



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

DEP USE ONLY	
Auth. No. 1208903	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) 37-051-20829 ✓	Date Drilled (If known) 06/16/97
Name Range Resources -Appalachia, LLC ✓		Well Farm Name Shirocky 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) 40.0635 ✓	Longitude (DD) - 79.669 ✓
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. Notified? <input type="checkbox"/> Yes <input type="checkbox"/> No	Telephone No. Notified? <input type="checkbox"/> Yes <input type="checkbox"/> No	Telephone 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) **04-15-19** ✓ at (time) 8:00 am

Checklist and Additional Attached Information <input checked="" type="checkbox"/> Location Plat <input checked="" type="checkbox"/> Current Well Record <input checked="" type="checkbox"/> Available Well Record <input type="checkbox"/> Application for Approval of Alternate Method of Plugging <input type="checkbox"/> Mine - Through <input type="checkbox"/> Other, describe:	Signature of Applicant (Operator or Agent) Signature _____ Date 04-08-19 Print or Type Signer's Name and Title Kyle Thomas, Area Completion Supervisor
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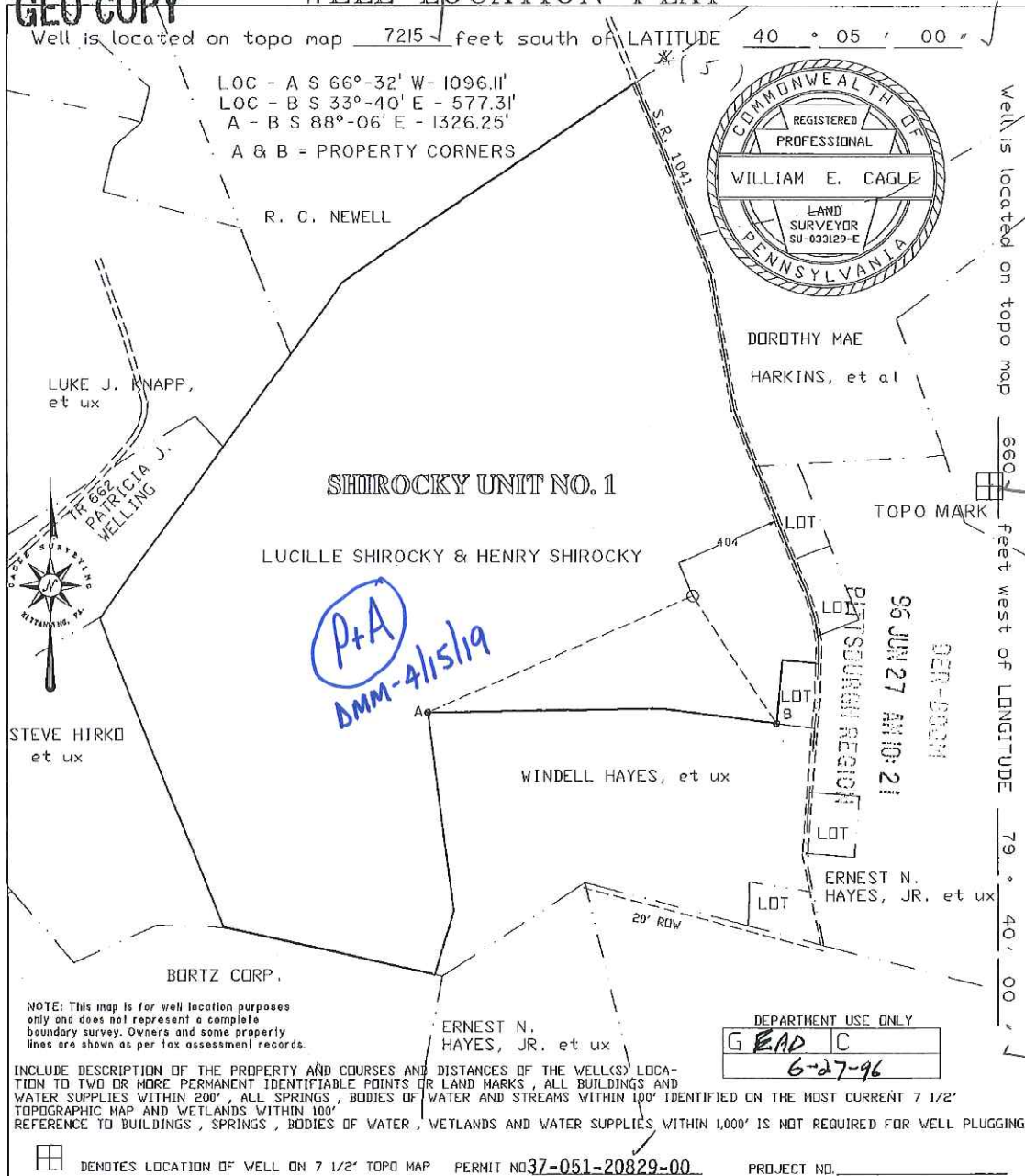
If this well has not been permitted or registered previously, DEP hereby assigns this identification number to the well location described in this notice: Identification No. _____ Date _____ Please refer to this number in all future correspondence.	DEP USE ONLY	
	Notice acknowledged by _____ Date _____ DEP Rep (Signature) David McDermott 4/15/19 (Print Name) David McDermott	Geologist _____ Date _____

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

<input type="checkbox"/> Applicant <input type="checkbox"/> Oil and Gas Inspector <input type="checkbox"/> Mine Inspector	<div style="border: 2px solid blue; padding: 5px;"> <p>RECEIVED Date Received in DEP Office Plugging must begin within 30 days of: APR 12 2019 DEP Southwest Region Oil & Gas</p> </div>
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GEO COPY

WELL LOCATION PLAT



LOMAK OPERATING COMPANY		<input type="checkbox"/> REVISION <input type="checkbox"/> ALTERATION <input type="checkbox"/> STORAGE RECONDITION <input type="checkbox"/> NEW LOCATION <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> ABANDONMENT <input type="checkbox"/> REGISTRATION <input type="checkbox"/> PLUGGING	WILLIAM E. CAGLE	
Well Permittee/Registrant P. O. BOX 235			Surveyor/Engineer SU-033129-E BK 91 PG 35 SHIRUN-LDWG	
Address YATESBORO, PA. 16263			Drawing Number 6-03-96	
Surface Owner N/A			Date 1 INCH = 500 FEET	
Surface Lessor (if any) SHIROCKY UNIT		Scale		
Farm Name I		APPROXIMATE COURSE AND DISTANCE TO WATER SUPPLY WITHIN 1,000'		
Well No. 108.362		S-80 ROBERT HAYES N 80-18° E - 450'		
Tract		W-69 JACK E. BAIRD S 52-52 E - 505'		
Serial No. 1059		S-66 DORIS K. STUNJA S 53-51 E - 722'		
Acres N/A		S-68 ERNEST N. HAYES JR. S 67-17 E - 956'		
Ground Elevation 4000		S-67 THOMAS W. HAYES S 33-03 E - 937'		
Angle of Deviation (Drilling) FAYETTE				
Anticipated TD LOWER TYRONE TWP.				
Municipality 5				
County DAWSON				
Topo Quadrange				
Section				
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES BUREAU OF OIL AND GAS MANAGEMENT		RECEIVED PA GEOLOGICAL SURVEY Oil & Gas Geology Division JUL 8 1996		

January 18, 2019



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

RE: Shirocky 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

Commonwealth of Pennsylvania
Department of Environmental Protection
Bureau of Oil and Gas Management

COAL/NON-COAL DETERMINATION

Well Name Shirocky Unit 1

Approved as:

☐ Coal

☒ Non-Coal

Permit Number 051-20829

Geologist HLK

COAL SEAM

Date 4/15/2019

Washington Absent

Waynesburg Absent

Sewickley Absent

Redstone Absent

Pittsburgh Absent

Upper Freeport Inferred

Lower Freeport Inferred

Upper Kittanning Inferred

Middle Kittanning Inferred

Lower Kittanning Inferred

Clarion Inferred

Brookville Inferred

Mercer Inferred

Other

Comments:

References: M-68 Mine Maps

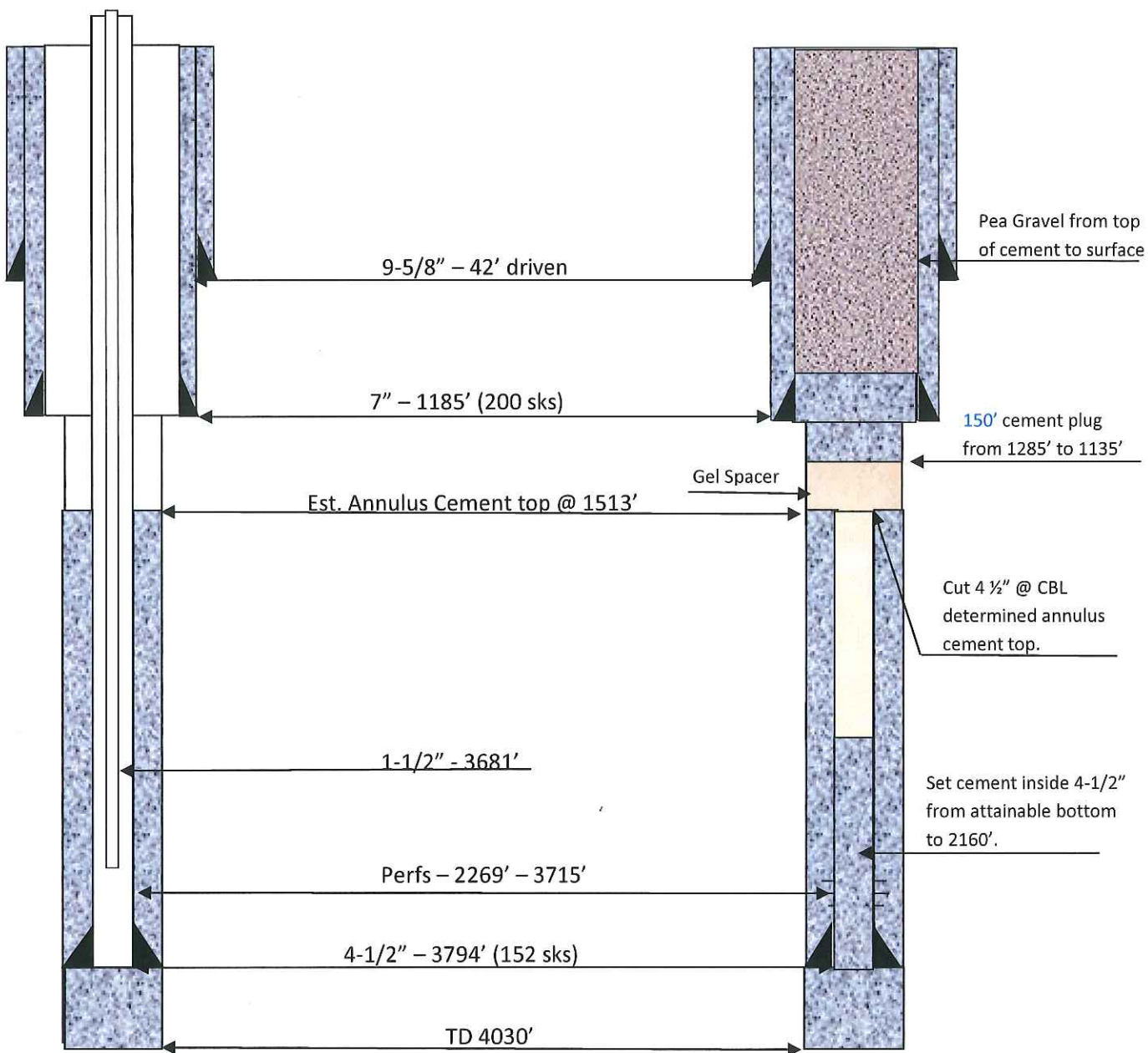
FOR INFORMATION ONLY

Well Name Shirocky Unit #1

Permit 37-051-20829

Current Well Bore

Proposed P&A



REMARKS: _____

Commonwealth of Pennsylvania
Department of Environmental Resources
Bureau of Oil and Gas Management

WELL RECORD AND COMPLETION REPORT

- In accordance with 25 Pa. Code 78.122(a), a Well Record must be submitted to the Department within 30 calendar days of cessation of drilling or altering a well.
- In accordance with 25 Pa. Code 78.122(b), a Completion Report must be submitted within 30 calendar days after completion of the well. In addition, the information on land application of topsoil water and disposal of residual waste (including contaminated drill cuttings) in a pit is to be filed with the Completion Report (see ER-OG-76).

Well Operator	Lomak Operating Company		Telephone Number	(412) 783-7144	
Address	P. O. Box 235, Yatesboro, PA		Zip	16263	
Permit Number	37-051-20829	Project Number			
Farm Name	Shirocky Unit	Farm Number	1	Serial Number	
Township	Lower Tyrone	County	Wayne		
Type of Well	X Gas	Oil	Injection	Storage	Disposal
Other (Specify)					

WELL RECORD
(Include Driller's Log on Reverse Side)

Drilling Method	Rotary (Air X Mud)		Cable Tool	Date Drilling Started	Date Drilling Completed
Other (Specify)				06/16/97	06/22/97
Elevation	1059	Total Depth	4030	7-1/2" Quadrangle	Dawson

CASING AND TUBING RECORD

Hole Size	Pipe Size	Amount in Well	Material Behind Pipe	Packer/Hardware			Date Run
			Type and Amount	Type	Size	Depth	
12-1/4"	9-5/8"	42'	Driven				06/16/97
8-7/8"	7"	1185'	100 sacks Class A cement	guide shoe	7"	1195' KBM	06/17/97
6-1/4"	4-1/2"	3794'	100 sacks 50/50 Poz Mix cement	float shoe	4-1/2"	3794' GL	06/22/97
	1-1/2"	3681'	152 sacks Class A cement	float shoe			07/14/97
			Tubing				

Cement return on surface casing? Yes X No

COMPLETION REPORT

Perforation Record			Stimulation Record						
Date	Interval	Perforated	Date	Interval Treated	Fluid		Propping Agent		Average Injection Rate
	From	To			Type	Amount	Type	Amount	
07/02/97	3698	3715	07/02/97	3698-3715	gelled water	16,884	20/40 sand	34,500	27 bpm
"	3345	3357	"	3345-3357	gelled water	16,968	20/40 sand	41,000	25 bpm
"	2387	2432	"	2387-2432	gelled water	26,838	20/40 sand	33,000	27.5 bpm
"	2269	2277	"	2269-2277	gelled water	18,018	20/40 sand	22,000	20 bpm

Natural Open Flow	NA	Natural Rock Pressure	NA	Hours
After Treatment Open Flow	61 MCFPD	After Treatment Rock Press.	1,070 psi	72 Hours

Name, Address, and Telephone Number of Well Service Companies	
Northeast Energy, Inc., 2794 Route 422W, Bldg. 3, Indiana, PA 15701 412-349-7538	RECEIVED FEB 10 1998 PA GEOLOGICAL SURVEY Oil & Gas Geology Division WEST REGION
B J Services Company, R R 1, Box 144A, Fairmount City, PA 16224 814-365-2003	
Allegheny Wireline Services, P.O. Box 506 Weston, WV 26452 304-266-2500	
Titan Wireline Services, 227 S Main Street, P O Box 286, Elderton, PA 15736 412-354-2829	

DRILLER'S LOG OF FORMATIONS						
Name	Top	Bottom	Gas at	Oil at	Water at (Fresh or Brine)	Source of Data
TB-Gl	0	5				Driller log
Shale & Sand	5	195			Freshwater @ 50' & 56'	
Coal	195	198				
Shale & Sand	198	956				
Red Rock	956	990				
Shale & Sand	990	1,090				
Red Rock	1,090	1,095				
Shale & Sand	1,095	2,260				
Red Rock	2,260	2,290				
Shale & Sand	2,290	2,607				
Shale	2,607	2,850				
Shale & Sand	2,850	3,040				
Shale	3,040	3,340				
Shale & Sand	3,340	3,680				
Shale	3,680	3,705				
Sand	3,705	3,720				
Shale	3,720	3,940				
Sand	3,940	3,980				
Shale	3,980	4,030				
Total Depth	4,030					Driller's TD
Fifth Sandstone	2,238	2,313				Geophysical logs
Bayard Sandstone	2,332	2,434				
Speechley Sandstone	3,194	3,216				
Balltown Sandstone	3,341	3,394				
Bradford Marker	3,642	3,647				
First Bradford Sandstone	3,696	3,716				

William G. Zagorski
Operator's Signature

Manager of Geology & Exploration, Appalachian District
Title

9/8/97
Date

FOR OFFICIAL USE ONLY

ckc 10/17/97
Reviewed By Date