

ALT METHOD

8000-FM-OOGM0005 Rev. 3/2017



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS MANAGEMENT

DEP USE ONLY	
Auth. No. 1268959	U.S. Well

NOTICE OF INTENTION BY WELL OPERATOR TO PLUG A WELL

<input checked="" type="checkbox"/> Well Operator	<input type="checkbox"/> Coal Operator	OGO No. 141142	U.S. Well No. (Permit / Reg) 37-051-21339	Date Drilled (If known) 10/25/01
Name Range Resources -Appalachia, LLC		Well Farm Name Christner Unit		
Address 3000 Town Center BLVD		Telephone No. 724)743-6700	Well No. 1	Well Serial No.
City Cannonsburg	State PA	Zip Code 15317	County Fayette	
<input type="checkbox"/> Agent (contractor) acting on behalf of the operator named above.		Municipality Lower Tyrone		
Address		Telephone No.	Latitude (DD) 40.0656	Longitude (DD) - 79.6601
City	State	Zip Code	Attach well record if not previously submitted.	

Complete this section if applicable. Prior to abandoning any well in an area underlain by a workable coal seam, the well operator or owner shall notify the coal operator, lessee, or owner of the intention to plug and abandon the well, and shall submit a plat showing the location and affix the date and time at which the work of plugging will commence.

Coal: <input type="checkbox"/> Operator <input type="checkbox"/> Owner <input type="checkbox"/> Lessee	Coal: <input type="checkbox"/> Operator <input type="checkbox"/> Owner <input type="checkbox"/> Lessee	Coal: <input type="checkbox"/> Operator <input type="checkbox"/> Owner <input type="checkbox"/> Lessee
Name N/A	Name N/A	Name N/A
Address	Address	Address
City, State, Zip Code	City, State, Zip Code	City, State, Zip Code
Telephone No.	Telephone No.	Telephone No.
Notified? <input type="checkbox"/> Yes <input type="checkbox"/> No	Notified? <input type="checkbox"/> Yes <input type="checkbox"/> No	Notified? <input type="checkbox"/> Yes <input type="checkbox"/> No
This Party hereby waives the rights to be notified of the date and time before plugging work will begin and to be present at the plugging of this well. Signature:	This Party hereby waives the rights to be notified of the date and time before plugging work will begin and to be present at the plugging of this well. Signature:	This Party hereby waives the rights to be notified of the date and time before plugging work will begin and to be present at the plugging of this well. Signature:

Scheduled Date and Time of Plugging Plugging is scheduled to begin on (date) **04-29-19** at (time) 8:00 am

Checklist and Additional Attached Information	Signature of Applicant (Operator or Agent)
<input checked="" type="checkbox"/> Location Plat <input checked="" type="checkbox"/> Current Well Record <input checked="" type="checkbox"/> Available Well Record <input checked="" type="checkbox"/> Application for Approval of Alternate Method of Plugging <input type="checkbox"/> Mine - Through <input type="checkbox"/> Other, describe:	Signature Date 04-9-19 Print or Type Signer's Name and Title Kyle Thomas, Area Completion Supervisor

DEP USE ONLY	
If this well has not been permitted or registered previously, DEP hereby assigns this identification number to the well location described in this notice: Identification No. _____ Date _____ Please refer to this number in all future correspondence.	Notice acknowledged by DEP Rep (Signature) Date 4/15/19 (Print Name) David McDermott
	Geologist Date

Send a copy of this notice to the applicant and the DEP inspectors.

☐ Applicant ☐ Oil and Gas Inspector ☐ Mine Inspector





COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Oil and Gas Management Program
WELL LOCATION PLAT

DEP USE ONLY	DEP Application Tracking #	NC-362785	G. S. K. 8/29/01
	Permit #	37-051-21339-00	
	Project #		

Well is located on topo map 6440 feet south of latitude 40 • 05 • 00

Denotes Location of well on topo map

True Latitude: NORTH

40 ° 03 ' 56 36

True Longitude WEST

79 ° 39 ' 36 35



R SHREVE

CHARLES N. EICHER, et ux

GW 21275

TRAILER



DONALD R. SPRDAT, et ux

TOPO MARK

R BEESON

LOC - A N 29°-10' W 510 35'
LOC - B N 16°-08' E 598.68'
A - B = N 72°-41' E 434 76'

A & B = PROPERTY CORNERS

SCOTT CHRISTNER, et ux

TRAILER

JOHN MILLER, SR

BROCK RICE

GAYLE GHRIST

LOT

KENNETH LEONARD et ux

NOTE: This map is for well location purposes only and does not represent a complete boundary survey. Owners and some property lines are shown as per tax assessment records.

Surveyor or William E. Cagle
Engineer SU - 033129-E

Dwg # BK 133 PG 69
CHRISTNER-IDWG

Date: REV 7/20/01

Scale 1" = 200 FEET

Tract N/A

Applicant / Well Operator Name

GREAT LAKES ENERGY PARTNERS, L.L.C.

Address
P. O. BOX 235 YATESBORO, PA. 16263

Surface Landowner
SCOTT CHRISTNER, et ux

Surface Lessor
N/A

Surface Owner or Water Purveyor
Approximate Course and
with a Water Supply within 1000 ft. Distance to Water Supply

(SEE ATTACHED SHEET)

Well (Farm) Name

FAYETTE-26

County - Code
FAYETTE-26

USGS 7 1/2 Quadrangle Map Name
DAWSON

Angle & Course of Deviation (Drilling)

0

Municipality

TYRONE TWP

Well #

1

Serial #

N/A

Map Section

6

Surface Elevation

970 ft

Anticipated Total Depth

4000 ft

Owner, Lessee, or Operator of
Workable Coal Seam

NO WORKABLE COAL SEAMS

Name of Coal Seam
Owned, Leased, or Operated

PA GEOLOGICAL SURVEY
Subsurface Geology Section

SEP 10 2001



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS MANAGEMENT

DEP USE ONLY
Application Tracking # 1268961

Proposed Alternate Method or Material for Casing, Plugging, Venting or Equipping a Well

Well Operator Range Resources-Appalachia		DEP ID# 141142		Well Permit or Registration Number 37-051-21339	
Address 3000 Town Center BLVD.				Well Farm Name Christner Unit	
City Cannonsburg		State Pa	Zip Code 15317	Well # 1	Serial #
Phone 814) 425-3100	Fax 814) 425-3181	County Fayette		Municipality Lower Tyrone	

A proposed alternate method is subject to provisions in §3221 of the 2012 Oil and Gas Act, 58 Pa. C.S. §3221 Section 13 of the Coal and Gas Resource Coordination Act, 58 P.S. §513 and 25 PA Code §§78.75-78.75a (relating to Alternate Methods.) **Attach proof of notification of coal operator(s).**

Describe in reasonable detail using a written description and / or diagram:

- 1. the proposed alternate method or materials, and**
- 2. the manner in which the alternative will satisfy the goals of the laws and regulations.**

A service unit will be brought in and will lower the 1-1/2" production tubing string down to attainable bottom. Once reached the DEP oil and gas inspector will be notified for approval of the attainable bottom. Once approved, a cement unit will be used to pump a cement plug from the approved attainable bottom up to 2000' inside the 4-1/2". The cement unit will disconnect from the tubing and the service rig will pull to tubing out of the well bore. Once the tubing is removed a wireline unit will run a CBL inside the 4-1/2" to locate the annulus cement top. Once located the service rig will run the tubing back down the inside of the 4-1/2" to the cement top located inside the 4-1/2". Once at the cement top, the cement unit will then pump a cement plug inside the 4-1/2" up to the CBL located annulus cement top. The cement unit will disconnect from the tubing and the tubing removed from the well bore. A workstring will be run down the inside of the 4-1/2" with an inside cutter at the bottom of the workstring and used to cut the 4-1/2" at the free point above the annulus cement top. The workstring will be removed. Once the 4-1/2" is freed, it will be used as the workstring. The 4-1/2" will be used to set cement from the stub cut up to surface.

The 8-5/8" will be cut 36" below ground level and a 2'X2' steel plate with the API# affixed to it will be tacked welded to the top of the 8-5/8" and buried.



Optional: Approval by Coal Owner or Operator		Signature of Applicant / Well Operator	
Signature	Date	Signature	Date
Print or Type Signer's Name and Title		Print or Type Signer's Name and Title	
		Kyle Thomas, Area completion supervisor	

If optional approval is signed by coal owner or operator, the 15-day objection period may be waived.

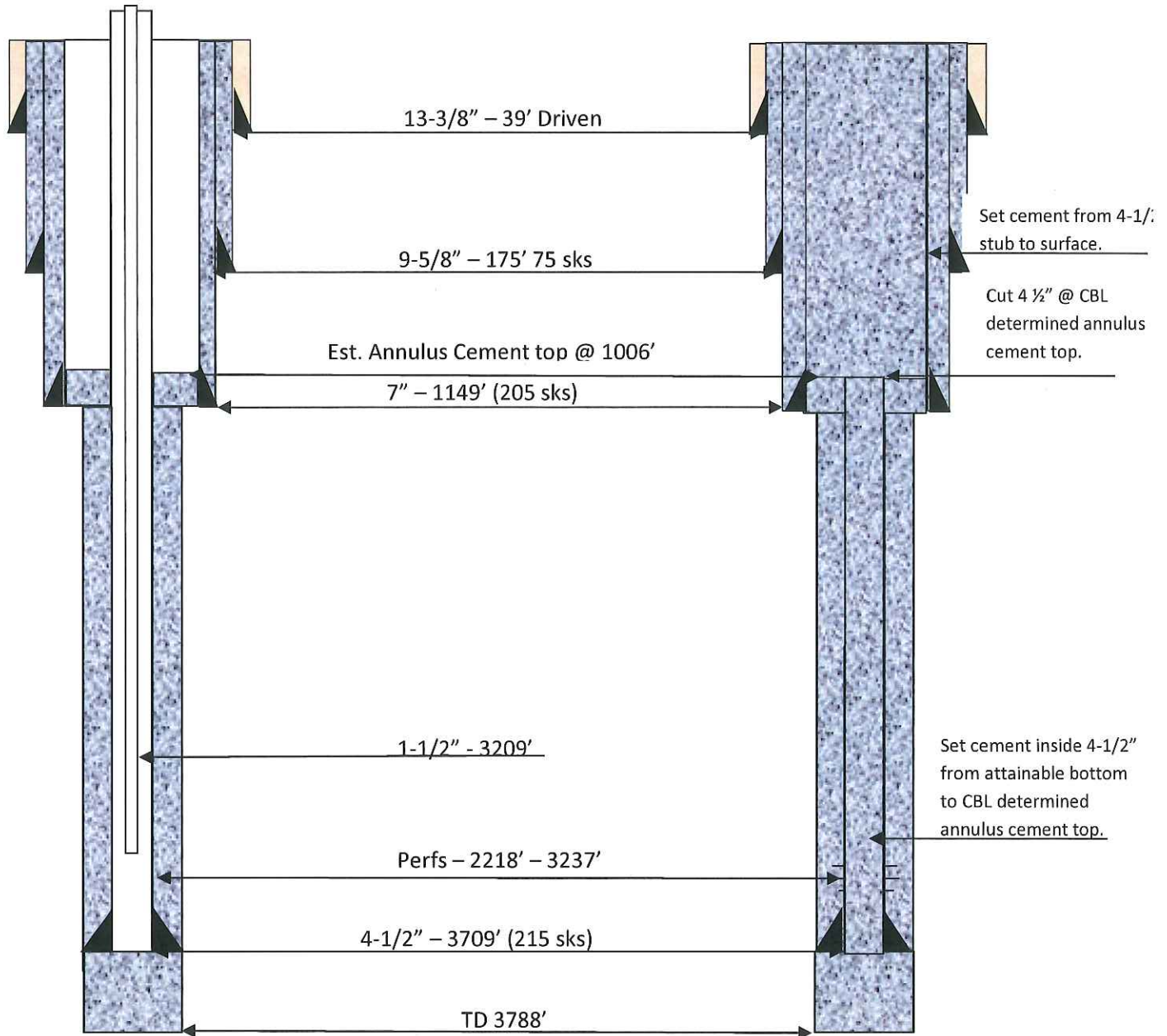
DEP USE ONLY	
Approved by (DEP Manager) 	Conditions <input type="checkbox"/> YES, See Attached <input checked="" type="checkbox"/> NO
	Date 5/1/19

Well Name Christner Unit #1

Permit 37-051-21339

Current Well Bore

Proposed P&A



REMARKS: _____

January 18, 2019



Pennsylvania Department of Environmental Protection
Southwest Regional Office
Bureau of Oil & Gas Management
400 Waterfront Drive
Pittsburgh, PA 15222

RE: Christner Unit 1

To Whom It May Concern:

Mineral Resource Report #68 (MRR #68) has been reviewed for the presence or absence of workable coal seams.

The well location(s) have been plotted on a section of each Plate with results listed below. Upon examination of these potted maps, the well(s) clearly fall outside the workable coal seam area.

MAP	COAL SEAMS	SEAM STATUS
Plate 1	Upper Mercer	Inferred
Plate 2	Brookville	Inferred
Plate 3	Clarion	Inferred
Plate 4	Lower Kittanning	Inferred
Plate 5	Middle Kittanning	Inferred
Plate 6	Upper Kittanning	Inferred
Plate 7	Lower Freeport	Inferred
Plate 8	Upper Freeport	Inferred
Plate 9	Pittsburgh	None
Plate 10	Redstone	None
Plate 11	Sewickley	None
Plate 12	Waynesburg	None
Plate 13	Washington	None

If you have any questions, please contact me at 724.743.6100.

Respectfully,
Range Resources-Appalachia, LLC

Al Vish
Senior Staff Geological Technician
avish@rangeresources.com



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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Oil & Gas Management Program

WELL RECORD AND COMPLETION REPORT

DEP USE ONLY	
Auth #	APS #
Site #	Facility #
FIX Client #	Sub-fac #

Well Operator Great Lakes Energy Partners, L.L.C.		DEP ID# 141142	Well API # (Permit / Reg) 37-051-21339	Project Number	Acres 6.864
Address P O Box 235, Route 85 and Northern Avenue			Well Farm Name Christner Unit	Well # 1	Serial #
City Yatesboro	State PA	Zip Code 16263	County Fayette	Municipality Lower Tyrone	
Phone 724-783-7144	Fax 724-783-7655	USGS 7.5 min. quadrangle map Dawson			

WELL RECORD Also complete for all formations in back (2005-2011)

Well Type	<input checked="" type="checkbox"/> Gas <input type="checkbox"/> Oil <input type="checkbox"/> Combination Oil & Gas <input type="checkbox"/> Injection <input type="checkbox"/> Storage <input type="checkbox"/> Disposal						
Drilling Method	<input checked="" type="checkbox"/> Rotary - Air <input type="checkbox"/> Rotary - Mud <input type="checkbox"/> Cable Tool						
Date Drilling Started 10/25/01	Date Drilling Completed 10/29/01	Surface Elevation 970'	Total Depth - Driller 3788'	Total Depth - Logger 3788'			
Casing and Tubing		Cement returned on surface casing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cement returned on coal protective casing? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A					
Hole Size	Pipe Size	Wt.	Thread / Weld	Amount in Well (ft)	Material Behind Pipe Type and Amount	Packer / Hardware / Centralizers Type Size Depth	Date Run
15	13-3/8	37	Thread	39'	Driven	-----	10/25/01
12	9-5/8	26	Thread	175'	Class A Cement, 75 sks	Guide Shoe 9-5/8 175'	10/26/01
8-7/8	7	17	Thread	1149'	Class A Cement, 205 sks	Guide Shoe 7 1149'	10/27/01
6-1/4	4-1/2	10.5	Thread	3709'	UFL Cement, 215 sxs	Float Shoe 4-1/2 3709'	10/29/01
	1-1/2	2.75	Thread	3209.2'	Tubing		11/5/01

COMPLETION REPORT

Perforation Record				Stimulation Record					
Date	Interval Perforated From To		Date	Interval Treated	Fluid Type Amount	Propping Agent Type Amount	Average Injection Rate		
11/1/01	3228'	3237'	11/2/01	3228' - 3237'	Gelled water 18400 gal	20-40 sand 360 sxs	34 bpm		
11/2/01	2218'	2222'	11/2/01	2218' - 2222'	Gelled water 14550 gal	20/40 sand 210 sxs	28.5 bpm		
Natural Open Flow NA			Natural Rock Pressure NA			Hours		Days	
After Treatment Open Flow 411 Mcfd			After Treatment Rock Pressure 1160 psi			Hours 72		Days	
Well Service Companies -- Provide the name, address, and phone number of all well service companies involved.									
Whipstock Natural Gas Serv., Inc., 150 Franklin Street, Route 286, Clymer, PA 15728 724-254-0500									
Titan Wireline Services, P.O. Box 286, Elderton, PA 15736 724-354-2629									
Universal Well Services, P.O. Box 305, Punxsutawney, PA 15767 814-938-2051									
Allegheny Wireline Services, P.O. Box 506 Weston, WV 26452 304-269-2500									

LOG OF FORMATIONS

Well API#: 37-051-21339

Formation Name	Top	Bottom	Gas at	Oil at	Water at (Fresh or Brine)	Source of Data
Soll & Clay	0'	12'				Drillers Log
Sandstone & Shale	12'	21'				"
Shale	21'	31'				"
Sandstone	31'	47'				"
Sandstone & Shale	47'	100'				"
Red Rock	100'	111'				"
Sandstone	111'	130'				"
Shale	130'	146'				"
Coal	146'	148'				"
Sandstone & Shale	148'	159'				"
Coal	159'	161'				"
Shale	161'	181'			Fresh @ 170'	"
Sandstone	181'	190'				"
Sandstone & Shale	190'	320'				"
Coal	320'	325'				"
Shale	325'	330'				"
Sandstone & Shale	330'	485'			Fresh @ 330'	"
Sandstone	485'	500'				"
Sandstone & Shale	500'	555'				"
Coal & Shale	555'	570'				"
Sandstone & Shale	570'	935'			Fresh @ 670'	"
Red Rock	935'	960'				"
Sandstone & Shale	960'	1230'				"
Red Rock	1230'	1250'				"
Sandstone & Shale	1250'	1625'				"
Sandstone	1625'	1650'				"
Sandstone & Shale	1650'	1835'				"
Red Rock	1835'	1860'				"
Sandstone & Shale	1860'	1985'				"
Shale	1985'	2000'				"
Sandstone & Shale	2000'	2040'				"
Red Rock	2040'	2340'				"
Sandstone & Shale	2340'	2400'				"
Red Rock & Shale	2400'	2460'				"
Shale	2460'	2940'				"
Sandstone & Shale	2940'	3200'				"
Shale	3200'	3230'				"
Sandstone & Shale	3230'	3530'				"
Sandstone	3520'	3560'				"
Sandstone & Shale	3560'	3788'				"
Total Depth		3788'				Driller's TD

DEP USE ONLY

James F. Watson

Reviewed by:

Date:

Title:

Date:

Production Engineer

1/18/02

Comments: