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

Monday, August 4, 2025

WELL WORK PLUGGING PERMIT
Vertical Plugging

EXPAND OPERATING LLC
6100 N WESTERN AVE.

OKLAHOMA CITY, OK 73118

Re: Permit approval for 1
47-057-00102-00-00

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

Operator's Well Number:
Farm Name: T.G.&C. COAL CO.
U.S. WELL NUMBER: 47-057-00102-00-00
Vertical Plugging
Date Issued: 8/4/2025

08/08/2025

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.

08/08/2025

WW-4B
Rev. 2/01

1) Date MAY 7, 2025
2) Operator's Well No. TG&C
3) API Well No. 47 - 057 00102

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 2,633 Watershed POWDER HOUSE RUN
District PIEDMONT County MINERAL Quadrangle WESTERNPORT

6) Well Operator EXPAND OPERATING LLC
Address PO BOX 18496
OKLAHOMA CITY, OK 73154-0496

7) Designated Agent ~~ERIC HASKINS - MANAGER REG OPS~~ Brittany Woody
Address ~~14 CHESAPEAKE LANE~~ ~~1300 Fort Pierpont Dr. Suite 201~~ ~~SAYRE, PA 18840~~ Morgantown, WV 26508

8) Oil and Gas Inspector to be notified
Name GAYNE J KNITOWSKI
Address 601 57TH STREET SE
CHARLESTON, WV 25304

9) Plugging Contractor
Name PLANTS AND GOODWIN
Address 360 HIGH STREET
BRADFORD, PA 16701

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

SEE ATTACHED

RECEIVED
Office of Oil and Gas
JUL 10 2025
WV Department of
Environmental Protection

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: 2025.06.09 08:11:49 -04'00' Date 6-3-2025

08/08/2025

T G & C COAL CO 1 (PN: 627092)

expand

Plug & Abandon

County/State: MINERAL, WV Township: PIEDMONT BLM: NO
Latitude: 38.8585243472 Longitude: -79.5295784044 (NAD 83)
Property Number: 627092 API: 4705700102
AFE: WO:

Summary
The T G & C COAL CO 1 will be plugged and abandoned. The well is located in MINERAL County, WV and was spud on 05-01-1999 by Cabot Oil & Gas Corporation, targeting the Oriskany as a DIRECTIONAL well. The last know production date for this well was 01-00-1900 where it produced MCF, BO, and BW. Pull ~9,453' Production Tubing Run CBL Cut and Pull ~8,380' of 5.5" Production Casing (3) 200' & (1) 100' Cement Plugs. Detail on Page 9 Gel 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.

	Flow Path	
Barriers	**Production Casing X Tubing**	**Tubing**
Primary		
Secondary		
Tertiary		

08/08/2025

Pump KWF at Start of Job	
Step	**Operation**
1	MIRU pump truck to production wing valve off. Prepare to leave rigged up until CIBP with cement is set in production casing.
2	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).
3	Perform flow check to ensure QHB is established.
	a. Contact supervisor and OKC engineer if higher weight kill fluid is required.
4	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**
5	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

6	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.
7	NU 7-1/16" WOR BOPs and 7-1/16" 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

Pull Tubing	
Step	**Operation**
8	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

9	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, ensuire pulling speeds are low enough to prevent swabbing.
10	Close 7-1/16" Master valve and 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."**	
11	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

12	Round trip 4.85" OD gauge ring to 9,335'.
13	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.
14	Pressure test CIBP to 1,500 psi or 80% of casing burst pressure accounting for hydrostatic to CIBP depth, which ever is less.
15	Run pressurized CBL log from CIBP to surface. Reported estimated TOC at 8,430'.
16	ND wireline lubricator, wireline rams, primary pressure control.

Pump Cement and Spacer and Tac Weld Slips		
Step	**Operation**	
17	Prep 9,333' of 2-3/8" 4.7# L-80 workstring.	
18	Change out pipe rams to handle 2-3/8" 4.7# L-80 workstring.	
19	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

20	Plug Details - Plug #2 - Cement - Cement Perf Isolation Pump balanced cement plug as directed in Plug Detials, displace tubing with specified volume. POOH 1,500' above estimated TOC. Close pipe ram. WOC for at least 8 hours.
21	Tag top of cement. Record depth.
22	TIH w/ workstring to bottom of spacer #1 and pump spacer as defined in Spacer Details.
23	POOH w/ workstring.
24	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 5.5" casing slips to 5.5" casing.

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

Nipple Up WOR BOPs (Test against CIBP)	
Step	**Operation**
25	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

26	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."**	

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

27	Using TOC from CBL, Round trip 4.85" gauge ring to desired depth.	
28	Make up 4.85" OD jet cutter and RIH to desired depth. Pressure up on 5.5" casing to 500 psi and fire cutter. Record all pressure changes at time of cut.	
29	RD wireline. Circulate down 5.5" 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.

Pull Casing		
Step	**Operation**	
30	MU casing spear, spear 5.5" casing. TOOH laying down 5.5" casing.	
	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	

31	Once out of hole with casing shut 7-1/16" Master Valve and Blind Ram.

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

Pump Cement and Spacer		
Step	**Operation**	
32	Prep 8,430' of 2-3/8" 4.7# L-80 workstring.	
33	Change out pipe rams to handle 2-3/8" 4.7# L-80 workstring.	
34	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

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

Pump Cement and Spacer	
Step	**Operation**
39	Prep 1,776' of 2-3/8" 4.7# L-80 workstring.
40	Change out pipe rams to handle 2-3/8" 4.7# L-80 workstring.
41	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

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

Pump Surface Cement Plug	
Step	**Operation**
46	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.
47	Plug Details - Plug #5 - Cement - Surface Plug Pump balanced cement plug as directed in Plug Detials, displace tubing with specified volume. Close pipe ram.
48	ND WOR BOPs. RDMO Workover rig and all associated equipment.

	Flow Path
Barriers	**Surface Casing**
Primary	Cement
Secondary	Cement
Tertiary	QHB

49	Monitor well for a minimum of 24 hrs or until state allows well to have abandoment cap installed.
50	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 08:10:51 -04'00'

08/08/2025

T G & C COAL CO 1 (PN: 627092)

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Well Information

Surface Location	
County/State	MINERAL, WV
Township	PIEDMONT
Latitude*	38.85852435
Longitude*	-79.5295784

*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

General Well Data

KB	15	Top Perf	9,435	Perf Interval (ft)	20	PBTD	9,869
KOP	N/A	Btm Perf	9,455	TD	10,003	Elevation	2,633

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" 42# LS			15	35			#N/A			20
Surface	9.625" 36# J-55	8.921	8.765	15	1,676	1,414	2,464	276	0.0773	128	12.25
Intermediate											
Production	5.5" 17# N-80	4.892	4.767	15	9,869	4,473	5,418	244	0.0232	229	8.75
Production											
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	9,453	15	9,468	6,480	6,160	72,000	0.0039	37

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	8,520	15	8,535	9,424	8,960	83,440	0.0039	33

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

08/08/2025

T G & C COAL CO 1 (PN: 627092)

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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	4.892	2	9,335	9,333	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	Cement	Cement Perf Isolation	4.892	200	9,333	9,133	Class A	1.28	15.5	0	4.6	20.4	35.1
3	Cement	Prod Csg Stub Plug (Inside Csg)	4.892	50	8,430	8,380	Class A	1.28	15.5	0	1.2	5.1	0.0
3	Cement	Prod Csg Stub Plug (Open Hole)	8.75	150	8,380	8,230	Class A	1.28	15.5	50	16.7	73.4	32.4
4	Cement	Inter Csg Shoe Plug (Open Hole)	8.75	100	1,776	1,676	Class A	1.28	15.5	50	11.2	48.9	0.0
4	Cement	Inter Csg Shoe Plug (Inside Csg)	8.921	100	1,676	1,576	Class A	1.28	15.5	0	7.7	33.9	6.5
5	Cement	Surface Plug	8.921	100	100	0	Class A	1.28	15.5	0	7.7	33.9	0.0
9													
10													

T G & C COAL CO 1 (PN: 627092)

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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	4.892	703	9,133	8,430	9	-	5	17.2
2	Gel	Elevation Plug to Inter Csg Shoe Plug	8.75	6,454	8,230	1,776	9	-	40	672.1
3	Gel	Inter Csg Shoe Plug to Surface Plug	8.921	1,476	1,676	100	9	-	5	119.8
4										
5										
6										
7										
8										
9										
10										

Estimated Casing Cuts	
String	Est. Cut Depth (ftKB)
Intermediate	
Production	8,380

08/08/2025

T G & C COAL CO 1 (PN: 627092)

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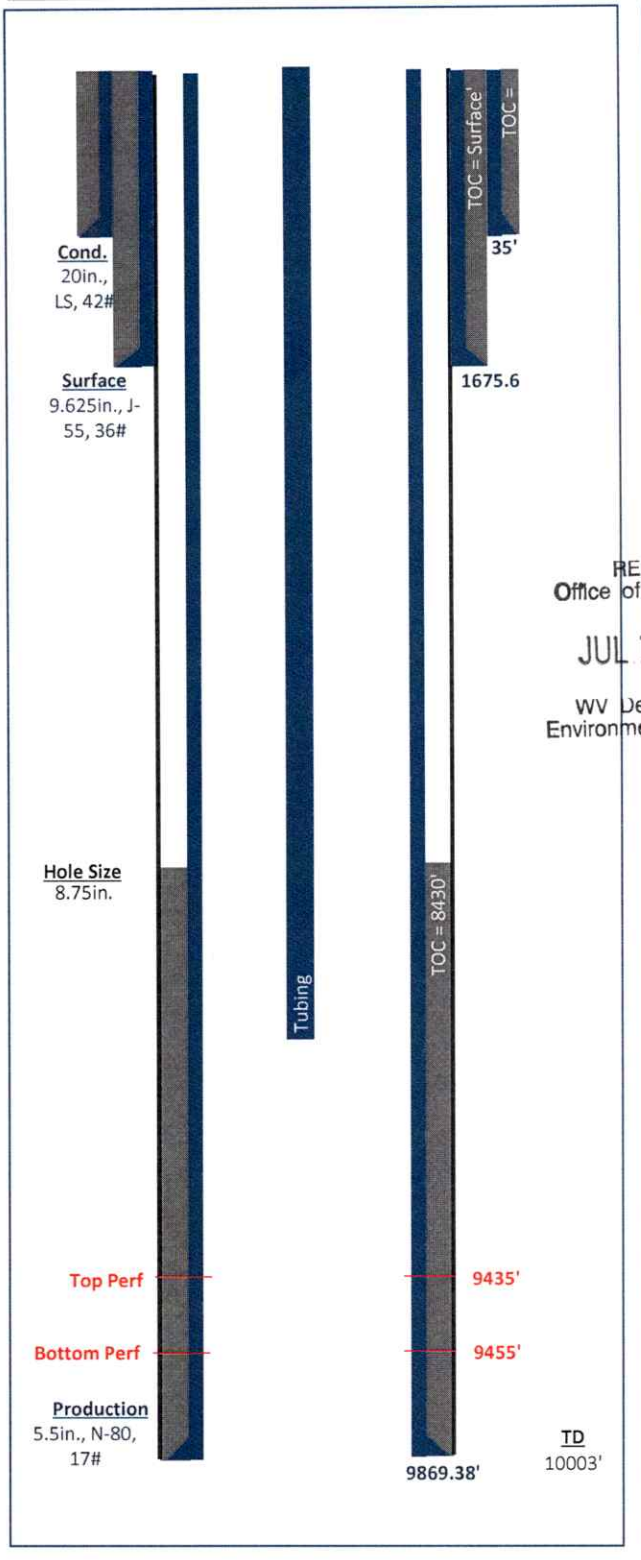
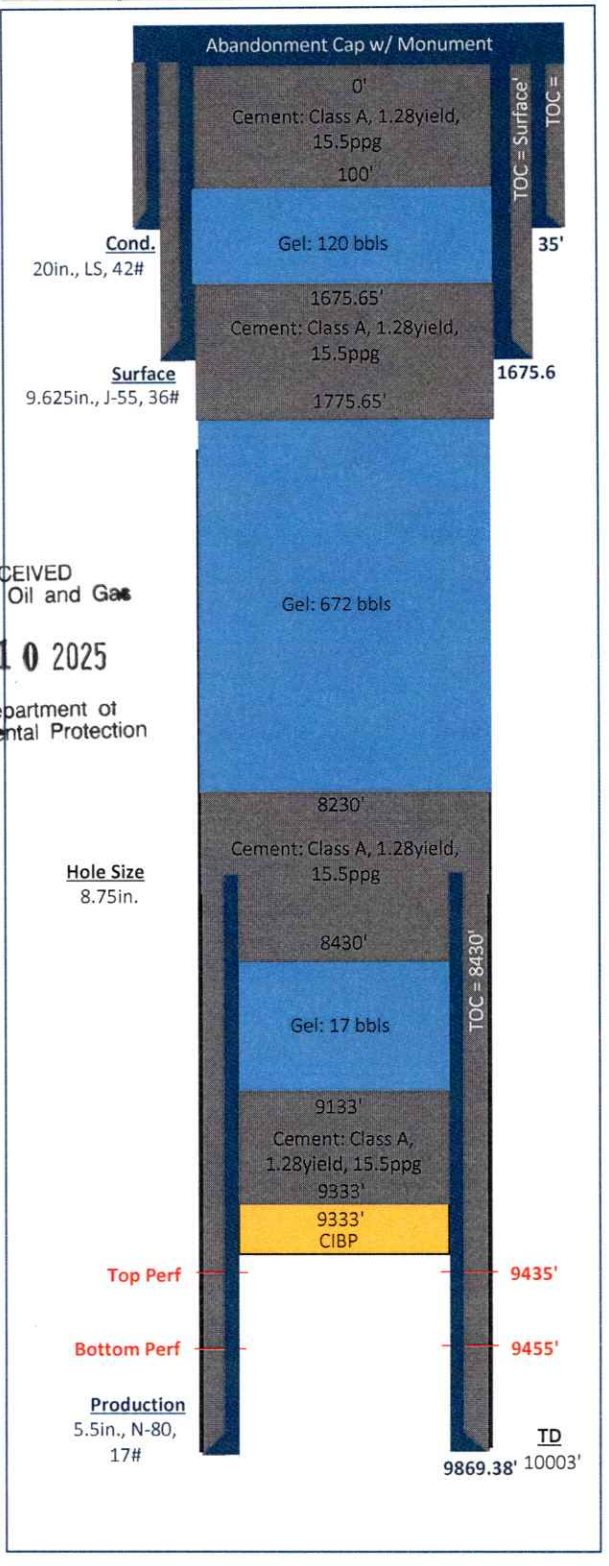
Current Wellbore Schematic



Proposed Wellbore Schematic



08/08/2025

WR-35

31-Mar-99
API # 47- 57-00102

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Reviewed

Farm name: T.G.&C. COAL CO. Operator Well No.: 1

LOCATION: Elevation: 2,633.00 Quadrangle: WESTERNPORT

District: PIEDMONT County: MINERAL
Latitude: 9368 Feet South of 39 Deg. 27Min. 30 Sec.
Longitude 12313 Feet West of 79 Deg. 0 Min. 0 Sec.

Company: FOX OIL AND GAS, INC.
370 LEONARD AVENUE
WASHINGTON, PA 15301-0000

Agent: ROBIN L. STIVALETTA

Inspector: PHILLIP TRACY
Permit Issued: 03/26/99
Well work Commenced: 5-1-99
Well work Completed: 5-25-99
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) _____
Fresh water depths (ft) _____
117', 241'
Salt water depths (ft) _____
None
Is coal being mined in area (Y/N)? N
Coal Depths (ft): ----

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 20"	20'	20'	---
9 5/8"	1660.65'	1660.65'	700
5 1/2"	----	9854.38'	450
2 7/8"	----	9452.60'	----

OPEN FLOW DATA

Producing formation Corriganville Limestone Pay zone depth (ft) 9835'
Gas: Initial open flow Show MCF/d Oil: Initial open flow ---- Bbl/d
Final open flow 1,000 MCF/d Final open flow ---- Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 3900 psig (surface pressure) after 72 Hours

Second producing formation Oriskany Sandstone Pay zone depth (ft) 9430
Gas: Initial open flow Show MCF/d Oil: Initial open flow ---- Bbl/d
Final open flow 1,200 MCF/d Final open flow ---- Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 3650 psig (surface pressure) after 72 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 A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: FOX OIL AND GAS, INC.
By: _____ Vice President
Date: 10/19/99

DRILLER'S LOG OF FORMATIONS

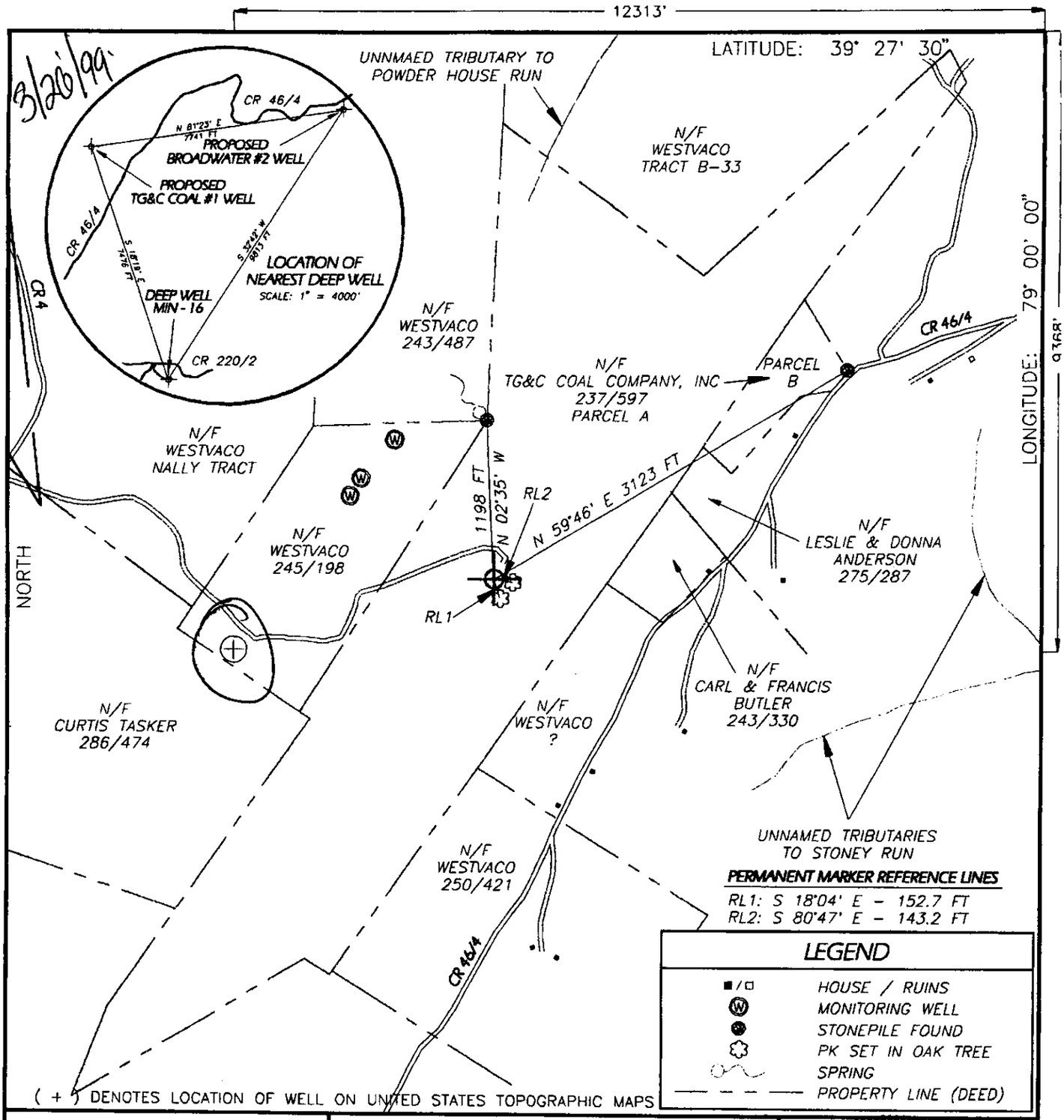
Name	Top	Bottom	Gas At	Oil At	Water At (Fresh or Brine)	Source of Data
Fill	0	8				Drillers Log
Sandstone	8	58			(Fresh)	
Sandstone & Shale	58	290			Damp @117'	
Red Shale	290	330			1" Stream @ 241'	
Sandstone & Shale	330	350				
Red Shale	350	375				
Sandstone & Shale	375	405				
Sandstone	405	442				
Sandstone & Shale	442	490				
Red Shale	490	745				
Sandstone & Shale	745	895				
Red Shale	895	1330				
Sandstone	1330	1396				
Red Shale	1396	1465				
Sand & Shale	1465	1693				Electric Log
Shale & Sand Stringer	1693	9190				
Upper Marcellus	9190	9222				
Purcell Limestone	9222	9252				
Shale	9252	9304				
Lower Marcellus	9304	9326				
Onondaga Limestone	9326	9382				
Needmore Shale	9382	9430				
Oriskany Sandstone	9430	9682	Gas @ 9450'			
Shriver Chert	9682	9800				
Mandata Shale	9800	9834				
Corriganville Limestone	9834	10,003 TD	Gas @ 9880'			

Perforation Record

Date	Interval Perforated From	Interval Perforated To
	Open Hole	
--	9854	10,003
6/28/99	9435	9,455

Stimulation Record

Date	Interval Treated	Fluid Type	Fluid Amount	Propping Agent Type	Propping Agent Amount	Average Injection Rate
6/16/99	Corriganville	Gelled Acid	20,000 Gal	None		14 BPM
7/1/99	Oriskany	Gelled Water	20,000 Gal	20-40 Sand	40,000#	19 BPM



FILE NO. _____
DRAWING NO. 1298-070-MM
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1 PART IN 200
PROVEN SOURCE OF ELEVATION GPS

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT 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 DEPARTMENT OF ENERGY.
(SIGNED) John E. Carey
R.P.E. _____ L.L.S. 967

JOHN E. CAREY LICENSED No. 967 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR SEAL

WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
#10 McJUNKIN ROAD
NITRO, WEST VIRGINIA 25143-2506

DATE: MONTH 3 19 99
OPERATOR'S WELL NO. TG&C Coal #1
API WELL NO.
47 - 057 - 00102
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 2633 WATERSHED POWDER HOUSE RUN
DISTRICT PIEDMONT COUNTY MINERAL
QUADRANGLE WESTERNPORT
SURFACE OWNER TG&C COAL COMPANY, INC. ACREAGE 221.67 (PARCEL A&B)
OIL & GAS ROYALTY OWNER TG&C COAL COMPANY, INC. LEASE ACREAGE 221.67 (PARCEL A&B)
LEASE NO. _____
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION ORISKANY ESTIMATED DEPTH 10,117 FT
WELL OPERATOR FOX OIL & GAS, INC. DESIGNATED AGENT POST MASTER
ADDRESS 370 LEONARD AVE., WASHINGTON, PA 15301 ADDRESS PO BOX 3621 SABRATON STATION, MORGANTOWN, WV 26505-3621

COUNTY NAME
PERMIT

08/08/2025

RECEIVED
Office of Oil and Gas

JUL 10 2025

WV Department of
Environmental Protection

WW-4A
Revised 6-07

1) Date: 5/7/2025
2) Operator's Well Number
EXPAND OPERATING LLC
3) API Well No.: 47 - 057 - 00102

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

4) Surface Owner(s) to be served:
(a) Name: PINNACLE WIND FORCE, LLC
Address: PO BOX 4900
SCOTTSDALE, AZ 85261
(b) Name:
Address:
(c) Name:
Address:

5) (a) Coal Operator
Name:
Address:
(b) Coal Owner(s) with Declaration
Name: PINNACLE WIND FORCE, LLC
Address: PO BOX 4900
SCOTTSDALE, AZ 85261
Name:
Address:
(c) Coal Lessee with Declaration
Name:
Address:

6) Inspector: GAYNE J KNITOWSKI
Address: 601 57TH STREET SE
CHARLESTON WV 25304
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.

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

Subscribed and sworn before me this 17th day of June 2025
Notary Public
My Commission Expires October 22, 2026

Commonwealth of Pennsylvania - Notary Seal
Carla M. Harris, Notary Public
Bradford County
My commission expires October 22, 2026
Commission number 1286242
Member, Pennsylvania Association of Notaries

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 deppprivacyoffier@wv.gov.

08/08/2025

ALERT: SEVERE WEATHER, STORMS, AND FLOODING ALONG THE EAST COAST AND IN TEXA...

USPS Tracking®

FAQs >

Remove ×

Tracking Number:

9114902307224062861429

Copy Add to Informed Delivery (https://informeddelivery.usps.com/)

Latest Update

Your item has been delivered and is available at a PO Box at 10:53 am on June 21, 2025 in SCOTTSDALE, AZ 85258.

Get More Out of USPS Tracking:

USPS Tracking Plus®

Delivered

Delivered, PO Box

SCOTTSDALE, AZ 85258
June 21, 2025, 10:53 am

Arrived at Post Office

SCOTTSDALE, AZ 85258
June 21, 2025, 2:41 am

Arrived at USPS Facility

SCOTTSDALE, AZ 85258
June 21, 2025, 1:52 am

Departed USPS Regional Facility

PHOENIX AZ DISTRIBUTION CENTER
June 21, 2025, 1:12 am

Arrived at USPS Regional Facility

PHOENIX AZ DISTRIBUTION CENTER

Feedback

08/08/2025

June 20, 2025, 10:08 am

Departed USPS Facility
AVONDALE, AZ 85323
June 20, 2025, 7:01 am

In Transit to Next Facility
June 20, 2025, 5:37 am

Arrived at USPS Facility
AVONDALE, AZ 85323
June 20, 2025, 2:46 am

In Transit to Next Facility
June 19, 2025, 1:17 pm

In Transit to Next Facility
June 18, 2025, 9:53 pm

Departed USPS Regional Facility
PHILADELPHIA PA DISTRIBUTION CENTER
June 18, 2025, 6:12 am

Arrived at USPS Regional Origin Facility
PHILADELPHIA PA DISTRIBUTION CENTER
June 18, 2025, 12:06 am

Arrived at USPS Regional Origin Facility
SCRANTON PA DISTRIBUTION CENTER
June 17, 2025, 11:00 am

Departed Post Office
SAYRE, PA 18840
June 17, 2025, 6:55 am

USPS picked up item
SAYRE, PA 18840
June 16, 2025, 11:34 am

Hide Tracking History

What Do USPS Tracking Statuses Mean? (https://faq.usps.com/s/article/Where-is-my-package)

08/08/2025

WW-9
(5/16)

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Office of Oil and Gas

JUL 10 2025

WV Department of
Environmental Protection

API Number 47 - 057 - 00102
Operator's Well No. TG&C COAL CO 1

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) POWDER HOUSE 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, 20 25

Carla M. Harris

Notary Public

My commission expires October 22, 2026

Commonwealth of Pennsylvania - Notary Seal
Carla M. Harris, Notary Public
Bradford County
My commission expires October 22, 2026
Commission number 1286242
Member, Pennsylvania Association of Notaries

08/08/2025

Form WW-9

Operator's Well No. TG&C COAL CO 1

Proposed Revegetation Treatment: Acres Disturbed 10 Prevegetation pH _____

Lime 3.90 Tons/acre or to correct to pH 7

Fertilizer type 8-16-16

Fertilizer amount 968 lbs/acre

Mulch 3 Tons/acre

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Office of Oil and Gas
JUL 10 2025
WV Department of
Environmental Protection

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
OATS/ANNUAL RYE	40LBS/ACRE	BIRDSFOOT TREFOIL	8LBS/ACRE
HAY/STRAW MULCH	3 TONS/ACRE	TALL 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

Comments: _____

Title: Inspector Date: 6-3-2025

Field Reviewed? (X) Yes ( ) No

08/08/2025

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Office of Oil and Gas

JUL 10 2025

WV Department of
Environmental Protection

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

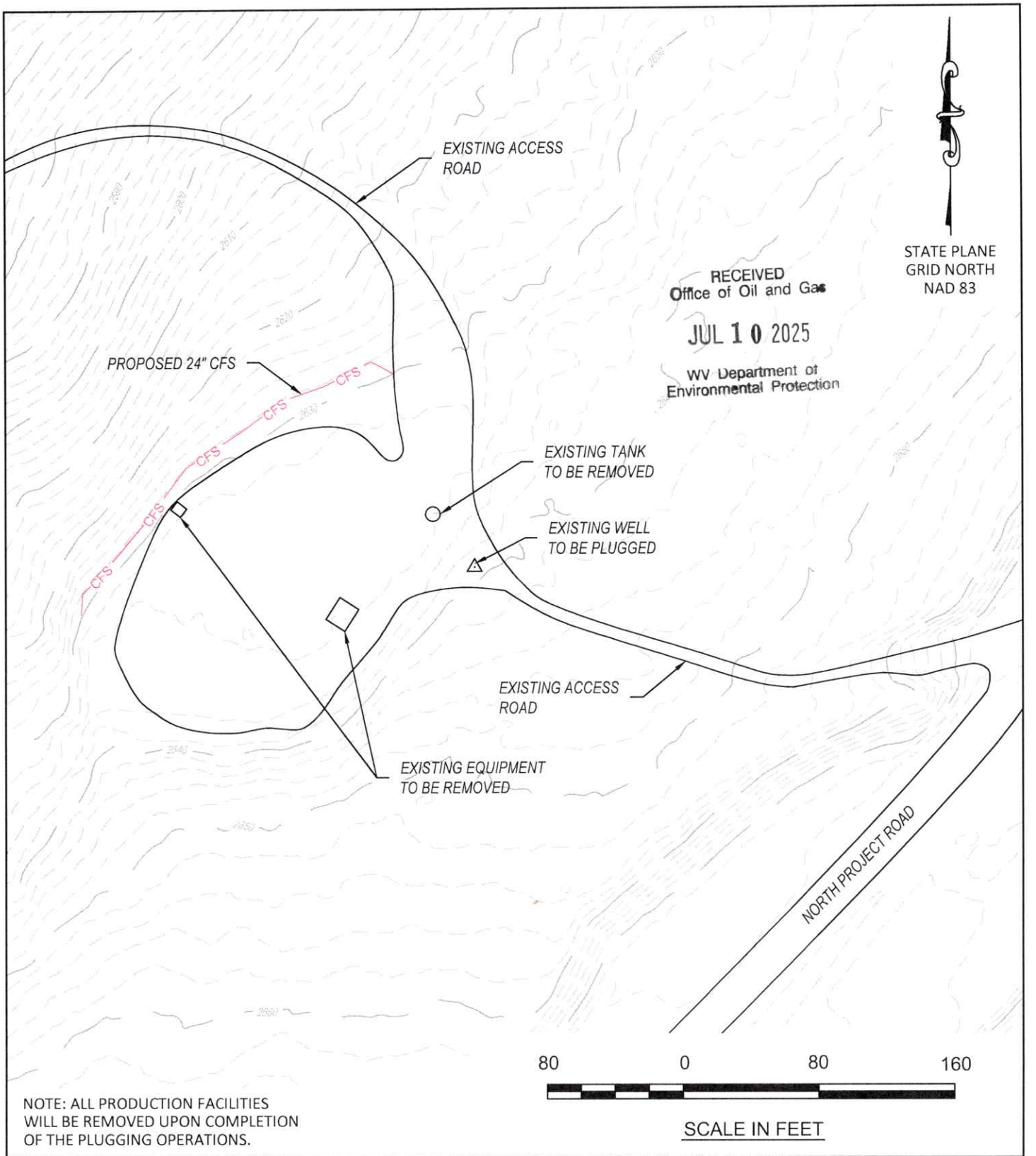
MATERIAL SHALL BE HAY OR STRAW WHICH IS FREE OF WEED AND SEEDS, NOT MOLDY, ROTTEN, AND SHALL BE APPLY TO ALL SLOPES FATTER THAN 3:1 AT A RATE OF 140 LBS/1,000 SF. (APPROXIMATELY TWO BALES PER 1,000 SF OR 3 TON PER AC)

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 COMMPOSED OF THE ABOVE "MATERIALS". ITEMS (1) THROUGHT (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.



NOTE: ALL PRODUCTION FACILITIES WILL BE REMOVED UPON COMPLETION OF THE PLUGGING OPERATIONS.

TG&C COAL CO 1
SITE RECLAMATION
API# 47-057-00102

FOR

EXPAND OPERATING, LLC

LOCATED IN

MINERAL COUNTY, WEST VIRGINIA

SITE PLAN

PLAN STATUS	DATE	NO.
FINAL	5/30/2025	1

LEGEND

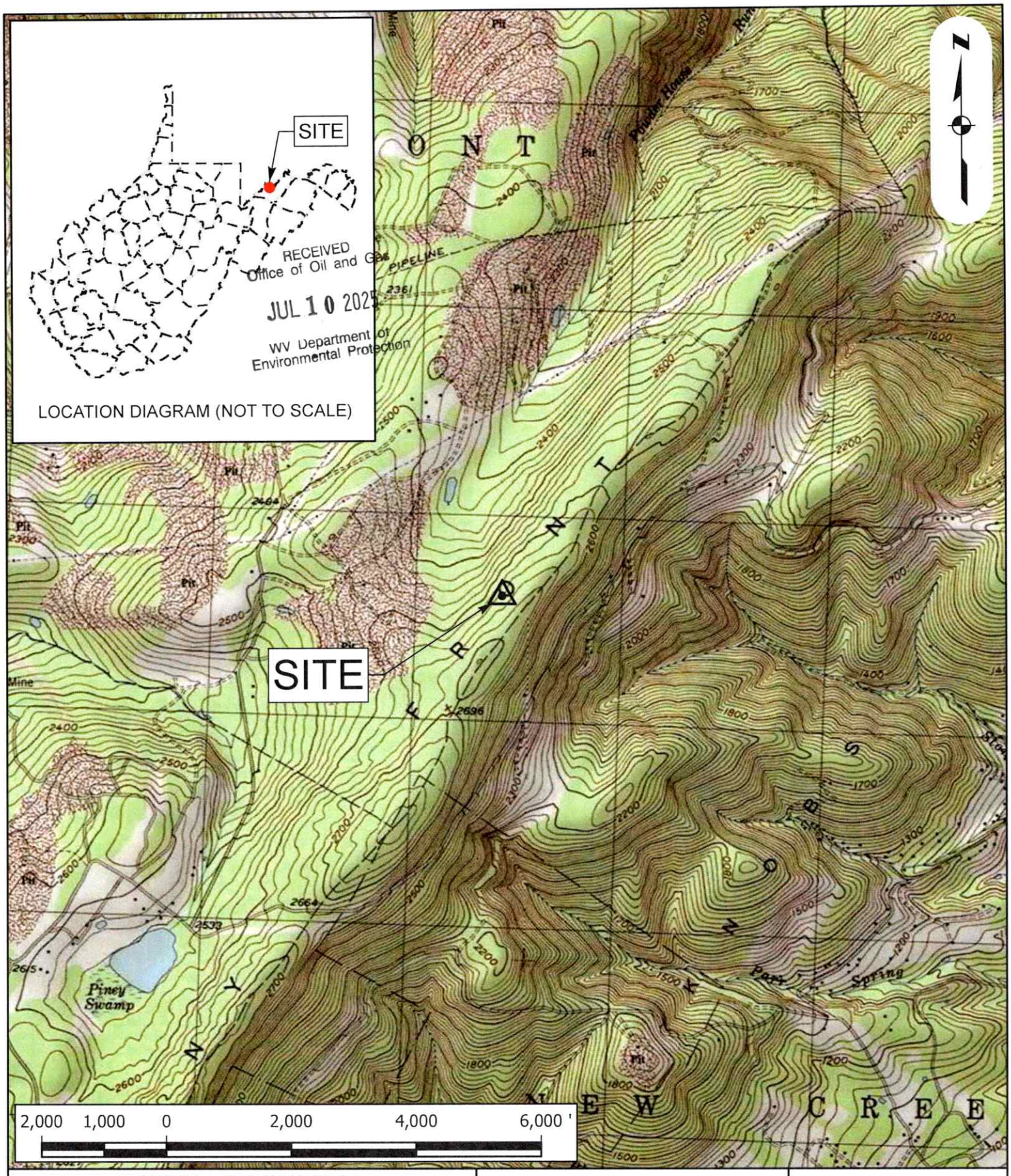
- EXISTING CONTOUR
- EXISTING TREE LINE
- EXISTING ACCESS ROAD EDGE
- WELLHEAD
- COMPOSITE FILTER SOCK (CFS)

JHA SURVEYING ENGINEERING ENVIRONMENTAL ARCHITECTURE

844-542-4757

466 SOUTH MAIN STREET
MONTROSE, PA 18801
PA • OH • NY • WV • VA • MD

08/08/2025



USGS LOCATION MAP

PREPARED FOR

TG&C COAL CO 1

MINERAL COUNTY, WEST VIRGINIA
WESTERNPORT USGS QUAD

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

JHA SURVEYING ENGINEERING ENVIRONMENTAL ARCHITECTURE

08/08/2025

(844) 542-4757

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

Operator Name: EXPAND OPERATING LLC
Watershed (HUC 10): POWDER HOUSE RUN Quad: WESTERNPORT
Farm Name: TG&C 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.

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.

Signature: Keri Lieno

Date: 6/17/25

WW-7
8-30-06

RECEIVED
Office of Oil and Gas
JUL 10 2025
WV Department of
Environmental Protection

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

API: 47-057-00102 **WELL NO.:** 1

FARM NAME: TG&C COAL CO 1

RESPONSIBLE PARTY NAME: EXPAND OPERATING LLC

COUNTY: MINERAL **DISTRICT:** PIEDMONT

QUADRANGLE: WESTERNPORT

SURFACE OWNER: Pinnacle Wind Force LLC

ROYALTY OWNER: " " "

UTM GPS NORTHING: 4,302,104.323

UTM GPS EASTING: 627,582.568 **GPS ELEVATION:** 2633'

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.

Keri Liens — Signature
REGULATORY SPECIALIST — Title
6/17/25 — Date

08/08/2025

Keri Fieno
Regulatory Specialist, HSER

7/8/2025

James Kennedy
WV DEP, Office of Oil and Gas
601 57th Street, SE
Charleston, WV 25304

Dear Mr. Kennedy

Expand Operating LLC submits the following P&A applications for your review:

TG&C Coal Co 1 47-057-00102

If you have any questions, please contact me.

Best regards,

Keri Fieno
Regulatory Specialist, HSER
Expand Energy

Expand Energy Corporation
14 Chesapeake Lane / Sayre, PA 18840
405-766-8791 / keri.fieno@expandenergy.com

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

plugging permit issued for 4705700102

1 message

Kennedy, James P <james.p.kennedy@wv.gov> Mon, Aug 4, 2025 at 9:17 AM
To: Eric Haskins <eric.haskins@expandenergy.com>, Keri Fieno <keri.fieno@expandenergy.com>, Gayne J Knitowski <gayne.j.knitowski@wv.gov>, jcosner@wvassessor.com

To whom it may concern, a plugging permit has been issued for 4705700102.

--

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

4705700102.pdf
3924K

08/08/2025