

Our ref: 12602792-LTR-17

May 02, 2024

Ashley Lesser  
Michigan Department of Environmental Great Lakes & Energy  
Remediation and Redevelopment Division – Jackson District Office  
301 East Louis Glick Highway  
Jackson, Michigan 49201-1556

**2024 Proposed Well Abandonment Update  
Former Willow Run Powertrain Plant  
Ypsilanti, Michigan**

Dear Ms. Lesser:

GHD has prepared this letter on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust as part of the ongoing Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) at the Willow Run Powertrain site (Site) in Ypsilanti, Michigan, to submit a 2024 update to the proposed list of wells to abandon.

On May 10, 2022, GHD submitted to EGLE a letter titled *2021 Hydraulic Monitoring Update and Monitoring Network Optimization*. This letter included information on the original proposed reduction of the monitoring well network and abandonment of wells no longer required at the Site. On April 18, 2023, GHD submitted to EGLE a letter titled *Proposed Well Abandonment Update*. This letter updated the well abandonment tracking table to include an additional twenty wells that were previously selected for abandonment for the purpose of continuing investigations of PFAS concentrations in the groundwater at the Site.

This 2024 proposed well abandonment update focuses on the Yankee Air Museum (YAM) portion of the Site and the deep monitoring wells throughout the Site. With the potential sale and redevelopment of this portion of the Site by YAM, the well abandonment activities within this area have become a priority. It is proposed that a portion of the wells located on the YAM property be abandoned in 2024. The wells proposed to remain will allow for:

- Continued investigation of PFAS concentrations in groundwater, if needed. This includes monitoring well locations east and west of the French drain to allow for evaluation of PFAS concentration groundwater trends on and off site.
- Continued evaluation east of the PCE Area, as needed. This includes wells west of the YAM building.
- Monitoring (as needed) of the light non-aqueous phase liquid (LNAPL) plumes located on YAM. LNAPL TAPS team review in 2020 concluded that passive management of LNAPL in place is a viable option for the Site. The TAPS team recommended long term groundwater monitoring for evidence of potential LNAPL changes.

Perimeter wells located on Wayne County Airport Authority (WCAA) property adjacent to the YAM portion of the Site are not currently proposed to be abandoned.

In the 2019 groundwater levels letter (GHD, April 2020), RACER proposed that no further monitoring (water levels or chemistry) was needed for the deep wells onsite, which are located on YAM and American Center for Mobility (ACM) property. As EGLE did not object to this conclusion, these wells have not been

monitored since 2019. Abandonment of these wells is proposed in 2024 given the lack of data needed from them.

Figures 1 and 2 show the locations of the proposed wells for abandonment, as well as locations that are not currently proposed to be abandoned. Also shown for reference on Figure 1 are existing monitoring wells that are located on the ACM property, north and west of YAM property.

The attached Table 1 is an update to a portion of the proposed well abandonment table from 2023 *Proposed Well Abandonment Update* letter. This updated table provides a list of all monitoring wells that currently exist on both the YAM portion of the Site, the adjacent WCAA wells, and the four deep wells. The wells proposed to be abandoned in 2024 are noted in the table. Most of the current wells located on YAM property are proposed to be abandoned. As mentioned above, wells that are needed for the continued evaluation of PFAS at the Site and of the PCE Area are not included in the current list of wells proposed for abandonment. Keeping these wells will allow for further groundwater sampling and groundwater level monitoring as needed for both PFAS investigations and PCE Area evaluation.

Forty-one (41) wells are now proposed to be abandoned in 2024 (see Table 1). Figure 1 shows 39 of those wells on YAM property, including one deep well. Two additional deep wells located on the ACM portion of the Site are shown on Figure 2. Six wells were confirmed to be destroyed and no longer exist as noted in the figures and Table 1.

Table 2, below, summarizes the details from Table 1 attached.

**Table 2**      **Well Count Summary**

Interval	Existing	Abandon	To Remain
Shallow Wells on YAM	69	35	34
Intermediate Well on YAM	3	3	0
Deep Wells Sitewide	3	3	0
<b>Total</b>	<b>75</b>	<b>41</b>	<b>34</b>

With EGLE concurrence, the proposed wells listed in Table 1 will be abandoned. All wells will be abandoned by pressure grouting the wells to ground surface and the surface restored to surrounding conditions as detailed in the 2014 Remediation and Redevelopment Coordination Plan between YAM and RACER.

Please feel free to reach out with any questions.

Regards,



**Lauren Kaltz**  
Graduate Environmental Engineer

+1 248 893-3441  
lauren.kaltz@ghd.com

DB/mg/LTR-17

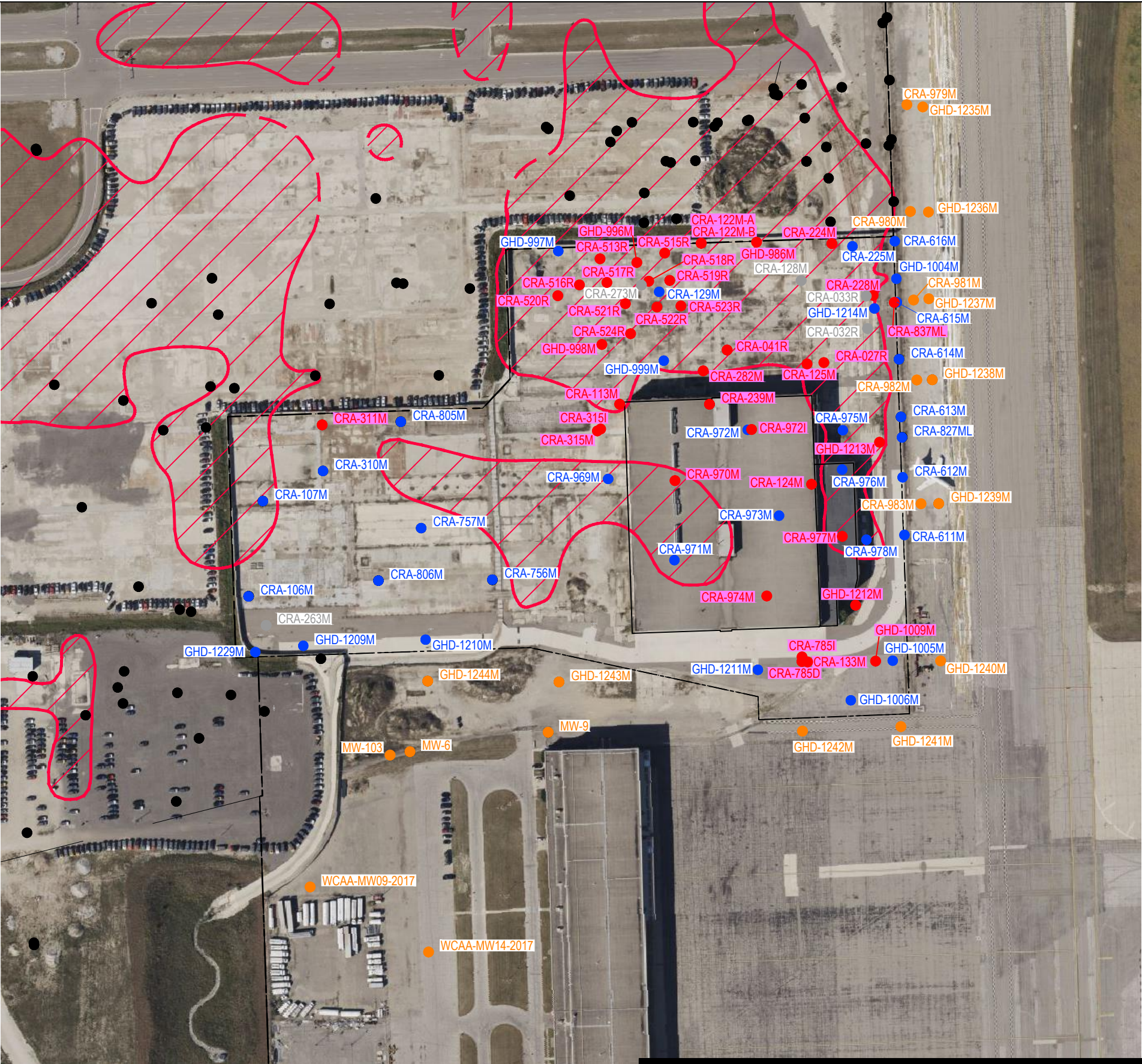


**Daniel Beck**  
Project Manager

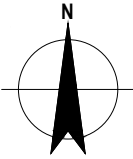
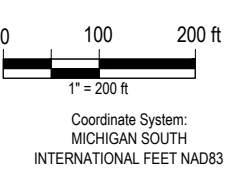
+1 248 893-3383  
daniel.beck@ghd.com

Copy to: Clayton Joupperi, EGLE  
Chris Svoboda, EGLE  
Robert Hare, RACER  
Grant Trigger, RACER  
Beth Landale, GHD





- LEGEND**
- PROPERTY BOUNDARY
  - APPROXIMATE EXTENTS OF LNAPL
  - EXISTING MONITORING WELL LOCATION
  - NON-EXISTING/DAMAGED MONITORING WELL LOCATION
  - EXISTING MONITORING WELL ON ACM PROPERTY
  - EXISTING MONITORING WELL LOCATION ON WCAA PROPERTY
  - 2024 PROPOSED FOR ABANDONMENT



FORMER WILLOW RUN POWERTRAIN SITE  
YPSILANTI, MICHIGAN

2024 PROPOSED MONITORING WELL  
ABANDONMENT ON YAM PROPERTY

Project No. 12602792  
Date May 2024

FIGURE 1



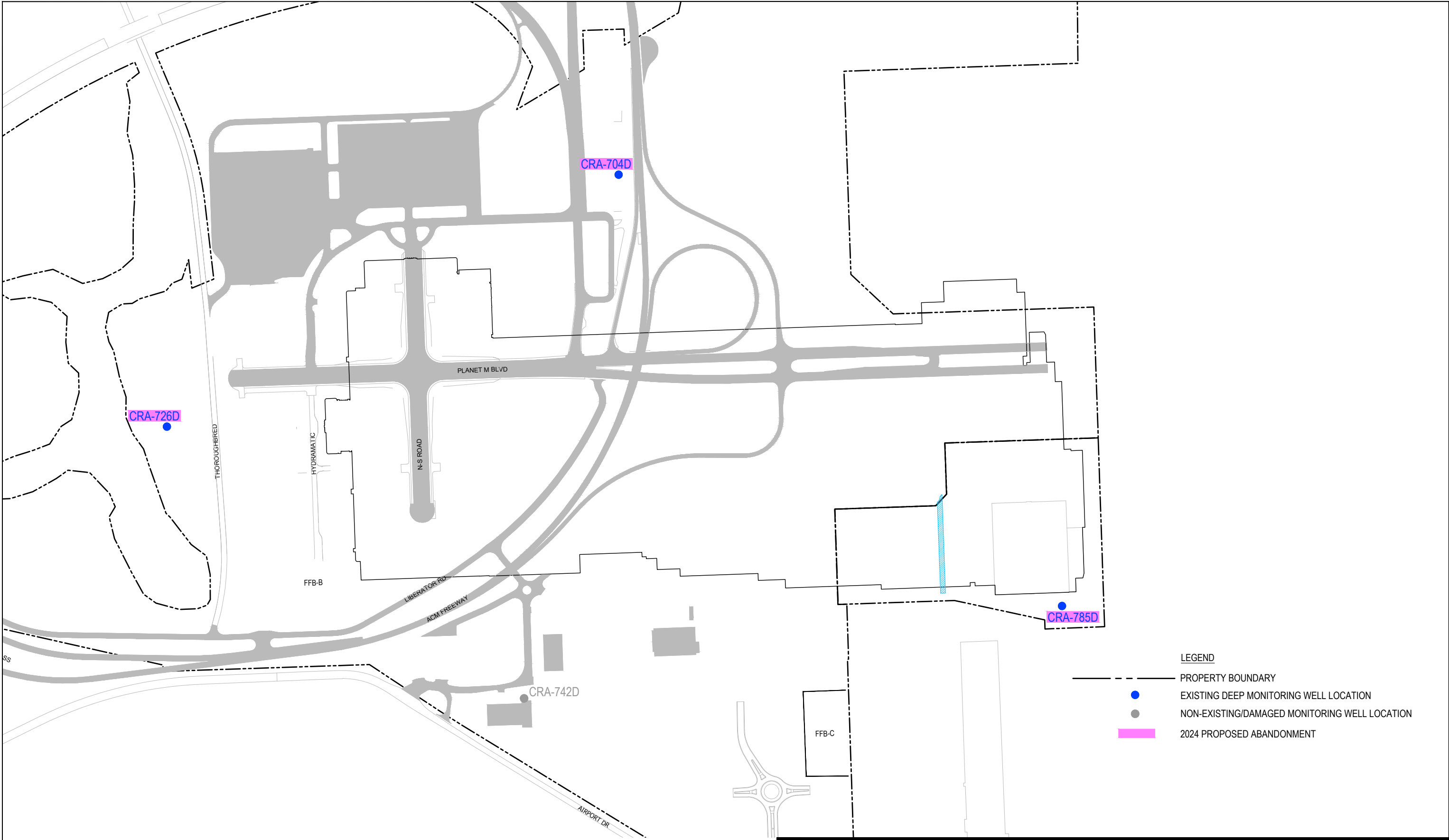


Table 1

Proposed 2024 Well Abandonment Plan  
Former Willow Run Powertrain Site  
Ypsilanti, Michigan

Property	Monitoring Location	Groundwater Zone	GW Quality - Perimeter (2021 - 2023) (VOCs, SVOCs, Metals)	GW Quality and Levels - PCE Area (VOCs)	LNAPL Stability	LNAPL - NSZD/VI	GW Flow - French Drain	GW Flow / Elevation NW Infiltration Area	GW Flow - Sitewide	Sampled for PFAS?	2024 Proposed Abandonment	Abandonment Notes / Rationale (No Specific Use + ...)	Stratigraphy & Instrumentation Log?	Well Type (SU,FM,Vault, A/B)
YAM	CRA-027R	Shallow					Y		Y		Y	Abandon 2024	No	FM
YAM	CRA-106M	Shallow	Y	Y	Y		Y		Y	Y		Keep for PCE Area Evaluation	No	FM
YAM	CRA-107M	Shallow		Y						Y		Keep for PCE Area Evaluation	Yes	FM
YAM	CRA-124M	Shallow				Y	Y		Y		Y	Abandon 2024	Yes	FM
YAM	CRA-129M	Shallow								Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-133M	Shallow				Y	Y		Y		Y	Abandon 2024	Yes	FM
YAM	CRA-224M	Shallow								Y	Y	Abandon 2024	No	FM
YAM	CRA-225M	Shallow				Y	Y		Y			Keep for PFAS sampling	No	FM
YAM	CRA-239M	Shallow					Y		Y	Y	Y	Abandon 2024	No	FM
YAM	CRA-315M	Shallow					Y		Y	Y	Y	Abandon 2024	Yes	FM
YAM	CRA-611M	Shallow			Y		Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-612M	Shallow					Y		Y			Keep for PFAS sampling	Yes	FM
YAM	CRA-613M	Shallow	Y		Y		Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-614M	Shallow			Y		Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-615M	Shallow	Y		Y	Y	Y		Y			Keep for PFAS sampling	Yes	FM
YAM	CRA-616M	Shallow				Y	Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-756M	Shallow	Y	Y	Y		Y		Y	Y		Keep for PCE Area Evaluation	Yes	FM
YAM	CRA-805M	Shallow								Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-806M	Shallow	Y	Y	Y		Y		Y	Y		Keep for PCE Area Evaluation	Yes	FM
YAM	CRA-827ML	Shallow	Y		Y		Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-837ML	Shallow	Y		Y		Y		Y		Y	Abandon 2024	Yes	FM
YAM	CRA-970M	Shallow				Y	Y		Y		Y	Abandon 2024	Yes	FM
YAM	CRA-971M	Shallow				Y	Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-972M	Shallow				Y	Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-973M	Shallow				Y	Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-974M	Shallow	Y		Y	Y	Y		Y	Y	Y	Abandon 2024	Yes	FM
YAM	CRA-975M	Shallow					Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	CRA-976M	Shallow				Y	Y		Y			Keep for PFAS sampling	Yes	FM
YAM	CRA-977M	Shallow				Y	Y		Y		Y	Abandon 2024	Yes	FM
YAM	CRA-978M	Shallow				Y	Y		Y	Y		Keep for PFAS sampling	Yes	FM
WCAA	CRA-979M	Shallow					Y		Y	Y		Keep for PFAS sampling	Yes	FM
WCAA	CRA-980M	Shallow			Y		Y		Y	Y		Keep for PFAS sampling	Yes	FM
WCAA	CRA-981M	Shallow					Y		Y	Y		Keep for PFAS sampling	Yes	FM
WCAA	CRA-982M	Shallow					Y		Y	Y		Keep for PFAS sampling	Yes	FM
WCAA	CRA-983M	Shallow					Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	GHD-1004M	Shallow				Y	Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	GHD-1005M	Shallow	Y		Y	Y	Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	GHD-1006M	Shallow				Y	Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	GHD-1009M	Shallow			Y	Y	Y		Y		Y	Abandon 2024	Yes	FM

Table 1

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Property	Monitoring Location	Groundwater Zone	GW Quality - Perimeter (2021 - 2023) (VOCs, SVOCs, Metals)	GW Quality and Levels - PCE Area (VOCs)	LNAPL Stability	LNAPL - NSZD/VI	GW Flow - French Drain	GW Flow / Elevation NW Infiltration Area	GW Flow - Sitewide	Sampled for PFAS?	2024 Proposed Abandonment	Abandonment Notes / Rationale (No Specific Use + ...)	Stratigraphy & Instrumentation Log?	Well Type (SU,FM,Vault, A/B)
YAM	GHD-1209M	Shallow		Y			Y		Y			Keep for PCE Area Evaluation	Yes	FM
YAM	GHD-1210M	Shallow			Y		Y		Y	Y		Keep for PCE Area Evaluation	Yes	FM
YAM	GHD-1211M	Shallow	Y		Y		Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	GHD-1212M	Shallow	Y		Y		Y		Y		Y	Abandon 2024	Yes	FM
YAM	GHD-1213M	Shallow	Y		Y		Y		Y		Y	Abandon 2024	Yes	FM
YAM	GHD-1214M	Shallow	Y		Y		Y		Y	Y		Keep for PFAS sampling	Yes	FM
YAM	GHD-1229M	Shallow	Y	Y	Y		Y		Y	Y		Keep for PCE Area Evaluation	Yes	FM
YAM	GHD-986M	Shallow				Y			Y	Y	Y	Abandon 2024	Yes	FM
YAM	GHD-999M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	GHD-1235M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	GHD-1236M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	GHD-1237M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	GHD-1238M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	GHD-1239M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	GHD-1240M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	GHD-1241M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	GHD-1242M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	GHD-1243M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	GHD-1244M	Shallow								Y		Keep for PFAS sampling	Yes	FM
WCAA	MW-103	Shallow								Y		Keep for PFAS sampling	No	SU
WCAA	MW-6	Shallow		Y			Y		Y	Y		Keep for PCE Area Evaluation	No	FM
WCAA	MW-9	Shallow		Y			Y		Y	Y		Keep for PCE Area Evaluation	No	FM
WCAA	WCAA-MW09-2017	Shallow								Y		Keep for PCE Area Evaluation	Yes	FM
WCAA	WCAA-MW14-2017	Shallow		Y						Y		Keep for PCE Area Evaluation	Yes	FM
YAM	CRA-315I	Intermediate							Y		Y	Abandon 2024	Yes	FM
YAM	CRA-972I	Intermediate							Y		Y	Abandon 2024	Yes	FM
YAM	CRA-041R	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-113M	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-122M-A	Shallow									Y	Abandon 2024	No	FM (A/B)
YAM	CRA-122M-B	Shallow									Y	Abandon 2024	No	FM (A/B)
YAM	CRA-125M	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-128M	Shallow										Not Part of Network. Destroyed or Concreted Over/CNL. No Action.	Yes	FM
YAM	CRA-228M	Shallow									Y	Abandon 2024	No	FM
YAM	CRA-282M	Shallow									Y	Abandon 2024	No	FM
YAM	CRA-310M	Shallow		Y								Keep for PCE Area Evaluation	Yes	FM
YAM	CRA-311M	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-513R	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-515R	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-516R	Shallow									Y	Abandon 2024	Yes	FM

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YAM	CRA-517R	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-518R	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-519R	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-520R	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-521R	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-522R	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-523R	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-524R	Shallow									Y	Abandon 2024	Yes	Vault
YAM	CRA-757M	Shallow		Y								Keep for PCE Area Evaluation	Yes	FM
YAM	CRA-969M	Shallow										Keep for PFAS sampling	Yes	FM
YAM	GHD-996M	Shallow									Y	Abandon 2024	Yes	FM
YAM	GHD-997M	Shallow										Keep for PFAS sampling	Yes	FM
YAM	GHD-998M	Shallow									Y	Abandon 2024	Yes	FM
YAM	CRA-785I	Intermediate									Y	Abandon 2024	Yes	FM
ACM	CRA-704D	Deep									Y	Abandon 2024	Yes	FM
ACM	CRA-726D	Deep									Y	Abandon 2024	Yes	FM
ACM	CRA-742D	Deep										Destroyed	Yes	N/A
YAM	CRA-785D	Deep									Y	Abandon 2024	Yes	FM
YAM	CRA-263M	Unk (S assumed)										Not Part of Network. Destroyed (assumed)/CNL. No Action.	No	FM
YAM	CRA-273M	Unk (S assumed)										Destroyed	No	FM
YAM	CRA-032R	Unk (I assumed)										Not Part of Network: Destroyed / CNL (buried, in vault). No Action.	No	Vault
YAM	CRA-033R	Unk (I assumed)										Not Part of Network: Destroyed / CNL (buried, in vault). No Action.	No	Vault

Abbreviations

- GW: Groundwater
- LNAPL: Light Non-Aqueous Phase Liquid
- NSZD/VI: Natural Source Zone Depletion / Vapor Intrusion
- SU: stick-up style protective casing (top of well is above ground)
- FM: flush mount style protective casing (top of well is below ground)
- temp EXT: temporary extension (will be converted to a FM in future)