



TECHNICAL MEMORANDUM

DATE January 19, 2024

Project No. 1239330906

TO Barbara K. Nielsen, Manager, Remedial Projects
Cyprus Amax Minerals Company

CC Steve Anderson

FROM Bob Ireson

EMAIL bob.ireson@wsp.com

**RE: COMPLETION OF WELL DECOMMISSIONING
FORMER SATRALLOY SITE (JEFFERSON COUNTY, OHIO)**

This report summarizes groundwater monitoring well decommissioning activities by Cyprus Amax Minerals Company (CMAC) at the Former Satralloy Site (the Site) prior to the slag removal interim action at the Site. A letter describing the decommissioning plan was submitted to Ohio EPA and approved on May 16, 2023. These monitoring wells required decommissioning because they were located in areas that will be impacted by the interim action.

WSP USA Inc. (WSP) completed well decommissioning between August 28 and September 28, 2023. WSP subcontractor Cascade Drilling LP (Cascade) was retained to complete the drilling and sealing activities. A WSP geologist monitored and logged drilling and decommissioning activities.

As set forth in the Ohio EPA approved decommissioning plan, the work proceeded in accordance with the Ohio EPA Division of Drinking and Ground Waters Technical Guidance Manual (TGM) for Hydrogeologic Investigations and Ground Water Monitoring, Chapter 9, Sealing Boreholes and Decommissioned Monitoring Wells (September 2016) as specified in Ohio Administrative Code Rule 3475-9-03, Monitoring Wells.

Well casings were inspected and determined to be in good condition prior to decommissioning. Each well was originally drilled and constructed between 2014 and 2021. Field observations and measurements, including water levels and total depth, confirmed wells remained in their original condition.

Several wells in the former coal mine area of the Site had previously installed transducers and piezometers. WSP downloaded data and removed transducers from wells RBH-01, MW-101-S, MW-101-D and MW-111. Vibrating wire piezometers were removed and discarded from MW-106, MW-112 and MW-113. The wells did not contain any pumps or other fixtures.

The primary sealing material consisted of Quick-Grout®, a bentonite grout sealing and plugging material with standard ANSI/NSF 60 certification and mixed according to the manufacturer's instructions with fresh potable water. Cascade completed pressure grouting of boreholes and casings in a continuous operation without interruption. As anticipated, WSP observed some settling of grout following initial well removal in areas where they had been constructed in unconsolidated layers of slag, noting slag will be excavated from these locations

during the interim action. In these instances, generally less than three feet below grade, Cascade placed gravity fed Bentonite Holeplug® over the grout up to grade to prevent surface water infiltration.

Protective bollards and steel well casings were removed and managed as construction debris. Well decommissioning activities consisted of over-drilling and some casing sealing as specified in the TGM. Specific methodologies used were based on whether the original well screen was constructed in unconsolidated soils above bedrock in the lowland portion of the Site, or in consolidated bedrock formations in the uplands. The following summarizes the methodologies used in those two areas of the Site:

Lowland Monitoring Wells

- Sixteen monitoring wells were decommissioned in the lowland (refer to Table 1 for well IDs with locations presented on Figure 1).
- This includes three lowland wells previously constructed for the Bureau of Underground Storage Tank Regulations (BUSTR) Tier Investigations, TW-01, TW-02 and TW-03. They are no longer necessary after BUSTR issued on October 3, 2023, a No Further Action status for the incident.
- Lowland monitoring well MW-2T was previously decommissioned at the Site, which is also depicted on Figure 1.
- For fourteen of the lowland wells, Cascade removed well casings to the extent practical. They over-drilled each well to the original borehole depth, resulting in the removal of well casing, sand pack, and original annular fill material. Using a tremie tube, each over-drilled borehole was filled with a grout slurry (described previously) from the bottom of the borehole to the surface.
- Two lowland area wells, MW-10 and TW-02 could not be readily accessed by the drill rig. Cascade completed decommissioning at these locations by removing the flush mount surface protector and pressure grouting the well casing with a grout slurry from the bottom using a tremie tube. Cascade removed the upper three feet of well casing and placed hydrated bentonite slurry to the surface. Cascade installed a concrete pad at the surface of TW-02 due to its proximity to a temporary retaining wall and changes in the original surface elevation. Cascade placed approximately one foot of topsoil at the surface of MW-10.

Upland Monitoring Wells

- Fourteen upland monitoring well locations were decommissioned in the ridge top and former mine areas (refer to Table 1 for well IDs with locations presented on Figure 1). Two of those locations included nested well pairs (MW-101-S/D and MW-112 S/D) in the same borehole. These nested monitoring wells had one or more well screens constructed in bedrock.
- Upland monitoring well RBH-2 was previously decommissioned at the Site, which is also depicted on Figure 1.
- Five former mine area monitoring wells (MW-107-D, MW-107-S, MW-109, and MW-110) and upland well RBH-3S were over-dilled to the original borehole depth which extended into bedrock. They were decommissioned with the same methodology as the unconsolidated monitoring wells in the lowlands, as described above.

- The nine other consolidated monitoring wells (MW-101-S/D, MW-102, MW-106, MW-108, MW-111, MW-112-S/D, MW-113, MW-115 and RBH-1) were decommissioned by first pressure grouting each well casing with a grout slurry pumped using a tremie tube from the well bottom to within 2-3 feet of the planned over-drill depth. Cascade then proceeded to over-drill each original borehole through the unconsolidated formation to bedrock. The over-drilled borehole was pressure grouted with a grout slurry from the bottom of the over-drilled portion of the borehole to the surface pumped using a tremie tube.

Table 1 summarizes decommissioning observations and materials used for each monitoring well. All decommissioned and retained monitoring wells are illustrated on Figure 1. Appendix A includes copies of well sealing reports prepared by Cascade for submittal by them to the Ohio Department of Natural Resources (ODNR). Information contained in the ODNR sealing reports is entered by the driller and subject to data entry limitations of the ODNR data base. Information presented in Table 1 accurately reflects sealing details observed by WSP.

In summary, thirty monitoring wells were decommissioned in 2023 at the Former Satralloy Site. If you have questions, please contact Barbara Nielsen at (602) 366-8270.

WSP USA Inc.



D. Robert Ireson
Assistant Vice President



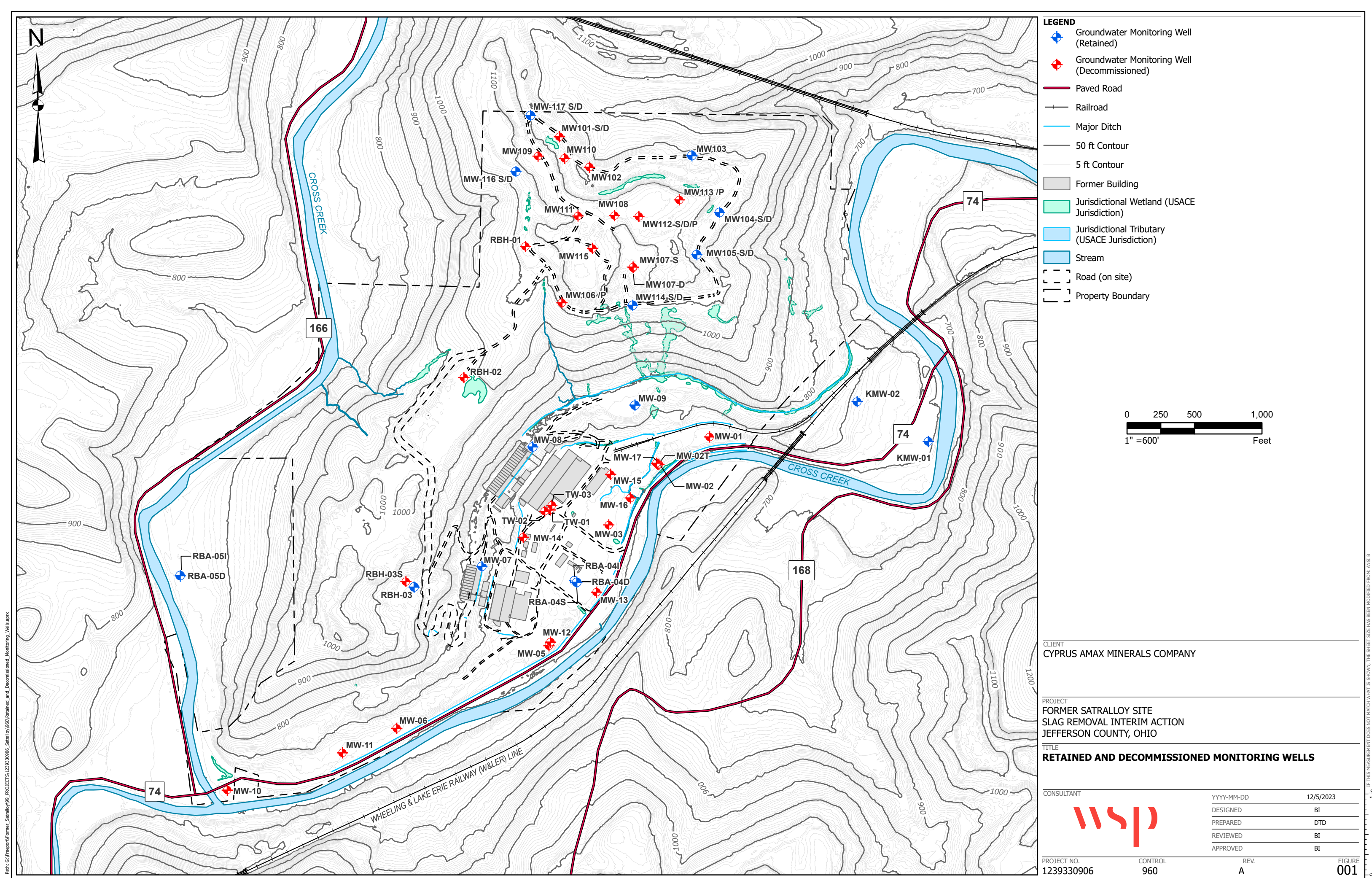
R. Stephen Anderson
Mid-Atlantic District Leader, Earth & Environment Vice President

DRI/RSA

Attachments: Table 1 – Well Decommissioning Observations
Figure 1 – Retained and Decommissioned Monitoring Wells
Appendix A – Well Sealing Reports

Table 1 - Well Decommissioning Observations
Completion of Well Decommissioning - Former Satralloy Site

Location	Area	Original ODNR Log No.	Original Well Construction							Sealing Procedure						Casing			
			Depth of Well (from ground)	Water Level (from TOC)	Borehole Depth	Borehole Diameter	Casing Diameter	Casing Length to Top of Well Screen	Casing Type	From	To	Material	Volume Calculated (gallons)	Volume Used (gallons)	Method	Condition	Casing Removed	Date Start	Date End
MW-01	Lowland	2047719	45.59	30.84	65	6	2	35.59	PVC	0	65	Bentonite Grout	169.7	184.1	Overdrill/Tremie Tube	Good	Yes	08/31/23	09/01/23
MW-02	Lowland	2047717	48.12	29.5	48.12	6	2	38.12	PVC	0	49	Bentonite Grout	127.9	131.5	Overdrill/Tremie Tube	Good	Yes	08/31/23	08/31/23
MW-03	Lowland	2047733	25.64	22.94	30	6	2	15.64	PVC	0	30	Bentonite Grout	78.3	78.9	Overdrill/Tremie Tube	Good	Yes	08/29/23	08/29/23
MW-05	Lowland	2047736	40.72	35.22	65	6	2	30.72	PVC	0	65	Bentonite Grout	169.4	184.1	Overdrill/Tremie Tube	Good	Yes	09/22/23	09/22/23
MW-06	Lowland	2047735	47.59	22.09	55	6	2	37.59	PVC	0	49	Bentonite Grout	127.6	157.8	Overdrill/Tremie Tube	Good	Yes	09/21/23	09/21/23
MW-107D	Upland	2088532	47.89	43.86	48	6	2	38.89	PVC	0	48	Bentonite Grout	125.3	131.5	Overdrill/Tremie Tube	Good	Yes	09/18/23	09/20/23
MW-107S	Upland	2088538	14.94	~17	27	6	2	4.94	PVC	0	15	Bentonite Grout	39.5	52.6	Overdrill/Tremie Tube	Good	Yes	09/18/23	09/20/23
MW-108	Upland	2088536	37.87	39.7	57	6	2	27.87	PVC	0	10	Bentonite Grout	26.1	26.3	Overdrill/Tremie Tube	Good	Yes	09/12/23	09/12/23
MW-109	Upland	2088538	31.87	16.35	67	6	2	18.87	PVC	0	32	Bentonite Grout	83.56	105.2	Overdrill/Tremie Tube	Good	Yes	09/14/23	09/15/23
MW-11	Lowland	NA	14.45	16.38	14.5	6	2	11.45	PVC	0	15	Bentonite Grout	43.4	52.6	Overdrill/Tremie Tube	Good	Yes	09/21/23	09/21/23
MW-110	Upland	2088539	33.59	27.74	38	6	2	23.59	PVC	0	38	Bentonite Grout	99.23	105.2	Overdrill/Tremie Tube	Good	Yes	09/15/23	09/21/23
MW-12	Lowland	NA	6.9	7.94	10	6	2	3.4	PVC	0	10	Bentonite Grout	26.2	26.3	Overdrill/Tremie Tube	Good	Yes	09/25/23	09/25/23
MW-13	Lowland	NA	14.73	Dry	15	6	2	11.73	PVC	0	15	Bentonite Grout	39.5	157.8	Overdrill/Tremie Tube	Good	Yes	09/25/23	09/25/23
MW-14	Lowland	NA	17.62	9.97	20	6	2	13.62	PVC	0	20	Bentonite Grout	52.1	52.6	Overdrill/Tremie Tube	Good	Yes	09/05/23	09/05/23
MW-15	Lowland	NA	17.49	18.4	18	6	2	12.49	PVC	0	18	Bentonite Grout	47	52.6	Overdrill/Tremie Tube	Good	Yes	08/30/23	08/30/23
MW-16	Lowland	NA	24.11	22.24	24	6	2	14.11	PVC	0	24	Bentonite Grout	62.7	78.9	Overdrill/Tremie Tube	Good	Yes	08/29/23	08/29/23
MW-17	Lowland	NA	14.96	11.7	16	6	2	9.96	PVC	0	16	Bentonite Grout	41.8	52.6	Overdrill/Tremie Tube	Good	Yes	08/31/23	08/31/23
RBH-3S	Upland	NA	48.41	38.01	50	6	2	28.41	PVC	0	50	Bentonite Grout	130.6	131.5	Overdrill/Tremie Tube	Good	Yes	09/20/23	09/20/23
TW-01	Lowland	NA	24.7	11.31	40	6	2	14.7	PVC	0	28	Bentonite Grout	73.1	52.6	Overdrill/Tremie Tube	Good	Yes	09/26/23	09/26/23
TW-03	Lowland	NA	39.75	18.02	40	6	2	29.75	PVC	0	40	Bentonite Grout	104.5	105.2	Overdrill/Tremie Tube	Good	Yes	09/26/23	09/26/23
MW-10	Lowland	NA	10	5.71	10	6	2	5	PVC	0	3	Bentonite Pellets	50 lbs	5.5	Excavated	Good	No	09/25/23	09/25/23
										3	10	Bentonite Grout	4.55		Filled Casing/Tremie Tube				
TW-02	Lowland	NA	40	17.34	40	6	2	30	PVC	0	3	Bentonite Pellets	50 lbs	5.5	Excavated	Good	No	09/26/23	09/26/23
										3	40	Bentonite Grout	5.5		Filled Casing/Tremie Tube				
MW-101-S/D	Upland	2088505	88.32	32.82	96	6	2	73.22	PVC	0	32	Bentonite Grout	83.56	105.2	Overdrill/Tremie Tube	Good	Partial	09/14/23	09/14/23
										32	88.32	Bentonite Grout	9.19		Filled Casing/Tremie Tube				
MW-102	Upland	2088509	83.47	63.44	90	6	2	73.47	PVC	0	55	Bentonite Grout	143.3	157.8	Overdrill/Tremie Tube	Good	Partial	09/15/23	09/06/23
										55	83.5	Bentonite Grout	4.7		Filled Casing/Tremie Tube				
MW-106	Upland	2088530	68.3	50.7	70	6	2	53.3	PVC	0	38	Bentonite Grout	97.3	105.2	Overdrill/Tremie Tube	Good	Partial	09/06/23	09/06/23
										38	68	Bentonite Grout	4.9		Filled Casing/Tremie Tube				
MW-111	Upland	2088541	67.69	50.32	68	8	2	58.69	PVC	0	42	Bentonite Grout	171.4	184.1	Overdrill/Tremie Tube	Good	Partial	09/11/23	09/11/23
										42	67.7	Bentonite Grout	4.19		Filled Casing/Tremie Tube				
MW-112-S/D	Upland	2088547	92.22	78.95	142.6	6	2	82.22	PVC	0	73.5	Bentonite Grout	187.6	184.1	Overdrill/Tremie Tube	Good	Partial	09/12/23	09/13/23
										73.5	92.2	Bentonite Grout	3.1		Filled Casing/Tremie Tube				
MW-113	Upland	2088553	131.44	101.21	177.4	6	2	111.44	PVC	0	47	Bentonite Grout	122.5	157.8	Overdrill/Tremie Tube	Good	Partial	09/13/23	09/13/23
										47	131.44	Bentonite Grout	13.78		Filled Casing/Tremie Tube				
MW-115	Upland	2088560	87.46	83.4	88	6	2	79.46	PVC	0	76	Bentonite Grout	198.44	236.7	Overdrill/Tremie Tube	Good	Partial	09/11/23	09/11/23
										76	87.46	Bentonite Grout	1.87		Filled Casing/Tremie Tube				
RBH-1	Upland	2046554	198	181.01	199.6	8	2.5	178.7	PVC	0	25	Bentonite Grout	102	157.8	Overdrill/Tremie Tube	Good	Partial	09/07/23	09/08/23
										25	199.6	Bentonite Grout	44.5		Filled Casing/Tremie Tube				



APPENDIX A

Well Sealing Reports

WATER WELL SEALING REPORT
OHIO DEPARTMENT OF NATURAL RESOURCES
Division of Geological Survey
2045 Morse Road, Bldg B
Columbus, OH 43229-6693
Phone: (614) 265-6576

1008036

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner CYPRUS AMAX MINERALS COAddress of Well Location 4243 COUNTY RDCity MINGO JUNCTION Zip Code 43983Well Location Description OWNER ID MW- 01
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.31173 Longitude -80.666726Previous Well Use MONITORElevation of Well +/- ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____
Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2047719 Project Well ID MW-01**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/1/2023Depth of Well 65 ft. Static Water Level 30.84 ft.Borehole Depth 65 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 37 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

Sealing Material

Volume/Weight Used
Units Required

Placement Method

From 0 ft. To 65 ft. CEMENT/BENTONITE MIX 169.4 GALLONS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No Perforations: From _____ ft. To _____ ft.
(check one)Date Sealing Performed 9/1/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/19/2023

I hereby certify the information given is accurate and correct to the best of my knowledge.

Last revised on 12/19/2023

WATER WELL SEALING REPORT
OHIO DEPARTMENT OF NATURAL RESOURCES
Division of Geological Survey
2045 Morse Road, Bldg B
Columbus, OH 43229-6693
Phone: (614) 265-6576

1008037

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner CYPRUS AMAX MINERALS COAddress of Well Location 4243 COUNY RDCity MINGO JUNCTION Zip Code 43983Well Location Description OWNER ID MW- 02
(120 Characters)Location of Well: Latitude/Longitude **Latitude** 40.311278 **Longitude** -80.668194Previous Well Use MONITORElevation of Well +/- ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2047717 Project Well ID MW-02**MEASURED CONSTRUCTION DETAILS**Date of measurements 8/31/2023Depth of Well 48.1 ft. Static Water Level 29.5 ft.Borehole Depth 48 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 40 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

From 0 ft. To 48.1 ft. CEMENT/BENTONITE MIX 127.7 GALLONS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 8/31/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/19/2023

I hereby certify the information given is accurate and correct to the best of my knowledge.

Last revised on 12/19/2023

WATER WELL SEALING REPORT
OHIO DEPARTMENT OF NATURAL RESOURCES
Division of Geological Survey
2045 Morse Road, Bldg B
Columbus, OH 43229-6693
Phone: (614) 265-6576

1008039

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner CYPRUS AMAX MINERALS COAddress of Well Location 4243 COUNTY RDCity MINGO JUNCTION Zip Code 43983Well Location Description OWNER ID: MW-03
(120 Characters)Location of Well: Latitude/Longitude **Latitude** 40.310194 **Longitude** -80.669528Previous Well Use MONITORElevation of Well +/- ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2047733 Project Well ID MW-03**MEASURED CONSTRUCTION DETAILS**Date of measurements 8/29/2023Depth of Well 25.6 ft. Static Water Level 22.9 ft.Borehole Depth 30 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 18 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

Sealing Material

Volume/Weight Used

Units Required

Placement Method

From 0 ft. To 25.6 ft. CEMENT/BENTONITE MIX 78.3 GALLONS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 8/31/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed CHRIS BUCHANAN Filed electronically on 12/19/2023

I hereby certify the information given is accurate and correct to the best of my knowledge.

Last revised on 12/19/2023

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OHIO DEPARTMENT OF NATURAL RESOURCES
Division of Geological Survey
2045 Morse Road, Bldg B
Columbus, OH 43229-6693
Phone: (614) 265-6576

1008040

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner CYPRUS AMAX MINERALS COAddress of Well Location 4243 COUNTY RDCity MINGO JUNCTION Zip Code 43983Well Location Description OWNER ID: MW-05
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.307647 Longitude -80.670893Previous Well Use MONITORElevation of Well +/- ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2047736 Project Well ID MW-05**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/22/2023Depth of Well 40.7 ft. Static Water Level 35.22 ft.Borehole Depth 65 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 33 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

Sealing Material

Volume/Weight Used

Units Required

Placement Method

From 0 ft. To 40.7 ft. CEMENT/BENTONITE MIX 169.4 GALLONS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/22/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/19/2023

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Columbus, OH 43229-6693
Phone: (614) 265-6576

1008042

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner CYPRUS AMAX MINERALS COAddress of Well Location 4243 COUNTY RDCity MINGO JUNCTION Zip Code 43983Well Location Description OWNER ID: MW-06
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.309974 Longitude -80.669554Previous Well Use MONITORElevation of Well +/- ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2047735 Project Well ID MW-06**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/21/2023Depth of Well 47.5 ft. Static Water Level 22 ft.Borehole Depth 60 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 38 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

Sealing Material

Volume/Weight Used
Units Required

Placement Method

From 0 ft. To 47.5 ft. CEMENT/BENTONITE MIX 127.6 GALLONS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/21/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/19/2023

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2045 Morse Road, Bldg B
Columbus, OH 43229-6693
Phone: (614) 265-6576

1008084

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-10
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.304718 Longitude -80.679713Previous Well Use MONITORElevation of Well 705.99 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID MW-10**MEASURED CONSTRUCTION DETAILS**

Date of measurements 9/25/2023
Depth of Well 10 ft. Static Water Level 5.7 ft.
Borehole Depth _____ ft. Borehole Diameter _____ in.
Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC
Borehole Depth _____ ft. Borehole Diameter _____ in.
Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>10</u> ft. <u>CEMENT/BENTONITE MIX</u>		<u>4.55 GALLONS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/25/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

I hereby certify the information given is accurate and correct to the best of my knowledge.

Last revised on 12/20/2023

WATER WELL SEALING REPORT
OHIO DEPARTMENT OF NATURAL RESOURCES
Division of Geological Survey
2045 Morse Road, Bldg B
Columbus, OH 43229-6693
Phone: (614) 265-6576

1008067

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-11
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.305427 Longitude -80.676631Previous Well Use MONITORElevation of Well 714.26 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____
Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID MW-11**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/21/2023Depth of Well 14.4 ft. Static Water Level 16.3 ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

Sealing Material

Volume/Weight Used
Units Required

Placement Method

From 0 ft. To 14.4 ft. CEMENT/BENTONITE MIX 43.4 GALLONS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/22/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-12
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.307591 Longitude -80.671042Previous Well Use MONITORElevation of Well 722.66 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088539 Project Well ID MW-12**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/25/2023Depth of Well 6.9 ft. Static Water Level 7.9 ft.Borehole Depth 35 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 23 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>6.9</u> ft. <u>CEMENT/BENTONITE MIX</u>	<u>CEMENT/BENTONITE MIX</u>	<u>26.2 GALLONS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/25/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-13
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.308587 Longitude -80.669792Previous Well Use MONITORElevation of Well 708.81 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____
Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID MW-13**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/25/2023
Depth of Well 14.7 ft. Static Water Level 0 ft.
Borehole Depth _____ ft. Borehole Diameter _____ in.
Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC
Borehole Depth _____ ft. Borehole Diameter _____ in.
Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____**SEALING PROCEDURE**

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>14.7</u> ft. <u>CEMENT/BENTONITE MIX</u>	<u>CEMENT/BENTONITE MIX</u>	<u>39.5 GALLONS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/25/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-14
(120 Characters)Location of Well: Latitude/Longitude **Latitude** 40.309735 **Longitude** -80.671708Previous Well Use MONITORElevation of Well 727.64 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID MW-14**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/5/2023Depth of Well 17.6 ft. Static Water Level 9.9 ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>17.6</u> ft. <u>CEMENT/BENTONITE MIX</u>	<u>CEMENT/BENTONITE MIX</u>	<u>52.1 GALLONS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/22/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4242 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-15
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.310978 Longitude -80.669353Previous Well Use MONITORElevation of Well 717.98 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID MW-15**MEASURED CONSTRUCTION DETAILS**Date of measurements 8/30/2023Depth of Well 17.4 ft. Static Water Level 18.4 ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>17.4</u> ft. <u>CEMENT/BENTONITE MIX</u>		<u>47 GALLONS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/22/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-16
(120 Characters)Location of Well: Latitude/Longitude **Latitude** 40.310489 **Longitude** -80.668843Previous Well Use MONITORElevation of Well 707.12 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID MW-16**MEASURED CONSTRUCTION DETAILS**Date of measurements 8/29/2023Depth of Well 24.1 ft. Static Water Level 22.2 ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>24.1</u> ft. <u>CEMENT/SAND MIX</u>		<u>61 GALLONS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/22/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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1008080

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-17
(120 Characters)Location of Well: Latitude/Longitude **Latitude** 40.311184 **Longitude** -80.668128Previous Well Use MONITORElevation of Well 715.42 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID MW-17**MEASURED CONSTRUCTION DETAILS**Date of measurements 8/31/2023Depth of Well 14.9 ft. Static Water Level 11.7 ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>14.9</u> ft. <u>CEMENT/SAND MIX</u>		<u>41.7 GALLONS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/22/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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1008082

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 43938 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description TW-01
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.310278 Longitude -80.670975Previous Well Use MONITORElevation of Well 720.06 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____
Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID TW-01**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/26/2023Depth of Well 24.7 ft. Static Water Level 11.3 ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

Sealing Material

Volume/Weight Used
Units Required

Placement Method

From 0 ft. To 24.7 ft. CEMENT/BENTONITE MIX 72.9 GALLONS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/26/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description TW-02
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.310253 Longitude -80.671123Previous Well Use MONITORElevation of Well 720.75 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID TW-02**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/26/2023Depth of Well 40 ft. Static Water Level 17.3 ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>40</u> ft. <u>CEMENT/BENTONITE MIX</u>	<u>CEMENT/BENTONITE MIX</u>	<u>494 LBS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/26/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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1008083

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description TW-03
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.310372 Longitude -80.67093Previous Well Use MONITORElevation of Well 719.86 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID TW-03**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/26/2023Depth of Well 39.7 ft. Static Water Level 18 ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

Sealing Material

Volume/Weight Used
Units Required

Placement Method

From 0 ft. To 39.7 ft. CEMENT/BENTONITE MIX 104.5 GALLONS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/26/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-101
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.317864 Longitude -80.670524Previous Well Use MONITORElevation of Well 1095.78 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088505 Project Well ID MW-101**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/14/2023Depth of Well 88.3 ft. Static Water Level 32.8 ft.Borehole Depth 98 ft. Borehole Diameter 8 in.Casing Diameter 2 in. Casing Length 35 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>88.3</u> ft. <u>CEMENT/BENTONITE MIX</u>		<u>1092 LBS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/14/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUCTION Zip Code 43938Well Location Description MW-102
(120 Characters)Location of Well: Latitude/Longitude **Latitude** 40.317231 **Longitude** -80.669743Previous Well Use MONITORElevation of Well 1092.75 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088530 Project Well ID MW-102**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/6/2023Depth of Well 83.4 ft. Static Water Level 63.4 ft.Borehole Depth 70 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 52 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>83.4</u> ft. <u>CEMENT/BENTONITE MIX</u>	<u>CEMENT/BENTONITE MIX</u>	<u>1031 LBS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/6/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed CHRIS BUCHANAN Filed electronically on 12/20/2023

I hereby certify the information given is accurate and correct to the best of my knowledge.

Last revised on 12/20/2023

WATER WELL SEALING REPORT
OHIO DEPARTMENT OF NATURAL RESOURCES
Division of Geological Survey
2045 Morse Road, Bldg B
Columbus, OH 43229-6693
Phone: (614) 265-6576

1008088

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-106
(120 Characters)Location of Well: Latitude/Longitude **Latitude** 40.314487 **Longitude** -80.67055Previous Well Use MONITORElevation of Well 1059.41 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088530 Project Well ID MW-106**MEASURED CONSTRUCTION DETAILS**

Date of measurements 9/6/2023
Depth of Well 68.3 ft. Static Water Level 50.7 ft.
Borehole Depth 70 ft. Borehole Diameter 6 in.
Casing Diameter 2 in. Casing Length 52 ft. Casing Type PVC
Borehole Depth _____ ft. Borehole Diameter _____ in.
Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>68.3</u> ft. <u>CEMENT/BENTONITE MIX</u>	<u>844 LBS</u>	<u>PUMPED WITH TREMIE PIPE</u>	
From _____ ft. To _____ ft. _____	_____	_____	
From _____ ft. To _____ ft. _____	_____	_____	
From _____ ft. To _____ ft. _____	_____	_____	

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/6/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed CHRIS BUCHANAN Filed electronically on 12/20/2023

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Page ____ of ____

LOCATION

County _____ Township _____ Section No. _____ Lot No. _____

Owner _____

Address of Well Location _____

City _____ Zip Code _____

Well Location Description
(120 Characters)

Location of Well: Latitude/Longitude Latitude _____ Longitude _____

Previous Well Use _____

Elevation of Well [][][][][] . [][] +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☐ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☐ Other _____**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID _____**MEASURED CONSTRUCTION DETAILS**

Date of measurements _____

Depth of Well _____ ft. Static Water Level _____ ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From _____ ft. To _____ ft.	_____	_____	_____
From _____ ft. To _____ ft.	_____	_____	_____
From _____ ft. To _____ ft.	_____	_____	_____
From _____ ft. To _____ ft.	_____	_____	_____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☐ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☐ No Perforations: From _____ ft. To _____ ft.
(check one)

Date Sealing Performed _____

Comments/Reason for Sealing

CONTRACTOR

Name _____ ODH Registration # _____

Address _____

City/State/Zip _____

Signed _____ Filed electronically on _____

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Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 CR 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-107S
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.315182 Longitude -80.66864Previous Well Use MONITORElevation of Well 1083.91 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088538 Project Well ID MW-107S**MEASURED CONSTRUCTION DETAILS**

Date of measurements 9/20/2023
Depth of Well 14.9 ft. Static Water Level 0 ft.
Borehole Depth 67 ft. Borehole Diameter 6 in.
Casing Diameter 2 in. Casing Length 19 ft. Casing Type PVC
Borehole Depth _____ ft. Borehole Diameter _____ in.
Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>14.9</u> ft.	<u>CEMENT/BENTONITE MIX</u>	<u>39.5 GALLONS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft.	_____	_____	_____
From _____ ft. To _____ ft.	_____	_____	_____
From _____ ft. To _____ ft.	_____	_____	_____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/20/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/19/2023

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1008045

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 CR 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-108
(120 Characters)Location of Well: Latitude/Longitude **Latitude** 40.316237 **Longitude** -80.669102Previous Well Use MONITORElevation of Well 1 1 2 4 3 4 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088536 Project Well ID MW-108**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/12/2023Depth of Well 37.8 ft. Static Water Level 39.7 ft.Borehole Depth 58 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 27 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>37.8</u> ft. <u>CEMENT/BENTONITE MIX</u>		<u>136.1 GALLONS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____		_____	_____
From _____ ft. To _____ ft. _____		_____	_____
From _____ ft. To _____ ft. _____		_____	_____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/12/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/19/2023

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Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 CR 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-109
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.317479 Longitude -80.671103Previous Well Use MONITORElevation of Well 1120.6 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____
Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088538 Project Well ID MW-109**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/15/2023
Depth of Well 31.8 ft. Static Water Level 16.3 ft.
Borehole Depth 67 ft. Borehole Diameter 6 in.
Casing Diameter 2 in. Casing Length 19 ft. Casing Type PVC
Borehole Depth _____ ft. Borehole Diameter _____ in.
Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____**SEALING PROCEDURE**

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>31.8</u> ft. <u>CEMENT/BENTONITE MIX</u>		<u>105.2 GALLONS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/15/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/19/2023

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1008069

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-110
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.317421 Longitude -80.670397Previous Well Use MONITORElevation of Well 1081.14 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID MW-110**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/15/2023Depth of Well 33.5 ft. Static Water Level 27.7 ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

Sealing Material

Volume/Weight Used

Units Required

Placement Method

From 0 ft. To 33.5 ft. CEMENT/BENTONITE MIX 78.9 GALLONS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/22/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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OHIO DEPARTMENT OF NATURAL RESOURCES
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1008089

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-111
(120 Characters)Location of Well: Latitude/Longitude **Latitude** 40.316245 **Longitude** -80.670074Previous Well Use MONITORElevation of Well 1112.84 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088541 Project Well ID MW-111**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/11/2023Depth of Well 67.6 ft. Static Water Level 50.3 ft.Borehole Depth 68 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 59 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>67.6</u> ft.	<u>CEMENT/BENTONITE MIX</u>	<u>836 LBS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft.	_____	_____	_____
From _____ ft. To _____ ft.	_____	_____	_____
From _____ ft. To _____ ft.	_____	_____	_____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/11/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed CHRIS BUCHANAN Filed electronically on 12/20/2023

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1008090

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-112
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.31621 Longitude -80.668457Previous Well Use MONITORElevation of Well 1131.44 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____
Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088547 Project Well ID MW-112**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/13/2023
Depth of Well 92.2 ft. Static Water Level 78.9 ft.
Borehole Depth 142 ft. Borehole Diameter 8 in.
Casing Diameter 2 in. Casing Length 15 ft. Casing Type PVC
Borehole Depth _____ ft. Borehole Diameter _____ in.
Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____**SEALING PROCEDURE**

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>92.2</u> ft. <u>CEMENT/BENTONITE MIX</u>		<u>1140 LBS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			
From _____ ft. To _____ ft. _____			

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)
If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/13/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506
Address 1010 GREENE ST
City/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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1008091

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-113
(120 Characters)Location of Well: Latitude/Longitude **Latitude** 40.316529 **Longitude** -80.667374Previous Well Use MONITORElevation of Well 1126.77 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088553 Project Well ID MW-113**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/13/2023Depth of Well 131.4 ft. Static Water Level 101.2 ft.Borehole Depth 177 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 110 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>131.4</u> ft. <u>CEMENT/BENTONITE MIX</u>	<u>1625 LBS</u>	<u>PUMPED WITH TREMIE PIPE</u>	
From _____ ft. To _____ ft. _____	_____	_____	
From _____ ft. To _____ ft. _____	_____	_____	
From _____ ft. To _____ ft. _____	_____	_____	

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/13/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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1008092

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description MW-115
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.31558 Longitude -80.669707Previous Well Use MONITORElevation of Well 1 1 2 5 5 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2088560 Project Well ID MW-115**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/11/2023Depth of Well 87.4 ft. Static Water Level 83.4 ft.Borehole Depth 88 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 79 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:	Sealing Material	Volume/Weight Used Units Required	Placement Method
From <u>0</u> ft. To <u>87.4</u> ft. <u>CEMENT/BENTONITE MIX</u>	<u>CEMENT/BENTONITE MIX</u>	<u>1081 LBS</u>	<u>PUMPED WITH TREMIE PIPE</u>
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____
From _____ ft. To _____ ft. _____	_____	_____	_____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/11/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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1008093

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner CYPRUS AMAX MINERALS COAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description (120 Characters) LOCATED ON THE NNE SIDE OF THE FORMER SATALLOY SITE
RBH-1Location of Well: Latitude/Longitude Latitude 40.315548 Longitude -80.671395Previous Well Use MONITORElevation of Well +/- ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☐ GPS ☐ Survey ☒ Other MAP-OTHERSSource of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number 2046554 Project Well ID RBH-1**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/8/2023Depth of Well 181 ft. Static Water Level 199.6 ft.Borehole Depth 200 ft. Borehole Diameter 6 in.Casing Diameter 2 in. Casing Length 178 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

Sealing Material

Volume/Weight Used
Units Required

Placement Method

From 0 ft. To 181 ft. CEMENT/BENTONITE MIX 2238 LBS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/8/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

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Phone: (614) 265-6576

1008081

Page 1 of 1**LOCATION**County JEFFERSON Township CROSS CREEK Section No. _____ Lot No. _____Owner FORMER SATRALLOY SITEAddress of Well Location 4243 COUNTY RD 74City MINGO JUNCTION Zip Code 43938Well Location Description RBH-3S
(120 Characters)Location of Well: Latitude/Longitude Latitude 40.308886 Longitude -80.674851Previous Well Use MONITORElevation of Well 911.35 +/- _____ ft. Datum Plane: ☐ NAD27 ☐ NAD83Source of Coordinates: ☒ GPS ☐ Survey ☐ Other _____
Source of Elevation: ☐ GPS ☐ Survey ☒ Other DIGITAL MAP**WELL IDENTIFICATION** ODNR Well Log Number _____ Project Well ID RBH-3S**MEASURED CONSTRUCTION DETAILS**Date of measurements 9/20/2023Depth of Well 48.4 ft. Static Water Level 37 ft.

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter 2 in. Casing Length 10 ft. Casing Type PVC

Borehole Depth _____ ft. Borehole Diameter _____ in.

Casing Diameter _____ in. Casing Length _____ ft. Casing Type _____

SEALING PROCEDURE

Placement:

Sealing Material

Volume/Weight Used
Units Required

Placement Method

From 0 ft. To 48.4 ft. CEMENT/BENTONITE MIX 131.5 GALLONS PUMPED WITH TREMIE PIPE

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

From _____ ft. To _____ ft. _____

Condition of Casing _____ Was Casing Removed? ☐ Yes or ☒ No
(check one)If casing **Not Removed**, was it Perforated? ☐ Yes or ☒ No
(check one) Perforations: From _____ ft. To _____ ft.Date Sealing Performed 9/22/2023Comments/Reason for Sealing NO LONGER NEEDED**CONTRACTOR**Name CASCADE DRILLING LP ODH Registration # 003506Address 1010 GREENE STCity/State/Zip MARIETTA OH 45750Signed _____ CHRIS BUCHANAN Filed electronically on 12/20/2023

I hereby certify the information given is accurate and correct to the best of my knowledge.

Last revised on 12/20/2023