

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Thursday, January 19, 2017 WELL WORK PERMIT Not Available / Plugging

LEATHERWOOD, INC. (A) 1000 CONSOL ENERGY DR

CANNONSBURG, PA 153176506

Re: Permit approval for 1 47-049-01022-00-00

This well work permit 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 any additional specific 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin

Chief

Operator's Well Number: 1

Farm Name: KEON

U.S. WELL NUMBER: 47-049-01022-00-00

Not Available / Plugging

Date Issued: 1/19/2017

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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

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 11/22	, 2016
2) Operator's	
Well No. KOEN#1	
3) API Well No. 47-	049 - 01022

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

OFFICE OF OIL AND GAS					
APPLICATION FOR A PERMIT TO PLUG AND ABANDON					
4) Well Type: Oil X / Gas / Liquid	d injection/ Waste disposal/				
(If "Gas, Production or Unc	derground storage) Deep/ Shallow				
5) Location: Elevation 998.28 ft	Watershed Pyles Fork				
District Mannington	County Marion Quadrangle Mannington				
6) Well Operator Leatherwood, Inc.	Soth Wilson				
6) Well Operator Leatnerwood, Inc. Address 1000 CONSOL Energy Drive	7) Designated Agent Seth Wilson Address 7000 Hampton Center, Suite K				
Canonsburg, PA 15317	Morgantown, WV 26505				
9,	ineigamemi, it i zecoo				
8) Oil and Gas Inspector to be notified	9) Plugging Contractor				
Name Sam Ward	Name Coastal Drilling East LLC				
Address P.O. Box 2327	Address 70 Gums Springs Road				
Buckhannon, WV 26201	Morgantown, WV 26508				
See Attached.					
RECEIVED					
Office of Oil and Gas					
Office of Giran					
	NOV 2 9 2016				
Notification must be given to the district of work can commence.	il and gas inspector 24 hours before permitted				
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence. WV Department of with the district oil and gas inspector 24 hours before permitted work can commence.					
WV Departmental Protection Environmental Protection Work order approved by inspector SI Duant Date 1/23/2016					
	04/00/004				

Koen #1

API 47-049-01022

Mannington District

Marion County

Location: Mannington

Proposed Plug & Abandonment Procedure:

The work order for the manner of plugging this well is as follows:

We will rig up on site and, if necessary, begin to blow the well down and load with fluid to kill. If possible, any tubing or rods present will be removed from the well. We will run in the hole to determine the total depth of the well. Next, we will run wire line in hole and run a caliper/bond log. After the log, we will run work string to the attainable bottom. A bottom cement plug will be set from the attainable to the first packer, based on the log. We will attempt to pull any remaining pipe. If unable to pull, the pipe will be perforated and cemented to surface. Once complete, a monument with the API number will be set on the wellbore at the surface. All plugging shall comply with WV Code Chapter 22 Article 6.

All cement will be Class A with no more than 3% CaCl2. All spacers will be 6% gel.

The disturbed areas shall be graded, seeded and mulched as required. The site will be reclaimed as soon as possible.

Notify inspector if unable to remove pipe, prior to perforating to Cementing,

Office of Oil and Gas

NOV 2 9 2016

WV Department of
Environmental Protection

· INSTRUCTIONS	(550 L
"1)Attach a photo copy of the location of the well on a 7.5 minute Quadrangle with the corresponding Longitude and Latitude. 2:Designate the location of the well with the symbol(+).	3935
1.7.5	LATITUDE 35 34 19 1
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, the undersigned, Hereby certify that his plat is correct to the best of my nowledge and belief.	SIGNED OL
RECEIVED	TITLE VICE PRESIDENT
So Manufactured Production	DATE MARCH 15 , 1993
Permitting of Oil and	API WELL NO. 049-1022-1
STATE OF WEST DEPARTMENT OF OIL AND GAS	r virginia Of energy
HELL TYPE: OIL X GAS LIQUID INJECTA	SHALLOW
LOCATION: ELEVATION & 1065 WATER S DISTRICT MANNINGTON COL	HED PYLES FORK. INTY MARION
SURFACE OWNER KOEN	ACREAGE
PRODUCING FORHATION (445)	LEASE ACREAGE
PRODUCING FORHATION (455)	TOTAL DEPTH Z
ADDRESS 1145 BOOK 26330	ADDRESS SOID MAIL ST
BRIDGE CORT WV 26330	BRIDGEBURT HV 2(330
	01/

WW-4A			1) D-4	41/20/40		
Revised 6-07			1) Dat			
Revised 6-07			2) Ups Koen #1	erator's Well Number	r	

			3) API	Well No.: 47 -	049 - 01022	
		STATE	OF WEST VIRGIN	AIL		
Di	EPARTMENT OF			ON, OFFICE OF C	III. AND GAS	
				D ABANDON A WI		
4) Surface Ow	ner(s) to be served:	5)	(a) Coal Operator			
(a) Name	Shenal, Elizabeth T & Ro	obert F Jr	Name	Милау Energy Corp.		
Address	51 Ell Way		Address	46226 National Road	/	
	Metz, WV 26585		-	St. Clairsville, OH 43950		
(b) Name			(b) Coal Own	ner(s) with Declarati	ion /	
Address	3		Name	Murray Energy Corp.		
			Address	46226 National Road		
				St. Clairsville, OH 43950		
(c) Name			Name			
Address			Address			
Inspector	Sam Ward		(c) Coal Less	see with Declaration		
Address	P.O. Box 2327		Name	N/A		
	Buckhannon, WV 26201	/	Address			
Telephone	304-389-7583					

TO THE PE	RSONS NAME	D ABOVE: Yo	u should have recei	ved this Form and the	following documents:	
			Form WW-4B, which s	ets out the parties involv	ved in the work and describes th	ne
	its and the plugging worl plat (surveyor's map) sho		on on Form WW 6			
(2) The p	iat (surveyor a map) and	willig the well location	on on Form ww-6.			
			thts regarding the applica-	tion which are summarized is	n the instructions on the reverses sid	le.
However, ye	ou are not required to take a	ny action at all.				
Take notice	that under Chapter 22-6 of	the West Virginia Cod	e, the undersigned well of	perator proposes to file or has	s filed this Notice and Application as	nd
accompanyi	ng documents for a permit t	to plug and abandon a	well with the Chief of the	Office of Oil and Gas, West	Virginia Department of Environment	al
Protection,	with respect to the well at the	ne location described of mailed by registered	n the attached Application or certified mail or deliv	and depicted on the attache	d Form WW-6. Copies of this Notice (s) named above (or by publication	e,
	imstances) on or before the			and of man is and person	by hamou above (or by publication	ш
					-	
OF DENI	MCM VANIA	Well Operator	Leatherwood, Inc.	1.00.00	.*	
COMMONWEALTH OF PEN		By:	Gerald Ramsburg	Est! Dea		-
NOTARIAL SEA LINDSEY K PRIT	TS	Its:	General Manager			
Notary Public		Address	1000 Consol Energy Dri	ive		
CECIL TWP, WASHINGTO Ay Commission Expires J	N COUNTY an 28, 2019		Canonsburg, PA 15317		BEGEIVER	
Ay Commission Expires o	all Editoria	Telephone	724-485-4081	0	ffice of All and Co-	
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		27 nd		0011	NAV & A 2010	
Subscribed and	sworn before me thi		ay of Novemb	our aulu	NOV 2 9 2016	
	Lindsy K. I	inth		Notary Public	601 D	
My Commission	Expires	January 28	.2019	V	V Department of	
			1	Envi	ronmental Protection	n

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 depprivacyoffier@wv.gov.

Oil and Gas Privacy Notice

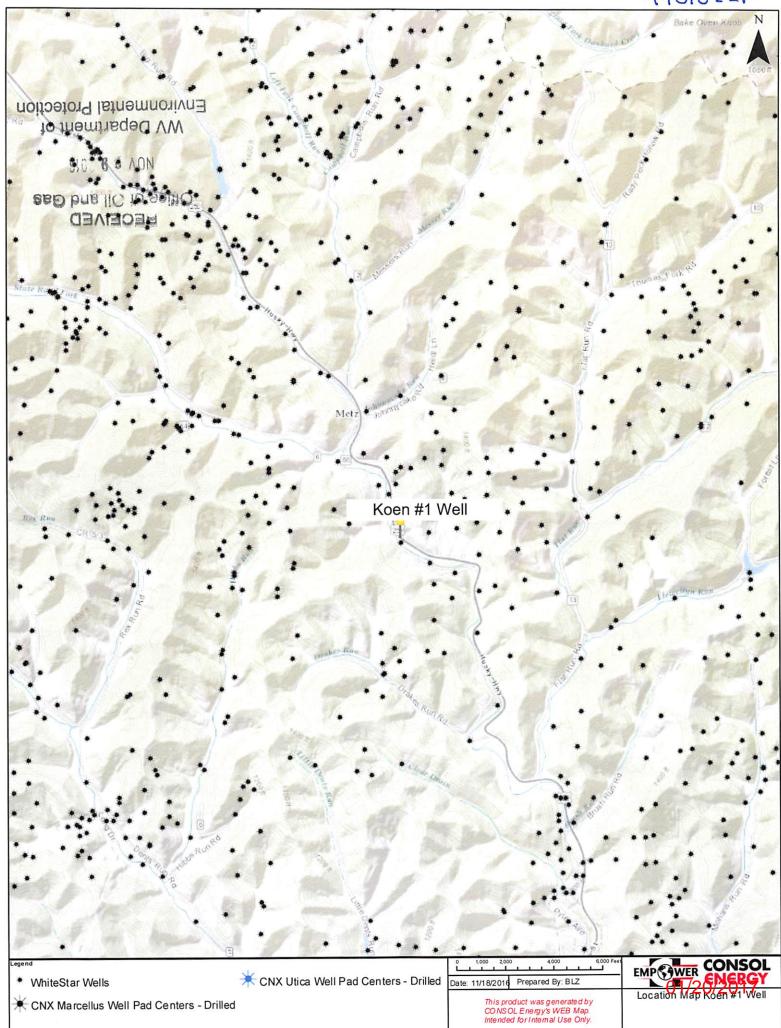
WW-9 (5/16)

API Number	47 -	049	_ 01022
Operator's W	ell No	. Koen #1	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS FLUIDS/ CUITINGS DISPOSAL & RECLAMATION PLAN

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN
Operator Name LEATHERWOOD, INC. OP Code 494476721
Watershed (HUC 10) Pyles Fork Quadrangle Mannington
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: N/A
Will a synthetic liner be used in the pit? Yes No If so, what ml.? N/A
Proposed Disposal Method For Treated Pit Wastes:
Land Application (if selected provide a completed form WW-9-GPP) Underground Injection (UIC Permit Number)
Reuse (at API Number)
x Off Site Disposal (Supply form WW-9 for disposal location)
Other (Explain Waste Management or Ryan Environmental will use vacuum trucks, and properly dispose of any fluid or waste returns.
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
-If oil based, what type? Synthetic, petroleum, etc
Additives to be used in drilling medium? N/A
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 April 1, 2016, 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 to 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. NOV 2 9 2016
Company Official (Typed Name) Gerald Ramsburg
VVV Department of
Environmental Protection
Subscribed and sworn before me this. 22 nd day of November , 20 (commonwealth of Pennsylvania Notary Fublic Lindsey K Pritts Notary Public Cecil TWP, Washing 19/20/2017 My commission expires January 28, 2019

ttach: [aps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been rovided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W, D) of the pit, and dimensions of involved 7.5' topographic sheet. an Approved by: Authorite Office of Oil an NOV 2 9 CO WV Departm Environmental F	Form WW-9		Operator's	Well No. Koen #1
Lime 2-3	roposed Revegetation Trea	ment: Acres Disturbed le	ess than 1 acre Preveg etation	ı pH
Fertilizer amount 500 Mulch hay or straw 2 Tons/acre Seed Mixtures Temporary Seed Type lbs/acre Tall Fescue 40 Tall Fescue 40 Landino Clover 5 Mulch hay or straw 2 Temporary Permanent Seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Landino Clover 5 Landino Clover 5 Mulch hay or straw 2 Temporary Permanent Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Type lbs/acre Tall Fescue 40 Landino Clover 5 Mulch hay be a seed Typ				
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Seed Mixtures Temporary Seed Type Ibs/acre Seed Type Ibs/acre Tall Fescue 40 Tall Fescue 40 Landino Clover 5 Landino Clover 6 Landino Clover 6 Landin	Fertilizer amount 5	00	Ibs/acre	
Temporary Seed Type Ibs/acre Seed Type Tall Fescue 40 Landino Clover 5 Landino Landi	Mulch_hay or str	aw 2	_Tons/acre	
Seed Type Ibs/acre Tall Fescue 40 Tall Fescue 40 Landino Clover 5 Landino Clover 5 Landino Clover 5 Landino Clover 5 ttach: aps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been ovided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions of the land application area. Notocopied section of involved 7.5' topographic sheet. An Approved by: All Landino Clover 5 Landino Clover 5 Landino Clover 5 White a continuous contin			Seed Mixtures	
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Landino Clover 5 Landino Clover 15 Landino L	Seed Type	lbs/acre	Seed Type	lbs/acre
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Office of Oil an NOV 2 9 WV Departm Environmental F	an Approved by:	- Dulanat	A	
Office of Oil an	omments:			
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Detail 11 25 5	0			WV Department of Environmental Protect
Date: 11 CS12016	tle: <u>606</u>	Inspector	Date: 11 23/201	6



01/20/2017

WW-7 8-30-06



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

API: 47-049-01022		WELL NO.: 1	
FARM NAME: KOEN			
RESPONSIBLE PARTY NAME	Gerald R	amsburg	
		ISTRICT: MAN	NINGTON
QUADRANGLE: MANNIN	GTON		
SURFACE OWNER: Shena	l, Elizabetl	n T & Robert	F Jr
ROYALTY OWNER:			
UTM GPS NORTHING: 4380	923.09m		(9981)
UTM GPS EASTING: 55450	3.48m	GPS ELEVATION	
The Responsible Party named above preparing a new well location plat to above well. The Office of Oil and Othe following requirements: 1. Datum: NAD 1983, Zon height above mean seal 2. Accuracy to Datum – 3. 3. Data Collection Method Survey grade GPS: Post P	for a plugging per Gas will not accept ne: 17 North, Coolevel (MSL) – me 05 meters	rmit or assigned API of GPS coordinates the ordinate Units: meter sters.	number on the hat do not meet
	Time Differential		
Mapping Grade GPS X : Po			
	al-Time Differen	According to the Control of the Cont	
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.			
And the		Manager	11/22/14
Signature	Tit	le	Date