



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

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Wednesday, July 23, 2025
WELL WORK PLUGGING PERMIT
Vertical Plugging

EXPAND OPERATING LLC
6100 N WESTERN AVE.

OKLAHOMA CITY, OK 73118

Re: Permit approval for 20364
47-057-00016-00-00

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.

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. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, 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

A handwritten signature in blue ink, appearing to read "James A. Martin", is written over the printed name and title.

Operator's Well Number: 20364
Farm Name: MASTELLAR COAL CO.
U.S. WELL NUMBER: 47-057-00016-00-00
Vertical Plugging
Date Issued: 7/23/2025

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.
4. 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.

1) Date MAY 7, 2025
2) Operator's
Well No. MASTELLAR COAL CO 1
3) API Well No. 47 - 057 00016

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil ____/ Gas X/ Liquid injection ____/ Waste disposal ____/
(If "Gas, Production ____ or Underground storage ____) Deep ____/ Shallow ____

5) Location: Elevation 1,862 Watershed PURR SPRING RUN
District NEW CREEK County MINERAL Quadrangle WESTERNPORT

6) Well Operator EXPAND OPERATING LLC 7) Designated Agent Brittany Woody S
Address PO BOX 18496 Address Box Belmont Dr Suit 201
OKLAHOMA CITY, OK 73154-0496 Morgantown WV 26508

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name GAYNE J KNITOWSKI Name PLANTS AND GOODWIN
Address 601 57TH STREET SE Address 360 HIGH STREET
CHARLESTON, WV 25304 BRADFORD, PA 16701

10) Work Order: The work order for the manner of plugging this well is as follows:

SEE ATTACHED

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Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector Gayne Knitowski Digitally signed by Gayne Knitowski Date: 2025.06.03 08:03:50 -0400 Date 6-3-2025

08/01/2025

MASTELLAR COAL CO 1 (PN: 620364)**Plug & Abandon**

County/State: MINERAL, WV Township: NEW CREEK BLM: NO
 Latitude: 39.4128318644 Longitude: -79.0352492255 (NAD 83)
 Property Number: 620364 API: 4705700016
 AFE: WO:

Gayne Knitowski
 Digitally signed by
 Gayne Knitowski
 Date: 2025.06.03
 08:02:27 -04'00'

Summary

The MASTELLAR COAL CO 1 will be plugged and abandoned. The well is located in MINERAL County, WV and was spud on 09-22-1978 by Columbia Natural Resource, targeting the Oriskany as a Vertical well. The last know production date for this well was 01-00-1900 where it produced MCF, BO, and BW.

Pull 8,476' of Production Tubing

Run CBL

Cut and Pull ~7,210' of 7" 26/23# Production Casing

(3) 200' & (1) 100' Cement Plugs. See detail on Page 9

Get detail on Page 10

Guideline

Step	Operation
	To align with the intended barrier design and designation in this procedure, on-site supervision is expected to review the relevant well history and parameters that could impact the efficacy of a barrier, or present mechanical issues with the wellbore. Per the Well Control Standard (OGB-CHK-STD-001): If any of the required minimum barriers fail or otherwise become non-operational, the well shall be immediately secured and operations suspended until a procedure to re-establish the minimum number of barriers is approved. Preferred Well Control Method – Bullhead Method. The goal will be to apply a volume of fluid with sufficient density to exceed reservoir pressure.
1	Hold safety meeting and PJSA prior to each significant operation. Review critical parameters and objectives as well as emergency action plans. Everyone on location has stop work authority. If work is stopped or course needs altered contact COI.
2	Observe condition of location before moving equipment onto location. Notify superintendent of any spills, trash, or tanks/equipment left on location. Clean and dress location.
3	Record and report all casing pressures in Wellview.
4	Negative pressure test all valves. Grease valves if necessary.

Barriers	Flow Path	
	Production Casing X Tubing	Tubing
Primary		
Secondary		
Tertiary		

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Pump KWF at Start of Job	
Step	Operation
5	MIRU pump truck to production wing valve off. Prepare to leave rigged up until CIBP with cement is set in production casing.
6	Pump fluid down production casing until a Qualified Hydrostatic Barrier (QHB) is established and maintained, per Section 4.2 of Well Control Standard (OGB-CHK-STD-001).
7	Perform flow check to ensure QHB is established.
	a. Contact supervisor and OKC engineer if higher weight kill fluid is required.
8	Complete Well Control Standard (OGB-CHK-STD-001) Exception to remove casing wing needle valve and install 2" ball valve.

Flow Path		
Barriers	Production Casing X Tubing	Tubing
Primary	Tubing Hanger Seals	QHB
Secondary	Master Valve	Master Valve
Tertiary		

Nipple Up WOR BOPs (Test against Master Valve)	
Step	Operation
9	ND master valves and NU 7-1/16" 10K master valve to tubing head and close.

Flow Path		
Barriers	Production Casing X Tubing	Tubing
Primary	QHB	QHB
Secondary	Tubing Hanger Seals	Pump through plug
Tertiary		TWC

10	Pressure test 7-1/16" 10K master valve against TWC to 250 / 4,500 psi.
a.	If unable to install TWC in tubing hanger, NU wireline lubricator, wireline rams, primary pressure control, set test plug with wireline ~100'-200'. Test 7-1/16" 10K flange against test plug to 250 / 4,500 psi.
11	NU 7-1/16" WOR BOPs and 2-3/8" Annular. Function and pressure test each ram. (T to B)
a.	Annular - Test against closed 7-1/16" master valve to 250 / 2,500 psi.
b.	Pipe Ram - Test against closed 7-1/16" master valve to 250 / 4,500 psi.
c.	Blind Ram - Test through kill port against closed 7-1/16" master valve to 250 / 4,500 psi.

Flow Path		
Barriers	Production Casing X Tubing	Tubing
Primary	QHB	QHB
Secondary	Tubing Hanger Seals	Pump Through Plug
Tertiary	Master Valve	TWC / Master Valve

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Pull Tubing	
Step	Operation
12	If applicable, release packer and let elastomers relax for 20 min.

Flow Path		
Barriers	Production Casing X Tubing	Tubing
Primary	QHB	QHB
Secondary	Annular	Pump Through Plug
Tertiary	Pipe Ram	TIW

13	TOOH laying down tubing	
	a.	Ensure appropriate TIW valve (in open position) w/ operating key is always on the rig floor.
	b.	To continuously maintain QHB, should utilize trickle fluid method or monitor fluid level.
	c.	If pulling packer, ensure pulling speeds are low enough to prevent swabbing.

14	Close 7-1/16" Master valve and Blind Ram
----	--

Flow Path	
Barriers	Production Casing
Primary	QHB
Secondary	Master Valve
Tertiary	Blind Ram

Set CIBPs	
Step	Operation
Note: For slickline work detailing barrier envelope, barrier testing, surface equipment specs for this operation refer to the " Marcellus Production Wireline, Slickline, Braided Line Barrier Template. "	
15	Close master valve, NU wireline lubricator, wireline rams, primary pressure control, and test against upper master valve to 250 psi low / and a high pressure to a minimum of well's SICP pre-job.

Flow Path	
Barriers	Production Casing
Primary	QHB
Secondary	Master Valve
Tertiary	Blind Ram

16	Round trip 4.70" OD gauge ring to 8,400'.
----	---

17	Plug Details - Plug #1 - CIBP - CIBP Perf Isolation Make up and RIH with CIBP and set at depth defined in Plug Details. Using CCL do not place CIBP across collar.
18	Pressure test CIBP to 1,500 psi or 80% of casing burst pressure accounting for hydrostatic to CIBP depth, which ever is less.

19	Run pressurized CBL log from CIBP to surface. Reported estimated TOC at 7,210'.
20	ND wireline lubricator, wireline rams, primary pressure control.

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Pump Cement and Spacer and Tac Weld Slips	
Step	Operation
21	Prep 8,400' of 2-3/8" 4.7# L-80 workstring.
22	Change out pipe rams to handle 2-3/8" 4.7# L-80 workstring.
23	TIH w/ 2-3/8" workstring and tag TOC/CIBP.
	a. Ensure appropriate TIW valve with the operating key always on the rig floor. TIW valve must be in open
	b. To continuously maintain QHB, should utilize trickle fluid method or monitor fluid level.

Flow Path		
Barriers	Production Casing X Workstring	Workstring
Primary	CIBP	CIBP
Secondary	QHB	QHB
Tertiary	Annular / Pipe Ram	TIW

24	Plug Details - Plug #2 - Cement - Cement Perf Isolation Pump balanced cement plug as directed in Plug Details, displace tubing with specified volume. POOH 1,500' above estimated TOC. Close pipe ram. WOC for at least 8 hours.
25	Tag top of cement. Record depth.
26	TIH w/ workstring to bottom of spacer #1 and pump spacer as defined in Spacer Details.
27	POOH w/ workstring.
28	Establish hot work permit. Perform LEL assessment of well head and ensure LEL monitoring remains in place. Make sure well is static. Place fire extinguishers near wellhead and ensure fire watch is designated as outlined by hot work permit. ND Tubing Head, 7-1/16" Master Valve, 7-1/16" WOR BOPs and tac weld 7" casing slips to 7" casing.

Flow Path		
Barriers	Production X Intermediate Casing	Production Casing
Primary	Casing Packoff	CIBP
Secondary	QHB	Cement
Tertiary		QHB

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Nipple Up WOR BOPs (Test against CIBP)	
Step	Operation
29	NU 11" WOR BOPs and annular. Torque all bolts/nuts to spec.

Flow Path		
Barriers	Production Casing X Tubing	Tubing
Primary	QHB	QHB
Secondary	Tubing Hanger Seals	Pump through plug
Tertiary		TWC

30	NU 11" WOR BOPs and 11" Annular. Function and pressure test each ram. (T to B)	
	a.	Annular - Test against CIBP to 250 low / 1,500 psi or 80% of casing burst pressure accounting for hydrostatic to CIBP depth, which ever is less.
	b.	Pipe Ram - Test against CIBP to 250 low / 1,500 psi or 80% of casing burst pressure accounting for hydrostatic to CIBP depth, which ever is less.
	c.	Blind Ram - Test through kill port against CIBP to 250 low / 1,500 psi or 80% of casing burst pressure accounting for hydrostatic to CIBP depth, which ever is less.

Flow Path		
Barriers	Production Casing X Tubing	Tubing
Primary	Casing Packoff	CIBP
Secondary	QHB	Cement
Tertiary		QHB

Cut Casing	
Step	Operation
Note: For slickline work detailing barrier envelope, barrier testing, surface equipment specs for this operation refer to the "Marcellus Production Wireline, Slickline, Braided Line Barrier Template."	
31	Shut 7-1/16" Master Valve. NU wireline lubricator, wireline rams, primary pressure control, and test against upper master valve to 250 psi low / and a high pressure to a minimum of well's SICP pre-job.

Flow Path	
Barriers	Production Casing
Primary	CIBP
Secondary	QHB
Tertiary	Master Valve / Blind Ram

32	Using TOC from CBL, Round trip 3.87" gauge ring to desired depth.
33	Make up 3.80" OD jet cutter and RIH to desired depth. Pressure up on 4.5" casing to 500 psi and fire cutter. Record all pressure changes at time of cut.
34	RD wireline. Circulate down 4.5" casing and out 9.625" casing to establish successful cut was made.
	a. Do not exceed a 0.8 psi/ft gradient when establishing circulation against open hole accounting for hydrostatic pressure.

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Pull Casing	
Step	Operation
	MU casing spear, spear 4.5" casing. TOOH laying down 4.5" casing.
35	a. Ensure appropriate TIW or swage to TIW valve with the operating key always on the rig floor. TIW valve must be in open position when not in use.
	b. To continuously maintain QHB, should utilize trickle fluid method or monitor fluid level.
	c. NU casing jacks if necessary or unable to pull casing.

Flow Path		
Barriers	Production X Intermediate Casing	Production Casing
Primary	QHB	QHB
Secondary	Pipe Ram	TIW
Tertiary	Annular	

Flow Path	
Barriers	Intermediate Casing
Primary	QHB
Secondary	Master Valve
Tertiary	Blind Ram

Pump Cement and Spacer	
Step	Operation
36	Prep 7,260' of 2-3/8" 4.7# L-80 workstring.
37	Change out pipe rams to handle 2-3/8" 4.7# L-80 workstring.
	TIH w/ 2-3/8" workstring and tag TOC/CIBP.
38	a. Ensure appropriate TIW valve with the operating key always on the rig floor. TIW valve must be in open
	b. To continuously maintain QHB, should utilize trickle fluid method or monitor fluid level.

Flow Path		
Barriers	Production Casing X Workstring	Workstring
Primary	CIBP	CIBP
Secondary	QHB	QHB
Tertiary	Annular / Pipe Ram	TIW

39	Plug Details - Plug #3 - Cement - Prod Csg Stub Plug
	Pump balanced cement plug as directed in Plug Details, displace tubing with specified volume. POOH 1,500' above estimated TOC. Close pipe ram. WOC for at least 8 hours.
40	Tag top of cement. Record depth.
41	TIH w/ workstring to bottom of spacer #2 and pump spacer as defined in Spacer Details.
42	POOH w/ workstring.

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Flow Path		
Barriers	Production X Intermediate Casing	Production Casing
Primary	Casing Packoff	CIBP
Secondary	QHB	Cement
Tertiary		QHB

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Pump Cement and Spacer	
Step	Operation
43	Prep 2,594' of 2-3/8" 4.7# L-80 workstring.
44	Change out pipe rams to handle 2-3/8" 4.7# L-80 workstring.
45	TIH w/ 2-3/8" workstring and tag TOC/CIBP.
	a. Ensure appropriate TIW valve with the operating key always on the rig floor. TIW valve must be in open
	b. To continuously maintain QHB, should utilize trickle fluid method or monitor fluid level.

Flow Path		
Barriers	Production Casing X Workstring	Workstring
Primary	CIBP	CIBP
Secondary	QHB	QHB
Tertiary	Annular / Pipe Ram	TIW

46	Plug Details - Plug #4 - Cement - Inter Csg Shoe Plug (Inside Csg) Pump balanced cement plug as directed in Plug Details, displace tubing with specified volume. POOH 1,500' above estimated TOC. Close pipe ram. WOC for at least 8 hours.
47	Tag top of cement. Record depth.
48	TIH w/ workstring to bottom of spacer #3 and pump spacer as defined in Spacer Details.
49	POOH w/ workstring.

Flow Path		
Barriers	Production X Intermediate Casing	Production Casing
Primary	Casing Packoff	CIBP
Secondary	QHB	Cement
Tertiary		QHB

Pump Surface Cement Plug	
Step	Operation
50	TIH w/ 2-3/8" workstring and tag TOC/CIBP.
	a. Ensure appropriate TIW valve with the operating key always on the rig floor. TIW valve must be in open
	b. To continuously maintain QHB, should utilize trickle fluid method or monitor fluid level.
51	Plug Details - Plug #5 - Cement - Surface Plug Pump balanced cement plug as directed in Plug Details, displace tubing with specified volume. Close pipe ram.
52	ND WOR BOPs. RDMO Workover rig and all associated equipment.

Flow Path	
Barriers	Surface Casing
Primary	Cement
Secondary	Cement
Tertiary	QHB

53	Monitor well for a minimum of 24 hrs or until state allows well to have abandonment cap installed.
54	Establish hot work permit. Perform LEL assessment of well head and ensure LEL monitoring remains in place. Visually check wellbore and cellar for signs of bubbling. Contact supervisor and OKC engineer if LELs or bubbling are present. Place fire extinguishers near wellhead and ensure fire watch is designated as outlined by hot work permit. Cut casing and weld abandonment cap with monument as specified by WVDEP.

Gayne
Knitowski

Digitally signed by
Gayne Knitowski
Date: 2025.06.03
08:02:51 -04'00'

08/01/2025

MASTELLAR COAL CO 1 (PN: 620364)



Well Information

Surface Location	
County/State	MINERAL, WV
Township	NEW CREEK
Latitude*	39.41283186
Longitude*	-79.03524923

*NAD 83

CHK Contacts		
Title	Name	Mobile
Workover Foreman	Heath Pottmeyer	740-525-3445
Completions Superintendent	Nick Flesher	304-669-3777
Production Superintendent	Donny McHenry	304-884-1624
Production Engineer	Eddie Watson	740-336-4199
Production Manager	Brandon Yaw	713-417-8537
Completions Manager	Matt Briggs	501-428-6630
Regulatory Manager	Eric Haskins	607-242-3839

Driving Directions

Not Available

General Well Data

KB	12	Top Perf	8,501	Perf Interval (ft)	4	PBTD	8,635
KOP	N/A	Btm Perf	8,505	TD	8,747	Elevation	1,862

Casing Details

String	Casing Type	ID	Drift	Top (ftKB)	Bottom (ftKB)	Collapse 70% (PSI)	Burst 70% (PSI)	Yield 70% (klb)	Capacity (bbl/ft)	Tot. Cap. (bbl)	Hole Size
Conductor	20" 94# H-40	19.124	18.936	12	58	364	1,071	407	0.3553	16	
Surface	13.375" 48# H-40	12.715	12.559	12	435	518	1,211	225	0.1571	66	17.5
Intermediate	9.625" 36# K-55	8.921	8.765	12	2,494	1,414	2,464	296	0.0773	192	12.25
Production	7" 26# N-80	6.276	6.151	12	8,300	3,787	5,068	363	0.0383	317	8.75
Production	5.5" 17# J-55	4.892	4.767	8,255	8,617	3,437	3,724	160	8.4158	6	6.25
DV Tool											

Tubing Details

Size / Weight	Grade	ID	Drift	Total (ft)	Top (ftKB)	Bottom (ftKB)	Collapse 80% (PSI)	Burst 80% (PSI)	Yield 80% (lb)	Capacity (bbl/ft)	Tot. Cap. (bbl)
2.375" 4.7#	J-55	1.995	1.901	8,476	12	8,488	6,480	6,160	72,000	0.0039	33

Workstring Details

Size / Weight	Grade	ID	Drift	Total (ft)	Top (ftKB)	Bottom (ftKB)	Collapse 80% (PSI)	Burst 80% (PSI)	Yield 80% (lb)	Capacity (bbl/ft)	Tot. Cap. (bbl)
2.375" 4.7#	L-80	1.995	1.901	7,890	12	7,902	9,424	8,960	83,440	0.0039	31

Reference Documents:

Live Locations for Barrier Templates:

[Policies and Controlled Documents Portal](#)[Teams: App Field Operations > Engineering > Barrier Templates](#)

Technical Documents:

[Well Control Standard](#)[Completion and Workover BOP Technical Bulletin](#)[Tubing Pull and Run Barrier Template](#)[Blanket Wellhead Lubricator Exception](#)[Wireline, Slickline, Braided Line Barrier Template](#)RECEIVED
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MASTELLAR COAL CO 1 (PN: 620364)



Plugging Proposal

Plug Details													
#	Type	Description	Set ID	Plug Height (ft)	Bottom of Plug (ftKB)	Top of Plug (ftKB)	Cement Type	Cement Yield	Cement Density (ppg)	Excess Cement (%)	Cement Volume (bbl)	Cement Volume (sacks)	Tubing Displacement Volume (bbls)
1	CIBP	CIBP Perf Isolation	6.276	2	8,401	8,399	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	Cement	Cement Perf Isolation	6.276	200	8,399	8,199	Class A	1.28	15.5	0	7.7	33.6	30.5
3	Cement	Prod Csg Stub Plug (Inside Csg)	6.276	50	7,260	7,210	Class A	1.28	15.5	0	1.9	8.4	
3	Cement	Prod Csg Stub Plug (Open Hole)	8.75	150	7,210	7,060	Class A	1.28	15.5	50	16.7	73.4	25.9
4	Cement	Inter Csg Shoe Plug (Open Hole)	8.75	100	2,594	2,494	Class A	1.28	15.5	50	11.2	48.9	
4	Cement	Inter Csg Shoe Plug (Inside Csg)	8.921	100	2,494	2,394	Class A	1.28	15.5	0	7.7	33.9	7.6
5	Cement	Surface Plug	8.921	100	100	0	Class A	1.28	15.5	0	7.7	33.9	0.0
9													
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Classification: DCL-internal

MASTELLAR COAL CO 1 (PN: 620364)

expand

Spacer Details										
#	Fluid Type	Description	Set ID	Spacer Height	Bottom of Spacer (ftKB)	Top of Spacer (ftKB)	Spacer Density (ppg)	Spacer Viscosity (cp)	Excess Spacer (%)	Spacer Volume (bbls)
1	Gel	Perf Isolation to Prod Csg Stub Plug	6.276	939	8,199	7,260	9	-	5	37.7
2	Gel	Elevation Plug to Inter Csg Shoe Plug	8.75	4,466	7,060	2,594	9	-	40	465.0
3	Gel	Inter Csg Shoe Plug to Surface Plug	8.921	2,294	2,494	100	9	-	5	186.2
4										
5										
6										
7										
8										
9										
10										

Estimated Casing Cuts	
String	Est. Cut Depth (ftKB)
Intermediate	
Production	7,210

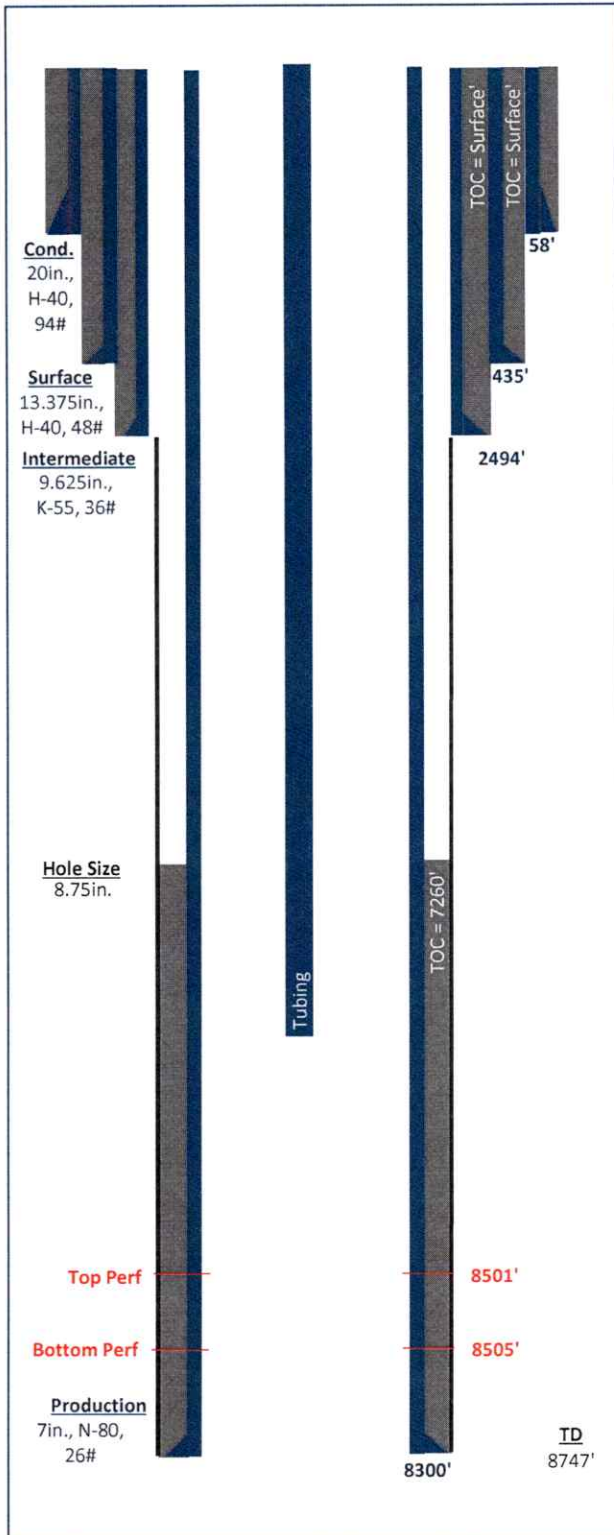
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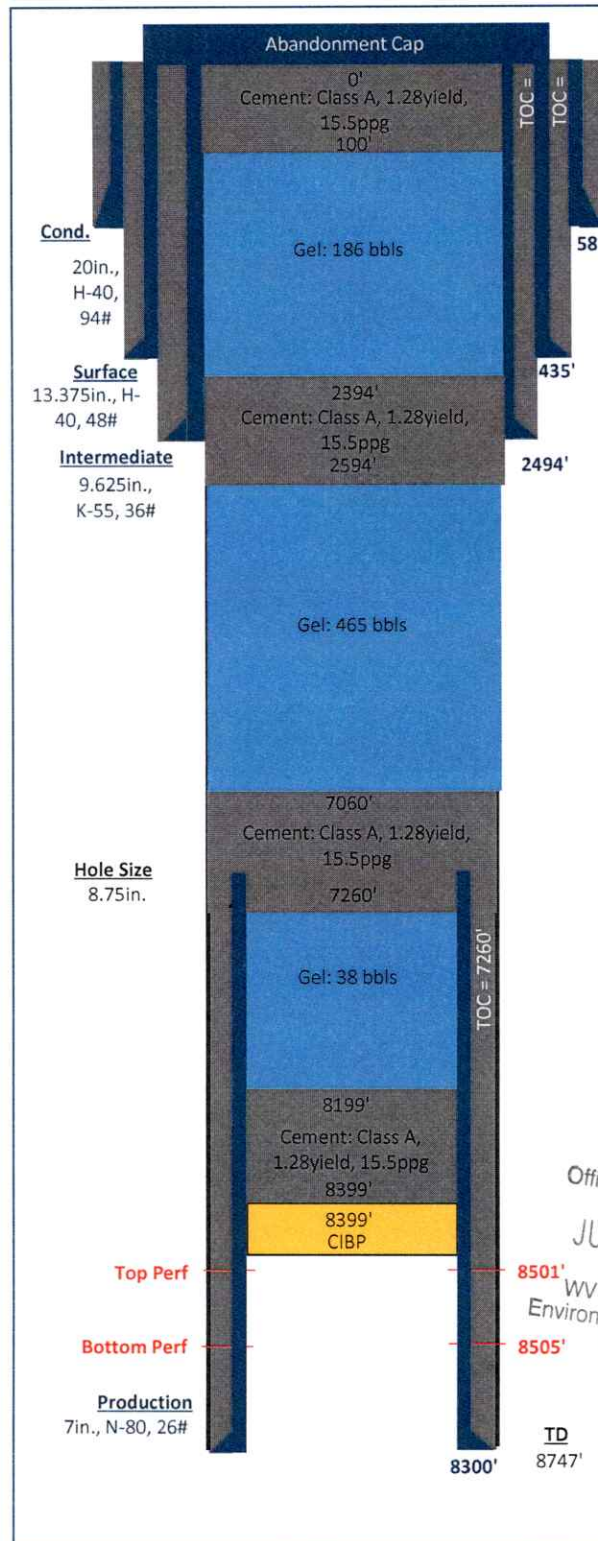
MASTELLAR COAL CO 1 (PN: 620364)



Current Wellbore Schematic



Proposed Wellbore Schematic



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MAR - 4 1990

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Westernport, WV-Md

Permit No. Min. -16

Rotary X Oil
Cable Gas X
Recycling Comb.
Water Flood Storage
Disposal (Kind)

Company <u>Columbia Gas Transmission Corp.</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>P.O. Box 1273, Chas., WV 25314</u>				
Farm <u>Mastellar Coal Co.</u> Acres <u>4957</u>				
Location (waters) <u>Parr Spring Branch</u>				
Well No. <u>20364-T</u> Elev. <u>1862.54</u>				
District <u>New Creek</u> County <u>Mineral</u>				
The surface of tract is owned in fee by <u>Mastellar Coal Co.</u>				
Address <u>R.F.D. 4, Keyser, WV 26726</u>				
Mineral rights are owned by <u>Same as above</u>				
Address <u> </u>				
Drilling Commenced <u>Sept. 22, 1978</u>				
Drilling Completed <u>Dec. 20, 1978</u>				
Initial open flow <u>4,440 M</u> cu. ft. <u> </u> bbls				
Final production <u>9,728 M</u> cu. ft. per day <u> </u> bbls				
Well open <u>4</u> hrs. before test <u>3633</u> RP.				

Size				
20-16				
Cond. 20"	58'	58'	150 sacks	
13-10 13 3/8"	435'	435'	300 sacks	
9 5/8	2,494'	2,494'	790 sacks	
8 5/8	8,312'	8,312'	135 sacks	
7				
5 1/2				
4 1/2				
3				
2 3/8 EUE		8,476'	not cemented	
Liners Used 5 1/2"		362'	145 sacks	

Well treatment details:

Attach copy of cementing record.

Treated with 15,000 gallons Mud Acid, by Halliburton on 9/7/79.
Treated at 3500# at rate of .8 BPM

Coal was encountered at None Feet Inches
Fresh water Feet Salt Water Feet
Producing Sand Oriskany Depth 8500-8506

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sandstone			0'	460'		
Shale			460	580		
Sandstone			580	590		
Shale			590	614		
Sandstone			614	626		
Shale			626	640		
Sandstone			640	710		
Shale			710	780		
Siltstone, Shale			780	920		
Sandstone			920	930		
Siltstone, Shale			930	1,160		
Shale			1,160	1,240		
Siltstone			1,240	1,800		
Sandstone			1,800	1,840		
Shale, Siltstone			1,840	1,865		
Sandstone, Siltstone			1,865	1,960		
Siltstone			1,960	1,990		
Shale			1,990	2,020		
Sandstone, Siltstone			2,020	2,272		
Sandstone			2,272	2,396		
Shale, Sandstone			2,396	2,510		
Sandstone, Siltstone			2,510	2,720		
Sandstone			2,720	2,870		
Siltstone, Sandstone			2,870	2,910		

(over)

* Indicates Electric Log tops in the remarks section.

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Formation	Color	Hard or Soft	Top Feet <i>4</i>	Bottom Feet	Oil, Gas or Water	* Remarks
Sandstone			2,910	3,000		
Siltstone			3,000	3,050		
Sandstone			3,050	3,460		
Silty Shale			3,460	3,700		
Siltstone			3,700	3,760		
Sandstone, Siltstone			3,760	4,164		
Sandstone			4,164	4,200		
Siltstone, Sandstone			4,200	4,360		
Sandstone			4,360	4,430		
Shale, Siltstone			4,430	5,140		
Sandstone			5,140	5,246		
Siltstone, Sandstone			5,246	5,292		
Shale, Siltstone			5,292	5,790		
Silty Shale			5,790	6,070		
Shale			6,070	6,590		
Silty Shale			6,590	6,920		
Shale			6,920	7,232		
Limestone			7,232	7,234		
Siltstone, Limestone			7,250	7,280		
Shale			7,282	7,365		
Siltstone, Shale			7,365	8,262		
Limestone			8,262	8,382		
Tioga			8,382	8,396		
Shale-Needmore			8,396	8,500		
Sandstone-Oriskany			8,500	8,732	Gas @ 8500'	
Helderburg			8,732			
		LTD		8,747		

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Date February 27, 19 80

APPROVED *Rushon L. Hesham*, Owner

By Manager, Drilling
(Title)

08/01/2025

1) Date: 5/7/2025

2) Operator's Well Number
EXPAND OPERATING LLC

3) API Well No.: 47 - 057 - 00016

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

4) Surface Owner(s) to be served:		5) (a) Coal Operator	
(a) Name	STATE OF WEST VIRGINIA, PUBLIC LAND CORP	Name	_____
Address	DEPT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES	Address	_____
	1900 KNAWHA BLVD EAST, BUILDING 2, SUITE 600		_____
(b) Name	CHARLESTON, WV 25305	(b) Coal Owner(s) with Declaration	
Address	_____	Name	STATE OF WEST VIRGINIA, PUBLIC LAND CORP
	_____	Address	DEPT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES
			1900 KNAWHA BLVD EAST, BUILDING 2, SUITE 600
(c) Name	_____	Name	CHARLESTON, WV 25305
Address	_____	Address	_____
	_____		_____
6) Inspector	GAYNE J KNITOWSKI	(c) Coal Lessee with Declaration	
Address	601 57TH STREET SE	Name	_____
	CHARLESTON WV 25304	Address	_____
Telephone	304546-8171		

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

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JUN 23 2025

Well Operator	EXPAND OPERATING LLC
By:	KERI FIENO
Its:	REGULATORY SPECIALIST
Address	PO BOX 18496 OKLAHOMA CITY, OK 73154-0496
Telephone	405-766-8791

WV Department of
Environmental Protection

Subscribed and sworn before me this 17th day of June 2025

My Commission Expires October 22, 2026

Notary

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 depprivacyofficer@wv.gov.

08/01/2025

Keri Fieno

From: UPS <pkginfo@ups.com>
Sent: Tuesday, June 17, 2025 11:18 AM
To: Keri Fieno
Subject: [EXTERNAL] UPS Delivery Notification, Tracking Number 1ZV3127X1396582071

This Message Is From an External Sender

This message came from outside your organization.

Report Suspicious

Hello, your package has been delivered.

Delivery Date: Tuesday, 06/17/2025

Delivery Time: 11:03 AM

Signed by: ALFARO

EXPAND ENERGY CORPORATION

MASTELLAR COAL CO 1 & 2 P&A LANDOWNER NOTIFICATION

Tracking Number:

[1ZV3127X1396582071](#)

Ship To:

STATE OF WEST VIRGINIA
1900 KANAWHA BOULEVARD EAST
BUILDING 3, SUITE 600
DEPT OF COMMERCE; LABOR & ENVIRONME
CHARLESTON, WV 253050001
US

Number of Packages:

1

UPS Service:

UPS Next Day Air Saver®

Package Weight:

0.0 LBS

Reference Number:

MASTELLAR COAL CO 1 P&A

Reference Number:

MASTELLAR COAL CO 2 P&A

Discover more about UPS:

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Office of Oil and Gas
JUN 23 2025
WV Department of
Environmental Protection

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZV3127X1399573861

Service

UPS Next Day Air Saver®

Shipped / Billed On

07/08/2025

Delivered On

07/09/2025 10:50 A.M.

Delivered To

1900 KANAWHA BLVD E
CHARLESTON, WV, 25305, US

Received By

ALFARO

Left At

Inside Delivery

Please print for your records as photo and details are only available for a limited time.

Sincerely,

UPS

Tracking results provided by UPS: 07/10/2025 1:41 P.M. EST

08/01/2025

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

Operator Name EXPAND OPERATING LLC OP Code _____

Watershed (HUC 10) PURR SPRING RUN Quadrangle WESTERNPORT

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 (if selected provide a completed form WW-9-GPP)
____ Underground Injection (UIC Permit Number _____)
____ Reuse (at API Number _____)
____ Off Site Disposal (Supply form WW-9 for disposal location)
____ Other (Explain _____)

Will closed loop system be used? If so, describe: DRILL CUTTINGS WILL BE CIRCULATED BACK INTO AN OPEN TANK

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. FRESH WATER

-If oil based, what type? Synthetic, petroleum, etc. N/A

Additives to be used in drilling medium? NONE

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. LANDFILL

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) SAWDUST AND CITRIC ACID

-Landfill or offsite name/permit number? KIMBLE SANITARY LANDFILL OR MUD MASTERS

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 for obtaining 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.

Company Official Signature Keri Fieno

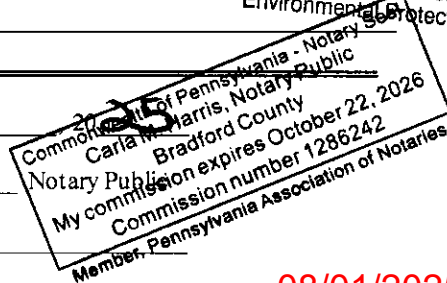
Company Official (Typed Name) KERI FIENO

Company Official Title REGULATORY SPECIALIST

Subscribed and sworn before me this 17th day of June

Carla M. Harris

My commission expires October 22, 2026



08/01/2025

Proposed Revegetation Treatment: Acres Disturbed 10 Prevegetation pH _____Lime 3.90 Tons/acre or to correct to pH 7Fertilizer type 8-16-16Fertilizer amount 968 lbs/acreMulch 3 Tons/acreSeed Mixtures**Temporary****Permanent**

Seed Type lbs/acre

OATS/ANNUAL RYE 40LBS/ACRE

Seed Type lbs/acre

BIRDSFOOT TREFOIL 8LBS/ACREHAY/STRAW MULCH 3 TONS/ACRETALL FESCUE 40LBS/ACRE

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

 Plan Approved by: Gayne Knitowski
Digitally signed by Gayne Knitowski
Date: 2025.06.03 08:55:28 -0400

Comments: _____

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WV Department of
Environmental ProtectionTitle: Inspector Date: 6-3-2025Field Reviewed? (X) Yes () No

08/01/2025

**RECOMMENDED PERMANENT SEEDING MIXTURE
FOR ALL DISTURBED AREAS**

MIXTURE NUMBER	SEASON	SPECIES	SEEDING RATE (lb/ac)
2	COOL	BIRDSFOOT TREFOIL TALL FESCUE	8 / 40

MULCHING

MATERIAL SHALL BE HAY OR STRAW WHICH IS FREE OF WEED AND SEEDS, NOT MOLDY, ROTTEN, AND SHALL BE APPLY TO ALL SLOPES FATTER THAN 3:1 AT A RATE OF 140 LBS/1,000 SF. (APPROXIMATELY TWO BALES PER 1,000 SF OR 3 TON PER AC)

HYDROSEEDING SPECIFICATION

MATERIAL	DESCRIPTION	APPLICATION RATE (PER 1,000 SY)
(1) SEE MIXTURE (% BY WEIGHT)	REDTOP - 10% PENNLAWN FESCUE - 45% KENTUCKY BLUEGRASS - 45%	27 LBS
(2) 8-16-16	COMMERCIAL FERTILIZER	200 LBS
(3) LIME	GROUND COMMERCIAL LIMESTONE	1,650 LBS
(4) MULCH	WOOD CELLULOSE FIBER	750 LBS

APPROXIMATE TACK COAT

PROCEDURE: SURFACE TO BE HYDROSEEDED SHALL BE CLEANED OF ALL DEBRIS AND OTHER MATTER HARMFUL TO UNIFORM GERMINATION. A WATER-SURRY MIXTURE COMPOSED OF THE ABOVE "MATERIALS". ITEMS (1) THROUGH (3) INCLUSIVE, SHALL BE SPRAYED UNIFORMLY OVER THE AREAS TO BE HYDROSEEDED. IMMEDIATELY, THEREAFTER, ITEM (4) "MULCH" SHALL BE BLOWN ON THE SAME AREA AND TACK-COATED. RATES AND TYPE OF MATERIALS SHALL BE SPECIFIED.

MAINTENANCE AND GUARANTEE

THE CONTRACTOR SHALL GUARANTEE A GOOD STAND OF GRASS IN THE SWALES AND ON BANKS. THE MEANS OF GUARANTEE SHALL BE BY WATERING, MOWING, REGRADING, REMULCHING, AND RESEEDING TO THE SATISFACTION OF THE OWNER UNTIL FINAL ACCEPTANCE. ANY AREAS WHICH FAIL TO SHOW A UNIFORM STAND WITHIN ONE YEAR SHALL BE RESEEDED AND REMULCHED AT THE CONTRACTORS EXPENSE WITH THE SAME MIXTURE ORIGINALLY USED THEREON. ERODED AREAS SHALL BE REPAIRED AND RESTORED TO FINISHED GRADE PRIOR TO RESEEDING AND REMULCHING. ALL SUCH REPAIRING OF EROSION, RESEEDING, AND REMULCHING SHALL BE REPEATED UNTIL ALL EFFECTED AREAS ARE COVERED WITH GRASS.

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6-3-2025

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

Operator Name: EXPAND OPERATING LLC
Watershed (HUC 10): PURR SPRING RUN Quad: WESTERNPORT
Farm Name: MASTELLAR COAL CO 1

1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

SEE ATTACHED

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

4. Summarize all activities at your facility that are already regulated for groundwater protection.

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

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6. Provide a statement that no waste material will be used for deicing or fill material on the property.

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

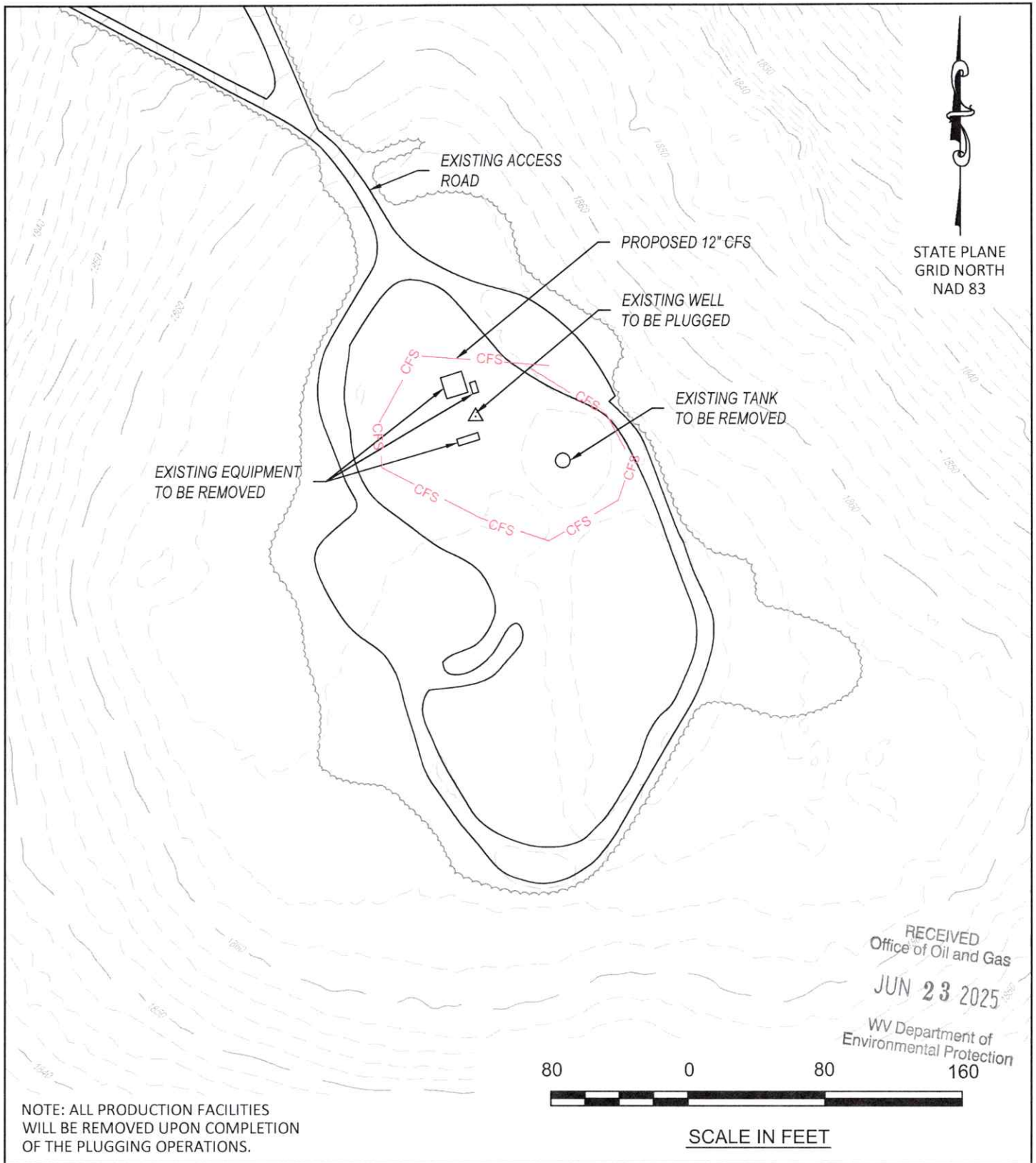
8. Provide provisions and frequency for inspections of all GPP elements and equipment.

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Signature: *Kevin Leno*

Date: 6/17/25

08/01/2025



MASTELLAR COAL CO 1
SITE RECLAMATION
API# 47-057-00016
 FOR
EXPAND OPERATING, LLC
 LOCATED IN
 MINERAL COUNTY, WEST VIRGINIA

SITE PLAN

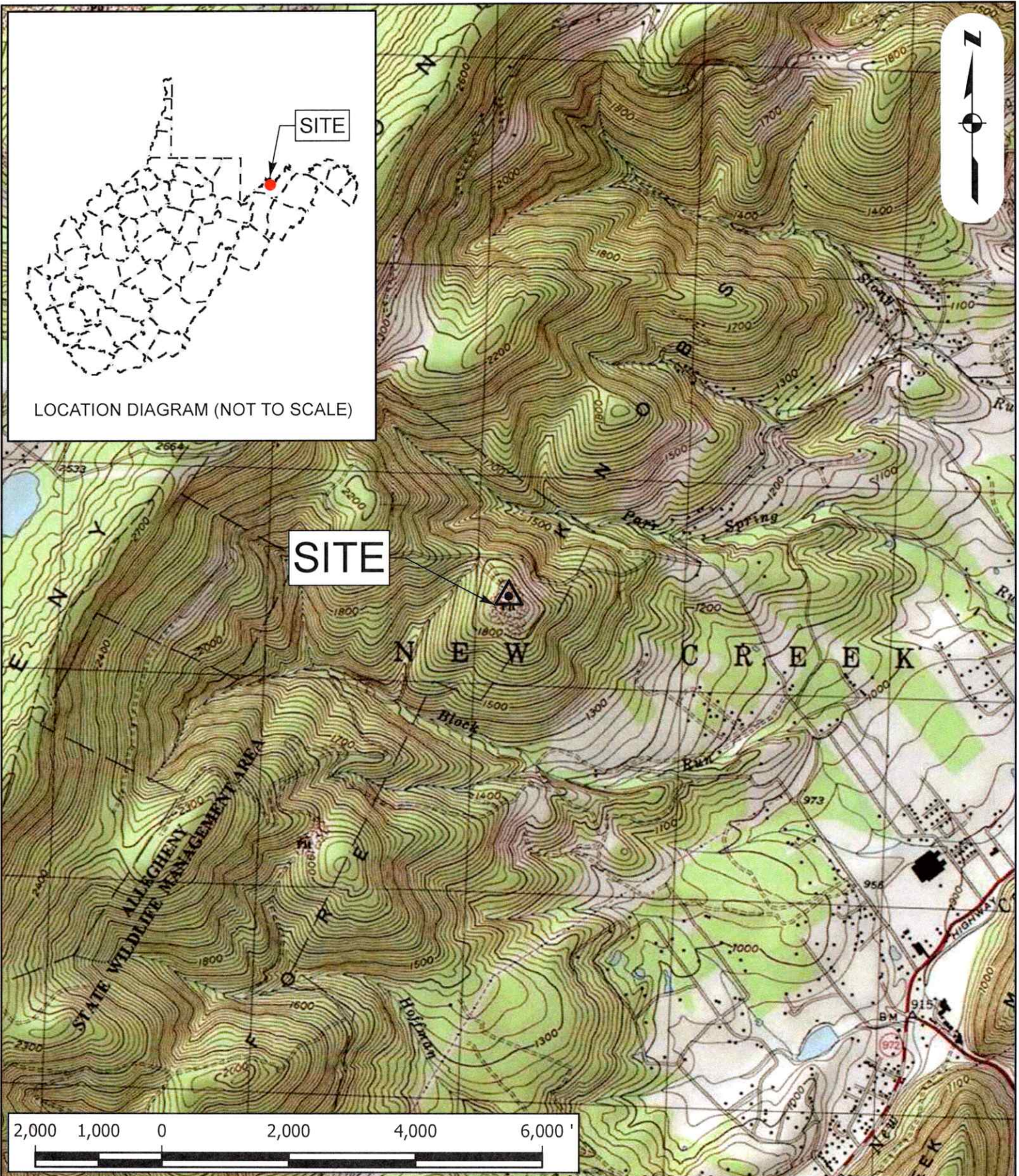
LEGEND

EXISTING CONTOUR	
EXISTING TREE LINE	
EXISTING ACCESS ROAD EDGE	
WELLHEAD	
COMPOSITE FILTER SOCK	



844-542-4757
 466 SOUTH MAIN STREET
 MONTROSE, PA 18801
 PA • OH • NY • WV • VA • MD

08/01/2025



USGS LOCATION MAP

PREPARED FOR

MASTELLAR COAL CO 1

MINERAL COUNTY, WEST VIRGINIA
WESTERNPORT USGS QUAD

PROJECT -	MASTELLAR COAL CO 1
DATE -	5/30/2025
SCALE -	1" = 2,000'
DRAWN -	MWS
FILE -	USGS_LOCATION_MAP.mxd



08/01/2025
(844) 342-4757



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-057-00016 WELL NO.: 1

FARM NAME: MASTELLAR COAL CO

RESPONSIBLE PARTY NAME: EXPAND OPERATING LLC

COUNTY: MINERAL DISTRICT: NEW CREEK

QUADRANGLE: WESTERNPORT

SURFACE OWNER: State of West Virginia, Public Land, Labor & Environmental Resources

ROYALTY OWNER: " "

UTM GPS NORTHING: 4,364,432.289

UTM GPS EASTING: 669,144.645 GPS ELEVATION: 1862'

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.

2. Accuracy to Datum – 3.05 meters

3. Data Collection Method:

Survey grade GPS X: Post Processed Differential X

Real-Time Differential _____

Mapping Grade GPS _____: Post Processed Differential _____

Real-Time Differential _____

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.

Kevin L. Leno
Signature

REGULATORY SPECIALIST
Title

6/17/25
Date

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08/01/2025



Kennedy, James P <james.p.kennedy@wv.gov>

plugging permits issued 4705700016 00022

1 message

Kennedy, James P <james.p.kennedy@wv.gov>

Wed, Jul 23, 2025 at 1:16 PM

To: Gayne J Knitowski <gayne.j.knitowski@wv.gov>, Eric Haskins <eric.haskins@expandenergy.com>, Keri Fieno <keri.fieno@expandenergy.com>, "jcosner@wvassessor.com" <jcosner@wvassessor.com>

To whom it may concern, plugging permits have been issued for 4705700016 00022.

--

James Kennedy

Environmental Resource Specialist III / Permitting

WVDEP Office of Oil and Gas

601 57th Street, SE

Charleston, WV 25304

304-926-0499 ext. 45025

james.p.kennedy@wv.gov

2 attachments**4705700016.pdf**
4116K**4705700022.pdf**
4344K

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