

QUALITATIVE SHEEN ASSESSMENT SUMMARY REPORT

East Palestine, Ohio

Prepared for: **Norfolk Southern Railway Company**

Project No.: 18722
Date: 12/11/23

Prepared by:



5070 Stow Rd.
Stow, OH 44224
800-940-4025
www.EnviroScienceInc.com

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	METHODS	1
3.0	SITE ACCESS.....	2
4.0	OBSERVATIONS	2
4.1	Overall	2
4.2	Sulphur Run.....	2
4.3	Leslie Run.....	5
4.4	Stream Morphology and Substrate.....	6
4.5	Biological Observations	7
5.0	CONCLUSIONS	7

LIST OF TABLES

- Table 4.1 November 2023 Sheen Scores Downstream of Derailment
- Table 4.2 Sulphur Run Stream Lengths and Percentages of Sheen Scores
- Table 4.3 Leslie Run Stream Lengths and Percentages of Sheen Scores

LIST OF FIGURES

- Figure 4.1 Sulphur Run Behind Leake Oil Property
- Figure 4.2 Example of Concrete Blocks in Sulphur Run

LIST OF APPENDICES

- Appendix A: Examples of Sheen Scores
- Appendix B: Sulphur Run May and November 2023 Qualitative Assessment Scoring Map
- Appendix C: Leslie Run March, May and November 2023 Qualitative Assessment Scoring Map
- Appendix D: Qualitative Sheen Data

1.0 INTRODUCTION

This report summarizes the results of the November 2023 Qualitative Sheen Assessment (Assessment) conducted in accordance with the October 18, 2023, United States Environmental Protection Agency (USEPA) issued Administrative Order (Docket No. CWA-1321-5-24-001) pursuant to Section 311 of the Clean Water Act (CWA). The Assessment was performed following the approved methods in the November 2023, Comprehensive Sheen, and Sediment Investigation Work Plan – Sulphur Run and Leslie Run (Work Plan), as well as the November 2023, Comprehensive Sheen and Sediment Investigation Quality Assurance Project Plan (QAPP). The November 2023 Assessment documented potentially impacted sediments within Sulphur Run and Leslie Run. Results from the November 2023 Assessment informed sediment and sheen sampling and will be compared to results of similar assessments performed in March 2023 (only in Leslie Run) and May 2023, and to aid in developing potential future characterization, mitigation, removal, or other actions.

Sheen is an iridescent film that is on the surface of water that can be caused by petroleum products or natural bacteria such as iron bacteria. They are affected by natural influences such as water temperature, flow, and biological nutrients in the receiving stream. Sheen can be differentiated by how their physical characteristics act on the surface of water and how they appear when disturbed. Sheens for both biological and petroleum can be persistent in the environment due to ambient water chemistry or historical releases to a watershed. This survey focused on the documentation of non-biological sheens and potential historical or derailment related sources.

2.0 METHODS

The November 2023 Assessment followed methods described in Section 4.2 of the Work Plan using equipment detailed on Work Sheet 22-A1 of the QAPP. Qualitative sheen assessments were performed at a frequency of every 25 feet working from downstream to upstream in each section. The survey also included a 1,000-foot stream reach on Leslie and Sulphur Run upstream of the influence from the derailment and baseline sediment sampling locations from July / August 2023. At each assessment location, a submeter accurate dGPS was used to record mid-channel coordinates, a field tablet was used to record video and photographs of field observations, as well as wetted width, stream morphology (i.e., riffle/run/pool/glide), qualitative sheen score, and field notes. Using feet or shovels, the field team disturbed representative areas at each transect, agitating sediments and turning over rocks to record visual observations regarding the degree of sheen observed.

The degree of sheen observed was qualitative in nature and included observations of speed of release from the disturbed sediment, horizontal expanse of sheen, and smell of product. Consistent with the previous approved qualitative assessments in March and May 2023, the qualitative observations were scored using the following criteria:

- Score 0 = No sheen
- Score 1 = Light sheen; assigned when a small presence of string-sheen is observed, and the majority of the stream bed area does not produce sheen during disturbance.
- Score 2 = Medium sheen; assigned when there is a step-down in the presence of sheen stream-wide, with basketball-sized bubbles and no odor

- Score 3 = Heavy sheen assigned when there is a stream-wide prevalence of sheen or larger amounts of sheen produced with odor upon disturbance

The assessments were performed by a single field team, comprised of EnviroScience USEPA and Ohio Environmental Protection Agency (OH EPA) personnel to ensure consistency in visual observations and qualitative scoring.

3.0 SITE ACCESS

Norfolk Southern Railway Company (NSRC), with support from USEPA, secured access agreements with properties along Sulphur Run and Leslie Run. On November 2, 2023, the Assessments were initiated at the downstream end of Sulphur Run at the confluence with Leslie Run. Assessments continued the week of November 6th through 10th as access agreements were granted by property owners. On November 27, 2023, the final Assessments were completed when additional access agreements were obtained in Sulphur Run and Leslie Run.

4.0 OBSERVATIONS

4.1 OVERALL

A total of 822 locations over approximately 4 miles were assessed for sheen along both Sulphur and Leslie Run and include 732 locations downstream of the derailment and 90 upstream references / background locations. These are summarized in Table 4.1. Excluding reference and background scores, a sheen score of 1 was the most abundant score during the assessment (378 locations and 52%), followed by a 0 score (268 and 37%), then a score of 2 (60 locations and 8%). The least observed score was a 3 (26 locations and 3%). The 86 locations on Sulphur and Leslie Run that had a score of 2 or 3 were then sampled for sediment and sheen by Arcadis. Below is a table of sheen assessment scores by category downstream of the derailment, an additional six locations in the reference / background locations scored a 1 for sheen presence. Examples of each sheen score are presented in Appendix A and all photographs and videos collected each day of the survey were uploaded to the NSRC SharePoint site the following day. Figures of the November qualitative sheen survey results and past sheen surveys results for comparison are present in Appendix B and C. A table of all data collected is presented in Appendix D.

Table 4.1. November 2023 Sheen Scores Downstream of Derailment

Score	Sulphur	Leslie	Total
0	19	249	268
1	71	307	378
2	22	38	60
3	14	12	26
Total	126	606	732

4.2 SULPHUR RUN

On November 2, 2023, EnviroScience with representatives from USEPA and Ohio Environmental Protection Agency (OEPA), initiated the Assessment at the downstream end of Sulphur Run at the confluence with Leslie Run. In Sulphur Run, from the confluence with Leslie Run to West St., the field team observed an improvement in sheen scores compared to the previous assessment

performed in May 2023. [Note: the qualitative sheen assessment completed in March 2023 was only performed in Leslie Run.] This area had previously been washed following the approved operating tactics for cleanup of sheen in sediments after being identified as a heavier sheen area in the May 2023 assessment.

From West St. to Walnut St., sheen scores of 2 and 3 were observed that were not previously observed during the May 2023 assessment. A potential reason for the change in sheen scores from May to November include that during the time frame from late summer and early fall, the downstream end of Sulphur Run was relatively dry unless significant rain events occurred. During this time, surface water flow in Sulphur Run ended just west of West St. This temporary change in hydrology may have resulted in new areas where sheen was observed.

From Market St. to Sumner St., there was an improvement in sheen scores compared to the May 2023 assessment. This reach previously (May 2023) had sheen scores of 2 and 3 throughout the area and has improved to most scores being 1, with one site scoring a 2 and a few areas of scores of 3 during the November 2023 assessment. This area, adjacent to public car wash, was also previously washed following the May 2023 assessment to clean-up sheen in sediments.

Additional improvements in sheen scores were observed east of the CeramSource, Inc. property to Anna St., which was also previously washed following the higher sheen scores observed during the May 2023 assessment. This area had a reduction in 2 and 3 observations and increase in scores of 1.

From Anna St. to the railroad track culvert, a few locations with sheen scores of 3 were observed during the November 2023 assessment, near the Leake Oil property, that were not previously observed during the May 2023 assessment. During the incident response, OEPA observed sheen emanating from the stream bank in this area. OEPA coordinated with the landowner for remedial actions, and the landowner hired a contractor to install wooden berms and absorbent booms in an attempt to contain the sheen source. Figure 4.1 shows the wooden berms and absorbent booms installed along Sulphur Run behind the Leake Oil property.

Figure 4.1 Sulphur Run Behind Leake Oil Property



A summary of the observed stream lengths and percentage of each sheen score for Sulphur Run is presented in Table 4.2. To aid in comparison to the May 2023 assessment, each November 2023 25-foot assessment location is considered a 25-foot section of stream that is scored in a particular category. Visual comparisons between May 2023 and November 2023 assessments are presented in Appendix B.

Table 4.2 Sulphur Run Stream Lengths and Percentages of Sheen Scores

Sheen Score	May 2023			November 2023		
	Feet	Miles	%	Feet	Miles	%
0	0	0	0%	475	0.09	15%
1	2,079.6	0.4	65%	1,775	0.3	56%
1 & 2	31.9	0.006	1%	0	0	0%
2	557.4	0.1	17%	550	0.1	17%
2 & 3	150.1	0.03	5%	0	0	0%
3	383.6	0.1	12%	350	0.07	11%
Total Length	3,202.6	0.6	100%	3,150	0.6	100%

Additionally, 1,000 feet of upstream Sulphur Run was assessed during the November 2023 Assessment. Of the 40 transects assessed, 2 locations with small amounts of sheen were observed with sheen scores of 1. Sulphur Run upstream of the derailment influence is mostly residential with one business located on Clark Street, which does not have any significant discharges to this section of Sulphur Run.

4.3 LESLIE RUN

On November 6, 2023, the Assessment was initiated at the downstream end of Leslie Run at the confluence with Bull Run. From Bull Run to north of Carbon Hill Road, the November 2023 assessment resulted in sheen scores of 0 and 1. This is an improvement from the March 2023 and May 2023 assessments.

Sheen scores of 1 and 2 with a relatively small pocket of scores of 3 were observed North of Carbon Hill Road to the park pull off on Rt. 170 as assessments progressed north. Compared to the first two rounds of assessment, scores from March 2023 included more 2 and 3 scores throughout this reach, with slight improvements to more scores of 2 in May 2023

From the park pull off on Rt. 170 to the confluence with Sulphur Run, sheen scores of 2 and 3 were observed during the November 2023 assessment. However, the frequency of these observations was spaced out, with significantly more scores of 1 and 0 compared to the results of the March 2023 and May 2023 assessments.

Overall, throughout Leslie Run, there was an increase of sheen scores of 0 and 1 compared to previous assessment. A summary of the observed stream lengths and percentage of each sheen score for Leslie Run is presented in Table 4.3. To aid in comparison to the March 2023 and May 2023 assessment, each 25-foot assessment location is considered a 25-foot section of stream that scored a particular category. Visual comparisons between March 2023, May 2023 and November 2023 assessments are presented in Appendix C.

Table 4.3 Leslie Run Stream Lengths and Percentages of Sheen Scores

Sheen Score	March 2023			May 2023			November 2023		
	Feet	Miles	%	Feet	Miles	%	Feet	Miles	%
0	189.0	0.04	1%	0	0	0%	6,225	1.2	41%
0 & 1	0	0	0%	1,125.0	0.2	6%	0	0	0%
Assumed 1	4,492.4	0.9	24%	5,409.6	1.0	29%	0	0	0%
1	3,796.0	0.7	20%	3,977.7	0.8	21%	7,675	1.5	51%
2 & 1	0	0	0%	6,332.9	1.2	34%	0	0	0%
2	3,087.0	0.6	17%	1,682.8	0.3	9%	950	0.2	6%
3 & 1	3,126.0	0.6	17%	0	0	0%	0	0	0%
3 & 2	294.0	0.1	2%	0	0	0%	0	0	0%
3	3,698.8	0.7	20%	0	0	0%	300	0.1	2%
Total Length	18,683.2	3.54	100%	18,528.0	3.5	100%	15,150	2.9	100%

Along the 1,000-foot upstream section of Leslie Run, 3 of the 40 transects assessed had a sheen score of 1. This section of Leslie Run is mostly residential with a couple businesses located further upstream, outside of the 1,000-foot assessment area.

4.4 STREAM MORPHOLOGY AND SUBSTRATE

Sulphur Run stream substrates are mainly comprised of gravel, sand, and cobble. However, some of the heavier sheen areas located along Sulphur Run were observed underneath larger concrete blocks that are used to stabilize the banks in some areas. Figure 4.2 shows an example of the large concrete blocks found in Sulphur Run. Stream morphology observed in Sulphur Run was comprised of mostly pools and riffles. The average wetted width of Sulphur Run was approximately 10.5 feet. The average wetted width of upstream Sulphur Run was approximately 4.8 feet.

Figure 4.2 Example of Concrete Blocks in Sulphur Run



Leslie Run stream substrates are mainly comprised of gravel, cobble, and sand, as well as boulder and bed rock in the southern sections of the stream. Sheen observed in Leslie Run was typically found along the banks in sediments under cobble or boulders. Stream morphology observed in Leslie Run was comprised of mostly runs, riffles, and pools. The average wetted width of Leslie Run was approximately 24.3 feet. The average wetted width of upstream Leslie Run was approximately 13.4 feet.

4.5 BIOLOGICAL OBSERVATIONS

Throughout Sulphur Run, aquatic life was observed along the assessment areas, including fish and macroinvertebrates. There was less abundance of aquatic life observed in the upstream reach of Sulphur Run, as it continues in a progression of a headwater stream with narrower widths and shallower depths. Many of these areas were also dry during the summer months. In Leslie Run, fish and macroinvertebrates were observed in abundance at all assessment areas. Aquatic life was also observed in the upstream Leslie Run reach, but not at the same frequency as the downstream reach.

5.0 CONCLUSIONS

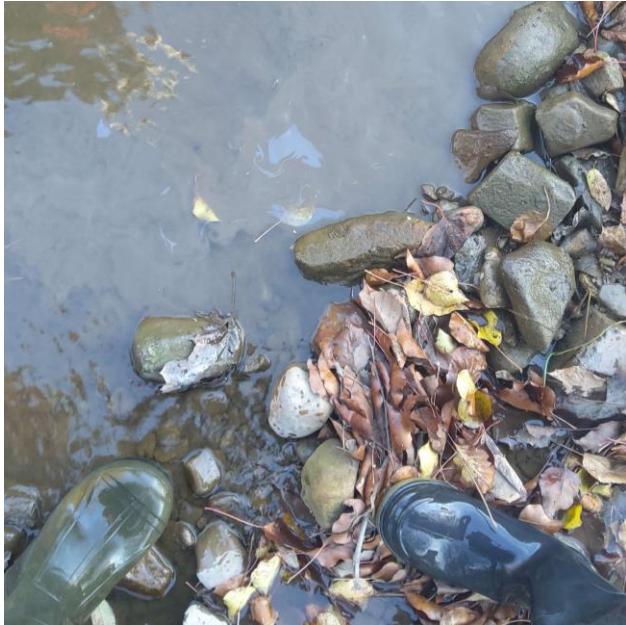
In conclusion, the survey included a high density of assessments on Sulphur and Leslie Run to inform areas for collection of sediment and sheen, along with continued monitoring of sheen prevalence in these stream reaches. The following conclusions can be drawn from this Assessment:

1. The amount of sheen observed on both Sulphur and Leslie Run continues to decrease, with a markedly fewer locations on both Sulphur and Leslie Run scoring 2 or 3 than earlier in 2023.
2. Improvement in scores was most evident in locations of Sulphur Run where the stream washing tactic was implemented in spring of 2023.
3. Natural attenuation also appears to be contributing to decreasing sheen observations.
4. Based on the documentation of sheen outside the influence of the derailment and field observations, non-derailment-related sheen sources appear to be present within the site and watershed.

Appendix A

Example of Sheen Scores

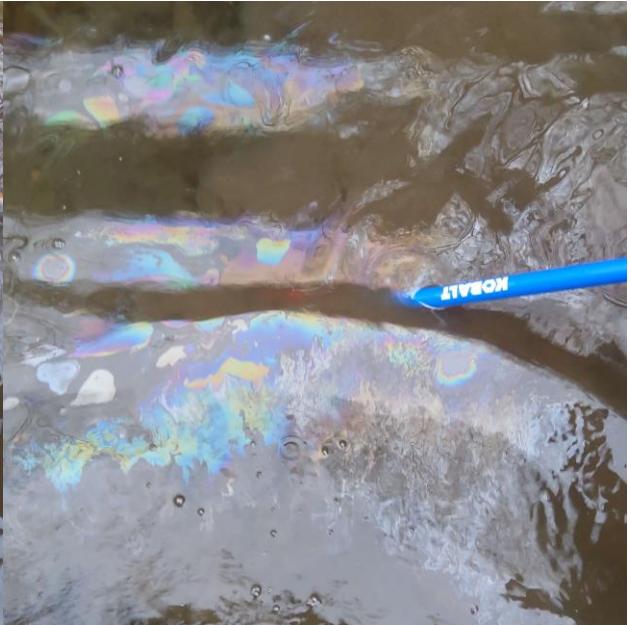
**Sheen Score 1: Leslie Run @
QALR692 on 11/9/23.**



**Sheen Score 2: Leslie Run @
QALR555 on 11/9/23.**



**Sheen Score 3: Leslie Run @
QALR548 on 11/9/23.**



Appendix B

Sulphur Run May and November 2023 Qualitative Assessment Scoring Map



Legend

- Sulphur Run (Blue dashed line)
- May 2023 Qualitative Sheen Observations
- Score 1 (Green line)
- Score 1 & 2 (Yellow-green line)
- Score 2 (Yellow line)
- Score 2 & 3 (Purple line)
- Score 3 (Magenta line)

November 2023 Qualitative Sheen Observations

- Score 0
- Score 1
- Score 2
- Score 3

PRELIMINARY DRAFT



0
480
960
Feet

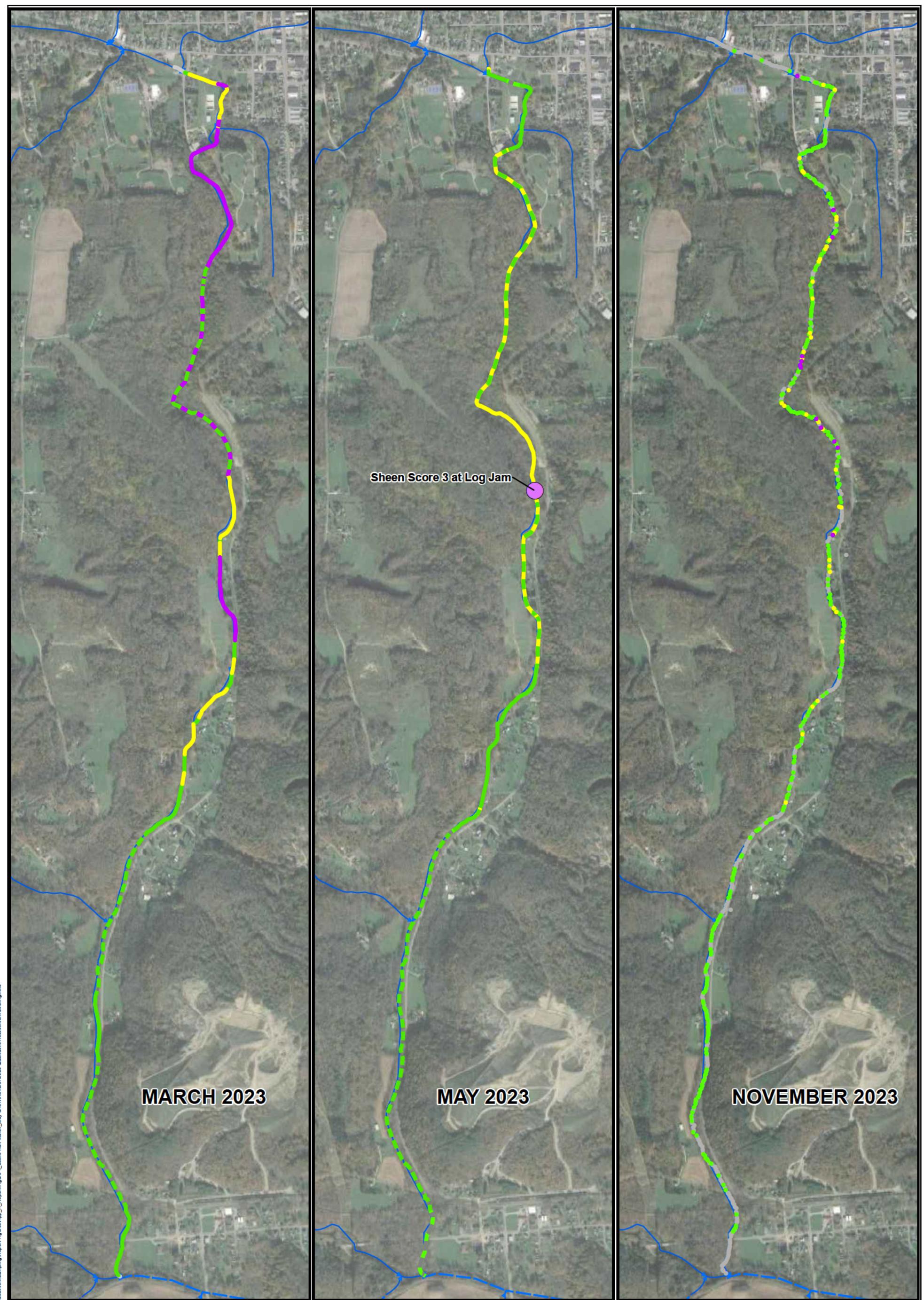
Drone image onsite dated: 11/30/2023
Drone image offsite dated: 11/30/2023

NORFOLK SOUTHERN
EAST PALESTINE, OHIO

SULPHUR RUN MAY AND NOVEMBER 2023
QUALITATIVE ASSESSMENT SCORING

Appendix C

Leslie Run March, May and November 2023 Qualitative Assessment Scoring Map



Legend

Qualitative Sheen Observations		November 2023 Qualitative Sheen Observations
Score 0		Score 0
Score 0 & 1		Score 1
Score 1		Score Assumed 1
Score 1 & 2		Score 2
Score 2		Score 1 & 2
Score 2 & 3		Score 2 & 3
Score 3		Score 3

- Score 0
- Score 1
- Score 2
- Score 3

Note:
Qualitative stream sediment assessments conducted by EnviroScience on March 16, 2023 and May 17-19, 2023. The GIS layers with the sheen extent and corresponding scores were provided by EnviroScience on May 31, 2023 and September 22, 2023.

PRELIMINARY DRAFT



Map Date: 12/6/2023

0 600 1,200
Feet

NORFOLK SOUTHERN
EAST PALESTINE, OHIO

LESLIE RUN MARCH, MAY AND NOVEMBER 2023
QUALITATIVE ASSESSMENT SCORING

FIGURE
4

Appendix D

Qualitative Sheen Data

Site_Name	WettedWidt	StreamMorp	OtherStrea	Notes	SheenCateg	Qualitativ	Date	Area	Contractor		
QALR785	15	Pool		Ldb large rock	3	Low	11/27/202	Sulphur Run	EnviroScience		
QALR786	12	Pool		Mid channel rock	2	Low	11/27/202	Sulphur Run	EnviroScience		
QALR787	22	Run		Mid chan	1	Low	11/27/202	Leslie Run	EnviroScience		
QALR788	18	Run			1	Low	11/27/202	Leslie Run	EnviroScience		
QALR789	25	Riffle			1	Low	11/27/202	Leslie Run	EnviroScience		
QALR790	28	Riffle			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR791	33	Riffle			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR792	32	Riffle			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR793	26.5	Run	Rdb		1	Low	11/27/202	Leslie Run	EnviroScience		
QALR794	16	Pool			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR795	28	Riffle			1	Low	11/27/202	Leslie Run	EnviroScience		
QALR796	40	Riffle			1	Low	11/27/202	Leslie Run	EnviroScience		
QALR797	30	Pool	Bedrock		0	Low	11/27/202	Leslie Run	EnviroScience		
QALR798	25	Riffle			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR799	19	Riffle			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR800	20	Riffle			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR801	17	Riffle			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR802	16	Riffle			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR803	39	Riffle	Rdb small string		1	Low	11/27/202	Leslie Run	EnviroScience		
QALR804	40	Riffle	Ldb tree root		1	Low	11/27/202	Leslie Run	EnviroScience		
QALR805	38	Riffle	Ldb small string		1	Low	11/27/202	Leslie Run	EnviroScience		
QALR806	42	Riffle			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR807	33	Riffle	Rdb leaf pile and rocks		2	Low	11/27/202	Leslie Run	EnviroScience		
QALR808	26	Pool			0	Low	11/27/202	Leslie Run	EnviroScience		
QALR809	30	Riffle	Rdb		1	Low	11/27/202	Leslie Run	EnviroScience		
QALR810	27	Riffle	Ldb		1	Low	11/27/202	Leslie Run	EnviroScience		
QALR811	24.5	Riffle	Ldb		1	Low	11/27/202	Leslie Run	EnviroScience		
QALR1	6.5	Riffle	Sulphur confluence with Leslie		0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR10	15	Glide			0	Significant	11/2/202	Sulphur Run	EnviroScience		
QALR11	11	Pool			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR12	10	Run	Film that isn't rainbow		1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR13	7.5	Riffle			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR14	8.5	Glide			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR15	10	Riffle			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR16	16	Riffle			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR17	14	Pool			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR18	14	Riffle	Found near bank		1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR19	10	Pool			0	Stagnate	11/2/202	Sulphur Run	EnviroScience		
QALR2	11	Pool			1	Stagnate	11/2/202	Sulphur Run	EnviroScience		
QALR20	7	Pool			1	Stagnate	11/2/202	Sulphur Run	EnviroScience		
QALR21	11	Riffle			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR22	13	Glide			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR23	9	Run			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR24	9	Run			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR25	9	Pool			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR26	5	Glide			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR27	7	Glide	Under large rock		2	Low	11/2/202	Sulphur Run	EnviroScience		
QALR28	11.5	Riffle			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR29	10	Glide			3	Low	11/2/202	Sulphur Run	EnviroScience		
QALR3	10.5	Run			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR30	8	Glide	Left bank		2	Low	11/2/202	Sulphur Run	EnviroScience		
QALR31	7.5	Run			2	Low	11/2/202	Sulphur Run	EnviroScience		
QALR32	9	Riffle			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR33	21	Riffle			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR34	19	Glide			2	Low	11/2/202	Sulphur Run	EnviroScience		
QALR35	15	Pool			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR36	15	Pool			3	Low	11/2/202	Sulphur Run	EnviroScience		
QALR37	13	Run	In root mat right bank		3	Low	11/2/202	Sulphur Run	EnviroScience		
QALR38	14	Riffle	Near drain pipe under boulders		3	Low	11/2/202	Sulphur Run	EnviroScience		
QALR39	12	Glide	Scent. Under slabs right bank		3	Low	11/2/202	Sulphur Run	EnviroScience		
QALR4	10	Run			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR40	10.5	Glide	Right bank under slabs		2	Low	11/2/202	Sulphur Run	EnviroScience		
QALR41	10	Riffle			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR42	9.5	Run			2	Low	11/2/202	Sulphur Run	EnviroScience		
QALR44	12	Glide			3	Low	11/2/202	Sulphur Run	EnviroScience		
QALR45	17	Pool			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR46	12	Pool			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR46b	14	Glide			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR47	14	Riffle			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR48	13	Riffle			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR49	13	Riffle			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR5	8.5	Riffle			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR50	14	Riffle			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR51	16	Glide	Left bank boulder		3	Low	11/2/202	Sulphur Run	EnviroScience		
QALR52	16	Glide			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR53	18	Glide			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR54	16	Glide			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR55	12	Glide			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR56	9	Run			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR57	13	Run			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR58	10	Riffle			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR59	10	Run			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR6	10	Pool			2	Low	11/2/202	Sulphur Run	EnviroScience		
QALR60	10.5	Glide			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR61	13	Riffle			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR7	11	Riffle			0	Low	11/2/202	Sulphur Run	EnviroScience		
QALR8	20	Riffle			1	Low	11/2/202	Sulphur Run	EnviroScience		
QALR9	8	Glide	Outlet pipe 5 ft down from bridge. Point under bridge		0	Low	11/2/2023	-80.544662	40.832767	Sulphur Run	EnviroScience

QALR 100	7	Pool	Rdb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 101	4	Riffle	Rdb-mid channel	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 102	7	Riffle	Rdb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 103	7	Riffle		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 104	8	Pool	L&r db	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 105	5.5	other	Dammed pool a Above and below dam area	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 106	9.5	Pool		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 107	8	Run	L&ldb . Absorbants and well digging area	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 108	9.5	Pool	Ldb absorbants oil odor	3	Low	11/3/2023		sulphur Run	EnviroScience
QALR 109	11	Pool	Petrol smell absorbants	3	Low	11/3/2023		sulphur Run	EnviroScience
QALR 110	8	Pool	Ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 111	8	Pool	Ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 112	5.5	Pool	Ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 113	7	Pool	Ldb	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 114	5	Riffle		3	Low	11/3/2023		sulphur Run	EnviroScience
QALR 115	8	Riffle	Ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 116	10	Pool	L&ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 117	5.5	Run	Rdb	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 118	8	Riffle	Rdb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 119	9	Pool	Ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 120	9	Pool	Ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 121	6	Pool	Lbd	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 122	3	Riffle	Balast washout from rr	0	Low	11/3/2023		sulphur Run	EnviroScience
QALR 123	11	Pool	Ldb pool under tree	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR124	12	Riffle	L& rdb	2	Low	11/3/2023		sulphur Run	EnviroScience
			Upstream if terracotta pipe at railroad bridge crossing						
QALR 125	3.5	Run		0	Low	11/3/2023		sulphur Run	EnviroScience
QALR 63	9	Pool		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 64	9	Riffle		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 65	7.5	Run	10 foot below bridge mid channel	3	Low	11/3/2023		sulphur Run	EnviroScience
QALR 66	12	Pool	At bridge	3	Low	11/3/2023		sulphur Run	EnviroScience
QALR 67	13	Pool		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 68	9.5	Pool		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 69	9	Run		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 70	14	Riffle		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 71	12.5	Riffle		1	Low	11/3/2023		sulphur Run	EnviroScience
			Up from concrete slab after culvert Sumner bridge. Larfe pipe culvert enterint from rdb						
QALR 73	14.5	Run		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 74	11	Riffle		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 75	14	Riffle		2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 76	13.5	Riffle	Ldb	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 77	15	Pool	Ldb noted	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 78	12.5	Riffle	2 rdb 1 ldb	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 79	15	Riffle	2 ldb 15f from bridge	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 80	17	Riffle	At bridge base	1	Low	11/3/2023		sulphur Run	EnviroScience
			Upsream of culvert bridge-Between bridge and tire retaining wall						
QALR 82	11	Pool		2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 81	8	Pool	Rdb where tire start	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 83	7.5	Pool	Ldb	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 84	8	Pool	Ldb along tree roots	3	Low	11/3/2023		sulphur Run	EnviroScience
QALR 85	6	Pool	Ldb off roots	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 86	6.5	Riffle		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 87	10	Pool		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 88	9.5	Pool	Upstream of steel beam and pipe outlet ldb	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 89	9.5	Pool		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 90	15.5	Pool	Rdb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 91	8	Riffle		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 92	4	Riffle		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 93	8.5	Pool	Ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR94	7	Riffle	Ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 95	11	Riffle		1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 96	11	Pool	Rdb video rdb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 97	15.5	Pool	Ldb deep pool down stream of culvert	2	Low	11/3/2023		sulphur Run	EnviroScience
QALR 98	4	Riffle	Upsream from culvert ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR 99	7	Riffle	Ldb	1	Low	11/3/2023		sulphur Run	EnviroScience
QALR126	23.5	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR127	21.5	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR128	8	Riffle		0	Low	11/6/2023		eslie Run	EnviroScience
QALR129	11.5	Riffle		0	Low	11/6/2023		eslie Run	EnviroScience
QALR130	22	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR131	23.5	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR132	16	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR133	14	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR134	21	Riffle		0	Low	11/6/2023		eslie Run	EnviroScience
QALR135	32.5	Riffle		0	Low	11/6/2023		eslie Run	EnviroScience
QALR136	34	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR137	35	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR138	24.5	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR139	32.5	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR140	26	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR141	28	Pool		0	Low	11/6/2023		eslie Run	EnviroScience
QALR142	20	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR143	16.5	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR144	17	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR145	17	Riffle		0	Low	11/6/2023		eslie Run	EnviroScience
QALR146	14	Run		0	Low	11/6/2023		eslie Run	EnviroScience
QALR147	25	Riffle		0	Low	11/6/2023		eslie Run	EnviroScience
QALR148	26	Run		1	Low	11/6/2023		eslie Run	EnviroScience
QALR149	13	Pool		1	Low	11/6/2023		eslie Run	EnviroScience
QALR150	18.5	Run		1	Low	11/6/2023		eslie Run	EnviroScience

QALR151	17.5	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR152	26	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR153	19.5	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR154	25	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR155	22	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR156	16.5	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR157	21	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR158	21	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR159	15.5	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR160	29	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR161	30	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR162	33	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR163	30.5	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR164	29	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR165	31	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR166	32	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR167	43	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR168	33	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR169	35	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR170	28	Pool			0	Low	11/6/202	eslie Run	EnviroScience
QALR171	28	Pool			1	Low	11/6/202	eslie Run	EnviroScience
QALR172	27	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR173	24	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR174	24	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR175	29	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR176	32	Riffle			1	Low	11/6/202	eslie Run	EnviroScience
QALR177	17.5	Pool			0	Low	11/6/202	eslie Run	EnviroScience
QALR178	22	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR179	22	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR180	20.5	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR181	20.5	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR182	22	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR183	14.5	Pool			0	Low	11/6/202	eslie Run	EnviroScience
QALR184	15	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR185	12	Pool			1	Low	11/6/202	eslie Run	EnviroScience
QALR186	15	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR187	19.5	Riffle			1	Low	11/6/202	eslie Run	EnviroScience
QALR188	21	Riffle			1	Low	11/6/202	eslie Run	EnviroScience
QALR189	16	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR190	15	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR191	22	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR192	25	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR193	25	Riffle			0	Significant	11/6/202	eslie Run	EnviroScience
QALR194	31.5	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR195	19.5	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR196	17.5	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR197	31	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR198	24.5	Pool			1	Low	11/6/202	eslie Run	EnviroScience
QALR199	12	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR200	22	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR201	27	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR202	24	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR203	23	Pool			1	Low	11/6/202	eslie Run	EnviroScience
QALR204	24.5	Pool			0	Low	11/6/202	eslie Run	EnviroScience
QALR205	18	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR206	29	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR207	31	Riffle			1	Low	11/6/202	eslie Run	EnviroScience
QALR208	33	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR209	38	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR210	32	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR211	32	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR212	33	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR213	28	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR214	25.2	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR215	28	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR216	24	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR217	24	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR218	22	Riffle			1	Low	11/6/202	eslie Run	EnviroScience
QALR219	20	Riffle			1	Low	11/6/202	eslie Run	EnviroScience
QALR220	21.5	Riffle			1	Low	11/6/202	eslie Run	EnviroScience
QALR221	25	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR222	21	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR223	24	Riffle			0	Significant	11/6/202	eslie Run	EnviroScience
QALR224	25	Riffle			1	Low	11/6/202	eslie Run	EnviroScience
QALR225	19	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR226	24	Run			0	Low	11/6/202	eslie Run	EnviroScience
QALR227	23	Pool			1	Low	11/6/202	eslie Run	EnviroScience
QALR228	21	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR229	18	Pool			1	Low	11/6/202	eslie Run	EnviroScience
QALR230	15.5	Run			1	Low	11/6/202	eslie Run	EnviroScience
QALR231	13	Riffle			0	Significant	11/6/202	eslie Run	EnviroScience
QALR232	17	Riffle			0	Significant	11/6/202	eslie Run	EnviroScience
QALR233	18	Riffle			0	Low	11/6/202	eslie Run	EnviroScience
QALR234	18	Riffle			0	Significant	11/6/202	eslie Run	EnviroScience
QALR235	15	Riffle			0	Significant	11/6/202	eslie Run	EnviroScience
QALR236	25	Riffle			0	Significant	11/6/202	eslie Run	EnviroScience
QALR237	24	Riffle			1	Low	11/6/202	eslie Run	EnviroScience
QALR238	17	Pool			1	Low	11/6/202	eslie Run	EnviroScience
QALR239	23	Riffle			0	Significant	11/6/202	eslie Run	EnviroScience
QALR240	16	Run			1	Low	11/6/202	eslie Run	EnviroScience

QALR241	16	Riffle			0	Significant	11/6/2023		slie Run	EnviroScience
QALR242	35	Riffle			0	Low	11/6/2023		slie Run	EnviroScience
QALR243	33	Riffle			1	Low	11/6/2023		slie Run	EnviroScience
QALR244	33	Run			0	Low	11/6/2023		slie Run	EnviroScience
QALR245	32	Run			1	Low	11/6/2023		slie Run	EnviroScience
QALR246	28	Run			1	Low	11/6/2023		slie Run	EnviroScience
QALR247	27	Run			1	Low	11/6/2023		slie Run	EnviroScience
QALR248	26	Run			1	Low	11/6/2023		slie Run	EnviroScience
QALR249	23	Run			1	Low	11/6/2023		slie Run	EnviroScience
QALR250	24	Riffle			1	Low	11/6/2023		slie Run	EnviroScience
QALR251	23	Riffle			1	Low	11/6/2023		slie Run	EnviroScience
QALR252	17	Run			0	Low	11/6/2023		slie Run	EnviroScience
QALR253	24	Riffle			1	Low	11/6/2023		slie Run	EnviroScience
QALR254	23	Run			1	Low	11/6/2023		slie Run	EnviroScience
QALR255	22	Pool			1	Low	11/6/2023		slie Run	EnviroScience
QALR256	24	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR257	23	Riffle			0	Significant	11/7/2023		slie Run	EnviroScience
QALR258	24	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR259	26	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR260	25	Pool			1	Low	11/7/2023		slie Run	EnviroScience
QALR261	18	Pool			0	Low	11/7/2023		slie Run	EnviroScience
QALR262	22	Pool			1	Low	11/7/2023		slie Run	EnviroScience
QALR263	18	Riffle			1	Significant	11/7/2023		slie Run	EnviroScience
QALR264	12	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR265	15	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR266	20	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR267	20	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR268	15	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR269	17	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR270	22	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR271	22	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR272	24	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR273	18	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR274	19	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR275	18	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR276	18	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR277	14	Pool			0	Low	11/7/2023		slie Run	EnviroScience
QALR278	10	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR279	14	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR280	16	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR281	16	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR282	23	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR283	28	Pool			0	Low	11/7/2023		slie Run	EnviroScience
QALR284	26	Pool			0	Low	11/7/2023		slie Run	EnviroScience
QALR285	22	Pool			0	Low	11/7/2023		slie Run	EnviroScience
QALR286	21	Pool			0	Low	11/7/2023		slie Run	EnviroScience
QALR287	20	Pool			1	Low	11/7/2023		slie Run	EnviroScience
QALR288	23	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR289	17	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR290	33	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR291	34	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR292	31	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR293	33	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR294	23	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR295	25	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR296	25.5	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR297	29	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR298	30	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR299	24	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR300	24	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR301	20	Riffle			0	Significant	11/7/2023		slie Run	EnviroScience
QALR302	14	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR303	25.5	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR304	29	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR305	30	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR306	20	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR307	26	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR308	16	Riffle			0	Significant	11/7/2023		slie Run	EnviroScience
QALR309	13	Riffle			0	Significant	11/7/2023		slie Run	EnviroScience
QALR310	25	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR311	23	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR312	23	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR313	22	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR314	22	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR315	22	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR316	24	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR317	28	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR318	25	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR319	29	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR320	22	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR321	23	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR322	19	Riffle			1	Low	11/7/2023		slie Run	EnviroScience
QALR323	23	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR324	29.5	Riffle			0	Low	11/7/2023		slie Run	EnviroScience
QALR325	32	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR326	29	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR327	16	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR328	24	Run			1	Low	11/7/2023		slie Run	EnviroScience
QALR329	21	Run			0	Low	11/7/2023		slie Run	EnviroScience
QALR330	29	Run			0	Low	11/7/2023		slie Run	EnviroScience

QALR331	25	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR332	24	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR333	22	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR334	21.8	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR335	19	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR336	34	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR337	33	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR338	27	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR339	17	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR340	18	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR341	32	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR342	31	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR343	24	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR343b	24	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR344	19	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR345	21	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR346	24	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR347	24.5	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR348	26	Riffle			1	Low	11/7/2023		eslie Run	EnviroScience
QALR349	22	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR350	22	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR351	22	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR352	25	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR353	25.5	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR354	19	Riffle			1	Low	11/7/2023		eslie Run	EnviroScience
QALR355	23	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR356	30	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR357	34	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR358	30	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR359	24	Pool			1	Low	11/7/2023		eslie Run	EnviroScience
QALR360	19	Pool			1	Low	11/7/2023		eslie Run	EnviroScience
QALR361	10	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR362	13	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR363	13	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR364	11	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR365	17.5	Riffle			1	Low	11/7/2023		eslie Run	EnviroScience
QALR366	11	Riffle			1	Low	11/7/2023		eslie Run	EnviroScience
QALR367	20	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR368	27	Pool			1	Low	11/7/2023		eslie Run	EnviroScience
QALR369	20	Pool			1	Low	11/7/2023		eslie Run	EnviroScience
QALR370	19	Pool			0	Low	11/7/2023		eslie Run	EnviroScience
QALR371	20	Pool			2	Low	11/7/2023		eslie Run	EnviroScience
QALR372	13	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR373	13	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR374	15	Riffle			0	Significant	11/7/2023		eslie Run	EnviroScience
QALR375	26	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR376	18	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR377	15	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR378	13	Riffle			1	Low	11/7/2023		eslie Run	EnviroScience
QALR379	11	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR380	13	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR381	20	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR382	16	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR383	13	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR384	13	Riffle			1	Low	11/7/2023		eslie Run	EnviroScience
QALR385	22	Run			2	Low	11/7/2023		eslie Run	EnviroScience
QALR386	25	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR387	18	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR388	17	Run			2	Low	11/7/2023		eslie Run	EnviroScience
QALR389	14	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR390	17	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR391	14	Riffle			1	Low	11/7/2023		eslie Run	EnviroScience
QALR392	13	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR393	17	Riffle			1	Low	11/7/2023		eslie Run	EnviroScience
QALR394	11	Run			0	Significant	11/7/2023		eslie Run	EnviroScience
QALR395	23	Riffle			0	Significant	11/7/2023		eslie Run	EnviroScience
QALR396	13	Riffle			0	Significant	11/7/2023		eslie Run	EnviroScience
QALR397	14	Riffle			0	Low	11/7/2023		eslie Run	EnviroScience
QALR398	16	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR399	14.5	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR400	17	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR401	20.5	Run			0	Low	11/7/2023		eslie Run	EnviroScience
QALR402	24	Pool			1	Low	11/7/2023		eslie Run	EnviroScience
QALR403	21	Pool			1	Low	11/7/2023		eslie Run	EnviroScience
QALR404	19	Run			1	Low	11/7/2023		eslie Run	EnviroScience
QALR405	17	Riffle			1	Low	11/7/2023		eslie Run	EnviroScience
QALR406	16	Riffle			1	Low	11/8/2023		eslie Run	EnviroScience
QALR407	13.5	Glide	Ldb		1	Low	11/8/2023		eslie Run	EnviroScience
QALR408	18.5	Riffle			0	Low	11/8/2023		eslie Run	EnviroScience
QALR409	25	Pool	Ldp		1	Low	11/8/2023		eslie Run	EnviroScience
QALR410	23	Run			1	Significant	11/8/2023		eslie Run	EnviroScience
QALR411	53	Run			1	Low	11/8/2023		eslie Run	EnviroScience
QALR412	17	Run			1	Low	11/8/2023		eslie Run	EnviroScience
QALR413	17.5	Run			1	Low	11/8/2023		eslie Run	EnviroScience
QALR414	20	Pool			1	Low	11/8/2023		eslie Run	EnviroScience
QALR415	21	Riffle			1	Low	11/8/2023		eslie Run	EnviroScience
QALR416	23	Run			1	Low	11/8/2023		eslie Run	EnviroScience
QALR417	22	Run			0	Low	11/8/2023		eslie Run	EnviroScience
QALR418	15	Pool			2	Low	11/8/2023		eslie Run	EnviroScience

QALR419	21	Pool			1	Low	11/8/2023	leslie Run	EnviroScience
QALR420	15	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR421	14	Pool			1	Low	11/8/2023	leslie Run	EnviroScience
QALR422	12	Riffle	Rb		1	Significant	11/8/2023	leslie Run	EnviroScience
QALR423	22.5	Pool			1	Low	11/8/2023	leslie Run	EnviroScience
QALR424	44	Glide			1	Low	11/8/2023	leslie Run	EnviroScience
QALR425	23	Pool			1	Low	11/8/2023	leslie Run	EnviroScience
QALR426	19	Pool			1	Low	11/8/2023	leslie Run	EnviroScience
QALR427	18	Pool			1	Low	11/8/2023	leslie Run	EnviroScience
QALR428	24	Pool	Lb		1	Low	11/8/2023	leslie Run	EnviroScience
QALR429	31	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR430	35	Riffle	Rb		1	Low	11/8/2023	leslie Run	EnviroScience
QALR431	35	Riffle	Small traces throughout		1	Low	11/8/2023	leslie Run	EnviroScience
QALR432	30	Riffle	Throughout gravel bed.		2	Low	11/8/2023	leslie Run	EnviroScience
QALR433	26	Glide			1	Low	11/8/2023	leslie Run	EnviroScience
QALR434	23	Pool	Rb. By horizontal tree		2	Low	11/8/2023	leslie Run	EnviroScience
QALR435	20	Pool			0	Low	11/8/2023	leslie Run	EnviroScience
QALR436	20	Riffle			1	Low	11/8/2023	leslie Run	EnviroScience
QALR437	20	Glide			1	Low	11/8/2023	leslie Run	EnviroScience
QALR438	18	Run	Right river		1	Low	11/8/2023	leslie Run	EnviroScience
QALR440	18	Riffle			1	Low	11/8/2023	leslie Run	EnviroScience
QALR441	18	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR442	23.5	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR443	18	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR444	21	Run	Rb		1	Low	11/8/2023	leslie Run	EnviroScience
QALR445	25	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR446	22	Pool			1	Low	11/8/2023	leslie Run	EnviroScience
QALR447	20	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR448	23	Run			0	Low	11/8/2023	leslie Run	EnviroScience
QALR449	16	Glide			2	Low	11/8/2023	leslie Run	EnviroScience
QALR450	13	Riffle			1	Low	11/8/2023	leslie Run	EnviroScience
QALR450	24	Run	Pipe discharging water right bank		0	Low	11/8/2023	leslie Run	EnviroScience
QALR451	22	Pool			1	Low	11/8/2023	leslie Run	EnviroScience
QALR461	21	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR452	23	Glide	Rb upstrm of trail		2	Low	11/8/2023	leslie Run	EnviroScience
QALR472	26	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR453	22	Riffle			0	Significant	11/8/2023	leslie Run	EnviroScience
QALR454	57	Run			1	Low	11/8/2023	leslie Run	EnviroScience
QALR455	31	Riffle	Lb see cherry tree		2	Low	11/8/2023	leslie Run	EnviroScience
QALR456	30.5	Riffle			1	Low	11/8/2023	leslie Run	EnviroScience
QALR526	20	Glide			1	Low	11/8/2023	leslie Run	EnviroScience
QALR457	27.5	Pool			1	Significant	11/8/2023	leslie Run	EnviroScience
QALR458	23	Pool			0	Low	11/8/2023	leslie Run	EnviroScience
QALR459	20	Glide			1	Low	11/8/2023	leslie Run	EnviroScience
QALR463	30	Glide			0	Low	11/8/2023	leslie Run	EnviroScience
QALR464	36	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR465	21.5	Run			3	Low	11/8/2023	leslie Run	EnviroScience
QALR466	21	Run	Center stream round boulder. On rock bar		2	Low	11/8/2023	leslie Run	EnviroScience
QALR467	20	Run			1	Low	11/8/2023	leslie Run	EnviroScience
QALR468	20	Riffle			1	Significant	11/8/2023	leslie Run	EnviroScience
QALR469	20	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR470	18	Pool			0	Low	11/8/2023	leslie Run	EnviroScience
QALR471	19	Riffle			0	Significant	11/8/2023	leslie Run	EnviroScience
QALR473	28	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR474	17	Glide			0	Low	11/8/2023	leslie Run	EnviroScience
QALR475	15	Run			0	Low	11/8/2023	leslie Run	EnviroScience
QALR476	14	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR477	17	Pool	Dwnst 10 ft from down tree rb		2	Low	11/8/2023	leslie Run	EnviroScience
QALR478	17	Run	Rb edge of pool		2	Low	11/8/2023	leslie Run	EnviroScience
QALR479	29	Run			1	Low	11/8/2023	leslie Run	EnviroScience
QALR480	21	Run			0	Low	11/8/2023	leslie Run	EnviroScience
QALR481	21	Run			1	Low	11/8/2023	leslie Run	EnviroScience
QALR482	18	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR483	19	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR484	32	Glide			1	Low	11/8/2023	leslie Run	EnviroScience
QALR485	29	Pool			1	Low	11/8/2023	leslie Run	EnviroScience
QALR486	18	Glide			1	Low	11/8/2023	leslie Run	EnviroScience
QALR487	19	Run			1	Low	11/8/2023	leslie Run	EnviroScience
QALR488	21	Run			0	Low	11/8/2023	leslie Run	EnviroScience
QALR489	10	Glide			0	Low	11/8/2023	leslie Run	EnviroScience
QALR490	19	Run			0	Significant	11/8/2023	leslie Run	EnviroScience
QALR491	31	Riffle			1	Low	11/8/2023	leslie Run	EnviroScience
QALR492	32	Pool	Ldb under big boulder		2	Low	11/8/2023	leslie Run	EnviroScience
QALR493	29	Riffle			1	Low	11/8/2023	leslie Run	EnviroScience
QALR494	31	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR495	34	Run			1	Low	11/8/2023	leslie Run	EnviroScience
QALR496	30	Pool			1	Stagnate	11/8/2023	leslie Run	EnviroScience
QALR497	28	Pool			0	Stagnate	11/8/2023	leslie Run	EnviroScience
QALR498	23	Pool			0	Low	11/8/2023	leslie Run	EnviroScience
QALR499	28	Pool			1	Low	11/8/2023	leslie Run	EnviroScience
QALR500	17.5	Glide	Mid channel boulder adjacent to root of dead fallen tree		3	Low	11/8/2023	leslie Run	EnviroScience
QALR501	15	Glide			1	Low	11/8/2023	leslie Run	EnviroScience
QALR501b	15	Glide			1	Low	11/8/2023	leslie Run	EnviroScience
Qalr502	14	Glide			1	Significant	11/8/2023	leslie Run	EnviroScience
QALR503	16	Run	Rock bar mid channel		3	Low	11/8/2023	leslie Run	EnviroScience
QALR504	25	Riffle			1	Low	11/8/2023	leslie Run	EnviroScience
QALR505	31	Riffle			0	Low	11/8/2023	leslie Run	EnviroScience
QALR506	29	Riffle			1	Low	11/8/2023	leslie Run	EnviroScience
QALR507	22	Run			1	Low	11/8/2023	leslie Run	EnviroScience

QALR508	33	Glide			1	Low	11/8/2		ie Run	EnviroScience
QALR509	31	Run			1	Low	11/8/2		ie Run	EnviroScience
QALR510	27	Run	Rb/channel next to boulders an root wads of tree		2	Low	11/8/2		ie Run	EnviroScience
QALR511	31	Riffle	Lb under boulders		3	Low	11/8/2		ie Run	EnviroScience
QALR512	22	Run			0	Low	11/8/2		ie Run	EnviroScience
QALR513	20	Glide	Lb by overhang large boulder slab		2	Low	11/8/2		ie Run	EnviroScience
QALR514	13	Glide			1	Low	11/8/2		ie Run	EnviroScience
QALR515	15	Glide	Rock bar adjacent to large boulder		3	Low	11/8/2		ie Run	EnviroScience
QALR516	22	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR517	26	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR518	22.5	Pool			1	Low	11/8/2		ie Run	EnviroScience
QALR519	21	Riffle	Lb bags in shrubs. Parallel to lwd		2	Low	11/8/2		ie Run	EnviroScience
QALR520	19	Pool			1	Low	11/8/2		ie Run	EnviroScience
QALR521	20	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR522	35	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR523	40	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR524	29.5	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR525	25	Pool			1	Low	11/8/2		ie Run	EnviroScience
QALR527	31	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR528	44	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR529	44	Riffle	Rb near fallen tree		2	Low	11/8/2		ie Run	EnviroScience
QALR530	42	Riffle	Rb in pool and gravel bar		2	Low	11/8/2		ie Run	EnviroScience
QALR531	35	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR532	21	Pool			0	Low	11/8/2		ie Run	EnviroScience
QALR533	21	Pool			0	Low	11/8/2		ie Run	EnviroScience
QALR534	22	Pool			1	Low	11/8/2		ie Run	EnviroScience
QALR535	19	Pool			1	Low	11/8/2		ie Run	EnviroScience
QALR536	21	Pool			0	Low	11/8/2		ie Run	EnviroScience
QALR537	37	Riffle			0	Low	11/8/2		ie Run	EnviroScience
QALR538	41	Riffle	30ft downstream from bench dbl tree. Left bank		2	Low	11/8/2		ie Run	EnviroScience
QALR539	37	Riffle			0	Low	11/8/2		ie Run	EnviroScience
QALR540	531	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR541	33	Pool			1	Low	11/8/2		ie Run	EnviroScience
QALR542	39	Riffle			0	Low	11/8/2		ie Run	EnviroScience
QALR543	39.5	Riffle			1	Low	11/8/2		ie Run	EnviroScience
QALR544	24	Pool			0	Low	11/8/2		ie Run	EnviroScience
QALR545	23	Pool			0	Low	11/8/2		ie Run	EnviroScience
QALR546	31	Glide			1	Low	11/8/2		ie Run	EnviroScience
QALR547	33	Pool			1	Low	11/8/2		ie Run	EnviroScience
QALR462	23	Riffle			0	Low	11/8/2		ie Run	EnviroScience
Qalr548	38	Pool	Lb upstream of log jam		3	Low	11/9/2		ie Run	EnviroScience
Qalr549	36	Pool	Bank to bank		3	Low	11/9/2		ie Run	EnviroScience
Qalr550	33.5	Pool			1	Low	11/9/2		ie Run	EnviroScience
Qalr551	35	Pool	Center gravel		3	Low	11/9/2		ie Run	EnviroScience
Qalr552	30	Pool	Center stream		2	Low	11/9/2		ie Run	EnviroScience
Qalr553	32	Pool	Rb sediment		3	Low	11/9/2		ie Run	EnviroScience
Qalr554	27	Pool			1	Low	11/9/2		ie Run	EnviroScience
Qalr555	19	Run	Lb between boulder and bank		2	Low	11/9/2		ie Run	EnviroScience
Qalr556	20	Riffle			0	Significant	11/9/2		ie Run	EnviroScience
Qalr557	35	Riffle			1	Low	11/9/2		ie Run	EnviroScience
Qalr558	24	Pool			1	Low	11/9/2		ie Run	EnviroScience
Qalr559	30	Pool			1	Low	11/9/2		ie Run	EnviroScience
Qalr560	32	Run			1	Low	11/9/2		ie Run	EnviroScience
Qalr561	41	Riffle			2	Low	11/9/2		ie Run	EnviroScience
Qalr562	35	Pool			1	Low	11/9/2		ie Run	EnviroScience
Qalr563	25	Pool	Under long slab		2	Low	11/9/2		ie Run	EnviroScience
Qalr564	22	Pool			1	Low	11/9/2		ie Run	EnviroScience
Qalr565	38	Pool			1	Low	11/9/2		ie Run	EnviroScience
Qalr566	25	Riffle			0	Low	11/9/2		ie Run	EnviroScience
Qalr567	31	Run			1	Low	11/9/2		ie Run	EnviroScience
Qalr568	20	Run			1	Low	11/9/2		ie Run	EnviroScience
Qalr569	34	Pool			0	Low	11/9/2		ie Run	EnviroScience
Qalr570	33	Run			1	Low	11/9/2		ie Run	EnviroScience
Qalr571	30	Glide			1	Low	11/9/2		ie Run	EnviroScience
Qalr572	29	Run			1	Low	11/9/2		ie Run	EnviroScience
Qalr573	24	Glide			1	Low	11/9/2		ie Run	EnviroScience
Qalr574	23.5	Glide			1	Low	11/9/2		ie Run	EnviroScience
Qalr575	23	Riffle			1	Low	11/9/2		ie Run	EnviroScience
Qalr576	22	Riffle			0	Low	11/9/2		ie Run	EnviroScience
Qalr577	31	Pool			1	Low	11/9/2		ie Run	EnviroScience
Qalr578	25	Pool	Under mid channel boulder		2	Low	11/9/2		ie Run	EnviroScience
Qalr580	24	Pool			1	Low	11/9/2		ie Run	EnviroScience
Qalr581	17	Run			1	Low	11/9/2		ie Run	EnviroScience
Qalr582	26	Riffle			1	Low	11/9/2		ie Run	EnviroScience
Qalr583	15	Riffle			0	Significant	11/9/2		ie Run	EnviroScience
Qalr584	22	Riffle			1	Low	11/9/2		ie Run	EnviroScience
Qalr585	20	Run			1	Low	11/9/2		ie Run	EnviroScience
Qalr586	33	Riffle	Mid channel gravel bar, upright rock		2	Low	11/9/2		ie Run	EnviroScience
Qalr587	33	Run			1	Low	11/9/2		ie Run	EnviroScience
Qalr588	28	Pool			0	Low	11/9/2		ie Run	EnviroScience
Qalr589	29	Run			0	Low	11/9/2		ie Run	EnviroScience
Qalr590	12	Glide			0	Low	11/9/2		ie Run	EnviroScience
Qalr591	20	Glide			1	Low	11/9/2		ie Run	EnviroScience
Qalr592	23	Glide			1	Low	11/9/2		ie Run	EnviroScience
Qalr593	36	Riffle			0	Low	11/9/2		ie Run	EnviroScience
Qalr594	40	Riffle			1	Low	11/9/2		ie Run	EnviroScience
Qalr595	44	Glide	Oxbow rb		2	Low	11/9/2		ie Run	EnviroScience
Qalr596	34	Glide	Rb oxbow/pool		2	Low	11/9/2		ie Run	EnviroScience
Qalr597	34	Pool			1	Low	11/9/2		ie Run	EnviroScience
Qalr598	28.5	Glide			1	Low	11/9/2		ie Run	EnviroScience

Qalr599	19	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr600	24	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr601	20	Run	Lb under largest slab		2	Significant	11/9/202		slie Run	EnviroScience
Qalr602	32	Riffle	Lb under slabs		2	Low	11/9/202		slie Run	EnviroScience
Qalr603	34	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr604	27	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr605	31	Riffle	Rb side channel under slab		2	Low	11/9/202		slie Run	EnviroScience
Qalr606	31	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr607	32	Riffle	Left bank in small pool . Cinder block up on bank. Chunks of chemical		3	Low	11/9/202		slie Run	EnviroScience
Qalr608	13.5	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr609	21	Glide			1	Significant	11/9/202		slie Run	EnviroScience
Qalr610	26	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr611	27	Riffle			0	Significant	11/9/202		slie Run	EnviroScience
Qalr612	27	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr613	23	Pool			0	Low	11/9/202		slie Run	EnviroScience
Qalr614	22	Pool	Lb boulder in channel		2	Low	11/9/202		slie Run	EnviroScience
Qalr615	20	Glide	Rb on bar		2	Low	11/9/202		slie Run	EnviroScience
Qalr616	14	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr617	17	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr618	21	Glide	Lb between cinder block and bank		3	Low	11/9/202		slie Run	EnviroScience
Qalr619	29	Glide			0	Low	11/9/202		slie Run	EnviroScience
Qalr620	54	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr621	49	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr622	48	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr623	43	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr624	38	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr625	19	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr626	19	Run			1	Low	11/9/202		slie Run	EnviroScience
Qalr627	19	Riffle			0	Significant	11/9/202		slie Run	EnviroScience
Qalr628	28	Riffle			0	Low	11/9/202		slie Run	EnviroScience
Qalr629	24	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr630	25	Run			1	Low	11/9/202		slie Run	EnviroScience
Qalr631	20.5	Glide			0	Low	11/9/202		slie Run	EnviroScience
Qalr632	28.5	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr633	21	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr634	25	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr635	19	Riffle			0	Low	11/9/202		slie Run	EnviroScience
Qalr636	22	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr637	29	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr638	32	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr639	26	Pool	In pool dwnstrm of tree rb		2	Low	11/9/202		slie Run	EnviroScience
Qalr640	30	Pool	Rb		2	Low	11/9/202		slie Run	EnviroScience
Qalr641	27	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr642	13.5	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr643	30	Riffle			0	Significant	11/9/202		slie Run	EnviroScience
Qalr644	38	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr645	38	Pool			0	Low	11/9/202		slie Run	EnviroScience
Qalr646	24	Pool	Lb in muck. 2ft deep water		2	Stagnate	11/9/202		slie Run	EnviroScience
Qalr647	19.5	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr648	26	Run			1	Low	11/9/202		slie Run	EnviroScience
Qalr649	31	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr650	22	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr651	20	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr652	25	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr653	25.5	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr654	25	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr655	16.5	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr656	17	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr657	18	Pool			1	Low	11/9/202		slie Run	EnviroScience
Qalr658	16.5	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr659	12	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr660	9	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr661	26	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr662	19	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr663	14	Glide			0	Low	11/9/202		slie Run	EnviroScience
Qalr664	16	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr665	17	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr666	13	Riffle	At unnamed trib		0	Low	11/9/202		slie Run	EnviroScience
Qalr667	20.5	Riffle			0	Low	11/9/202		slie Run	EnviroScience
Qalr668	14	Glide			0	Low	11/9/202		slie Run	EnviroScience
Qalr669	12	Riffle			0	Low	11/9/202		slie Run	EnviroScience
Qalr670	11	Glide			0	Significant	11/9/202		slie Run	EnviroScience
Qalr671	9.5	Riffle			0	Significant	11/9/202		slie Run	EnviroScience
Qalr672	32	Pool			1	Stagnate	11/9/202		slie Run	EnviroScience
Qalr673	17.5	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr674	17	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr675	11	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr676	13	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr677	14	Glide			1	Low	11/9/202		slie Run	EnviroScience
Qalr678	13.5	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr679	11	Glide			0	Low	11/9/202		slie Run	EnviroScience
Qalr680	13.5	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr681	21	Riffle			0	Low	11/9/202		slie Run	EnviroScience
Qalr682	25	Riffle			1	Low	11/9/202		slie Run	EnviroScience
Qalr683	28	Riffle			0	Low	11/9/202		slie Run	EnviroScience
Qalr684	21.5	Pool			1	Stagnate	11/9/202		slie Run	EnviroScience
Qalr685	23	Pool	At bend in river. Deep pool center channel		2	Stagnate	11/9/202		slie Run	EnviroScience
Qalr686	29	Pool			1	Stagnate	11/9/202		slie Run	EnviroScience
Qalr687	23.5	Pool			1	Stagnate	11/9/202		slie Run	EnviroScience

Qalr688	19	Pool			1	Stagnate	11/9/2022	leslie Run	EnviroScience
Qalr689	19	Run			1	Stagnate	11/9/2022	leslie Run	EnviroScience
Qalr690	18	Run			1	Low	11/9/2022	leslie Run	EnviroScience
Qalr691	16	Glide	Rb by pink flagging		2	Low	11/9/2022	leslie Run	EnviroScience
Qalr692	15	Riffle			1	Low	11/9/2022	leslie Run	EnviroScience
Qalr693	10	Riffle			0	Low	11/9/2022	leslie Run	EnviroScience
Qalr694	13	Pool			1	Stagnate	11/9/2022	leslie Run	EnviroScience
Qalr695	13	Run			1	Low	11/9/2022	leslie Run	EnviroScience
Qalr696	11	Riffle			0	Low	11/9/2022	leslie Run	EnviroScience
Qalr697	7	Glide			0	Low	11/9/2022	leslie Run	EnviroScience
Qalr698	6	Glide			0	Stagnate	11/9/2022	leslie Run	EnviroScience
Qalr699	15	Pool			1	Stagnate	11/9/2022	leslie Run	EnviroScience
Qalr700	10.5	Pool			1	Low	11/9/2022	leslie Run	EnviroScience
Qalr701	14	Glide			1	Low	11/9/2022	leslie Run	EnviroScience
Qalr702	12	Riffle			1	Low	11/9/2022	leslie Run	EnviroScience
Qalr703	5	Pool			0	Stagnate	11/9/2022	leslie Run	EnviroScience
			Across entire stream upstream of blockage. Here before we arrived. End of Leslie Run, downstream of bridge construction.						
Qalr704	18	Pool			3	Stagnate	11/9/2022	leslie Run	EnviroScience
Qalr579	25	Pool			1	Low	11/9/2022	leslie Run	EnviroScience
QAES1	147	Pool	Little Beaver Creek_ background		0	Low	11/10/2023	background-Sulphur Run	EnviroScience
QAL01504	73.5	Riffle	North fork Little Beaver Creek_ Background		0	Significant	11/10/2023	background-Leslie Run	EnviroScience
QAL01507	32	Pool	Bullrun Background		0	Low	11/10/2023	background-Leslie Run	EnviroScience
QAL01511	15	Pool	Background		0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR737	7.5	Riffle			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR705	14	Run	Midstream_ upstream of Sulphur Run		1	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR706	15.5	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR707	16	Pool			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR708	14	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR709	11	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR710	10	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR711	12	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR712	14.5	Riffle			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR713	13	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR714	13.5	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR715	11	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR716	11	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR717	12	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR718	9.5	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR719	12	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR720	11	Run	RDB_ Sediment		1	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR721	13	Riffle			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR722	11	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR723	12	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR724	21	Riffle	Stop before W Mainstreet bridge		0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR725	20	Pool	Upstream side of mainstreet bridge		0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR726	15	Pool			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR727	18	Pool			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR728	18.5	Pool	Downstream of stormwater culvert		0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR729	13	Pool	Downstream of unkown tributary_ LDB gravel		1	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR730	13	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR731	12	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR732	14	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR733	17	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR734	16	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR735	15	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR736	12	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR738	15	Riffle			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR739	9	Riffle			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR740	15	Riffle			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR741	9	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR742	14	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR743	15	Run			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR744	12	Riffle			0	Low	11/10/2023	background-Leslie Run	EnviroScience
QALR745	8	Pool	Sulfer Run Upstream 1st point		0	Low	11/10/2023	sulphur Run	EnviroScience
QALR746	3	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR747	3	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR748	4.5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR749	4	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR750	5.5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR751	5.5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR752	5	Run	LDB_ Sediment		1	Low	11/10/2023	sulphur Run	EnviroScience
QALR753	5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR754	5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR755	6	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR756	5.5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR757	6	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR758	7.5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR759	5.5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR760	5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR761	6	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR762	8.5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR763	15	Pool	East Marvin street culvert_ RDB Sediment		1	Low	11/10/2023	sulphur Run	EnviroScience
QALR764	5	Run	Upstream of E Marvin Culvert		0	Low	11/10/2023	sulphur Run	EnviroScience
QALR765	4	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR766	3.5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR767	7.5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR768	6.5	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR769	4	Run			0	Low	11/10/2023	sulphur Run	EnviroScience
QALR770	4.5	Pool			0	Low	11/10/2023	sulphur Run	EnviroScience

QALR771	2	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR772	1.5	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR773	1	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR774	4	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR775	1.5	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR776	6	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR777	3	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR778	4	Pool			0	Low	11/10/2023		phur Run	EnviroScience
QALR779	4	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR780	3	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR781	4.5	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR782	2	Run			0	Low	11/10/2023		phur Run	EnviroScience
QALR783	3.5	Run			0	Low	11/10/2023		phur Run	EnviroScience
			Also QASR-BG3_End of 1000 ft upstream Sulfer Run							
QALR784	4	Run	RDB and midstream_sediment		0	Low	11/10/2023		phur Run	EnviroScience
QASR1	5	Run	Background		1	Low	11/10/2023		phur Run	EnviroScience
QASR-BG1	9	Riffle	Background		0	Low	11/10/2023		Background-Sulphur Run	EnviroScience
QASR-BG2	9	Run	Background		0	Low	11/10/2023		Background-Sulphur Run	EnviroScience
QASR-BG3	4	Run	Background		0	Low	11/10/2023		phur Run	EnviroScience
QAW009	12.5	Run	Background		0	Low	11/10/2023		Background-Leslie Run	EnviroScience
QAW011	4	Run	Background		0	Low	11/10/2023		Background-Sulphur Run	EnviroScience