operators Report of Well Work

Operators well name: Goshorn 11A
Farm Name: Reed James W. Jr. Etal Operator # 41350

Location: Elevation 1259 Quadrangle: Elkhurst
District Union County: Clay
Latitude: 310 Feet South of 38 Deg 25 Min. 0 Sec.
Longitude: 360 Feet West of 81 Deg 12 Min. 30 Sec.

Company: Reed Gas Inc.
Address: 1206 Kanawha Blvd. E. - Suite 201
Charleston, WV 25301

Agent:	James W. Reed Jr.	Casing & Tubing	Used in Drilling	Left in Well	Cement Fill up Cu Ft				
Inspector	Carlos Hively					Sks		CU FT	
Date Permit Issued	11/13/01	13 3/8	35		FT				
Date Well Work Commenced	01/13/01	8 5/8	386	386	FT	155	Sks 215	CU FT	
Date Well Work Completed	05/03/02	4 1/2		2265	FT	240	Sks 360	CU FT	
Verbal Plugging:		2 3/8		2105	FT	NA	Sks	CU FT	
Date Permission Granted On					FT		Sks	CU FT	
Rotary X Cable	RIG								
Total Depth (feet):	2300								
Fresh Water Depth:	NA								
Salt Water Depth	560								
Is coal being mined in area ?	N								
Coal Depths									

OPEN FLOW DATA:

Producing Formation: Weir Pay zone depth (ft) 2123 to 2127
GAS: Initial Open Flow: NA MCF/d OIL: Initial Open Flow: Bbl/d
Final Open Flow: 60 MCF/d Final Open Flow: Bbl/d
Time of open flow between initial and final tests 6 Hours
Static rock pressure: 264 PSI (surface pressure) after 48 Hours

Second producing formation: Big Lime Pay zone depth (ft) 2044 to 2048
GAS: Initial Open Flow: NA MCF/d OIL: Initial Open Flow: Bbl/d
Final Open Flow: NA MCF/d Final Open Flow: Bbl/d
Time of open flow between initial and final tests NA Hours
Static rock pressure: NA PSI (surface pressure) after NA Hours

Received

APR 21 2005

Office of Oil and Gas
WV Dept. of Environmental Protection

RECEIVED
Office of Oil & Gas
Permitting
APR 01 2003
WV Department of
Environmental Protection

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

Signed: Mark Richards
By: _____
Date: 3/28/03

CLAY 2647

05/22/2015

State of West Virginia
Department of Environmental Protection
Office of Oil & Gas

Operators well name: Goshom 11A
Farm Name: Reed James W. Jr. Etal Operator # 41350
Company: Reed Gas Inc.
Address: 1206 Kanawha Blvd. E.- Suite 201
Charleston, WV 25301

GEOLOGICAL RECORD

Description:	Top	Bottom
Soil	0	30
Sand & Shale	30	959
Eagle Shale	959	968
Shale Break	968	1070
Salt Sands w/ intermittent Shale	1070	1695
Red Rock & Gray Shale	1695	1880
Little Lime	1880	1910
Pencil Cave	1910	1950
Big Lime	1950	2050
Sand & Shale	2050	2120
Upper Weir	2120	2146
Shale	2146	2300

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Office of Oil & Gas
Permitting

APR 01 2003

WV Department of
Environmental Protection

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APR 21 2015

Office of Oil and Gas
Permitting

Reed Brothers Limited Partnership

Well Completion Report

Well Name Goshorn 11A Date 03-May-02
 API # 47-015-22647-0000

Stage 1

Formation	<u>Weir</u>	<u>Perfs</u>	<u>2123 - 2127</u>
Break down PSI	<u>1720</u>	Avg PSI	<u>1762</u> ISDP <u>1730</u>
Average Pump Rate:	<u>16</u>	BPM	Fluid System <u>75% Foam</u>
Total Sand	<u>24,241</u>	LBs	Fluid to Recover <u>231</u> BBls
Max Sand Conc.	<u>3</u>	Lbs/gal	Acid <u>15%</u> <u>500</u> Gals
Nitrogen	<u>231,777</u>	SCF	Acid <u>28%</u> <u>0</u> Gals

Stage 2

Formation	<u>Big Lime</u>	<u>Perfs</u>	<u>2044 - 2083</u>
Break down PSI	<u>1850</u>	Avg PSI	<u>3700</u> ISDP <u>1730</u>
Average Pump Rate:	<u>18</u>	BPM	Fluid System <u>65% Foam</u>
Total Sand	<u>5,000</u>	LBs	Fluid to Recover <u>100</u> BBls
Max Sand Conc.	<u>2.5</u>	Lbs/gal	Acid <u>500</u> Gals
Nitrogen	<u>214,354</u>	SCF	Acid <u>28%</u> <u>0</u> Gals

Stage 3

Formation	<u>NA</u>	<u>Perfs</u>	
Break down PSI		Avg PSI	ISDP
Average Pump Rate:		BPM	Fluid System
Total Sand		LBs	Fluid to Recover <u> </u> BBls
Max Sand Conc.		Lbs/gal	Acid <u> </u> Gals
Nitrogen		SCF	Acid <u>28%</u> <u>0</u> Gals

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Office of Oil & Gas
Permitting

APR 01 2003

WV Department of
Environmental Protection

Stage 4

Formation	<u>NA</u>	<u>Perfs</u>	
Break down PSI		Avg PSI	ISDP
Average Pump Rate:		BPM	Fluid System
Total Sand		LBs	Fluid to Recover <u> </u> BBls
Max Sand Conc.		Lbs/gal	Acid <u> </u> Gals
Nitrogen		SCF	Acid <u>28%</u> <u>0</u> Gals

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APR 21 2015

Office of Oil and Gas
Environmental Protection

MAY 2007

Total Sand	<u>29,241</u>	LBs	Total Fluid	<u>331</u>	BBls
Total Nitrogen	<u>446,131</u>	SCF	Total Acid	<u>1000</u>	Gals

Reed Brothers Limited Partnership

05/22/2015

WW-9
Rev. 1/05

Page _____ of _____
API Number 47- 15 - 02647
Operator's Well No. Cashon 112

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 James Reed Gas OP Code _____

Watershed Wade Fork Outcrop Elkhurst

Thickness 1250' Corey Clay Dark Union

Description of anticipated Pit Waste: Gel water

Will a synthetic liner be used in the pit? _____

Proposed Disposal Method For Treated Pit Wastes:

- _____ Land Application
- _____ Underground Injection (UIC Permit Number _____)
- _____ Reuse (in API Number _____)
- _____ Off Site Disposal (Supply form WW-9 for disposal location)
- _____ Other (Specify _____)

Proposed Work For Which Pit Will Be Used:

- _____ Drilling
- _____ Wellbore
- _____ Other (Specify _____)
- _____ Sealing
- _____ Plugging

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2009, 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 Charles Reed *Charles Reed*

Company Official (Typed Name) Charles Reed

Company Official Title Vice President

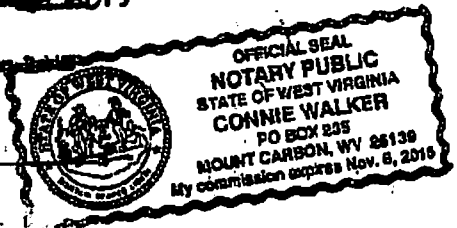
Subscribed and sworn before me this 20 day of April 2015

Connie Walker

Notary Public

My commission expires _____

7/06/2015

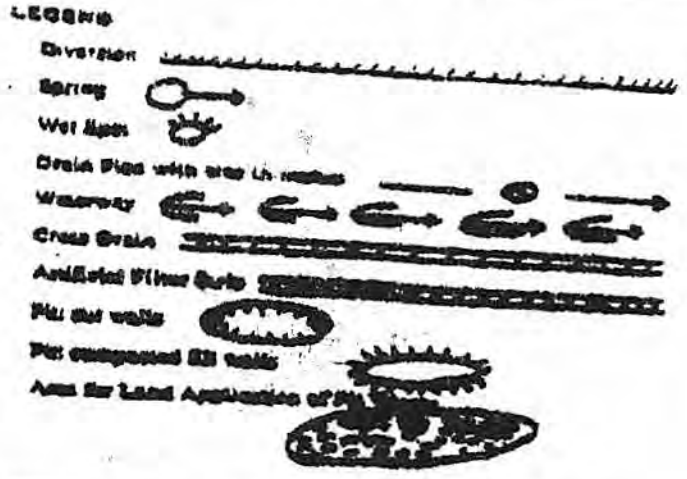


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Office of Oil and Gas
WV Dept. of Environmental Protection

05/22/2015

Operator's Well No. _____



Proposed Revegetation Treatment: Acres Disturbed _____ Revegetation pH _____

Lime _____ 3 _____ Ton/s/acre or 10 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	Tons/acre

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

Photocopied section of involved 7.5' topographic sheet.

Man Approved by: _____
 Comments: _____

Title: Inspector Date: 4/21/15

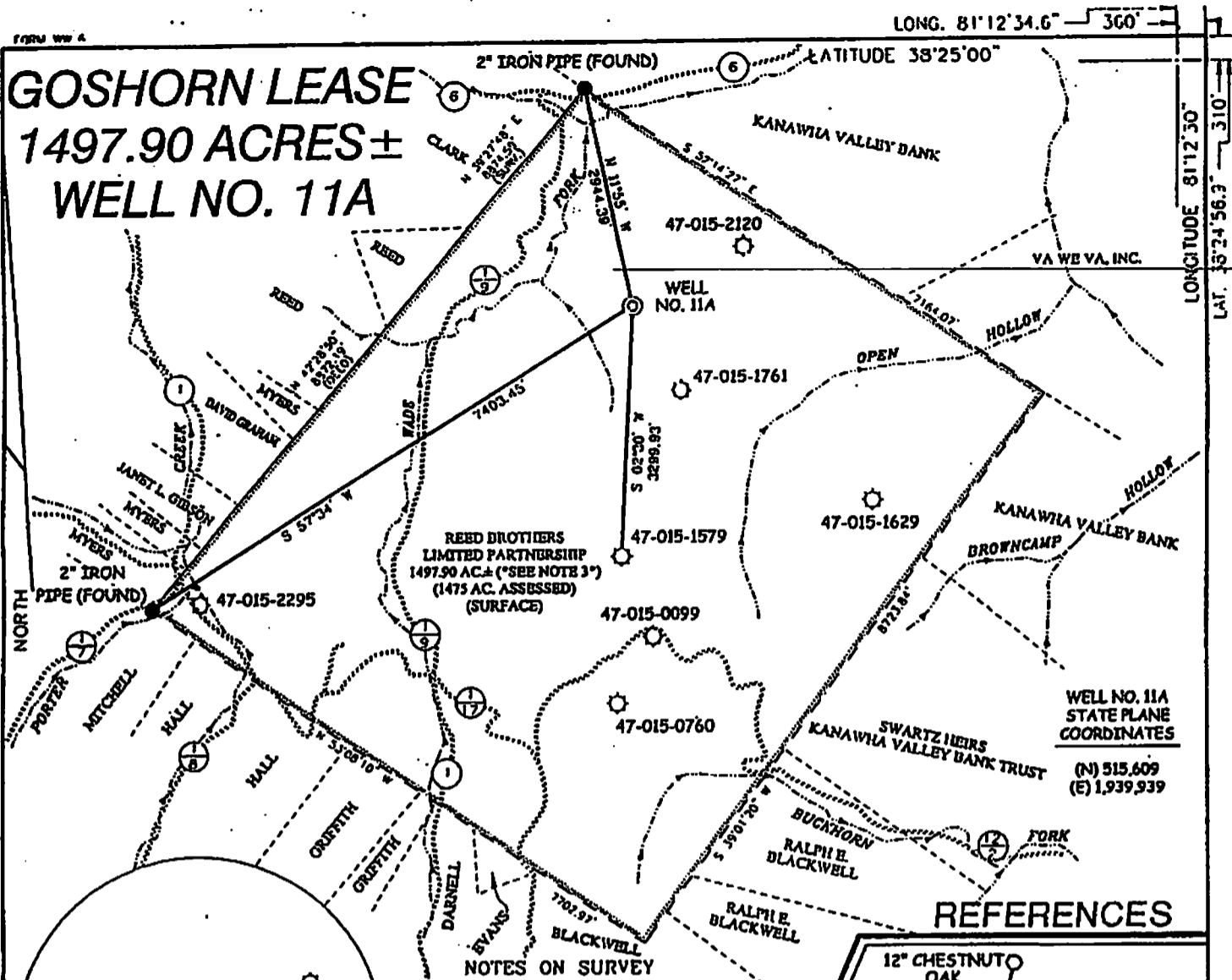
Field Reviewed? Yes No

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 APR 21 2015
 Office of Oil and Gas
 WV Dept. of Environmental Protection

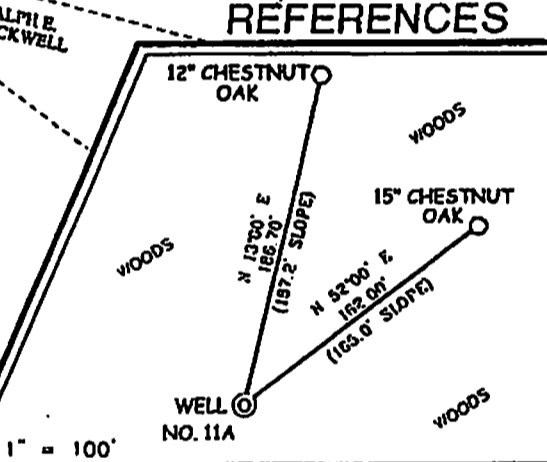
GOSHORN LEASE

1497.90 ACRES ±

WELL NO. 11A



- NOTES ON SURVEY**
1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.
 2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 10/17/01.
 3. LEASE BOUNDARY AND ACREAGE SHOWN HEREON TAKEN FROM A PLAT DATED 03/01/88 AS PREPARED BY ALBERT J. MILLER ENTITLED "PLAT SHOWING A SURVEY OF ONE LINE OF THE BRUCE B. CAMERON 3200 AND 5088.8 ACRE TRACTS".
 4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF CLAY COUNTY IN JUNE, 2000.
 5. WELL LAT./LONG. ESTABLISHED BY OGPS(SUBMETER MAPPING GRADE).



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.

P.S. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 DATE OCTOBER 22 2001
 OPERATOR'S WELL NO. GOSHORN NO. 11A
 API WELL NO. 47-15-02647
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4897P11A (114-16)
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 1063'
 SCALE 1" = 2000'

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

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

LOCATION : ELEVATION 1259' WATERSHED WADE FORK
 DISTRICT UNION COUNTY CLAY QUADRANGLE ELKHURST 7.5'

SURFACE OWNER JAMES W. REED, JR. ET AL ACREAGE 1497.90
 ROYALTY OWNER GOSHORN HEIRS LEASE ACREAGE 1497.90

PROPOSED WORK : DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF
 FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION DEVONIAN SHALE
 ESTIMATED DEPTH 5000'

WELL OPERATOR REED GAS, INC. DESIGNATED AGENT JAMES W. REED, JR.
 ADDRESS 1206 KANAWHA BLVD, SUITE 201, CHARLESTON, WV 25301 ADDRESS 1206 KANAWHA BLVD, SUITE 201, CHARLESTON, WV 25301

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03/22/2015

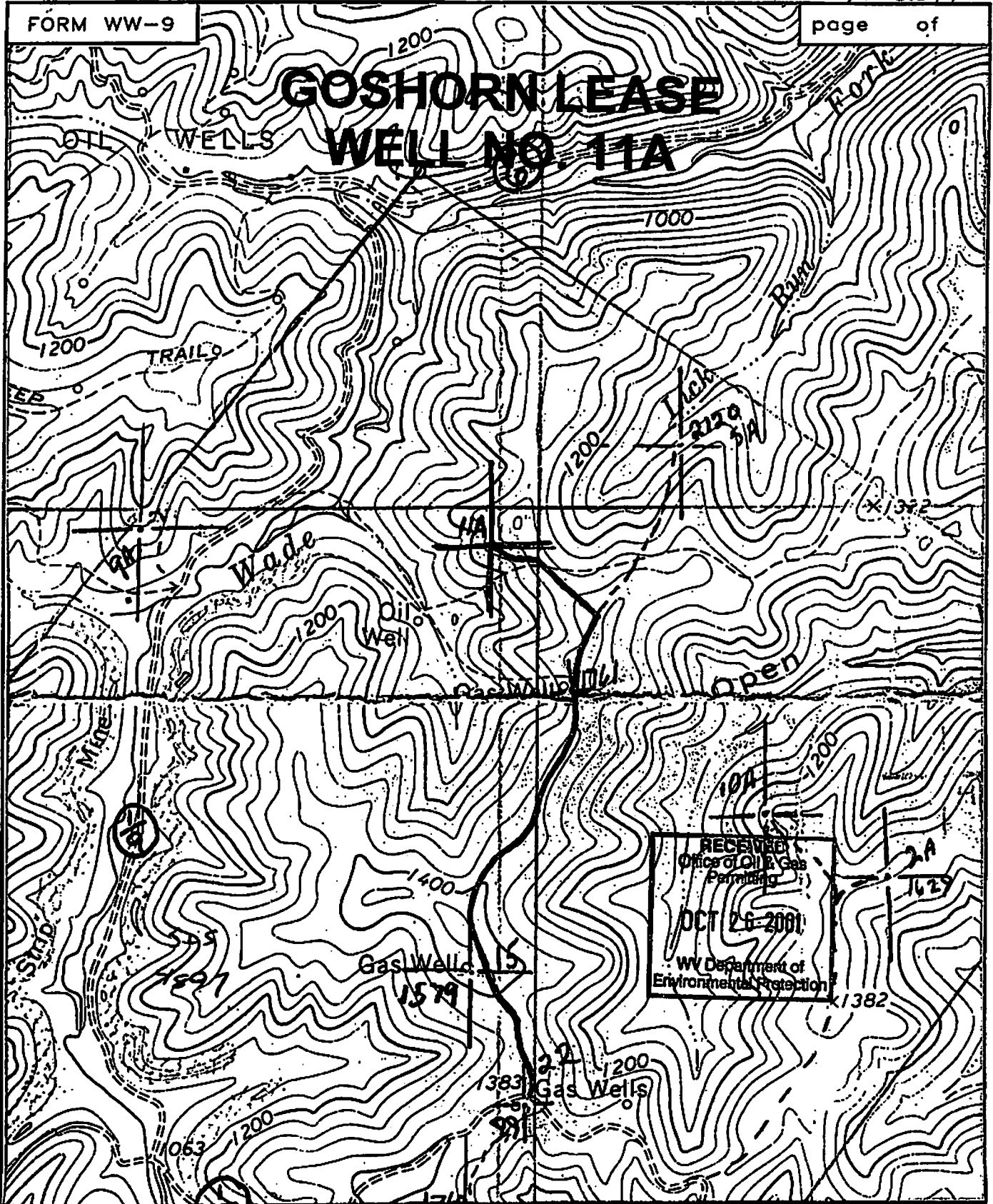
CLAY COUNTY NAME PERMIT 2647

15-02647

FORM WW-9

page of

GOSHORN LEASE WELL NO. 11A



SMITH LAND SURVEYING
P.O. BOX 150 GLENVILLE, WV, 26351

TOPO SECTION OF Elkhurst 7.5'

FILE NO. 4897

DATE 10/23/01 SCALE 1"=1000'

05/22/2015



Longitude: -81.209545
Latitude: 33.415997

TENNESSEE

VALLEY VIEW

PLEASANT



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

API: 47-15-02647 WELL NO.: 11A

FARM NAME: Goshorne

RESPONSIBLE PARTY NAME: Charles Reed Gas Inc.

COUNTY: Clay DISTRICT: UWIDN

QUADRANGLE: Elkhurst

SURFACE OWNER: Reed Brothers

ROYALTY OWNER: Reed Brothers

UTM GPS NORTHING: 4251982

UTM GPS EASTING: 481714 GPS ELEVATION: 1259'

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 Duckworth Cont.
Signature Title

4-6-15
Date

Received

APR 21 2015

Office of Oil and Gas
Department of Environmental Protection