

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

October 07, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-8101369, issued to CABOT OIL & GAS CORPORATION, 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: C-62

Farm Name: BEAVER COAL CO.

API Well Number: 47-8101369
Permit Type: Plugging
Date Issued: 10/07/2015

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.

1) Date September 3 , 20 15	
2) Operator's Well No. Beaver Coal C-62	
3) API Well No. 47-081 -01369	

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

5)	Location: Elevation 2,292.22'	Watershed Shockley Branch of Millers Camp Branch
	District Town	County Raleigh Quadrangle Lester
6)	Well Operator Cabot Oil & Gas Corporation	7) Designated Agent Phillip Hill
	Address 2000 Park Lane, Suite 300	Address Cabot Oil & Gas Corporation
	Pittsburgh, PA 15275	900 Lee St. E, Ste. 1500 Huntington Sq.
		Charleston, WV 25301
8)	Oil and Gas Inspector to be notified Name Gary Kennedy	9) Plugging Contractor Name Contractor Services, Inc.
	Address P.O. Box 268	Address 929 Charleston Road
	Nimitz, WV 25978	Spencer, WV 25276
	See Attached Sheet	manner of plugging this well is as follows:
		RECEIVED
		RECEIVED
		RECEIVED Office of Oil and Gas

BEAVER COAL C-62

API # 47 - 081 - 01369 PLUGGING PROCEDURE

Current Configuration

LTD @ 4042' KB

Elevation - 2305'

20" conductor @ 22' KB, not cemented

13-3/8" - 48# R-2 casing @ 505' KB, cemented & grouted to surface

9-5/8" - 26# LS casing @ 833' KB, cemented to surface

4 1/2" - 10.5# M-60 casing @ 4016' KB w/ TOC @ 2350'

2-3/8" - EUE tubing @ 2918' KB

Sunbury Shale perfs: 3800' - 3810'

Weir Shale perfs: 3600' - 3620'

Middle Big Lime perfs: 2946' - 2956'

Upper Big Lime perfs: 2782' - 2792'

Open mine @ 465' - 468'

Workable Coal @ 431' - 433'

Fresh water @ 177', 330', 430', & 530'

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WV Department of Environmental Protection

PROCEDURE

- 1. Contact Pineville District Office a minimum of 48 hours prior to starting work
- 2. Contact state inspector a minimum of 24 hours prior to starting work.
- 3. MIRU service rig and blow down well.
- 4. Lay 2" line from wellhead to pit/tank and stake down securely. Vent 4-1/2" x 9-5/8" annulus.
- 5. Unpack wellhead and ensure tubing is free and can be pulled.
- 6. Run rig tools to determine well TD and note any fluid level.
- 7. Lower tubing to 3820' with 29 joints of tubing.
- 8. MIRU Cementing Company.
- 9. Pump 25 sacks of Class A cement for cement plug 1 from 3820' to 3500'.
- 10. Displace with 13-1/2 bbls of 6% Gel.
- Pull tubing up to 3000' and pump 30 sacks of Class A cement for cement plug 2 from 3000' 2600'.
- 12. Displace with 10 bbls of 6% Gel.
- 13. POOH with tubing and let cement plug set for a minimum of eight hours.
- 14. Run freepoint and cut 4 ½" casing where free. Estimate ±2270'.
- Pick up casing 1 jt and pump 25 bbls of 6% Gel followed by 45 sacks of Class A cement for cement plug 3 from 2270' to 2050'.
- 16. Displace with 32 1/2 bbls of 6% Gel.
- Pull casing up to 870' and pump 45 cubic feet of expanding cement for cement plug 4 from 870' to 770'.
- 18. Displace with 12 bbls of 6% Gel.
- Pull casing up to 550' and pump 210 sacks of Class A cement for cement plug 5 from 550' to surface.
- 20. TOOH with casing and lay down.
- RDMO Cement company.
- 22. Place monument as required by law on top of well bore.
- 23. Reclaim well site.

Here

API 47-081-01369 PROPOSED CONFIGURATION Elevation - 2305 22" Conductor @ 21' KB Fresh water @ 177', 330', 430', & 530' CI A cmt Coal @ 431' -433' & 13 3/8" - 48# R-2 casing @ 505' KB 465' - 468' (open) Cemented & grouted to surface Exp. Con. ? Bottom of cmt plug 5 @ 550' 6% gel Top of cmt plug 4 @ 780' 9 5/8" - 26# LS casing @ 833' KB Exp cmt Cemented to surface Bottom of cmt plug 4 @ 880' RECEIVED Office of Oil and Gas 6% gel SEP 1 4 2015 WV Department of **Environmental Protection** Top of cmt plug 3 @ ±2050' CI A cmt Bottom of cmt plug 3 @ ±2270' TOC @ 2350' KB 6% gel 2484'-Top of cmt plug 2 @ 2600' **BIG LIME** Big Lime Perforations @ 2782'-2792' CI A cmt Big Lime Perforations @ 2946'-2956' 3118'-Bottom of cmt plug 2 @ 3000' 6% gel 3350'-WEIR 3410'-Top of cmt plug 1 @ 3500' Weir Shale Perforations @ 3600'-3620' CI A cmt: Sunbury Perforations @ 3800'-3810' 4-1/2" 10.5# M-60 casing @ 4016' KB LTD @ 4042' KB Schematic is not to scale T. Ott 04/23/15

Beaver Coal C-62

WHIL

WW-4B Rev. 2/01

1) Date September 3 , 20 15
2)Operator's
Well No. Beaver Coal C-62
3) APT Well No. 47-081 -01369

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

APPLICATION FOR A PER	RMIT TO PLUG AND ABANDON
) Well Type: Oil/ Gas X / Liqu	id injection/ Waste disposal/
(If "Gas, Production X or Un	nderground storage) Deep/ Shallow_X
) Location: Elevation 2,292.22	Watershed Shockley Branch of Millers Camp Branch
District Town	County Raleigh Quadrangle Lester
) Well Operator Cabot Oil & Gas Corporation	7) Designated Agent Phillip Hill
Address 2000 Park Lane, Suite 300	Address Cabot Oil & Gas Corporation
Pittsburgh, PA 15275	900 Lee St. E, Ste. 1500 Huntington Sq.
	Charleston, WV 25301
Oil and Gas Inspector to be notified	9) Plugging Contractor
Name Gary Kennedy	Name Contractor Services, Inc.
Address P.O. Box 268	Address 929 Charleston Road
Nimitz, WV 25978	Spencer, WV 25276
tification must be given to the district ork can commence.	oil and gas inspector 24 hours before permitte RECEIVED Office of Oil and Gas
rk order approved by inspector	Date SEP 1 6 2015
	y#V Deport <mark>10/09/201</mark> Environmental Protection

BEAVER COAL C-62

API # 47 – 081 – 01369 PLUGGING PROCEDURE

Current Configuration

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9-5/8" – 26# LS casing @ 833' KB, cemented to surface

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2-3/8" – EUE tubing @ 2918' KB Sunbury Shale perfs: 3800' – 3810' Weir Shale perfs: 3600' – 3620' Middle Big Lime perfs: 2946' – 2956' Upper Big Lime perfs: 2782' – 2792'

Open mine @ 465' – 468' Workable Coal @ 431' – 433'

Fresh water @ 177', 330', 430', & 530'

PROCEDURE

- 1. Contact Pineville District Office a minimum of 48 hours prior to starting work
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- 20. TOOH with casing and lay down.
- 21. RDMO Cement company.
- 22. Place monument as required by law on top of well bore.
- 23. Reclaim well site.

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Beaver Coal C-62 API 47-081-01369 PROPOSED CONFIGURATION Elevation - 2305 22" Conductor @ 21' KB Fresh water @ 177', 330', 430', & 530' CI A cmt 13 3/8" - 48# R-2 casing @ 505' KB Coal @ 431' -433' & 465' - 468' (open) Cemented & grouted to surface Bottom of cmt plug 5 @ 550' 6% gel Top of cmt plug 4 @ 780' 9 5/8" - 26# LS casing @ 833' KB Exp cmt Cemented to surface Bottom of cmt plug 4 @ 880' 6% gel Top of cmt plug 3 @ ±2050' CI A cmt Bottom of cmt plug 3 @ ±2270' TOC @ 2350' KB 2484'-6% gel Top of cmt plug 2 @ 2600' **BIG LIME** Big Lime Perforations @ 2782'-2792' CI A cmt Big Lime Perforations @ 2946'-2956' Bottom of cmt plug 2 @ 3000' 3118'-6% gel 3350' **WEIR** 3410' Top of cmt plug 1 @ 3500' Weir Shale Perforations @ 3600'-3620' CI A cmt Sunbury Perforations @_3800° 3810° in 4-1/2" 10.5# M-60 casing @ 4016 KBd Gas LTD @ 4042' KB Schematic is not to scale T. Ott 04/23/15 SEP 1 6 2015

WR-35 Date March 1, 2006 API# 47- 081 - 01369 State of West Virginia **Division of Environmental Protection** Section of Oil and Gas Well Operator's Report of Well Work Farm Name: **Beaver Coal Company** Operator Well No.: Beaver Coal C-62 LOCATION: Elevation: 2305 Quadrangle: Lester District: Town County: Raleigh Latitude: 6400' feet South of 37° DEG. 45' MIN. 00" SEC. Longitude: 8100' feet West of 81° DEG. 15' MIN. 00" SEC. Casing & Cement Fill Tubing Size Used in Drilling Left In Well Up Cu. Ft. Company: Cabot Oil & Gas Corporation 22" 900 Lee Street East, Suite 500 21' 21' NA Charleston, WV 25301 13-3/8" 505' 505' 445 Agent: Thomas S. Liberatore Inspector: 9-5/8" 833' 833' Richard S. Campbell 393 Permit Issued: 7/25/2005 Well Work Commenced: 4-1/2" 4016' October 10, 2005 200 Well Work Completed: November 7, 2005 Verbal Plugging: 2-3/8" 2919' NA Permission granted on: Rotary X Cable Total Depth (feet) 4042 Fresh Water Depths (ft) 177', 330', 430', 530' Salt Water Depths (ft) NONE REPORTED Is coal being mined in area (Y / N)? YES Coal Depths (ft) 431-433'; 465-468' (open) **OPEN FLOW DATA** SUNBURY Pay Zone 3800'-3810' Producing Formation LOWER WEIR SHALE Depth (ft) 3600'-3620' Gas: Initial Open Flow TSTM MCF/d Oil: Initial Open Flow Bbl/d Final Open Flow 0 MCF/d HOULE VE BOYO Final Open Flow Time of open flow between initial and final tests 8 Hours Office of Cil and Gas Static rock pressure _ psig surface pressure after Hours MIDDLE LIME Pay Zone 2946'-2956 P 1 6 2015 **Second Producing Formation** UPPER BIG LIME 278<u>2'-2792'</u> Depth (ft) Gas: Initial Open Flow WVV Department of TSTM MCF/d Oil: Initial Open Flow Final Open Flow 285 (COMMINGLED) MCF/d Final Open Flow 0 Bbl/d Time of open flow between initial and final tests Hours Static rock pressure 250 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 SYSTEMATIC DETAILED GEOLOGICAL RECORD 1/2015 OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE For: **CABOT OIL & GAS CORPORATION** Office of Oil & Gas Office of Chief By: **Drilling Superintendent** AAR 10 2006 Department of ntel Protection

Lester 3

RAL-1369

		ACID		SAND	NITROGEN				
STAGE	PERFS	15% HCI	FOAM	(lbs)	(scf)	BDP	AT?	MTP	ISIP
1-Sunbury Fault	3800-3810 (40)	250 gal	75Q	45,215	474.000	2675	1736	1790	1400
2-Lower Weir Shale	3600-3620'	350 gal	75Q	45,510	422,000	1588	1648	1776	1520
3-Middle Lime	2946-2956 (40)	500 gal	75Q	29,600	438.000	2331	2549	2622	2426
4-Upper Big Lime	2782-2792 (40)	500 gal	75Q	30,400	468.000	2333	2938	3128	2930
FORMATION		тс)P		BOTTON	Л	REMARI	K S	
Sill/Shale		Surf	ace		431				
Coal		43	31		433				
SilVShale		43	33		465				
Coal		46			468		OPEN		
Silt/Shale		46			525				
Shale	525				744				
RV, Sandstone		74			790				
Sill/Shale		79			851				
Avis, Limestone		85			898				
Silt/Shale		89			1474 1545				
Maxton		14			2252				
Shale			45 50		2379				
Little Lime			52 70		2484				
Pencil Cave			79		3118				
Big Lime			84 18		3350				
Pocono			50		3410				
Weir			10		3772				
Silt/Shale			72		3775				
Berea Silt/Shale			75		4045		ΤD		
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WW-4A	
Revised	6-07

Date: September 3, 2015
 Operator's Well Number
 Beaver Coal C-62

3) API Well No.: 47 -

081

01369

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

/- \ AT	ner(s) to be served:	a a server I describe at 1	(a) Coal Operator		
(a) Name Address	Beaver Coal Com 115 1/2 S Kanawh		_ Name	See Attached Sheet	
Address			Address	C-	
(h) Name	Beckley, WV 2580)	- (h) Cool Ou	(a) with Deplemention	
(b) Name	-			rner(s) with Declaration	
Address			_ Name Address	Beaver Coal Company, Limi 115 1/2 S Kanawha Street	ted
	-		Address	Beckley, WV 25801	
(c) Name			Name	Beckley, WV 25601	
Address	r y		Address	-	
Address	-		- Address		
6) Inspector	Gary Kennedy		(c) Coal Les	ssee with Declaration	
Address	P.O. Box 268		Name	None of Record	
Address	Nimitz, WV 25978		Address	None of Record	
Telephone	304-382-8402		Address	1.	
rerephone	004-002-0402		-		
Protection, the Applic	ying documents for a permit with respect to the well at the	to plug and abandon a v he location described or n mailed by registered	well with the Chief of the in the attached Application or certified mail or de	operator proposes to file or has filed this e Office of Oil and Gas, West Virginia D on and depicted on the attached Form W livered by hand to the person(s) named	epartment of Environmental W-6. Copies of this Notice,
		Well Operator	Cabot Oil & Gas	: Corporation	
		The second secon			
		By:	Kenneth L. Mar	cum James Osa	
		By: Its:	Kenneth L. Mark Regulatory Sup	cum Jonnell Officervisor Suite 300	EIVED
Notarial Constance C. Carde	Seal en, Notary Public	By:	Kenneth L. Mark Regulatory Sup 2000 Park Lane	cum Jonnell Officervisor Suite 300	EIVED Oil and Gas
Notarial Constance C. Carde McDonald Boro, Wa	Seal en, Notary Public sshington County	By: Its: Address	Kenneth L. Mark Regulatory Sup	cum Jonnell Officervisor Suite 300	EIVED Oil and Gas
Constance C. Carde	Seal en, Notary Public Ishington County res Nov. 16, 2017	By: Its:	Kenneth L. Mark Regulatory Sup 2000 Park Lane Pittsburgh, PA	cum Jonnell Office Offi	TANK T
Notarial Constance C. Carde McDonald Boro, Wa My Commission Expi MBER, PENNSYLVANIA ASS	Seal en, Notary Public shington County res Nov. 16, 2017 SOCIATION OF NOTARIES	By: Its: Address Telephone	Kenneth L. Mark Regulatory Sup 2000 Park Lane Pittsburgh, PA	cum Jonnell Officervisor Suite 300	TANK T
Notarial Constance C. Carde McDonald Boro, Wa My Commission Expi MBER, PENNSYLVANIA ASS	Seal en, Notary Public shington County res Nov. 16, 2017 SOCIATION OF NOTARIES	By: Its: Address Telephone	Regulatory Sup 2000 Park Lane Pittsburgh, PA 412-249-3850	cum Jonnell Office Offi	TANK T
Notarial Constance C. Carde McDonald Boro, Wa My Commission Expi MBER, PENNSYLVANIA ASS	Seal en, Notary Public shington County res Nov. 16, 2017 SOCIATION OF MOTARIES sworn before me th	By: Its: Address Telephone	Regulatory Sup 2000 Park Lane Pittsburgh, PA 412-249-3850	cum Jonnell Office Offi	TO THE STATE OF TH

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 deprivacyoffier@wv.gov.

COAL OPERATORS BEAVER COAL C-62 API #47-081-01369

ICG Beckley, LLC P.O. Box 49 Eccles, WV 25836

Pocahontas Coal Company, LLC 109 Appalachian Drive Beckley, WV 25801

Kentucky Fuel Corporation 818 N. Eisenhower Dr. Beckley, WV 25801

Newgate Development of Beckley 818 N. Eisenhower Dr. Beckley, WV 25801

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WV Department of Environment 10/09/2015

SURFACE OWNER WAIVER

Operator's Well Number

Beaver	Coal	C-62
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### INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

<u>Time Limits and methods for filing comments.</u> The law requires these materials to be served on or before the date the operator files his Application. You have FIVE (5) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

<u>Comments must be in writing.</u> Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

### **VOLUNTARY STATEMENT OF NO OBJECTION**

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

			. 12, and a bar (o) pract			
I further state that I have no objection to the planned work described in these materials, and I objection to a permit being issued on those materials.						
FOR EXECUTION BY A NATURA ETC.	AL PERSON	FOR	EXECUTION BY A CORPORATION			
	Date	Name	RECEIVED			
Signature		Ву	Office of Oil and Gas			
		Its	Date			
			CED 1400/66/2015			

Signature

WV Department of

API No.	47-081-01369	8101369P
Farm Name	Beaver Coal	·
Well No.	C-62	

## INSTRUCTIONS TO COAL OPERATORS OWNERS AND LESSEE

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less then five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

	WAIVER
has examined this proposed plugging	york order. The undersigned has no objection to the work proposed to be well operator has complied with all applicable requirements of the West lations.
Date:	
	Ву:
	Its

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Operator's Well No. Beaver Coal C-62

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

## FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name_Cabot Oil & Gas Corporation OP Code 08145	
Watershed (HUC 10) Shockley Branch of Millers Camp Branch Quadrangle Lester	
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 No treated pit wastes will be produced Taux?	
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. no drilling proposed	4
-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. No cuttings produced during plugging operation	
-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 an 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.	y 2
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT is on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other application can lead to enforcement action.  I certify under penalty of law that I have personally examined and am familiar with the information submitted of application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible obtaining the information, I believe that the information is true, accurate, and complete. I am aware that PIECEIVED Office of Oil and Company Official Signature  Company Official (Typed Name) Kenneth L. Marcum  SEP 1 4 2015	at the icable in this le for ficant
Company Criteria (Types Traine)	
Company Official Title Regulatory Supervisor WV Departmen	it of
Environmental Pro	tection
Subscribed and sworn before me this 34d day of September , 20 15	
Motorial Commonwealth of Pennsylvan	IA
My commission expires 11/16/2017  My commission expires 11/16/2017  My Commission Expires Nov. 16, 2017  MEMBER, PENNSYLVANIA ASSOCIATION OF NOTAR	2015

	2.0 Prevegetation pH 6.5
Lime 2 Tons/acre or to correct	t to pH 6.5
Fertilizer type 10-20/20 or equivalent	
Fertilizer amount 500	lbs/acre
Mulch Pulp Fiber at 1000 to 1500 lbs	Tons/acre
	Seed Mixtures
Temporary	Permanent
Seed Type lbs/acre	Seed Type lbs/acre
(Grain Rye - 100) (Red Clover - 5) (Fescue - 40	
(Annual Rye - 20) (White Clover - 5)	(Annual Rye - 20) (White Clover - 5)
(Perennial Rye - 10) (Alta Sweet Clover - 5	) (Perennial Rye - 10) (Alta Sweet Clover - 5
(Yellow Clover - 5) (Birdsfoot Trefoil - 1	0) (Yellow Clover - 5) (Birdsfoot Trefoil - 10
Prawing(s) of road, location, pit and proposed area for I rovided)	and application (unless engineered plans including this info have be
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Photocopied section of involved 7.5' topographic sheet.	
Orawing(s) of road, location, pit and proposed area for lorovided)  Photocopied section of involved 7.5' topographic sheet.	
Orawing(s) of road, location, pit and proposed area for lorovided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:	
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Orawing(s) of road, location, pit and proposed area for lorovided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:  Comments:	
Orawing(s) of road, location, pit and proposed area for lorovided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:	

WV Department of Environmantal Provider ion

API Number 47 - 081 - 01369

Operator's Well No. Beaver Coal C-62

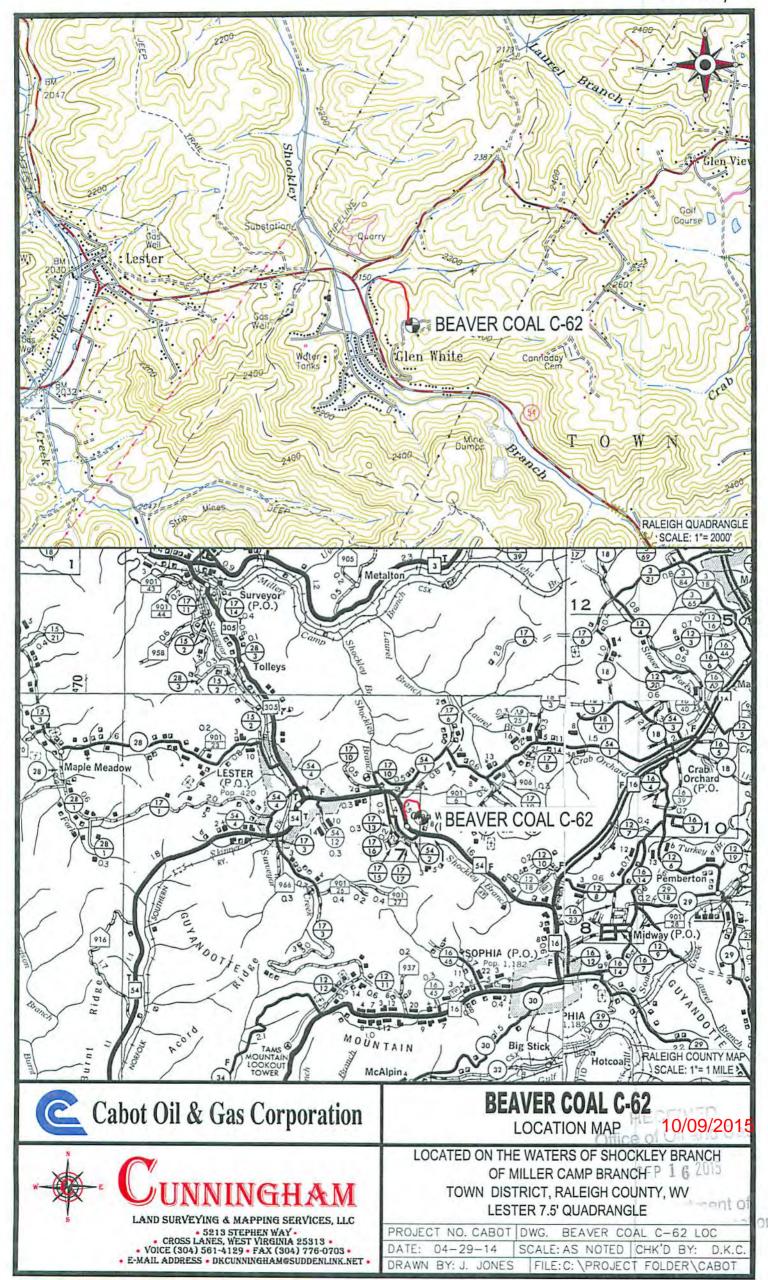
## STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

## FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Cabot Oil & Gas Corporation OP Code	08145
Watershed (HUC 10) Shockley Branch of Millers Camp Branch Quadrangle Lester	
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No V	es 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	
Will closed loop system be used? If so, describe: N/A	
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, e	tc. no drilling proposed
-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. No cuttings produced	during plugging operation
-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 o West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and where it was properly disposed.	
I certify that I understand and agree to the terms and conditions of the GENERAL War on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environme provisions of the permit are enforceable by law. Violations of any term or condition of the glaw or regulation can lead to enforcement action.  I certify under penalty of law that I have personally examined and am familiar wir application form and all attachments thereto and that, based on my inquiry of those individualing the information, I believe that the information is true, accurate, and complete. I penalties for submitting false information, including the possibility of fine or imprisonment.  Company Official Signature  **Terms of the West Virginia Department of Environment and Environment and Company Official Signature**  I certify that I understand and agree to the terms and conditions of the GENERAL War on August 1, 2005, by the Official Signature are not conditions of the West Virginia Department of Environment and Company Official Signature**  I certify that I understand and agree to the terms and conditions of the West Virginia Department of Environment and Company Official Signature**  I certify that I understand and Gas of the West Virginia Department of Environment and Company Official Signature**  I certify that I understand and Gas of the West Virginia Department of Environment and Company Official Signature**  I certify that I understand and Gas of the West Virginia Department of Environment and Company Official Signature**  I certify that I understand and Gas of the West Virginia Department of Environment and Company Official Signature**  Company Official Signature**  I certify the Company Official Signature**  I ce	ental Protection. I understand that the eneral permit and/or other applicable th the information submitted on this viduals immediately responsible for
Company Official (Typed Name) Kenneth L. Marcum	
Company Official Title Regulatory Supervisor	
	RECEIVED ice of Oil and Gas
Clarification of Paraless	0 <u>75</u>
My commission expires 11/16/2017	Notarial Seal Constance C. Carden, Notary Public McDonald Boro, Washing Ch (Commission Expires Nov. 16, 2017 EMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Cabot Oil & Gas Corporation	
Proposed Revegetation Treatment: Acres Disturbed 2.0	Prevegetation pH 6.5
Lime 2 Tons/acre or to correct to pH	6.5
Fertilizer type 10-20/20 or equivalent	
Fertilizer amount 500	os/acre
Mulch Pulp Fiber at 1000 to 1500 lbs Tons/a	acre
Seed	d Mixtures
Temporary	Permanent
Seed Type lbs/acre	Seed Type lbs/acre
(Grain Rye - 100) (Red Clover - 5) (Fescue - 40)	(Grain Rye - 100) (Red Clover - 5) (Fescue - 40)
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(Yellow Clover - 5) (Birdsfoot Trefoil - 10)	(Yellow Clover - 5) (Birdsfoot Trefoil - 10)
Plan Approved by:	
Comments:	
Title:	Date: BECEIVED Office of Oil and Gas
Field Reviewed? () Yes (	
	255 I P (20)

V/W Department of Environment - Protoot 9/09/2015



## **GENERAL NOTES:**

THIS DRAWING REPRESENTS A SCHEMATIC REPRESENTATION OF THE PROPOSED WELL SITE AND ACCESS ROAD.

PROPOSED STRUCTURES SUCH AS THE DRILLING PIT, ROADWAY, CULVERTS, SEDIMENT BARRIERS, ETC. ARE SHOWN IN
THEIR APPROXIMATE PREPLANNING CONFIGURATION. GIVEN UNFORESEEN CIRCUMSTANCES, THE AS—BUILT LOCATION OF
THESE STRUCTURES MAY VARY SLIGHTLY FROM THE LOCATION SHOWN ON THE ATTACHED DRAWINGS.

ALL ROADS SHOWN THEREON ARE EXISTING UNLESS OFFERENCES NOTED AND SALE BE MAINTAINED IN ACCORDANCE

WITH GUIDELINES AND REQUIREMENTS OF WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL

MANUAL.

ALL CULVERTS SHOWN ON THIS DRAWING ARE PROPOSED AND WILL BE A MINIMUM OF 15" IN DIAMETER UNLESS OTHERWISE NOTED.

DITCH LINES AND CULVERTS WILL BE INSTALLED WHENEVER PRACTICAL. HOWEVER PORTIONS OF THE EXISTING/ PROPOSED ROADS WHICH ARE LOCATED IN SOLID ROCK SHALL NOT REQUIRE DITCHES OR CROSS DRAINS, UNLESS OTHERWISE WARRANTED BY FIELD CIRCUMSTANCES.

SUPPLEMENTAL DRAINAGE AND/OR SEDIMENT CONTROL STRUCTURES MEASURES IN ADDITION TO THOSE SHOWN ON THE ATTACHED DRAWINGS WILL BE INSTALLED WHEN AND WHERE DEEMED NECESSARY. SUCH ADDITIONAL MEASURES MAY CONSIST OF EITHER STRAW BALES, SILT FENCES OR OTHER MEASURES OUTLINED IN THE WEST VIRGINIA DEPARTMENT

OF OIL AND GAS EROSION AND SEDIMENT CONTROL FIELD MANUAL.

SEDIMENT BASINS (TRAPS) WILL BE CONSTRUCTED AT ALL CULVERTS AND CROSS DRAINS INLETS AS REQUIRED IN
THE WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL MANUAL. FIELD CONDITIONS SUCH
AS ROCK OUTCROPS AND BEDROCK MAY PROHIBIT INLET TRAPS BEING INSTALLED WHEN THESE CONDITIONS EXIST.

ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.

A SEDIMENT BARRIERS OF EITHER BRUSH, STRAW BALES, FILTER FENCE, ETC. WILL BE INSTALLED AND MAINTAINED BELOW THE OUT FALL OF ALL PROPOSED CULVERTS AND AT ALL OTHER STORM WATER DRAINAGE POINTS FROM EITHER THE ROADWAY OR THE LOCATION.

THE ROADWAY OR THE LOCATION.

ALL NECESSARY TIMBER OR BRUSH WILL BE REMOVED FROM ROUTE OF THE ROADWAY AND LOCATION BY CLEANING AND GRUBBING ACTIVITIES. ANY SALVAGEABLE TIMBER WILL BE CUT AND STACKED TO THE SIDE OF THE ROADWAY OR REMOVED TO A STOCKPILE AREA. THE REMAINING TIMBER OR BRUSH WILL BE CUTUP AND WIND ROWED BELOW THE OUTSLOPE OF THE CONSTRUCTION AREAS TO BE UTILIZED AS A SEDIMENT BARRIER.

SEPARATE PERMITS WILL BE OBTAINED FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION FOR ALL POINTS OF INGRESS AND EGRESS FROM COUNTY AND STATE ROADS. THESE INGRESS AND EGRESS POINTS WILL BE MAINTAINED IN ACCORDANCE WITH CURRENT WEST VIRGINIA DEPARTMENT OF TRANSPORTATION REGULATIONS. A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF 8" OF CRUSHED STONE WILL BE CONSTRUCTED FOR A MINIMUM DISTANCE OF 50' FROM THE INGRESS AND EGRESS POINTS OF ALL PUBLIC ROADWAYS IN ACCORDANCE WITH CURRENT WEST VIRGINIA DEPARTMENT OF TRANSPORTATION REGULATIONS. DEPARTMENT OF TRANSPORTATION REGULATIONS.

DEPARTMENT OF TRANSPORTATION REGULATIONS.

ALL CULVERTS SHOWN ON THE ATTACHED DRAWINGS ARE TO BE CONSIDERED PERMANENT AND WILL REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION ACTIVITIES UNLESS NOTED OTHERWISE. A STABILIZED OUTLET CONTROL DEVICE SUCH AS RIP RAP, NATURAL STONE, BRUSH, ETC. WILL BE INSTALLED BELOW THE OUT FALL OF ANY ROADWAY CULVERT(S) WHICH ARE NOT LOCATED IN A STREAM OR CREEK.

PERMANENT CROSS DRAINS OR WATER BARS WILL BE INSTALLED AS AN INTEGRAL PART OF THE RECLAMATION PROCESS AND SHALL BE SPACED IN ACCORDANCE WITH AS-BUILT ROADWAY SLOPES AND TABLE 11-4 OF THE WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL FIELD MANUAL.

TEMPORARY SEEDING AND MULCHING WILL BE UTILIZED TO PROVIDE A VEGETATIVE COVER ON ALL DISTURBED AREAS I.E. ROADWAYS, LOCATION, ROAD/LOCATION SLOPES AND ANY OTHER AREAS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES.

ACTIVITIES.

THE LOCATION OF DRILLING PIT(S) MAY BE ADJUSTED TO THE MOST ENVIRONMENTAL SAFE SITE TO MEET THE REQUIREMENTS OF THE WYDEP.

## CONTRACTORS NOTE:

IT IS THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION AND CONDITION OF ALL UNDERGROUND UTILITIES, SANITARY SEWERS, STORM SEWERS, ETC. PRIOR TO THE COMMENCEMENT OF ANY/OR CONSTRUCTION ACTIVITIES. DIG WITH C.A.R.E. CALL MISS UTILITY 1-800-245-4848.

TABLE 11-4 SPACIN	G OF CROSS DRAINS
ROAD GRADE (%)	DISTANCE (FT)
1	400
2	250
5	135
10	80
15	60
20	45

TABLE 11-7 SPAC	ING OF CULVERTS
ROAD GRADE (%)	DISTANCE (FT)
2-5	500-300
6-10	300-200
11-15	200-100
16-20	100



1-800-245-4848

### DRAWING LEGEND

PROPOSED ROAD EXISTING ROAD STRAW BALES SILT FENCE BRUSH BARRIER TREE LINE ROCK RIP RAP CROSS DRAIN CULVERT DRILLING PIT ROAD DITCH GAS LINE GAS LINE
FENCE LINE
ROCK OUTCROP
WATER WELL
HOUSE/STRUCTURE
UTILITY ROLE
SPRING
WET SPOTH AND GAS
PIT WASTE APP. AREA 0 WASTE APP. AREA

#### DRIVING DIRECTIONS FOR BEAVER COAL C - 62

FROM PINEVILLE, W.VA DRIVE NORTH ON STATE ROUTE 97 FOR 22.7 MILES TO LESTER WATER OF

FROM LESTER, WY TURN RIGHT AND CONTINUE ON STATE ROUTE 97 AND 54 FOR APPROXIMATELY 1.2 MILES± TO WEST VIRGINIA STREET LOCATED ON THE LEFT—HAND SIDE OF THE ROAD. 2.)

TURN RIGHT AND FOLLOW THE ROAD FOR APPROXIMATELY 0.2 MILES± TO THE BEGINNING OF THE EXISTING 3.) ACCESS ROAD.

FROM THE AFOREMENTIONED SITE, FOLLOW THE EXISTING ROAD FOR APPROXIMATELY 0.2 MILES± TO THE EXISTING WELL SITE AS SHOWN ON THE "CONSTRUCTION AND RECLAMATION PLAN".

10/09/2015



