



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

September 08, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-10901115, issued to K. PETROLEUM, 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: W.B. 21
Farm Name: POCAHONTAS LAND CORP.
API Well Number: 47-10901115
Permit Type: Plugging
Date Issued: 09/08/2015

Promoting a healthy environment.

09/11/2015

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.

10901157

WW-4B
Rev. 2/01

1) Date JULY 8TH, 2015
2) Operator's
Well No. WB 21
3) API Well No. 47-109 - 0115

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 1505' Watershed INDIAN CREEK
District CENTER County WYOMING Quadrangle PINEVILLE 7.5

6) Well Operator K. PETROLEUM, INC. 7) Designated Agent MICHAEL E. COLLINS
Address 81 MILL ST. SUITE 205 Address 4299 NEWARK RD.
GAHANNA, OH 43230 ELIZABETH, WV 26143

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Dan Mullins Name PATCHWORK OIL & GAS, LLC
Address ~~124 Big Trace Fork Rd~~ Address 8165 ELIZABETH PIKE
Hart, WV 25524 ELIZABETH, WV 26143
220 JACK ACRES Rd Buckhannon WV 26201

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

DETAILED WORK ORDER TO FOLLOW

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Office of Oil and Gas
AUG 13 2015
WV Department of
Environmental Protection

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

Work order approved by inspector Danny Mullins Date 6-8-15

09/11/2015

REVISED WORK ORDER**WB #21**

47-109-01115

PROPOSED PLUGGING PROCEDURE

1. Prepare plugging permit application.
2. Certify to surface and coal owners.
3. Certify to designated State inspector for signature.
4. Once all signatures are obtained, copy for our records and certify to Jeff at the State Office for approval.
5. Receive plugging permit good for 2 years.
6. Notify the designated State inspector 24 hours prior to commencing operations.
7. Take equipment to location and begin prepping for plug.
8. Rig up
9. Verify total depth of 1551'.
10. Attempt to clean out well bore to original depth, if needed.
11. Run E-log (caliper, deviation, density, and gamma) to determine the location of the lowest mineable coal bed.
12. Run tubing to TD. Set first plug with 16 sacks of Class A cement with no more than 3% CaCl₂ and no other additives from TD up to 1338'. This will cover bottom plug, perforation and Elevation. Pull tubing back.
12. Wait 8 hours, run in and tag plug, add additional cement if needed.
13. Run 2 sacks of 6% Bentonite gel from 1338' up to 953'. (4 1/2)
14. Begin looking for free point, according to state record WR-35 cement fill up should be about 690', which is higher than POCA 3 seam, if so, go in and mill the 4 1/2 and cement out of the inside of the of the 8 5/8 down to the depth of approx. 753' to expose the 8 5/8 casing in the POCA 3 seam.
16. If the well bore still produces gas, a mechanical bridge plug shall be placed in the well bore in a competent stratum at least 200' below the lowest mineable seam of coal but above the uppermost hydrocarbon producing zone.

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17. Circulate gel. Section mill 8 5/8" from depth 753' to 733' to produce a 20' casing free zone from 5' below the P3 seam to 10' above. This will facilitate active mining of the P3 at depth 743'.

If the production string of casing is cemented through the POCA 3 coal seam and unable to remove, then the Production string may be Section milled and the protection string perforated with approximately 8 shots per foot in a 10' area. (this is a possibility, the 8 5/8 casing shoe could be at 753', which would not be able to be milled out)

18. Perforate 8 5/8" casing at 10' intervals beginning at depth 903' through depth 753'.

19. Run tubing to 953', circulate gel, then run 46 sacks of expandable cement slurry down the tubing to displace the gel and fill well bore from depth of 953' to 640'.

20. Pull tubing back, wait 8 hours

21. Run in and tag plug, add cement if needed.

22. Run 7 sacks of 6% Bentonite gel from 640' up to 100'.

24. Pull tubing up to 100' and cement from to surface with 29 sacks of Class A cement with no more than 3% CaCl₂ and no other additives.

25. Solidify pit if necessary with more cement and lime, then bury. (NO PIT PERMITTED)

26. Set ~~6" x 12.5"~~ steel pipe with concrete with 1/2" API identification. 30" high 7" casing
Also put the DATE that plugging was done

27. Rig down, and move equipment out.

28. Reclaim location.

29. Prepare WR-34 & WR-38 for permit release.

**Expanding Cement shall be Nabors Production and Well Completions "Thixotropic" or equivalent.

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09/11/2015

10901115P

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

Well Operator's Report of Well Work

Farm name: POCAHONTAS LAND CORP. Operator Well No.: WB #21

LOCATION: Elevation: 1505.00 Quadrangle: PINEVILLE

District: CENTER County: WYOMING
Latitude: 4340 Feet South of 37 Deg. 32Min. 30 Sec.
Longitude: 1270 Feet West of 81 Deg. 35 Min. 0 Sec.

Company: BOWIE, INC.
604 EAST MAIN STREET
CLARKSBURG, WV 26301-0000

Agent: WILLIAM H. BOWIE

Inspector: RODNEY G. DILLON
Permit Issued: 10/06/89
Well work Commenced: 12/10/89
Well work Completed: 12/16/89
Verbal Plugging
Permission granted on: 10/6/89
Rotary Cable _____ Rig
Total Depth (feet) 1620
Fresh water depths (FE) _____

20'
Salt water depths (FE) _____
Is coal being mined in area (Y/N)? N
Coal Depths (ft): 380-384, 472-475

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
1 3/4	30		
8 5/8	751	751	CTS
4 1/2	1551	1551	145 SKS

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

OPEN FLOW DATA

Producing formation RAWENCLIFF Pay zone depth (ft) 1388-1472
 Gas: Initial open flow SHOW MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow 504 MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure 240 psig (surface pressure) after 24 Hours

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

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

For: BOWIE, INC.

By: Bradley W. Thomas
Date: 12-28-89

WV 1111

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Office of Oil and Gas

AUG 13 2015

WV Department of
Environmental Protection

JK

Form IV-35
(REVERSE)

DETAILS OF RETURNED INTERVALS, FRACTURES OR STIMULATION, PHYSICAL CURVE, ETC.

RAVENCLIFF (1397-1470) 30 holes, 750 gal 15% HCL, 600 BBL 75Q FOAM, 500 SKS 20/40 SAND

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS including indication of all fresh and salt water, coal, oil and gas
FILL			0	10	
SAND & SHALE			10	41	1" STREAM H ₂ O @ 20'
SAND			41	217	
SAND & SHALE			217	380	
COAL			380	384	
SAND & SHALE			384	472	
COAL			472	475	
SAND			475	624	
SAND & SHALE			624	710	
COAL & SHALE			710	713	
SAND			713	750	
SAND & SHALE			750	1420	
RAVENCLIFF			1420	1520	GAS SHOW
AVIS			1520	1560	
SAND & SHALE			1560	1620	DTD

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

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WW-4A
Revised 6-07

1) Date: JULY 8TH, 2015
2) Operator's Well Number
WB 21
3) API Well No.: 47 - 109 - 01115

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

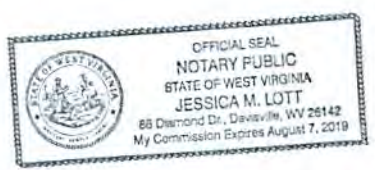
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>PINNACLE LAND COMPANY</u>	Name <u>PINNACLE LAND COMPANY</u>
Address <u>PO BOX 446</u> ✓	Address <u>PO BOX 446</u> ✓
<u>MAN, WV 25635</u>	<u>MAN, WV 25635</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
	Address _____
(c) Name <u>220 Jack Acres Rd</u>	Name _____
Address <u>Buckhannon WV 26201</u>	Address _____
6) Inspector <u>Dan Mullins</u>	(c) Coal Lessee with Declaration
Address <u>124 Big Trace Fork Rd</u>	Name <u>PINNACLE LAND COMPANY & MECHEL BLUESTONE</u>
<u>Harts, WV 25521</u>	Address <u>PO BOX 446</u> <u>PO BOX 1085</u> ✓
Telephone <u>304-932-6844</u>	<u>MAN, WV 25635</u> <u>BECKLEY, WV 25802</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 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 person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.



Well Operator K. PETROLUEM, INC.
 By: _____
 Its: DESIGNATED AGENT Michael E. Collins
 Address 4299 NEWARD RD RECEIVED
ELIZABETH, WV 26143 Office of Oil and Gas
 Telephone 304-275-0921

AUG 13 2015

Subscribed and sworn before me this 5 day of August, 2015
J. Mott Notary Public WV Department of Environmental Protection
 My Commission Expires Aug. 7, 2019

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.

109011157

WW-9
(2/15)

API Number 47 - 109 - 01115
Operator's Well No. WB 21

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name K. PETROLEUM. INC. OP Code 306574

Watershed (HUC 10) INDIAN CREEK Quadrangle PINEVILLE 7.5

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No

Will a pit be used? Yes No

If so, please describe anticipated pit waste: _____

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

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 PORTABLE PIT)

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

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

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

Additives to be used in drilling medium? _____

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

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

-Landfill or offsite 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.

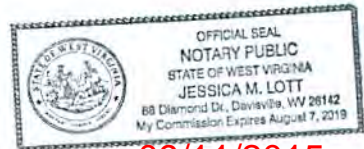
Company Official Signature _____
Company Official (Typed Name) MICHAEL E. COLLINS *Michael E Collins*
Company Official Title DESIGNATED AGENT

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AUG 13 2015
WV Department of Environmental Protection

Subscribed and sworn before me this 5th day of Aug, 2015

Jm Glatte Notary Public

My commission expires Aug. 7, 2019



09/11/2015

1090115P

K. PETROLEUM. INC.

Proposed Revegetation Treatment: Acres Disturbed 3.2 Prevegetation pH 6.67

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer type STRAW

Fertilizer amount 500 lbs/acre

Mulch _____ Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
TALL FESCUE	40	TALL FESCUE	40
LADINO CLOVER	5	LADINO CLOVER	5

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: _____

Title: _____

Date: _____

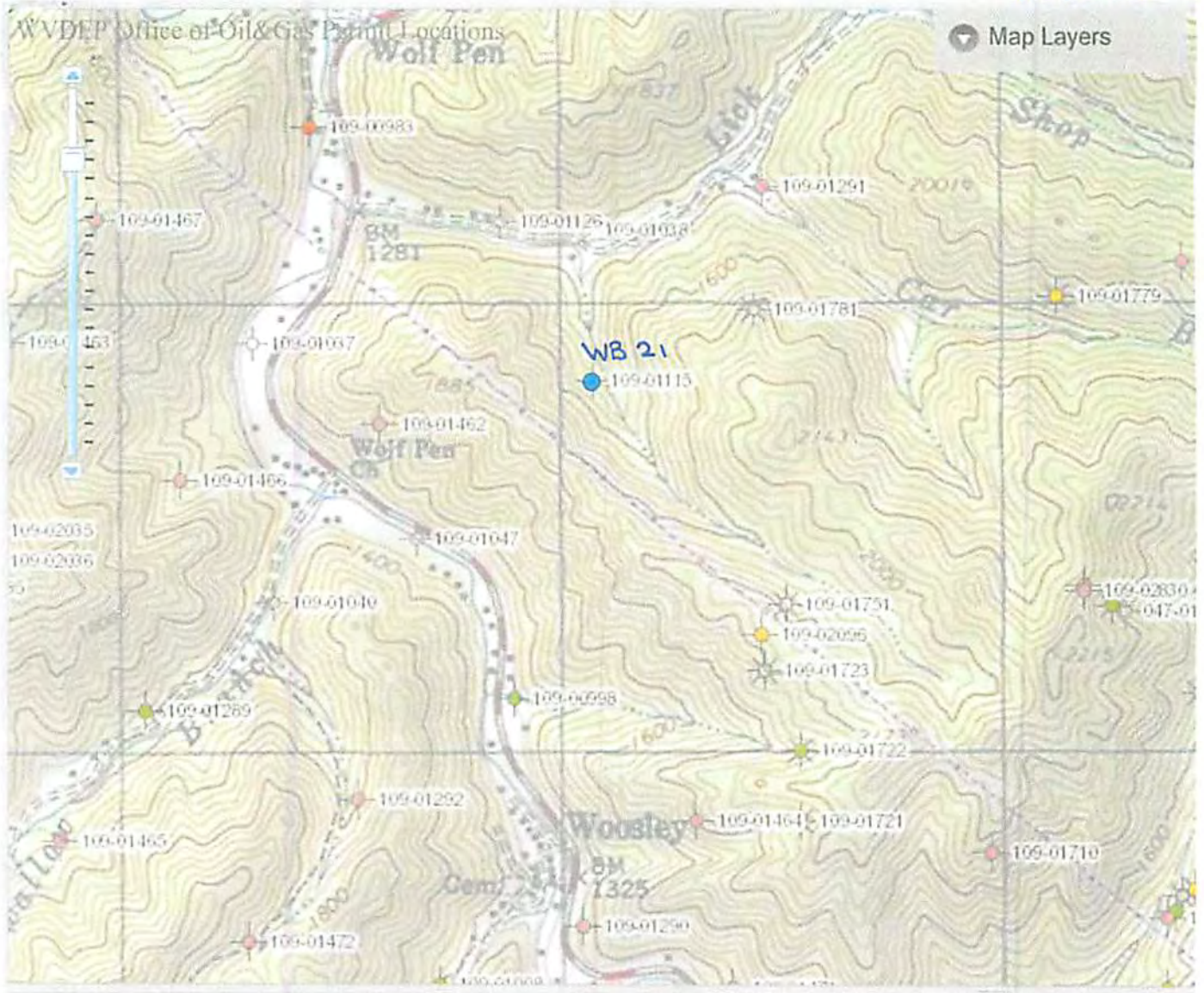
Field Reviewed? () Yes () No

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WB 21 47-109-01115

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10901115P

WW-7
8-30-06



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

API: 47-109-01115 WELL NO.: WB 21
FARM NAME: POCAHONTAS LAND CORP.
RESPONSIBLE PARTY NAME: K. PETROLEUM, INC.
COUNTY: WYOMING DISTRICT: CENTER
QUADRANGLE: PINEVILLE
SURFACE OWNER: PINNACLE LAND COMPANY
ROYALTY OWNER: PINNACLE LAND COMPANY
UTM GPS NORTHING: 4153818.3
UTM GPS EASTING: 448072.1 GPS ELEVATION: 1505'

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.

Signature

OFFICE MANAGER
Title

JULY 8TH, 2015
Date

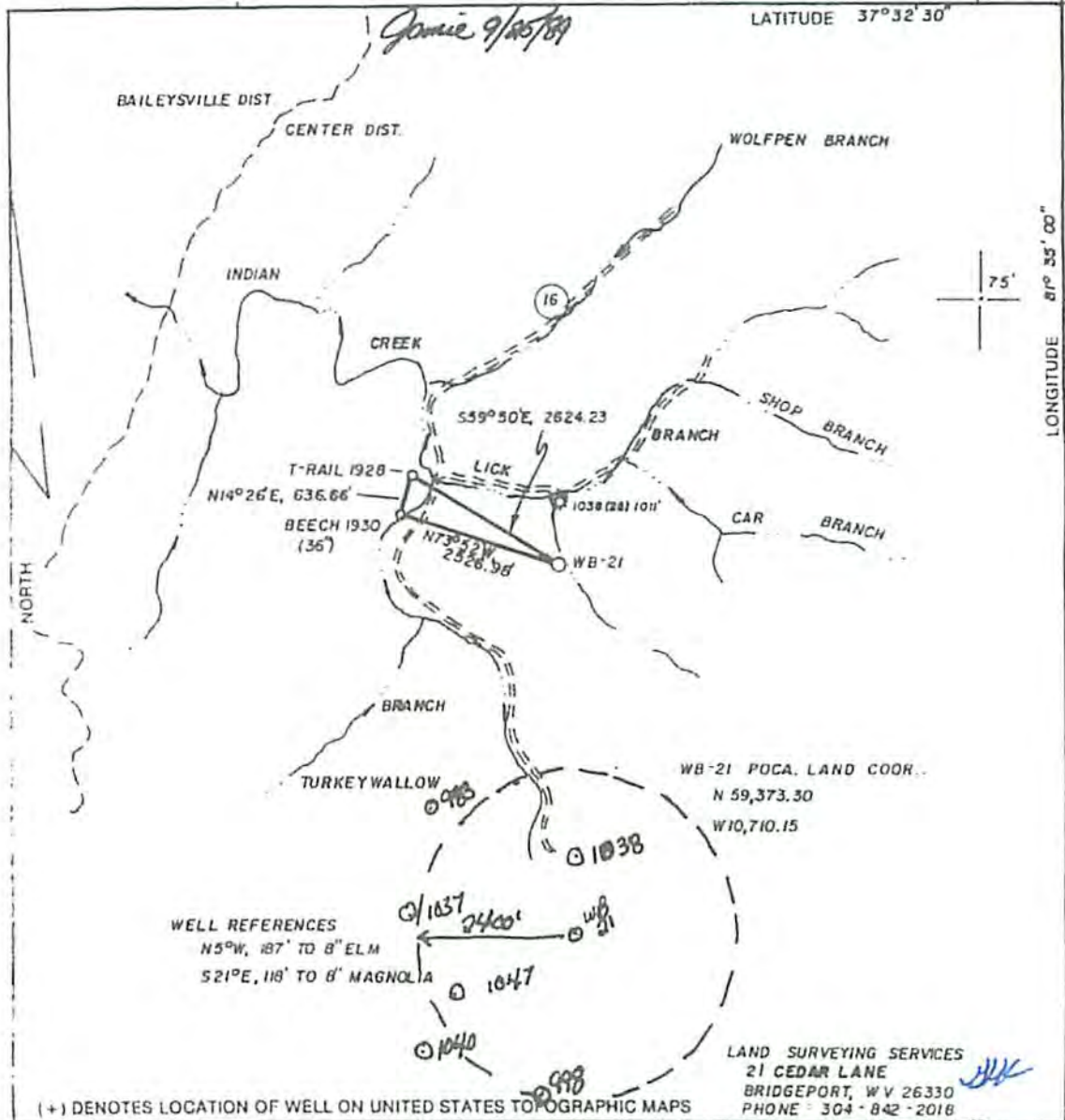
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Office of Oil and Gas

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West Virginia Department of
Environmental Protection

09/11/2015

109 011159



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

LAND SURVEYING SERVICES
21 CEDAR LANE
BRIDGEPORT, WV 26330
PHONE: 304-842-2018

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 IN 2500
 PROVEN SOURCE OF ELEVATION B.M. 2180' NW. OF LOC. AT ELEV. 1281'

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) _____
 R.P.E. _____ L.L.S. NO 674
STEPHEN D. LOSH

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE JULY 31, 19 89
 OPERATOR'S WELL NO. WB-21
 API WELL NO. _____

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1305' WATER SHED INDIAN CREEK
 DISTRICT CENTER COUNTY WYOMING
 QUADRANGLE PINEVILLE 7.5'

SURFACE OWNER POCAHONTAS LAND CORP ACREAGE 24,880.40
 OIL & GAS ROYALTY OWNER POCAHONTAS LAND CORP LEASE ACREAGE 10,050.85
 LEASE NO. 56244

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 BIO LIME ESTIMATED DEPTH 3100'
 WELL OPERATOR BOWIE, INC. DESIGNATED AGENT WILLIAM BOWE
 ADDRESS 604 EAST MAIN ST ADDRESS 604 EAST MAIN ST
 CLARKSBURG, WV 26301 CLARKSBURG, WV 26301

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WV Department of Environmental Protection

COUNTY NAME
 WYOMING
 PERMIT
 1115

09/11/2015

FORM: WV-6