

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: 47-10901464, 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 penalities 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.

Operator's Well No: PLC 31

Farm Name: POCAHONTAS LAND CORP.

API Well Number: 47-10901464
Permit Type: Plugging
Date Issued: 09/08/2015

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

- 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.

WW-4B Rev. 2/01

1) Date JULY	8TH	,	20 15
2) Operator	s		
Well No.	PLC #31		
3) API Well	No.	47-109	- 01464

STATE OF WEST VIRGINIA

		RONMENTAL PROTECTION OIL AND GAS
	APPLICATION FOR A PERM	MIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas X/ Liquid	d injection/ Waste disposal/
	(If "Gas, Production or Unc	derground storage/ Shallow
5)	Location: Elevation 1680'	Watershed INDIAN CREEK
	District CENTER	County WYOMING Quadrangle PINEVILLE 7.5
6)	Well Operator K. PETROLEUM, INC.	7) Designated Agent MICHAEL E. COLLINS
01	Address 81 MILL ST. SUITE 205	Address 4299 NEWARK RD.
	GAHANNA, OH 43230	ELIZABETH, WV 26143
8)	Oil and Gas Inspector to be notified Name Canny Mullins Address 24 Big Trace Fork Rd.	9) Plugging Contractor Name PATCHWORK OIL & GAS, LLC Address 8165 ELIZABETH PIKE ELIZABETH, WV 26143
_ 2	220 JACK ACTES Rd Buckharmon w	
	Work Order: The work order for the mann	ner of plugging this well is as follows:
		RECEIVED Office of Oil and Gas
		AUG 1 3 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

Jong Milins

REVISED WORK ORDER

PLC #31

47-109-01464

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 2533'.
- 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 bottom of 4 1/2 at 2533'. Set first plug with 35 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 2533' up to 2038'. (Bottom, Pay 2006) IVED
- 13. Pull tubing back, wait 8 hours

14. Run in and tag plug, add additional cement if needed.

15. Run 1 sack of 6% Bentonite gel from 2038' up to 1740'.

Office of Oil and Gas

WV Department of Environmental Protection

- Run back in to 1740' for second plug, run 17 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 1740' up to 1507' (This covers pay zone and elevation)
- 17. Pull tubing back, wait 8 hours
- 18. Run in and tag plug, add cement if needed.

- 19. Run 2 sacks of 6% Bentonite gel from 1507' up to 1140'
- 20. Begin looking for free point, according to state record WR-35 cement fill up should be about 900', 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 7" down to the depth of approx. 940" to expose the 7" casing in the POCA 3 seam.
- 21. 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.
- 22. Circulate gel. Section mill 7" from depth 920' to 940' 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 930'.
- **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.
- 23. Perforate 4 1/2 at 10' intervals beginning at depth 1090' to 1006' and perforate 7" casing at 10' intervals beginning at depth 940' through depth 1006'.
- 24. Run tubing to 1140', circulate gel, then run 44 sacks of expandable cement slurry down the tubing to displace the gel and fill well bore from depth of 1140' to 820'.
- 25. Pull tubing back, wait 8 hours.
- 26. Run in and tag plug, add cement if needed.
- 27. Run 7 sacks of 6% Bentonite gel from 820' up to 100'
- 30. Pull tubing back to 100' to set plug and run 19 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 100' up to surface. (Surface,)
- 31. Solidify pit if necessary with more cement and lime, then bury. (NO PIT PERMITTED)
- 32.. Set 6" x 12.5" steel pipe with concrete with 1/2" API identification. 36 1/2 to 7 "CASE ing
 Also put The Date plugging was Dome
- 33.. Rig down, and move equipment out.
- 34. Reclaim location

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

RECEIVED
Office of Oil and Gas

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WV Department of Environmental Projection

State of West Virginia Division of Environmental Protection JAN 2 3 1995 Section of Oil and Gas Permitting Office of Oil & Gas Well Operator's Report of Well Work Farm name: POCAHONTAS LAND CORP. Operator Well No.: PLC #31 LOCATION: Elevation: 1,680.00 Quadrangle: PINEVILLE District: CENTER County: WYONING Latitude: 7600 Feet South of 37 Deg. 32Min. 30 Sec. Longitude 620 Feet West of 81 Deg. 35 Min. 0 Sec. Company: BOWIE, INC. P.O. BOX 1430 CLARKSBURG, WV 26301-1430 Agent: GROVER BOWIE Inspector: OFIE HELMICK Permit Issued: 08/10/94 Well work Commenced: 11-3-94 Well work Completed: 11-8-94 Verbal Plugging Permission granted on:
Rotary X Cable Rig
Total Depth (feet) 2591 DTD
Fresh water depths (ft) 231, 260 Salt water depths (ft)

-	Cement Fill Up Cu. Ft.		Used in Drilling	Casing E Tubing
!				Size
[31'	31'	9 5/8"
CTS	170aks	1006'	1006'	7"
יור פט	140sks	2533'	2533'	4 1/2"
				1

16-Aug-94 API # 47-109-01464

N/A
Is coal being mined in area (VAN)
Coal Depths (ft):115-20.542-48.614-17.
905-12
OPEN FLOW DATA
Producing formation Mayton Payanoliff
Producing formation Maxton, Ravencliff Pay zone depth (ft) 1857-2250 Gas: Initial open flow show MCF/d Oil: Initial open flow N/A BOLYGED Final open flow 115 MCF/d Final open flow N/A BOLYGED Time of open flow between initial and final tests 12 HONGS GAS Static rock Pressure 210 psig (surface pressure) after 12 HONGS GAS
Final open flow 315 HCF/d Final open flow WASTER
Time of open flow between initial and final tests 12 12 12 12 12 12 12 12 12 12 12 12 12
Static rock Pressure 210 psig (surface pressure) aftermine Openio
Static rock Pressure 210 psig (surface pressure) after thick of open flow between initial and final tests 12 Hoghand Gas static rock Pressure 210 psig (surface pressure) after thick of the surface pressure)
Gas: Initial open flow
Final open flow MCF/d Oil: Initial open flow NUBbl/d
Time of open flow between initial and final testsBbl/d REGOVED
Static rock Pressure psiq (surface pressure) after and the first of Chiofie (see
Second producing formation Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow MCF/d Final open flow Bbl/d REGUVED Static rock Pressure psig (surface pressure) after WV Heliar Projections Gas NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED AUG 13 2015 INTERVALS, PRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL AUG 13 2015
NOTE: ON BACK OF THIS BODY DIE TON
INTERVALS, PRACTURING OR STEMLATING PURSONS: 1). DETAILS OF YERFORATED AUG 1 3 2015
BOO WILLIE IS A SYSTEMATIC DETAILED GEOLOGICAL PECOND OF THE
INCLUDING COAL ENCOUNTERED BY THE WELLBORE.
WV Department
For: BOWIE, INC. Environmental Protect
FOIL BOWIE, INC.
By: Chere Barrio
Date: 1-18-94

09/11/2015

11 11557-10201 30 110105.	750 gal 15% HCL, 450 sks sand, 640 bbl 75 qn2 foam
1 (100)	
SAND & SHALE	0-115
COAL	115-120
SAND	120-260 DAMPE 231', 1/4" H20 C 260
SAND & SHALE	260-398
SAND	398-485
SAND & SHALE	485-542
COAL	542-548
SHALE	548-614
COAL	614-617
SAND	-617-905-
COAL	905-912
SAND & SHALE	912-1530
RAVENCLIFF	1530-1630 GAS SHOW
AVIS	1630-1690
SHALE	1690-1990
U. MAXTON	1990-2058
SHALE & SAND	2058-2075
MAXTON	2075-2275 GAS SHOW
SAND & SHALE	2275-2424
SHALE	2424-2588
L. LIME	2588-2591 DTD

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WW-4A	
Revised	6-07

1)	Date:	JULY 8TH, 2015	
2)	Operator	r's Well Number	
PLC	#31		

3) API Well No.: 47 -

109 011464

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

(a) Name Pl	(s) to be served:	WOMEN CO.	(a) Coal Operator			
The state of the s	NNACLE LAND COMPA	MY	Name	PINNACLE LAND COM	PANY	
Address P	O BOX 446		Address	PO BOX 446	_	
-	AN, WV 25635			MAN, WV 25635	W.	
(b) Name			(b) Coal Own	ner(s) with Declar	ation	
Address			Name			
			Address			
	20 JACK AC	ires Rd	Name			
Address	Buckhamon	WU 2620	/ Address	-		
Inspector (Dan mulling	<i>5</i>	(c) Coal Less	see with Declaration	on	
Address	24 Big Trace	Fork Rd.	Name	PINNACLE LAND COM	PANY & MECHEL	BLUESTONE
	10cts 144 2	5524	Address	PO BOX 446	__ РО ВО	X 1085
Telephone	304-932-108	44		MAN, WV 25635	BECKL	EY, WV 25802
accompanying d	ocuments for a permit to	plug and abandon a location described	ode, the undersigned well of well with the Chief of the	Office of Oil and Gas, W.	est Virginia Dena	tice and Application and
the Application,	and the plat have been ances) on or before the de	mailed by registere	d or certified mail or deliv	n and depicted on the atta vered by hand to the pers	ched Form WW-6 con(s) named abo	Conjes of this Notice
the Application,	and the plat have been	mailed by registere ay of mailing or deli	ed or certified mail or delivity very to the Chief.	n and depicted on the atta vered by hand to the pers	on(s) named abo	Conjes of this Notice
the Application,	and the plat have been	mailed by registere ay of mailing or deli Well Operator	d or certified mail or deliv	n and depicted on the atta vered by hand to the pers	con(s) named abo	Conjes of this Notice
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official NOTARY P	and the plat have been unces) on or before the de	mailed by registere ay of mailing or deli Well Operator By:	r K. PETROLUEM, INC.	m and depicted on the atta wered by hand to the pers	con(s) named abo	Conjes of this Notice
official NOTARY P	and the plat have been unces) on or before the di	well Operator By: Its:	r K. PETROLUEM, INC. DESIGNATED AGENT	Mached 1	con(s) named abo	Conjes of this Notice
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OFFICIAL NOTARY P STATE OF WEST JESSICA M 88 Diamond Dt., David My Commission Expire	and the plat have been inces) on or before the displacement of the	well Operator By: Its: Address Telephone	r K. PETROLUEM, INC. DESIGNATED AGENT 4299 NEWARD RD	Marched	Call	Conjes of this Notice
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OFFICIAL NOTARY P BTATE OF WEST JESSICA M BB Dlamond Dt., David My Commission Expire	and the plat have been unces) on or before the de services on or before me this pires	well Operator By: Its: Address Telephone	r K. PETROLUEM, INC. DESIGNATED AGENT 4299 NEWARD RD ELIZABETH, WV 26143 304-275-0921	Mucheul 3 2015	olic F	5. Copies of this Notice ve (or by publication i

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 Acceptais Our of 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 depprivacyoffier@wv.gov.

09/11/2015

WW-9 (2/15)

API Number 47 - 109 - 01464

Operator's Well No. PLC #31

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

FLUIDS/ CUTTINGS DISPOSA	AL & 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 to Will a pit be used? Yes No	the proposed well work? 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:	
Reuse (at API Number Off Site Disposal (Supply form WW-9 form)	for disposal location)
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 offsi	
-If left in pit and plan to solidify what medium will be used	ed? (cement, lime, sawdust)
-Landfill or offsite name/permit number?	
Permittee shall provide written notice to the Office of Oil and Gas o West Virginia solid waste facility. The notice shall be provided with where it was properly disposed.	of any load of drill cuttings or associated waste rejected at any thin 24 hours of rejection and the permittee shall also disclose
on August 1, 2005, by the Office of Oil and Gas of the West Virgini provisions of the permit are enforceable by law. Violations of any law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examplication form and all attachments thereto and that, based on	samined and am familiar with the information submitted on this on my inquiry of those individuals immediately responsible for D, accurate, and complete. I am aware that there are significant of Gas
Company Official Signature	AUG 1 3 2015
Company Official (Typed Name) MICHAEL E. COLLINS 1	iebal E Livilia WV Department of
Company Official Title DESIGNATED AGENT	Environmental Protection
Subscribed and sworn before me this 5 day of Au My commission expires Aug. 7, 2019	Notary Public Notary Public Notary Public Notary Public Notary Public Fate of West Visiona JESSICA M. LOTT 88 Diamond Dr., Daviavilla, W 2814 Responsible Commission Express August 7, 20

Title:_

Field Reviewed?

(_____) Yes

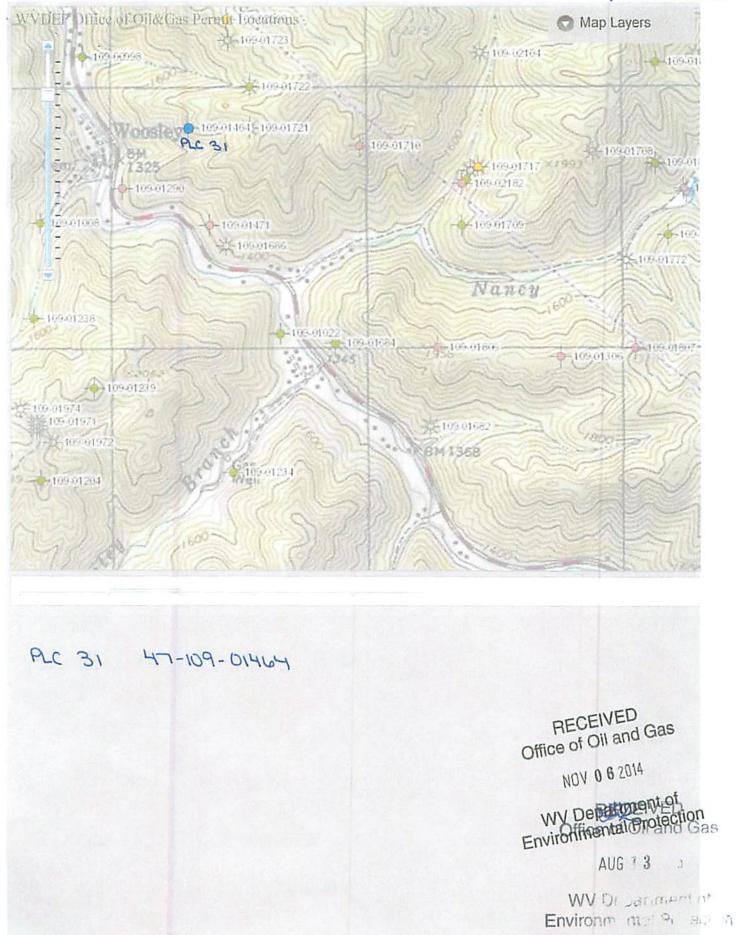
K. PETROLEUM. IN	C.		
roposed Revegetation Treatn	nent: Acres Disturbed 3.	Prevegetation pH	6.67
Lime 2	Tons/acre or to correc	et to pH 6.5	
Fertilizer type STR/	AW	0	
Fertilizer amount 50	0	lbs/acre	
Mulch		_Tons/acre	
		Seed Mixtures	
Теп	porary	Permane	ent
Seed Type	lbs/acre	Seed Type	lbs/acre
	40	TALL FESCUE	40
TALL FESCUE			
LADINO CLOVER	5	LADINO CLOVER	
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Date:_

WV Department of Environmental Pro action

Office of Oil and Gas

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WW-7 8-30-06



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

WELL LO	CATION FORM: GPS		
API: 47-109-01464	WELL NO.: F	PLC 31	_:
FARM NAME: POCAHON			_
RESPONSIBLE PARTY NAME:	K. PETROLEUM, IN	NC.	
COUNTY: WYOMING			
QUADRANGLE: PINEVILL	Ε		
SURFACE OWNER: PINNAC	CLE LAND COMPA	NY	_
ROYALTY OWNER: PINNC	ALE LAND COMPA	.NY	_
UTM GPS NORTHING: 41528			
UTM GPS EASTING: 448307	.5 GPS ELEVAT	_{ION:} 1680'	_
The Responsible Party named above preparing a new well location plat for above well. The Office of Oil and Gathe following requirements: 1. Datum: NAD 1983, Zone height above mean sea level. 2. Accuracy to Datum – 3.05 3. Data Collection Method: Survey grade GPS: Post Pro-	r a plugging permit or assigned As will not accept GPS coordinates: 17 North, Coordinate Units: medel (MSL) – meters.	API number on the es that do not meet	
Real-Ti Mapping Grade GPS X : Post	me Differential X	Off	RECEIVED
	Processed Differential		AUG a
	pography map showing the wo data is correct to the best of my required by law and the regulation	knowledge and vir	W.E. ,
amfitt	OFFICE MANAGER	JULY 8TH , 2015	5
Signature	Title	Date	50