



December 22, 2025

*Via E-mail*

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

RE: Proposed Alternate Method or Material for Casing, Plugging, Venting or Equipping a Well  
Sarah 11H  
Permit Number 37-125-29270  
Union Township, Washington County, Pennsylvania

Dear DEP Recipient,

Please find attached the following documentation:

- Completed Form 8000-PM-OOGM0024 "Proposed Alternate Method or Material for Casing, Plugging, Venting or Equipping a Well"
- Casing and Cementing Plan
- Wellbore Diagram
- Coal Party Proof of Notification

If you need further information regarding this submittal, please feel free to contact me at [BShrum@EQT.com](mailto:BShrum@EQT.com) or 412-660-0654.

Best Regards,

A handwritten signature in blue ink, appearing to read 'BS'.

Becky Shrum  
Permitting Coordinator



<b>DEP USE ONLY</b>
Application Tracking # <b>1553195</b>

Rec'd 12/22/25

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

Well Operator <b>EQT Production Company</b>		DEP ID# <b>146983</b>	Well Permit or Registration Number <b>37-125-29270</b>	
Address <b>2200 Energy Drive</b>		Well Farm Name <b>Sarah</b>		
City <b>Canonsburg</b>	State <b>PA</b>	Zip Code <b>15317</b>	Well # <b>11H</b>	Serial #
Phone <b>412-660-0654</b>	Fax <b>412-395-2974</b>	County <b>Washington</b>		Municipality <b>Union Twp</b>

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

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

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

EQT Production plans to set fresh water casing at approximately 265' RKB, or 14' below the expected deepest fresh water depth of 251' RKB on the Sarah Pad. The expected fresh water depth is determined by analyzing offset oil and gas wells within 5,000' of pad and water wells/surface water within 2,500' of pad. EQT identified the 3920 Bedell Rd #2 water well which is producing from a depth of 20' and is 1,375' from the Sarah location. This water source, once corrected for elevation, is at a depth of 251' at the Sarah Pad. The state regulations require casing to be set at least 50' below the deepest fresh water which would be at 301'. EQT anticipates encountering an open Pittsburgh Coal mine at 302'. EQT is concerned with the variability of the top of the mine and the competency of the formation as the top of the mine is approached. By shortening the fresh water casing, EQT will ensure that the fresh water and mine are not comingled and the fresh water is isolated.

<b>Optional: Approval by Coal Owner or Operator</b>		<b>Signature of Applicant / Well Operator</b>	
Signature	Date	Signature 	Date <b>11/25/25</b>
Print or Type Signer's Name and Title		Print or Type Signer's Name and Title <b>Regional Manager - Permitting</b>	

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

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

## Casing and Cementing Plan Through the Equitrans Gas Storage Zone

### Pad: Sarah

EQT Production plans to set fresh water casing at approximately 265' RKB, or 14' below the expected deepest fresh water depth of 251' RKB on the Sarah Pad. The expected fresh water depth is determined by analyzing offset oil and gas wells within 5,000' of pad and water wells/surface water within 2,500' of pad. EQT identified the 3920 Bedell Rd #2 water well which is producing from a depth of 20' and is 1,375' from the Sarah location. This water source, once corrected for elevation, is at a depth of 251' at the Sarah Pad. The state regulations require casing to be set at least 50' below the deepest fresh water which would be at 301'. EQT anticipates encountering an open Pittsburgh Coal mine at 302'. EQT is concerned with the variability of the top of the mine and the competency of the formation as the top of the mine is approached. By shortening the fresh water casing, EQT will ensure that the fresh water and mine are not co-mingled and the fresh water is isolated.

EQT plans to drill a 12 3/8" hole to a depth of approximately 2,821' through the gas storage zone, which runs from an approximate depth of 2,678' to 2,721'. EQT will dust drill the 12 3/8" hole until a water/oil influx or to a depth 100' above the Gas Storage Zone (whichever occurs first). At this time, EQT will foam drill to TD of the hole section in order to properly clean the wellbore and minimize the potential for gas to flow. EQT will use BOPs designed to control anticipated storage zone pressures. The depth of the Storage Zone(s) is determined from examination of open hole logs and offset wells, and may be adjusted to preserve the integrity of the storage zone. EQT then plans to run a string of 9 5/8" casing from the surface to at least 100' below the deepest storage zone. EQT will then cement the 9 5/8" to surface. The tail cement blend will contain additives designed to reduce potential for gas migration. The tail blend will cover from the casing shoe to at least 500' above the top of the storage zone. EQT will WOC until the cement reaches the required compressive strength outlined in the EQT-Equitrans Gas Storage Agreement prior to drilling out the float equipment and new formation, which will meet and exceed the requirements of §78.85 *Cement Standards* and §78.87 *Gas Storage Reservoir Protective Casing and Cementing Procedures*. Please refer to the attached diagram for more detail.

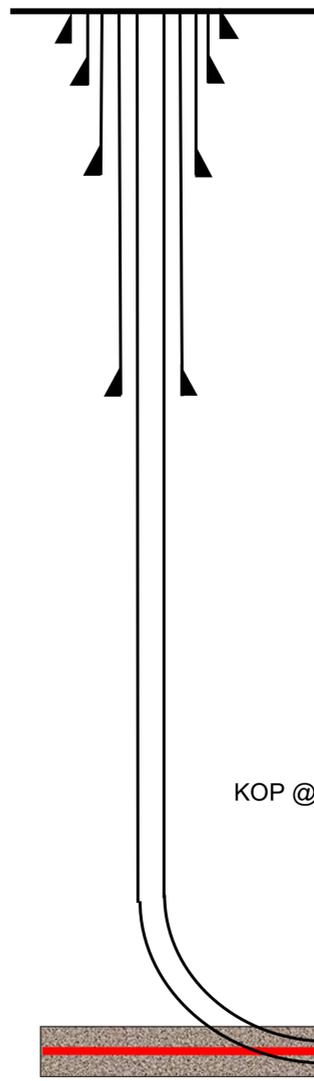
Note: All depths shown are estimations with reasonable accuracy and are subject to change with more geological analysis and further planning. In order to further protect the gas storage zone and provide the most adequate cement job possible, the cementing program is also subject to change for job quality purposes.

**EQT Production Company**

Well: **Sarah 11H**  
 County: **Washington**  
 Quad: **Glassport**

Site: **Sarah**  
 State: **Pennsylvania**  
 Elevation: **1130 GL, 1143 KB**

Formation Tops	TVD (ft)	
<b>Conductor</b>	<b>53</b>	
<b>Base Fresh Water</b>	<b>251</b>	
<b>Sewickley Coal</b>	<b>259</b>	<b>263</b>
<b>Fresh Water String</b>	<b>265</b>	
<b>Pittsburgh Coal</b>	<b>302</b>	<b>307</b>
<b>Pittsburgh Coal String</b>	<b>357</b>	
<b>Big Lime</b>	<b>1486</b>	<b>1530</b>
<b>Burgoon</b>	<b>1530</b>	<b>1693</b>
<b>Berea</b>	<b>1693</b>	<b>1813</b>
<b>Gantz</b>	<b>2110</b>	<b>2283</b>
<b>Fifty foot</b>	<b>2283</b>	<b>2547</b>
<b>STORAGE ZONE</b>	<b>2678</b>	<b>2721</b>
<b>Thirty foot</b>	<b>2547</b>	<b>2616</b>
<b>Gordon</b>	<b>2616</b>	<b>2689</b>
<b>Fourth Sand</b>	<b>2689</b>	<b>2725</b>
<b>Intermediate Casing</b>	<b>2821</b>	
<b>Bayard</b>	<b>2807</b>	<b>3602</b>
<b>Upper Speechley</b>	<b>3602</b>	<b>3662</b>
<b>Speechley</b>	<b>3662</b>	<b>3812</b>
<b>Balltown</b>	<b>3812</b>	<b>4265</b>
<b>Bradford</b>	<b>4265</b>	<b>4498</b>
<b>Benson</b>	<b>4498</b>	<b>4597</b>
<b>Alexander</b>	<b>5389</b>	<b>5792</b>
<b>Elk</b>	<b>5792</b>	<b>6826</b>
<b>Sonyea</b>	<b>6826</b>	<b>7027</b>
<b>Middlesex</b>	<b>7027</b>	<b>7092</b>
<b>Genesee</b>	<b>7092</b>	<b>7205</b>
<b>Genesee</b>	<b>7205</b>	<b>7223</b>
<b>Tully</b>	<b>7223</b>	<b>7285</b>
<b>Hamilton</b>	<b>7285</b>	<b>7481</b>
<b>Marcellus</b>	<b>7481</b>	<b>7559</b>
<b>Production Casing</b>	<b>28130</b>	<b>MD</b>



Casing and Cementing					
Type	Conductor	Fresh Water	Coal	Intermediate	Production
Hole Size (in)	30.000	24.000	17.500	12.375	8.500
Casing Size, OD (in)	26.000	18.625	13.375	9.625	5.500
Depth, MD (ft)	53	265	357	2821	28130
Casing Wall Thickness (in)	0.312	0.435	0.380	0.352	0.361
Weight (lbs/ft)	85.60	87.50	54.50	36.00	20.00
Grade	A252	J-55	J-55	J-55	P-110
New or Used	New	New	New	New	New
Burst (psi)	1000	2250	2730	3520	14360
Cement Class	A / L	A / L	A / L	A / H / L	A / H / L
Cement Yield	1.04 - 1.20	1.04 - 1.20	1.04 - 1.20	1.04 - 1.20	1.04 - 2.10
Top of Cement (Planned) TVD	Surface	Surface	Surface	Surface	500' inside 9.625" casing
Method	Displacement	Displacement	Displacement/ Balanced/1" Grout	Displacement	Displacement
Est. Cement Volume (cu ft)	45	400	300	1100	6100
Possible Additives	N/A	Calcium Chloride Flake/LCM	Calcium Chloride, Flake/LCM	Calcium Chloride, Flate/LCM, Fluid Loss, Defoamer, Dispersant, POZ, Bonding Agent, Extender, Retarder	Calcium Carbonate, Fluid Loss, Extender, Dispersant, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, Anti- Settling/Suspension Agent

- \* FW depth determined by analyzing offset O&G wells within 5,000' of pad and water wells/surface water within 2,500' of pad.
- \* Cement covering coal zones has Medium Sulfate Resistance characteristics (C3A <8% per mill reports).
- \* FW, Coal, and Intermediate wellbores will be conditioned with air and/or foam at TD of hole section.
- \* FW, Coal, Intermediate strings will have centralizers installed on the shoe joint and in intervals no greater than every 150' to surface.
- \* Gas storage blends contain additives designed to reduce potential for gas migration.
- \* Gas storage blend will be in place from 9 5/8" casing shoe to inside 13 3/8" shoe.
- \* Air/Foam/Fluid drill through gas storage zone to minimize potential for gas flow.
- \* 8.5" wellbore will be conditioned with mud at TD of hole section.
- \* Centralizers on 5.5" will be spaced every other joint from production casing shoe to landing point and one centralizer spaced every joint from landing point to 500' above KOP.

Land curve @ **7545** TVD  
**8130** MD

Est. TD @ **7545** TVD  
**28130** MD

Lateral Length (ft): **20000**  
 Max Anticipated Reservoir Pressure (psi): **2988**

Proposed Well Work:

- \*Drill and complete a new horizontal well in the Marcellus formation.
- \*Drill the vertical to KOP.
- \*Kick off and drill curve. Drill lateral in the Marcellus. Cement casing.

Dear Customer,

The following is the proof-of-delivery for tracking number: 886404396167

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**Delivery Information:**

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<b>Status:</b>	Delivered	<b>Delivered To:</b>	Shipping/Receiving
<b>Signed for by:</b>	C.Claire	<b>Delivery Location:</b>	275 TECHNOLOGY DRSTE 101
<b>Service type:</b>	FedEx 2Day		
<b>Special Handling:</b>	Deliver Weekday; No Signature Required		CANONSBURG, PA, 15317
		<b>Delivery date:</b>	Nov 26, 2025 09:17

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<b>Tracking number:</b>	886404396167	<b>Ship Date:</b>	Nov 25, 2025
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
CONSOLIDATION COAL COMPANY,  
275 TECHNOLOGY DRIVE SUITE 101  
CANONSBURG, PA, US, 15317

**Shipper:**  
Alicia Wischmann, KEYSTONE CONSULTANTS, LLC  
680 Andersen Drive  
Suite 400  
PITTSBURGH, PA, US, 15220

<b>Reference</b>	Sarah Notifications
<b>Purchase Order</b>	002
<b>Invoice</b>	00233.25.25
<b>Department Number</b>	mapping



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December 01, 2025

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<b>Status:</b>	Delivered	<b>Delivered To:</b>	Residence
<b>Signed for by:</b>	Signature Not Req	<b>Delivery Location:</b>	134 OYSTER POINT ROW
<b>Service type:</b>	FedEx 2Day		
<b>Special Handling:</b>	Deliver Weekday; Residential Delivery; No Signature Required		CHARLESTON, SC, 29412
		<b>Delivery date:</b>	Nov 28, 2025 14:47

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**Shipping Information:**

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<b>Tracking number:</b>	886404486570	<b>Ship Date:</b>	Nov 25, 2025
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
CYNTHIA BRANCH,  
134 OYSTER POINT ROW  
CHARLESTON, SC, US, 29412

**Shipper:**  
Alicia Wischmann, KEYSTONE CONSULTANTS, LLC  
680 Andersen Drive  
Suite 400  
PITTSBURGH, PA, US, 15220

<b>Reference</b>	Sarah Notifications
<b>Purchase Order</b>	002
<b>Invoice</b>	00233.25.25
<b>Department Number</b>	mapping

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<b>Signed for by:</b>	Signature not required	<b>Delivery Location:</b>	200 WINDEMERE RD
<b>Service type:</b>	FedEx 2Day		
<b>Special Handling:</b>	Deliver Weekday; Residential Delivery; No Signature Required		SYRACUSE, NY, 13205
		<b>Delivery date:</b>	Nov 28, 2025 16:11

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**Shipping Information:**

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<b>Tracking number:</b>	886404546742	<b>Ship Date:</b>	Nov 25, 2025
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
SUSAN DEMPSTER,  
200 WINDEMERE RD  
SYRACUSE, NY, US, 13205

**Shipper:**  
Alicia Wischmann, KEYSTONE CONSULTANTS, LLC  
680 Andersen Drive  
Suite 400  
PITTSBURGH, PA, US, 15220

<b>Reference</b>	Sarah Notifications
<b>Purchase Order</b>	002
<b>Invoice</b>	00233.25.25
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Dear Customer,

Rec'd 12/22/25

The following is the proof-of-delivery for tracking number: 886404628893

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<b>Status:</b>	Delivered	<b>Delivered To:</b>	Residence
<b>Signed for by:</b>	Signature not required	<b>Delivery Location:</b>	3 MARSIONS WAY
<b>Service type:</b>	FedEx 2Day		
<b>Special Handling:</b>	Deliver Weekday; Residential Delivery; No Signature Required		ORLEANS, MA, 02653
		<b>Delivery date:</b>	Nov 29, 2025 12:50

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**Shipping Information:**

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<b>Tracking number:</b>	886404628893	<b>Ship Date:</b>	Nov 25, 2025
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
MARGOT H. BALL,  
3 MARSIONS WAY  
ORLEANS, MA, US, 02653

**Shipper:**  
Alicia Wischmann, KEYSTONE CONSULTANTS, LLC  
680 Andersen Drive  
Suite 400  
PITTSBURGH, PA, US, 15220

<b>Reference</b>	Sarah Notifications
<b>Purchase Order</b>	002
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Dear Customer,

The following is the proof-of-delivery for tracking number: 886404675660

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<b>Status:</b>	Delivered	<b>Delivered To:</b>	Residence
<b>Signed for by:</b>	Signature not required	<b>Delivery Location:</b>	5516 N KENMORE AVEAPT 206
<b>Service type:</b>	FedEx 2Day		
<b>Special Handling:</b>	Deliver Weekday; Residential Delivery; No Signature Required		CHICAGO, IL, 60640
		<b>Delivery date:</b>	Nov 28, 2025 11:01

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**Shipping Information:**

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<b>Tracking number:</b>	886404675660	<b>Ship Date:</b>	Nov 25, 2025
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
RYDER HILL,  
5516 KENMORE AVE UNIT 206  
CHICAGO, IL, US, 60640

**Shipper:**  
Alicia Wischmann, KEYSTONE CONSULTANTS, LLC  
680 Andersen Drive  
Suite 400  
PITTSBURGH, PA, US, 15220

<b>Reference</b>	Sarah Notifications
<b>Purchase Order</b>	002
<b>Invoice</b>	00233.25.25
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Dear Customer,

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<b>Status:</b>	Delivered	<b>Delivered To:</b>	Residence
<b>Signed for by:</b>	Signature not required	<b>Delivery Location:</b>	753 LITCHFIELD ST
<b>Service type:</b>	FedEx 2Day		
<b>Special Handling:</b>	Deliver Weekday; Residential Delivery; No Signature Required		PITTSBURGH, PA, 15204
		<b>Delivery date:</b>	Nov 26, 2025 11:22

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**Shipping Information:**

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<b>Tracking number:</b>	886404719722	<b>Ship Date:</b>	Nov 25, 2025
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
NICOLA HILL,  
753 Litchfield St  
PITTSBURGH, PA, US, 15204

**Shipper:**  
Alicia Wischmann, KEYSTONE CONSULTANTS, LLC  
680 Andersen Drive  
Suite 400  
PITTSBURGH, PA, US, 15220

<b>Reference</b>	Sarah Notifications
<b>Purchase Order</b>	002
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Dear Customer,

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<b>Status:</b>	Delivered	<b>Delivered To:</b>	Residence
<b>Signed for by:</b>	Signature not required	<b>Delivery Location:</b>	15 BOWMORE LN
<b>Service type:</b>	FedEx 2Day		
<b>Special Handling:</b>	Deliver Weekday; Residential Delivery; No Signature Required		YARMOUTH, ME, 04096
		<b>Delivery date:</b>	Nov 28, 2025 16:10

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**Shipping Information:**

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<b>Tracking number:</b>	886404784750	<b>Ship Date:</b>	Nov 25, 2025
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
ADORA CLARK HILL,  
15 BOWMORE LN  
YARMOUTH, ME, US, 04096

**Shipper:**  
Alicia Wischmann, KEYSTONE CONSULTANTS, LLC  
680 Andersen Drive  
Suite 400  
PITTSBURGH, PA, US, 15220

<b>Reference</b>	Sarah Notifications
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Dear Customer,

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<b>Signed for by:</b>	Signature not required	<b>Delivery Location:</b>	243 SISQUISIC TRL
<b>Service type:</b>	FedEx 2Day		
<b>Special Handling:</b>	Deliver Weekday; Residential Delivery; No Signature Required		YARMOUTH, ME, 04096
		<b>Delivery date:</b>	Nov 28, 2025 13:57

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<b>Tracking number:</b>	886404817527	<b>Ship Date:</b>	Nov 25, 2025
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
CHRISTOPHER C. HILL,  
243 SISQUISIC TRL  
YARMOUTH, ME, US, 04096

**Shipper:**  
Alicia Wischmann, KEYSTONE CONSULTANTS, LLC  
680 Andersen Drive  
Suite 400  
PITTSBURGH, PA, US, 15220

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Dear Customer,

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<b>Status:</b>	Delivered	<b>Delivered To:</b>	Shipping/Receiving
<b>Signed for by:</b>	J.Jim	<b>Delivery Location:</b>	2200 ENERGY DREQT
<b>Service type:</b>	FedEx 2Day		
<b>Special Handling:</b>	Deliver Weekday; No Signature Required		CANONSBURG, PA, 15317
		<b>Delivery date:</b>	Nov 26, 2025 09:33

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**Shipping Information:**

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<b>Tracking number:</b>	886404855035	<b>Ship Date:</b>	Nov 25, 2025
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
EQUITRANS, L.P.,  
2200 ENERGY DR  
CANONSBURG, PA, US, 15317

**Shipper:**  
Alicia Wischmann, KEYSTONE CONSULTANTS, LLC  
680 Andersen Drive  
Suite 400  
PITTSBURGH, PA, US, 15220

<b>Reference</b>	Sarah Notifications
<b>Purchase Order</b>	002
<b>Invoice</b>	00233.25.25
<b>Department Number</b>	mapping



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<b>Signed for by:</b>	H.Sanitni	<b>Delivery Location:</b>	46226 NATIONAL RD
<b>Service type:</b>	FedEx 2Day		
<b>Special Handling:</b>	Deliver Weekday; No Signature Required		SAINT CLAIRSVILLE, OH, 43950
		<b>Delivery date:</b>	Nov 26, 2025 16:08

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**Shipping Information:**

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<b>Tracking number:</b>	886404884833	<b>Ship Date:</b>	Nov 25, 2025
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
ACNR Resources, INC,  
46226 National Rd  
SAINT CLAIRSVILLE, OH, US, 43950

**Shipper:**  
Alicia Wischmann, KEYSTONE CONSULTANTS, LLC  
680 Andersen Drive  
Suite 400  
PITTSBURGH, PA, US, 15220

<b>Reference</b>	Sarah Notifications
<b>Purchase Order</b>	002
<b>Invoice</b>	00233.25.25
<b>Department Number</b>	mapping



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