



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 06, 2014

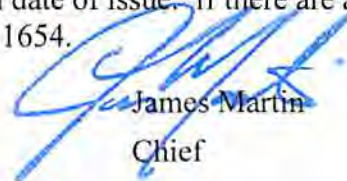
WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-3905426, 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: AL-104
Farm Name: APPALACHIAN LAND COMPANY
API Well Number: 47-3905426
Permit Type: Plugging
Date Issued: 08/06/2014

Promoting a healthy environment.

08/08/2014

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.

WV-4B
Rev. 2/01

1) Date 6/10/14 20 14
2) Operator's
Well No. AL-104
3) API Well No. 17-39-5426P

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 / Liquid injection / Waste disposal
(If "Gas, Production or Underground storage) Deep / Shallow

5) Location: Elevation 1376' Watershed Branch to Blue Creek
District Elk County Kanawha Quadrangle Mammoth

6) Well Operator Reed Gas Inc. 7) Designated Agent James W. Reed Jr.
Address Virginia Street Address Virginia St.
n Charleston WV 25201 Charleston WV 255201

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Terry Urban Name Duckworth Well Service
Address P.O. Box 2207 Address P.O. Box 6872
Clendnein WV 25045 Charleston WV

1/2

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

~~Cement 2427: 2204'
Cenent 1425' 1325'
Cement 100' 0'~~

SEE Plugging
Diagram

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

Work order approved by inspector

[Handwritten Signature]

Date

Received
30-14
2014

Office of Oil and Gas
WV Dept. of Environmental Protection
08/08/2014



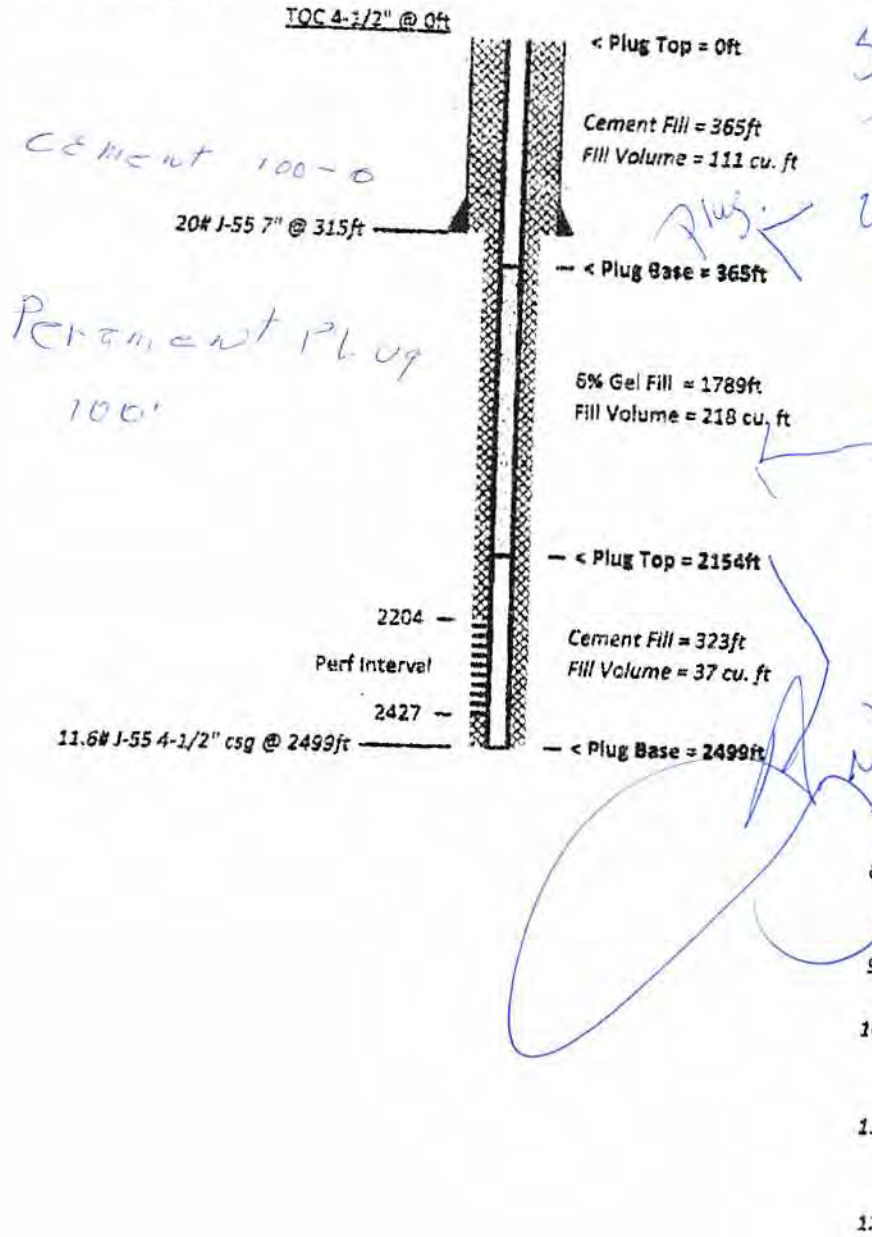
172 Odessa Drive
Glen, WV 25088
(304) 548.7142

39-5426

Pull tubing

Well Plugging Work Order

API #: 47-039-05426P
Operator: Reed Gas, Inc.
Well Name: AL-104



Received
JUL 1 2014
Division of Oil and Gas
West Virginia Department of Environmental Protection

08/08/2014

WR - 35
Rev (5-01)

Date: 04/01/03
API # 47-039-05426

AL 104

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

Operators well name: AL 104
Farm Name: Appalachian Land Company Operator # 41350

Location: Elevation 1376 Quadrangle: Mammoth
District Eik County: Kanawha
Latitude: 8300 Feet South of 38 Deg 22 Min. 30 Sec.
Longitude: 5200 Feet West of 81 Deg 15 Min. 0 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			FT	Sks	FT	Sks	CU FT	CU FT
Date Permit Issued	<u>08/31/01</u>	<u>7</u>	<u>315</u>	<u>315</u>	<u>FT</u>	<u>75</u>	<u>Sks</u>	<u>104</u>	<u>CU FT</u>
Date Well Work Commenced	<u>10/09/01</u>	<u>4 1/2</u>		<u>2499</u>	<u>FT</u>	<u>135</u>	<u>Sks</u>	<u>337</u>	<u>CU FT</u>
Date Well Work Completed	<u>11/09/01</u>				<u>FT</u>		<u>Sks</u>		<u>CU FT</u>
Verbal Plugging:		<u>2 3/8</u>		<u>2397</u>	<u>FT</u>	<u>NA</u>	<u>Sks</u>		<u>CU FT</u>
Date Permission Granted On					<u>FT</u>		<u>Sks</u>		<u>CU FT</u>
Rotary X Cable RIG									
Total Depth (feet):	<u>2528</u>								
Fresh Water Depth:									
Salt Water Depth:									
Is coal being mined in area?	<u>N</u>								
Coal Depths:									

OPEN FLOW DATA.

Producing Formation Weir/ Keener/ Line Pay zone depth (ft) 2206 to 2423
GAS: Initial Open Flow: 385 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 6 Hours
Static rock pressure: 540 PSI (surface pressure) after 72 + Hours

Second producing formation: Pay zone depth (ft) to
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: PSI (surface pressure) after Hours

NOTE: ON BACK OF THESE FORM PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRAC FURING 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 Ruckig
By:
Date: 4/10/03

Received
JUL 10 2014
KANAWHA
SUSAN
Office of Oil and Gas
WV Dept. of Environmental Protection
08/08/2014

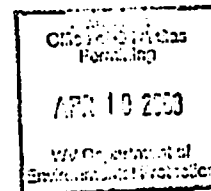
State of West Virginia
Department of Environmental Protection
Office of Oil & Gas

Operators well name: AL 104
Farm Name: Appalachian Land Company Operator # 41350
Company: Reed Gas Inc.
Address: 1206 Kanawha Blvd. E.- Suite 201
Charleston, WV 25301

GEOLOGICAL RECORD

Description:	Top	Bottom
Clay/Sand	0	12
Sand & Shale	12	1007
Eagle Shale	1007	1020
Rosedale Sand	1020	1086
Shale Break	1086	1020
Salt Sands With Intermittent Shales	1020	1810
Red Rock/ Grey Shale	1810	2005
Little Lime	2005	2083
Pencil Cave	2083	2080
Big Lime	2080	2242
Keener	2242	2257
Injun	2257	2268
Shale Break	2268	2420
Weir	2420	2442
Shale	2442	2500

Additional Comments:



Handwritten signature

JUL 1 2004

Office of Oil and Gas
WV Dept. of Environmental Protection
08/08/2014

WR - 35
Rev (5-01)

Date: 04/01/03
API # 47-039-05426

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

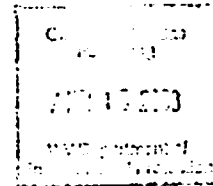
Operators well name: AL 104
Farm Name: Appalachian Land Co. Operator # 41350
Company: Reed Gas Inc.
Address: 1206 Kanawha Blvd. E. - Suite 201
Charleston, WV 25301

Stimulation Record

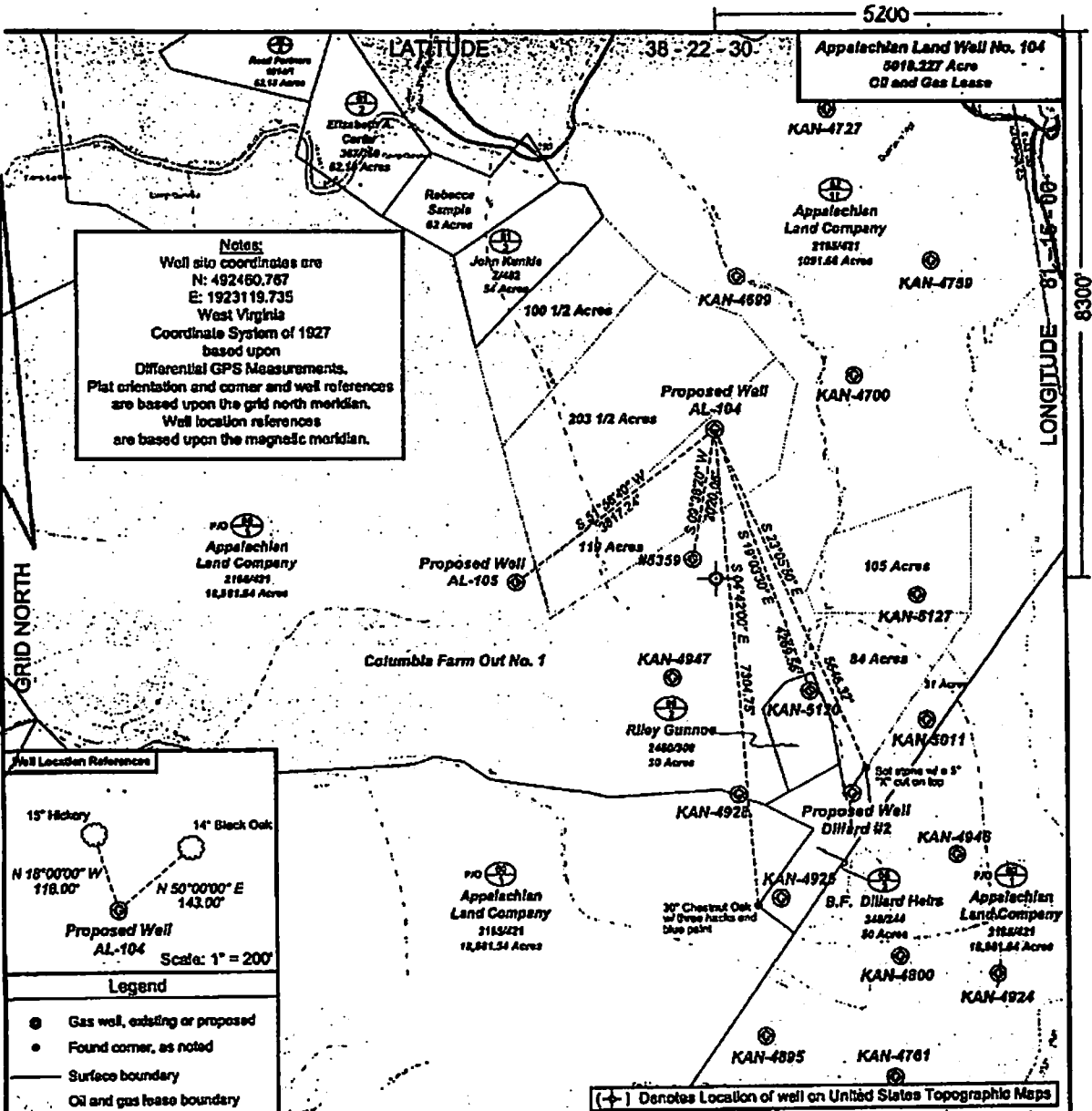
Stage 1) WEIR. Frac at 20 BPM with 75% foam system. Placing 30,957 lbs 20/40 sand using 176 BBIs treated fluid, 500 gals Hcl acid, 383,920 scf nitrogen. Average treating pressure 3200 PSI. Max sand Conc. 3 PPG Perfs - 25 shots from 2415 to 2423

Stage 2) KEENER 16 Shots from 2263 to 2267. Frac at 16 BPM 75% foam system, placing 24,864 lbs 20/40 Sand using 150 bbls treated fluid, 500 gals 15% Hcl acid & 2,8,816 scf Nitrogen. Average treating PSI 2450 Max sand Conc. 3 PPG

Stage 3) Big Lime 16 Shots from 2204 to 2229. Frac at 16 BPM 65% foam system, placing 5,676 lbs 20/40 using 95 bbls treated fluid, 500 gals 15% Hcl acid, 600 gals 28% hcl acid & 157,309 scf nitrogen. Average treating PSI 3350 Max sand Conc. 2 PPG



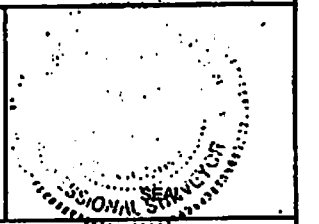
Received
JUL 08 11 2014
Office of Oil and Gas
WV Dept. of Environmental Protection
Office of Oil and Gas
WV Dept. of Environmental Protection
08/08/2014



FILE No. 37-14-E-01
 DRAWING No. 3714E01.dwg
 SCALE: 1" = 200'
 MINIMUM DEGREE OF
 ACCURACY: 1/2400
 PROVEN SOURCE OF
 ELEVATION U.S.G.S. MAMM
Station 677P Elevation 1811.57

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.

[Signature]
 P.S. 835



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DATE: August 28 20 01
 OPERATOR'S WELL No. AL-104
 API WELL No. _____

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____ STATE 47 COUNTY 039 PERMIT 05426
 (IF "GAS") PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW

LOCATION: ELEVATION: 1378.59' WATER SHED: Little Laurel Run and Laurel Run of Blue Creek
 DISTRICT: Elk COUNTY: Kanawha

QUADRANGLE: Mammoh

SURFACE OWNER: Appalachian Land Company ACREAGE: 18,981.54 Ac.
 OIL & GAS ROYALTY OWNER: Pine Mountain Oil and Gas LEASE ACREAGE: 5018.227 Ac.
 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: Wak ESTIMATED DEPTH: 2600'
 WELL OPERATOR: Reed Gas, Inc. DESIGNATED AGENT: James W. Reed, Jr.
 ADDRESS: 1208 Kanawha BLVD. E., Suite 201 ADDRESS: 1208 Kanawha BLVD. E., Suite 201
Charleston, WV 25301 Charleston, WV 25301

KAN 5426

Office of Oil and Gas
 Environmental Protection
 08/08/2014

1) Date: 6/10/14
 2) Operator's Well Number AL-104
 3) API Well No.: 47 . 39 . 5426P

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>Appalachian Land Company</u>	Name <u>Wabco</u>
Address <u>Blue Eagle Land Co</u>	Address _____
<u>700 Virginia</u>	
(b) Name <u>Charleston, WV 25302</u>	(b) Coal Owner(s) with Declaration
Address _____	Name _____
	Address _____
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Terry Urban</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 1207</u>	Name _____
<u>Clendenin WV 25045</u>	Address _____
Telephone <u>304-290-6782</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 log and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-8

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

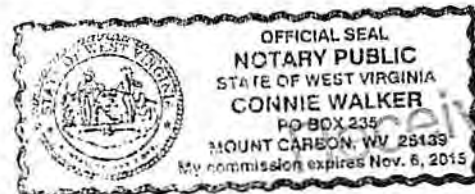
Taken notice that under Chapter 20-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well or the location described on the attached Application and approved 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 owner(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator Reed Gas Inc.
 By: James W. Reed, Jr.
 Its: President
 Address Virginia Street
 Telephone 304-345-3817

Subscribed and sworn before me this 24 day of June, 2014
Connie Walker Notary Public
 My Commission Expires Nov 6, 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 depr@dep.wv.gov.



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 JUL 11 2014
 08/08/2014

7009 1410 0001 3664 6028

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Restricted Delivery Fee (Endorsement Required)		\$0.00	
Total Postage & Fees	\$	\$6.91	

Sent To Blue Eagle Hand Co.
 Street, Apt. No.,
 or PO Box No. 700 Virginia St
 City, State, ZIP+4 Charleston WV 25302

PS Form 3800, August 2008 See Reverse for Instructions



Received

JUL 11 2014

Office of Oil and Gas
 WV Dept. of Environmental Protection

08/08/2014

7009 1430 0001 3664 6028

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CERTIFIED MAIL™ RECEIPT
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OFFICIAL USE

Postage	\$	\$0.91
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$6.91



Sent To Blue Eagle Fund
 Street, Apt. No.,
 or PO Box No. 700 Virginia St
 City, State, ZIP+4 Charleston WV 25301



Received

JUL 11 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

08/08/2014

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 Reed Gas Inc OP Code _____

Waterbed Larel Run of Blue Creek Quadrangle Mammoth

Elevation 1376' County Kanawha District Elk

Description of anticipated Pit Waste: _____

Will a synthetic liner be used in the pit? _____

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 _____)

Proposed Work For Which Pit Will Be Used
 Drilling
 Workover
 Piler (Explain _____)
 Swabbing
 Plugging

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2003, 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 James W Reed Jr.

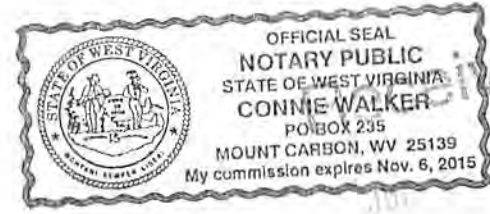
Company Official (Typed Name) James W. Reed Jr.

Company Official Title President

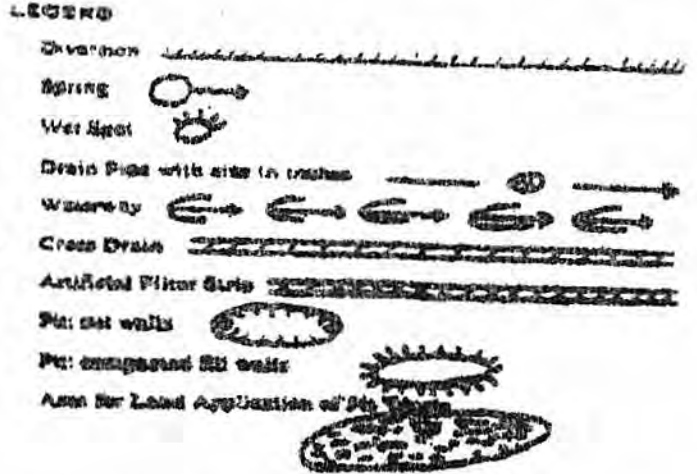
Subscribed and sworn before me this 24 day of June, 2014

Connie Walker Notary Public

My commission expires Nov 6, 2015



Office of Oil and Gas
Environmental Protection
08/08/2014



Proposed Revegetation Treatment: Acres Disturbed 1 Revegetation pH _____

Lime 3 Tons/acre or to correct to pH _____

Fertilizer (10-20-20 or equivalent) 500 lbs/acre (300 lbs minimum)

Mulch 2 Tons/acre

Seed Mixtures

Seed Type	Area I	Tons/acre	Seed Type	Area II	Tons/acre

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]
 Considered: _____

Title: Inspect Oil (64) Date: 6-30-14

Field Reviewed? Yes No

Received
 Office of Oil and Gas
 Wyoming Department of Environmental Protection
 08/08/2014



3905426 X
476594E, 4244940N, UTM17
NAD83



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

API: 47-39-5426 WELL NO.: 17h-104
FARM NAME: Appalachian Land Co.
RESPONSIBLE PARTY NAME: James W. Reed Jr.
COUNTY: Kanawha DISTRICT: ELL
QUADRANGLE: Mammoth
SURFACE OWNER: Appalachian Land Co.
ROYALTY OWNER: Pine Mountain Oil & Gas
UTM GPS NORTHING: 4244940.3
UTM GPS EASTING: 476594.2 , GPS ELEVATION: 1376

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:

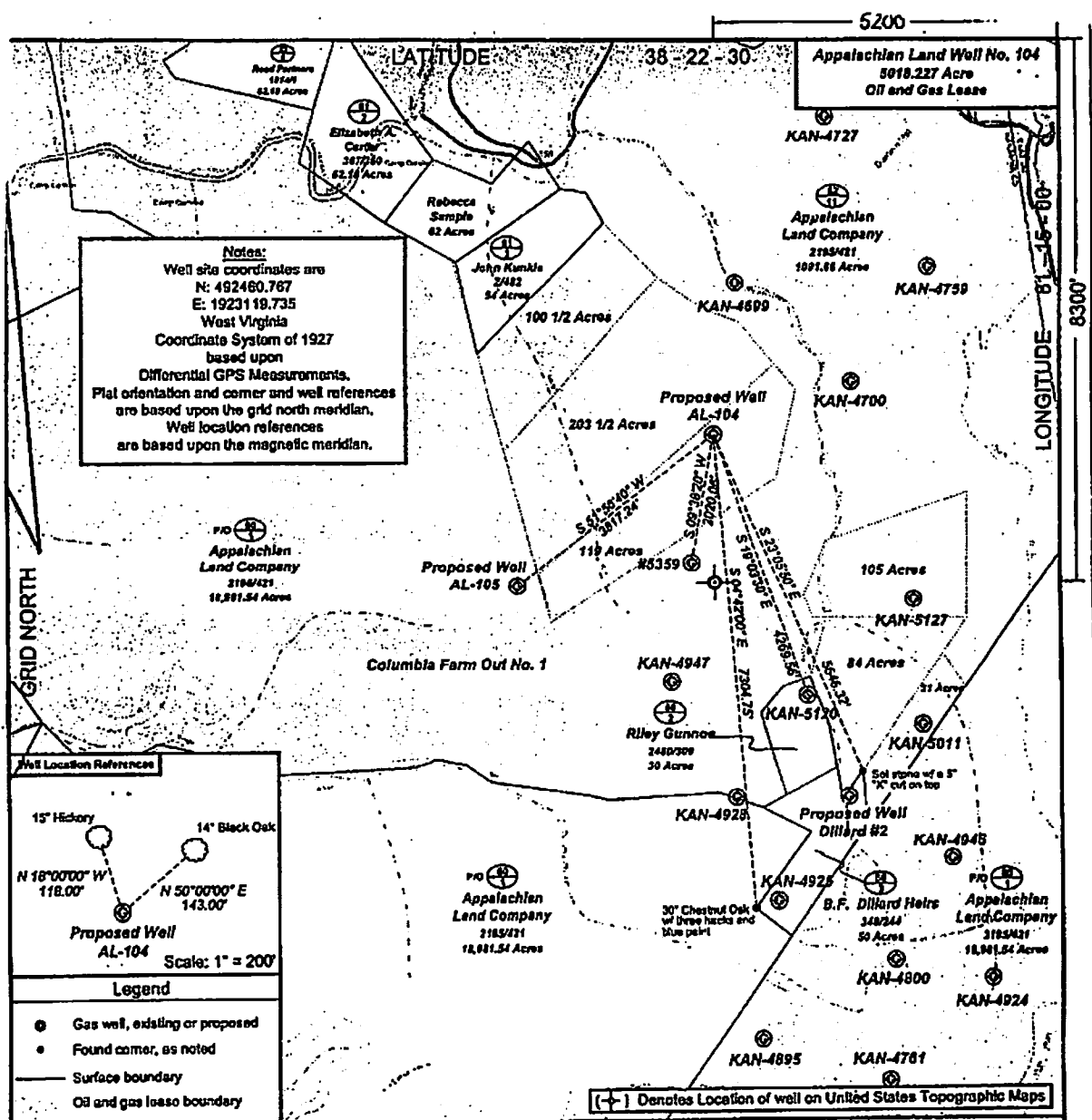
1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:
Survey grade GPS ____ : Post Processed Differential ____
Real-Time Differential ____
Mapping Grade GPS ____ : Post Processed 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.

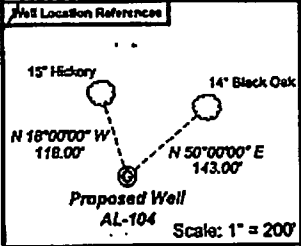
Steve DeLuca
Signature Title

6-10-14
Date

Received



Notes:
 Well site coordinates are
 N: 492460.767
 E: 1923119.735
 West Virginia
 Coordinate System of 1927
 based upon
 Differential GPS Measurements.
 Plat orientation and corner and well references
 are based upon the grid north meridian.
 Well location references
 are based upon the magnetic meridian.

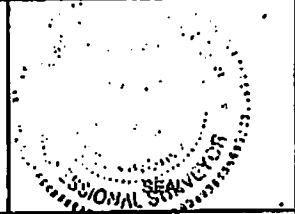


- Legend**
- Gas well, existing or proposed
 - Found corner, as noted
 - Surface boundary
 - - - Oil and gas lease boundary

FILE No. 37-14-E-01
 DRAWING No. 3714E01.dwg
 SCALE: 1" = 200'
 MINIMUM DEGREE OF ACCURACY: 1/2400
 PROVEN SOURCE OF ELEVATION U.S.G.S. HARN
 Station 107P Elevation: 1911.57'

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.

D.W. Casland
 P.S. 835



STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION

DATE: August 28 20 01
 OPERATOR'S WELL No. AL-104
 API WELL No. _____

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ STATE COUNTY PERMIT
 (IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION: 1376.59' WATER SHED: Little Laurel Run and Laurel Run of Blue Creek
 DISTRICT: Elk COUNTY: Kanawha

QUADRANGLE: Mammoth

SURFACE OWNER: Appalachian Land Company ACREAGE: 18,981.54 Ac.
 OIL & GAS ROYALTY OWNER: Pino Mountain Oil and Gas LEASE ACREAGE: 5018.227 Ac.
 LEASE No. _____

PROPOSED WORK: DRILL X 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: Walt ESTIMATED DEPTH: 2600'

WELL OPERATOR: Reed Gas, Inc. DESIGNATED AGENT: James W. Reed, Jr.
 ADDRESS: 1206 Kanawha BLVD. E. Suite 201 ADDRESS: 1206 Kanawha BLVD. E. Suite 201
 Charleston, WV 250301 Charleston, WV 250301

KAN-5126
 Office of Oil and Gas
 Environmental Protection
 08/08/2014