

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-9730
Exam Date: 04/18/2024

1. Current Owner:
JACK E BARKER 3708 MOCCASIN RD COEUR D ALENE ID 83815 AND/OR
LORI J BARKER 3708 MOCCASIN RD COEUR D ALENE ID 83815
2. Accompanied by: Jack Barker
Phone No: 208-818-0091
Address: Same as above.
Relationship to permit Holder: Permit Holder.

3. **SOURCE:**
UNNAMED STREAM

Tributary
PEND OREILLE RIVER

Method of Determination: ArcMap & DRG layer.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NO Overlap

Comments: The applicant filed a Notice of Claim 96-15161 using the same Unnamed Stream source and claiming the same Fire Protection, Domestic, & Irrigation water uses as this Permit asserting a 1/18/2019 priority date in the Clark Fork Pend Oreille River Basin Adjudication process (CFPRBA). Claim 96-15161's water use started after May 20, 1971, and doesn't predate the 5/20/1971 date required to qualify for a beneficial use claim, commonly known as a historic water use claim water right. Department staff will disallow the claim in the CFPRBA process and is not a concern for overlap.

2. Other water rights with the same point-of-diversion: NO Overlap

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

UNNAMED STREAM NE¼ NW¼, Sec. 36, Twp 56N, Rge 05W, B.M. BONNER County

Method of Determination: GPS, the POD is a ¼ inch mess screen attached to 1 1/4-inch intake poly pipe with pump located at -116°54.2680, 48°9.9385.

PLACE OF USE: DOMESTIC & FIRE PROTECTION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
56N	05W	36					X												

Method of Determination: Beneficial use field exam, ArcMap aerial imagery, & Bonner County tax parcel GIS map website.

3.
 - X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
 - X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
 - X Aerial Photo Attached (required for irrigation of 10+ acres).
 - X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Part No.	Pump Make	Pump Serial No. or Discharge Size
CENTRIFUGAL PUMP W/SCREENED INTAKE	GE MOTORS	1	5KC39QN1002BX	MYERS PUMP	S/N# 9869201 WITH ¾ INCH DISCHARGE POLYPIPE.

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
5-GAL BUCKET MEASUREMENT						

2. Measurements: I completed three 5-gallon bucket tests from the first frost-free hydrant in-line from the diverting pump, with average of three resulting in a diversion rate of 5 gal / 15.48 sec x 60 sec/min = 19.38 gpm = **0.04 cfs**, considering department rounding standards.

E. FLOW CALCULATIONS

Measured Method: 5-GAL Bucket Test = (5 gal / 15.53 sec) x 60 sec/min = 19.54 gpm
 = (5 gal / 15.51 sec) x 60 sec/min = 19.34 gpm
 = (5 gal / 15.59 sec) x 60 sec/min = 19.24 gpm

Average of 3ea 5-GAL Bucket Tests = (19.54 gpm + 19.34 gpm + 19.24 gpm) / 3 = 19.37 gpm = 0.04 cfs considering department rounding standards.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A; I removed the irrigation beneficial use from the Permit during licensing review. There had been no development of irrigation during the Permit's development period.

2. Volume Calculations for Other Uses: due to this Right's fire protection beneficial use there is no maximum diversion volume associated with the face of the license.

The domestic annual volume = 0.6 af for licensing purposes.

G. NARRATIVE/REMARKS/COMMENTS

Field exam performed on 4/18/2024 with the permit holder, Jack Barker, showed water being diverted from an Unnamed Stream for domestic and fire protection uses. At the POD, a Myers pump with 1 Hp GE Motors pump motor & 1 ¼ inch screened intake pipe serve as the diverting works for the system. The intake pipe routes to a small, pump station that houses the centrifugal pump and pressure pot prior to distributing via a ¾" main service line which routes uphill a short distance to one of three total frost-free hydrants. Three 5-gallon bucket measurements were completed from the first hydrant in-line from the diverting pump, resulting in an average diversion rate of 19.37 gpm = **0.04 cfs**, considering department rounding standards which is recommended as the maximum diversion rate for licensing purposes.

The permit authorized development of irrigation up to 2.0 acres. During the exam, I observed a densely treed parcel that had been opened up to allow for roadway, trails, and several buildable pads for development but no active irrigation was observed. The forest floor in non-graveled areas had not been developed by the applicant to date as the focus had been on

developing the domestic beneficial uses on the property. I've removed the irrigation beneficial use from the Permit during licensing review based on non-development and notified Mr. Barker that in the future if irrigation was planned a new application for permit should be pursued to add additional water uses from the current surface water system.

I walked the domestic POU with Mr. Barker and used field maps to sketch out usage while collecting photographs of each portion of the domestic use. The applicants have been living in an RV full time while developing a two-story shop that includes a restroom and shower connection. In addition, a custom external restroom & shower station has been constructed for use by guests who camp on the property along with a small ADU (dry unit no water connections) located near the RV pad. Mr. Barker asserts that at some point in the future a small cabin will replace the RV to serve as the primary residence on the property, but the RV will remain the primary home until that time.

Although the applicants have constructed multiple structures the water usage remains the same as one family residence on the property and I'm recommending an annual volume consistent with 1 home's domestic use or **0.6 af** for licensing purposes. I've reduced the domestic component diversion rate from 0.06 cfs to **0.04 cfs**; the rate is limited to the Department standard rate for 1 home but also limited by pump performance which is capped at 0.04 cfs. I used ArcMap aerial imagery, field maps, and Bonner County GIS map products to create the Domestic POU which includes all the structures located on the property in a shape of approximately 0.7 acres.

The applicant's fire protection POU consists of three frost-free hydrants with hose and spray nozzles at standby in the event fire suppression is required. Additionally, the applicants have two 275-gal basket tanks which are trailer mounted that are filled, with banjo fittings to flexible fire hoses ready for fire protection use. The Fire Protection component's diversion rate has also been reduced from 0.06 cfs to **0.04 cfs** reflecting the maximum diverting capacity of the 1 Hp pump observed at time of field exam. I have designated the applicant's parcel as the fire protection POU for licensing purposes. I didn't assign a maximum diversion volume on the face of the license based on the fire protection beneficial use, which doesn't require volume reporting but is restricted by conditions of approval for use only when suppressing an active fire.

During licensing review, I replaced condition 132 with a text domestic use condition that accurately describes the 1 home with shop water usage. I removed R66 due to irrigation not being developed under this permit. I've added condition(s) X59 & X60 to annotate the POD/POU are located within a subdivision lot. I've carried all remaining conditions on the permit forward to the license recommendation. There are no overlap concerns for this water right based on POU discussion on PG1 of this report.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
DOMESTIC	01/01 to 12/31	0.04 CFS	0.6 AF
FIRE PROTECTION	01/01 to 12/31	0.04 CFS	

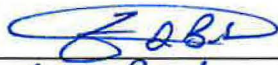
Totals: 0.04 CFS

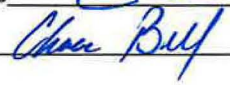
2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

I. AUTHENTICATION Luke Bates – Sr Water Resource Agent

Field Examiner's Name  Date 5/3/2024

Reviewer  Date 2/18/2025

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-9730

This map depicts the DOMESTIC system diagram.

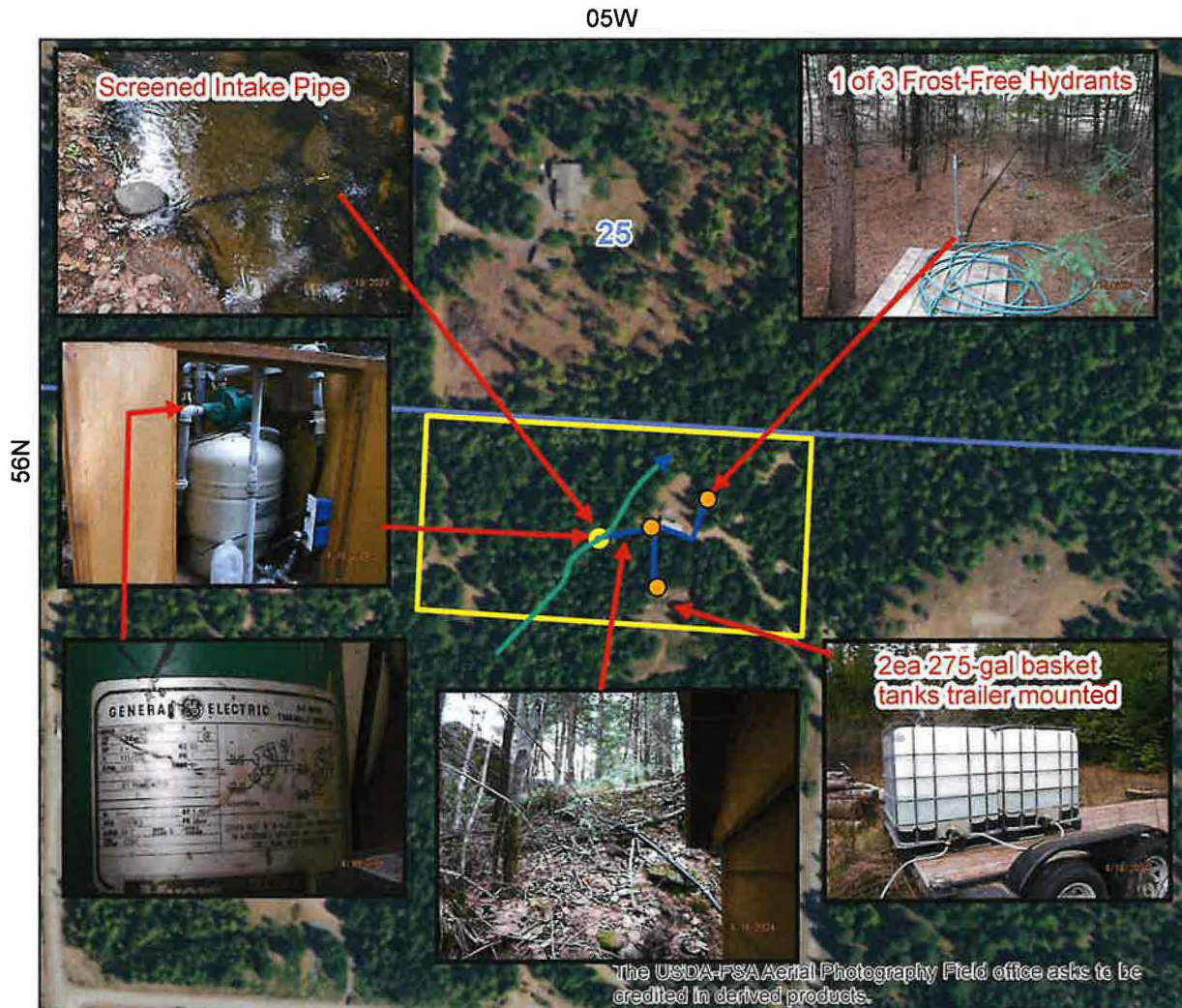


-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters
-  Point of Diversion



State of Idaho
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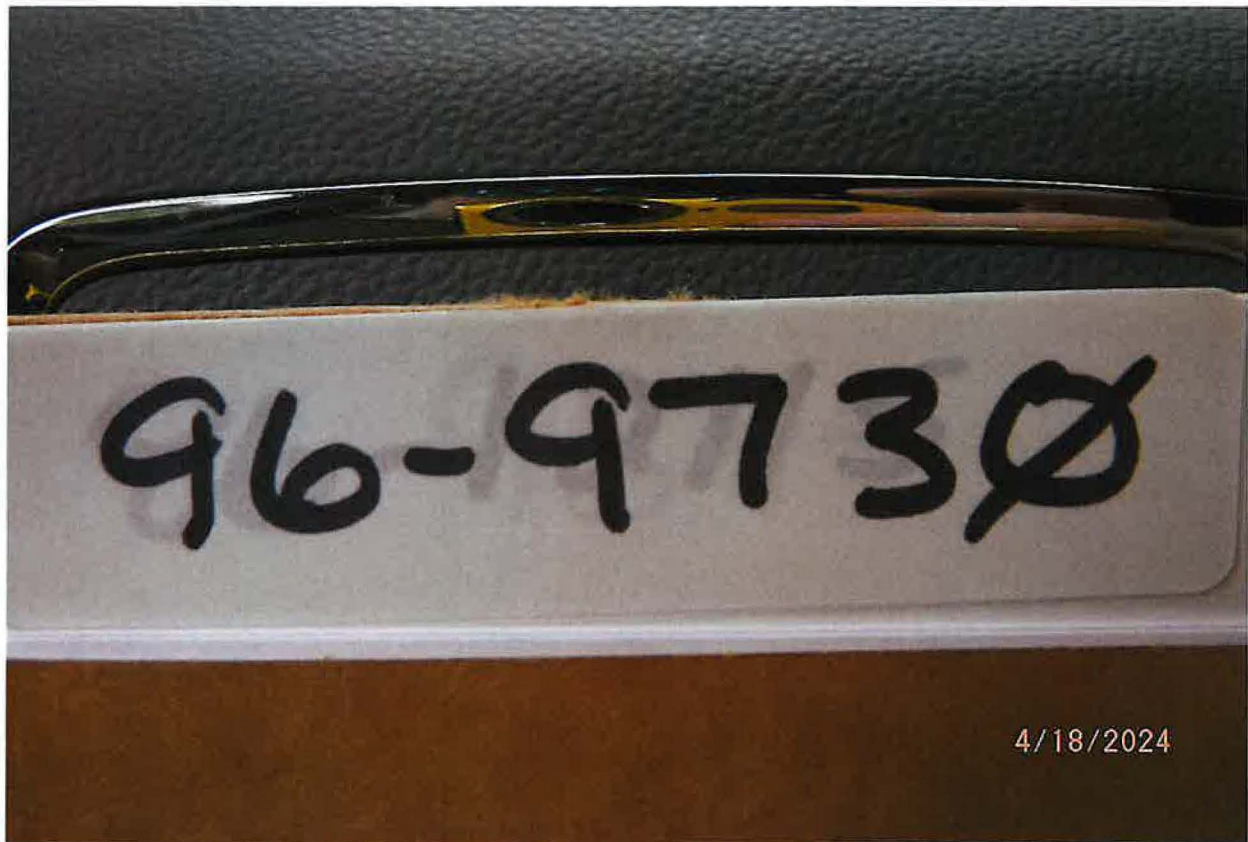
This map depicts the FIRE PROTECTION system diagram.



0 0.035 0.07 0.14 Miles

-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters
-  Point of Diversion





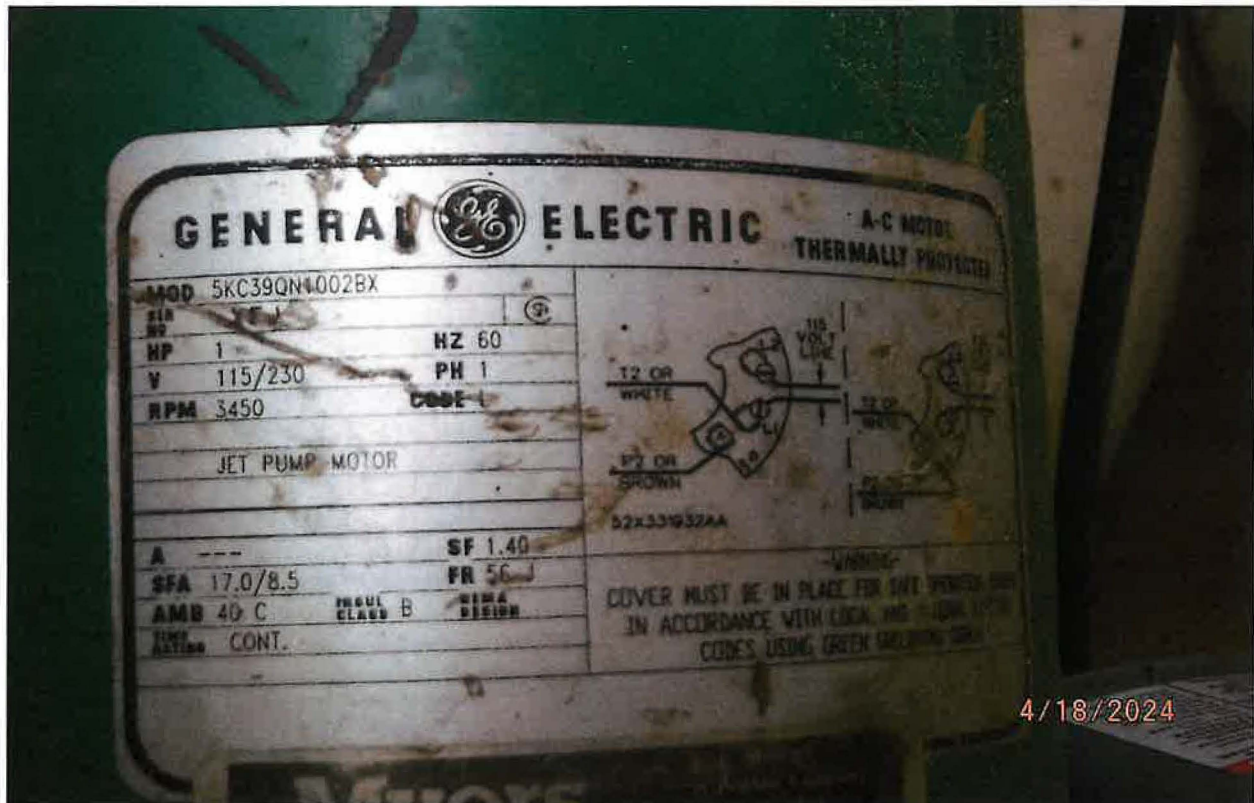
BENEFICIAL USE FIELD EXAM DATE 4/18/2024



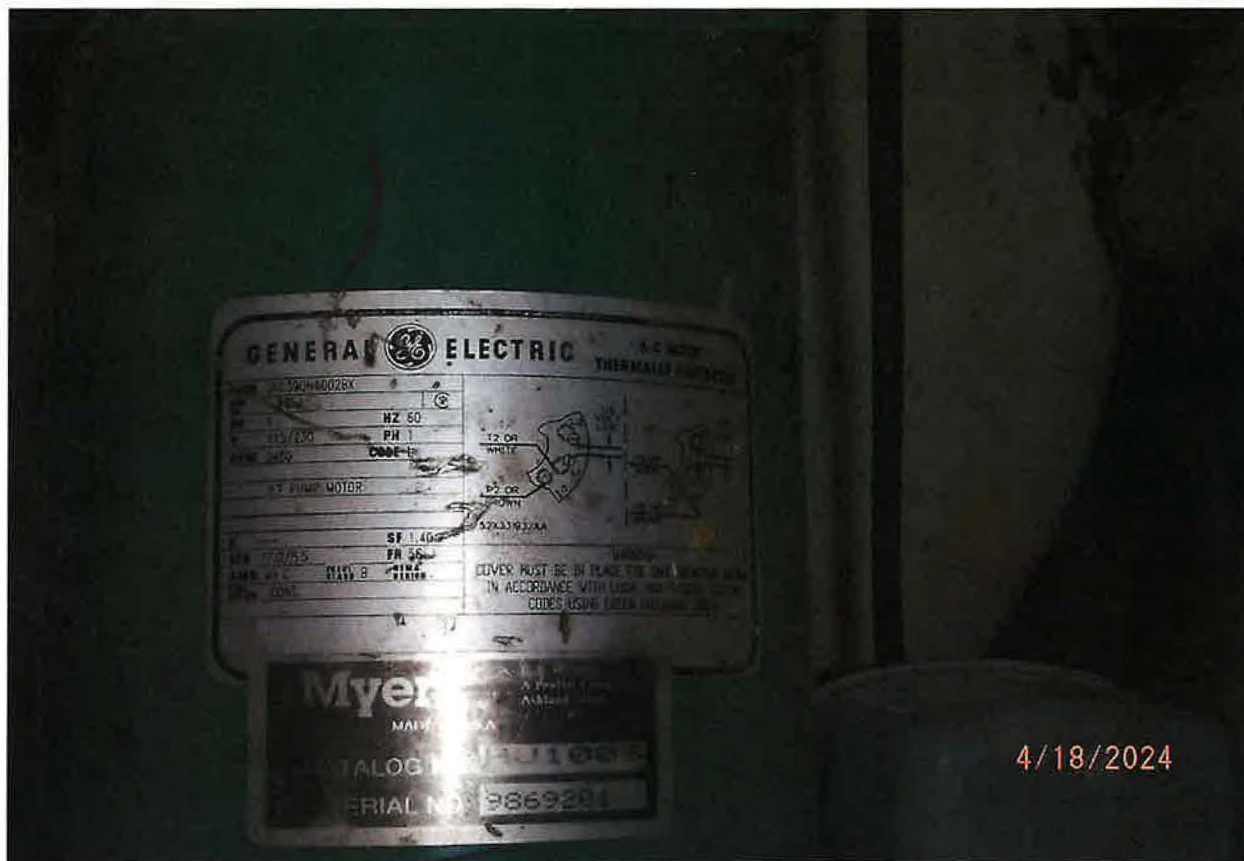
POD - 1 1/4" POLY PIPE INTAKE WITH 1/4" FISH SCREEN INSTALLED IN UNNAMED STREAM



DIVERTING WORKS – LOCATED ALONG THE STREAM BANK AT POD



1 HP GENERAL ELECTRIC JET PUMP MOTOR INSTALLED ON MYERS CENTRIFUGAL PUMP



DIVERTING WORKS – MYERS CENTRIFUGAL PUMP S/N# 9869201



SYSTEM PRESSURE POT STATICALLY HOLDS AT 25 PSI



3/4" DISCHARGE PIPE FROM PUMP TO POU FOR WATER USE



3EA 5-GAL BUCKET FLOW MEASUREMENTS CAPTURED FROM FIRST FROST-FREE HYDRANT INLINE FROM PUMP; LOCATED NEAR RV (FUTURE CABIN SITE)



FIRE PROTECTION POU – STREAM WATER USED TO FILL 2 TRAILER MOUNTED 275-GAL TANKS USED FOR DOMESTIC & PREPARED FOR FIRE PROTECTION USES.



DOMESTIC POU – TWO STORY SHOP WITH FULL SERVICES (WASHER/SHOWER/BATHROOMS/SINKS)



DOMESTIC POU – EXTERNAL RESTROOM WITH SHOWER INCLUDED



ON-DEMAND HOT WATER HEATER INSTALLED FOR RESTROOM



1 OF 3 FROST-FREE HYDRANTS INSTALLED IN WATER SYSTEM



DOMESTIC POU – RV CURRENTLY LIVED IN UNTIL CABIN BUILT TO REPLACE IT ON SAME BUILDING SITE



DRY ADU NO WATER SERVICES TO UNIT – EXTERNAL RESTROOM USED FOR GUESTS THAT USE THIS DRY ADU