TETRA TECH

Pavement Surface Condition Surveys 2016
Project Report

PRESENTED TO

British Columbia Ministry of Transportation and Infrastructure

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EXECUTIVE SUMMARY

The British Columbia Ministry of Transportation and Infrastructure (BCMoTI) has contracted Tetra Tech Canada Inc. (Tetra Tech) to provide automated network-level pavement surface condition surveys for the two-year period from 2016 to 2017 with an option for 2018 to 2019. In 2016, Tetra Tech collected regular network roadway condition data and digital images on 3,416 km of Primary Highways, 2,415 km of Secondary Highways, and 3,096 km of Side Roads. Digital images only were provided on 378 km of gravel and sealed highway sections. In addition, 223 km of project level surveys, representing 153 km of highway and 70 km of Side Roads, were collected in Contract Areas 21 and 22 on roads affected by the BC Hydro Site C Dam project.

The 2016 British Columbia provincial pavement condition data was collected using Tetra Tech's latest generation pavement surface profiling (PSP) and integrated data collection vehicle, PSP-7000, which incorporates multiple subsystems for single-pass data collection of many parameters. For this project, the PSP-7000 collected pavement condition data including International Roughness Index (IRI), rut, and pavement distress information, as well as digital right-of-way images at 10 m intervals. The PSP-7000's inertial profiler provided the IRI measurements, while the rut and distress measurements were provided by a Pavemetrics Laser Crack Measurement System 3D pavement profiling system.

The data collection program started in early June and ran until early August, with a few remaining roads collected in late August and September. The data collection program for 2016 focused on highways and Side Roads in Contract Areas 8 and 14 to 28, encompassing the Okanagan and Nicola Valleys plus most of central and northern British Columbia. The collected data was processed in Tetra Tech's offices and the final results were delivered to BCMoTI on January 20, 2017.

This report documents the methodology adopted for data collection and processing, an overview of the data collection equipment used for this project, a description of the procedures followed for data collection, processing, and quality assurance/quality control, along with recommendations for future improvements for the delivery of these pavement condition data surveys. Appendix A contains a detailed listing of the roads surveyed, including survey date and time plus start and end kilometres and spatial coordinates, as well as a list of special event kilometre locations encountered on the surveys.

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LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of British Columbia Ministry of Transportation and Infrastructure and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than British Columbia Ministry of Transportation and Infrastructure, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this report is subject to the terms and conditions stated in the project contract.

1.0 INTRODUCTION

The British Columbia Ministry of Transportation and Infrastructure (BCMoTI) has contracted Tetra Tech Canada Inc. (Tetra Tech) to provide automated network-level pavement surface condition surveys for the two-year period from 2016 to 2017 with an option to renew for 2018 to 2019. These surveys will be conducted on all Provincial Primary and Secondary Highways as well as 2,353 Side Roads located throughout the province. During the four year period, all Provincial Highways and all Side Roads on the test list will be tested twice.

This document represents the final report for the 2016 Provincial Roadway Condition Data Collection Program to collect Digital Video, Pavement Profile, International Roughness Index (IRI), Rut Depth, and Laser Crack Measurement System (LCMS) Pavement Distress Rating data on portions of the Provincial Highway and Side Road Networks in the Province of British Columbia. Regular network roadway condition and digital image data was collected on 3,416 km of Primary Highways, 2,415 km of Secondary Highways, and 3,096 km of Side Roads. In addition, digital images only were provided on 378 km of Secondary Highways 20, 37, and 52, representing gravel and sealed sections of these highways. An additional 223 km of project level surveys, representing 153 km of highway and 70 km of Side Roads, were collected in Contract Areas 21 and 22 on roads affected by the BC Hydro Site C Dam project.

The body of the report highlights the approach and methodology, and identifies any exceptional or anomalous aspects of the data collection program. The complete data collection schedule information tables and recorded event tables for the Primary and Secondary Highways and Side Road sections are presented in Appendix A

2.0 APPROACH AND METHODOLOGY

The 2016 British Columbia provincial pavement condition and digital image data was collected using Tetra Tech's latest generation pavement surface profiling (PSP) and integrated data collection vehicle, PSP-7000. This vehicle contains multiple subsystems, including an inertial roadway profile and rut measurement system, a 3D PSP system for pavement distress measurements, multiple digital cameras, and a high resolution cross-plane LiDAR for capturing transportation corridor 3D point clouds. All systems are fully integrated with the onboard distance measuring instrument (DMI) and inertially aided GPS subsystems providing accurate linear and spatial positioning of all collected data.

The data collection program commenced on June 7, 2016 with calibration site survey testing on five test sites, which had been set up on Highways and Side Roads in the vicinity of Prince George, BC. After an initial walkthrough of the survey sites with BCMoTI representatives, the PSP-7000 vehicle collected a total of five surveys on each site. The IRI and rut datasets were processed in the field and submitted to BCMoTI. Following acceptance of the IRI/Rut data and an initial review of the digital image and LCMS data, the PSP-7000 was cleared to start production data collection. The LCMS distress data was returned to Tetra Tech's offices for further processing, with initial results being submitted in the last week of June. Roads identified for collection were driven in the specified direction as directed from the shapefile and spreadsheet provided. Data was collected in daylight hours only when pavement surfaces were dry and free from debris. Some exceptions occurred where geographical constraints and circumstances did not permit perfect collection opportunities.

The 2016 data collection program included testing in the central interior and north regions of the province. Production data collection commenced on June 9, 2016 with surveys in the South Okanagan Contract Area. The survey vehicle then moved west and north collecting data in the Highway 5 and Highway 97 Cariboo corridors, then the Highway 16 corridor, and finally the Highway 97 corridor north to the Peace River region of the province. The initial data collection schedule anticipated completion of data collection in the third week of July; however, highly

variable weather and an untimely mechanical failure delayed testing. The majority of the testing was completed on August 4, 2016, but a few remaining sites required returning to the province in late August and September.

The collected data was returned to Tetra Tech's offices in batches, usually during the regular field crew shift changes. All datasets were uploaded onto Tetra Tech's data storage file servers for initial quality assurance/quality control (QA/QC) acceptance review and data processing. The initial data review revealed a few surveys that had mistakenly been marked as tested. This information was relayed to the field crew and input into the field survey mapping software so that the missing data from these roads could be collected while the vehicle was still within the general area.

The initial data processing and QA/QC was completed at the end of September and an interim dataset was sent to BCMoTI on October 3, 2016 for review. On December 14, 2016, BCMoTI directed Tetra Tech to provide a final dataset including a few adjustments to the distress ratings. The final dataset was sent to BCMoTI on January 20, 2017.

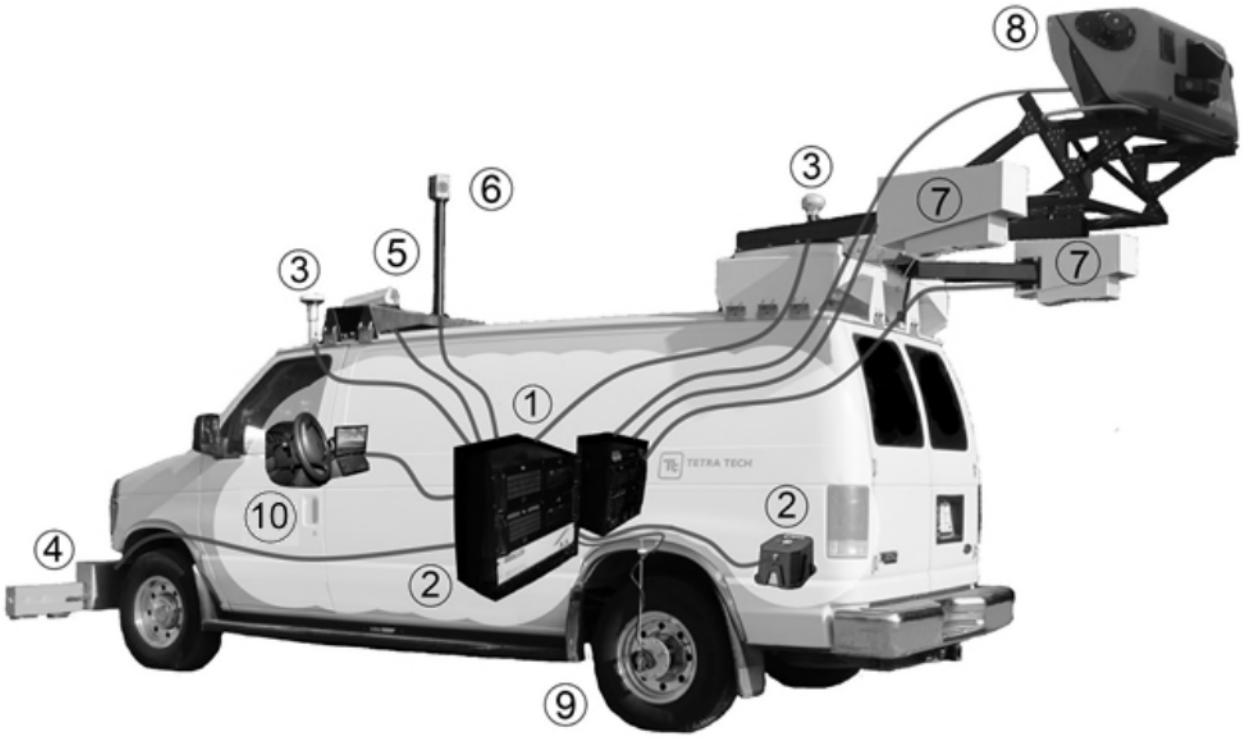
3.0 EQUIPMENT DESCRIPTION

The 2016 BC Provincial data collection project used one of Tetra Tech's PSP data collection platforms for simultaneous collection of five distinct roadway data measures: longitudinal profile, transverse profile, pavement distress, forward ROW images, and location referencing. The latest generation PSP vehicle (PSP-7000) is a state-of-the-art and highly integrated data collection platform. An overview of the PSP-7000 is provided below.

For this project, the IRI measurements were collected using the inertial longitudinal and transverse profiler mounted on the front bumper. The inertial profiler, which conforms to ATSM standard E950 and AASHTO standard M328-10, collects measurements at a fixed sampling rate of 21 mm along the road. These measurements are processed in the office to calculate the IRI according to ASTM standard E1926. Although the inertial profiler is capable of an 11-point rut measurement, this measurement was not used in favour of the LCMS rut calculation capability.

The PSP includes a high resolution digital ROW imaging system, capable of acquiring images at any client-specified interval. All images acquired during data collection include linear chainage and geo-spatial position meta-data. The associated meta-data allows the import of survey imagery into GIS, web-map, photolog or photogrammetry applications, which allow the identification, inventory, and referencing of all discernible infrastructure and appurtenances located within the driven survey area.

The PSP-7000 contains two separate 3D measurement technologies - the Laser Crack Measurement System (LCMS), providing continuous 3D roadway surface elevation profiles for use in automated pavement surface condition assessment, and a high resolution cross-plane LiDAR for capturing transportation corridor 3D point clouds useful for ROW inventory, geometric design, safety audits, and clearance applications. The LCMS allows the objective detection and measurement of the surface pavement surface distress types and wheelpath rutting required for this assignment. The LiDAR data was not required for this contract, but was collected for all roads in case its use is requested for additional assignments.



Key **System**

1. Integrated Cybernetics Corporation data control, acquisition, and storage system. This subsystem is used to reliably store and backup active survey data and provides real-time field data QA/QC capabilities.
2. High-precision inertial vehicle positioning and orientation system (POS). This subsystem is critical for accurate geo-spatial referencing and roadway geometric and LiDAR measurements.
3. High performance GPS and real-time DGPS correction receivers. These components combined with the inertial POS system provide accurate gap-free spatial coordinates in areas of limited GPS availability.
4. Inertial longitudinal and transverse profiler. This subsystem provides the integrated IRI and fixed-point transverse rut measurements.
5. Fully integrated, spatially referenced digital right-of-way (ROW) image system.
6. Fully integrated, spatially referenced digital 360° panoramic image system.
7. Fully integrated, spatially referenced 3D PSP system (LCMS). This system provides high-resolution transverse profiles (complex ruts) and automated pavement distress capabilities.
8. Fully integrated, spatially referenced 360° LiDAR system.
9. High resolution distance measurement wheel encoder (0.5 mm resolution).
10. Fully integrated operator console.

4.0 DATA COLLECTION AND PROCESSING

4.1 Pre-qualification and Verification Surveys

Prior to the commencement of the data collection program, pre-qualification surveys were conducted on five different test sites in the vicinity of Prince George, BC. The initial pre-qualification surveys were conducted on June 7, 2016 under the direction of Mr. Shawn Landers of Opus International Consultants (Canada) Ltd., and Mr. Rhett Cole of Insight Roadway Analysis Ltd, on behalf of BCMoTI. The survey vehicle was directed to test all sites five times each and to produce summary tables listing the IRI and rut depths for each test run for review. The results were compared against each other for repeatability and against manual ratings previously collected by Mr. Rhett Cole.

After an initial verification that the LCMS profiler was collecting valid 3D pavement profile data, the LCMS data was returned to Tetra Tech's offices for processing. Initial distress processing was completed and submitted for review on June 27 and, following feedback from BCMoTI, a second iteration of processing was completed with parameters slightly adjusted to more closely match the manual site ratings. The second processing iteration was provisionally accepted subject to further testing on a number of other validation sites set up on some of the production survey roads.

Following substantial completion of data collection and office processing of the LCMS distress datasets, BCMoTI provided Tetra Tech with the locations of eight blind sites on tested highways and Side Roads on which BCMoTI had obtained manual distress rating results. Tetra Tech compiled and submitted the data for these sites for review.

From the blind site review, it was determined that the edge cracking is being substantially impacted by false detections due to the presence of rumble strips, which are not currently recognized and handled by the LCMS manufacturer's crack detection modules. Tetra Tech made a number of attempts to filter out the false detections which were partially, but not completely, successful. After reviewing the results, BCMoTI directed Tetra Tech to modify the edge cracking rules to exclude cracks located outside the fog line.

4.2 Highway and Side Road Referencing

Production data collection for this project commenced on June 9, 2016 and continued until August 4, 2016 at which time most of the project roads had been collected. Following a two week break during which the collected data was reviewed for completeness and initial quality assessment, the field crew returned to British Columbia to collect the few remaining project roads. A further data collection in early September was required to pick up some remaining roads passed over due to inclement weather.

Data collection for all highways was conducted in the primary highway direction, usually north or east, as defined by the survey schedule provided by BCMoTI. In addition, major divided highway sections of Highway 5 and Highway 97C were also tested in the opposite travel direction. Most of the highway datasets were collected in segments of length ranging from 30 to 70 km. Each data collection segment started and ended at recognizable landmarks (such as intersections or bridge decks) on the highway. During office post processing, the start and end survey locations were adjusted using GPS coordinates so that the end location for one segment matched the start location for the next segment, within a tolerance of one metre.

Data collection for Side Road surveys were conducted mostly in the direction specified in the survey schedule provided by BCMoTI. In a few cases, the correct survey direction was not completely clear (for example, 15-A-@-03748 Pinantan-Pritchard Road appeared to be an east-west road, but the test direction was labelled as "South"), so the field crew was required to make an assumption about the correct survey direction. In the few cases, where

it was determined that the survey had been conducted opposite to the intended direction, the data was reported referenced to the decreasing chainage lane.

In most cases, Side Road surveys were collected in a single pass for the entire road. However, for a few roads, it was necessary for operational reasons to break the road into two different segments. In these cases, during office post-processing the start and end points for the different segments were adjusted to match each other to ensure continuous linear referencing of the data for the entire road. In a few cases, the road alignment was more complex than a single line (for example there were a number of “T” shaped roads) requiring multiple passes for complete coverage of the road.

In many cases, the start or end point for the Side Road survey was unclear as it appeared that paved section of the road continued further than the length listed in the survey schedule. In those cases, the field crew were instructed to collect data for the full length of the paved road. During post-processing, all length discrepancies were checked, and were reported to BCMoTI at the time of the interim delivery. BCMoTI subsequently reviewed all roadways with length discrepancies and replied to Tetra Tech with instructions on which sections of road were required to be submitted.

At the start of the data collection program, BCMoTI approached Tetra Tech with a request to add some extra project level testing as part of the BC Hydro Site C Dam project. In most cases, the project level surveys comprised opposite direction surveys on sections of road that were already on the network data collection list, but there were a few other roads where project level testing was required in both travel directions. In all cases, the same deliverables were provided as for the network level surveys.

The total length of roads tested for this contract is presented in Table 1:

Table 1: Total Length of Roads Tested

Route Type	Network Level Testing Requested	Network Level Length Tested	Network Level Length Omitted	Project Level Length Tested
Primary Highway	3418.16 km	3415.81 km	2.09 km	91.93 km
Secondary Highway	2403.15 km	2414.65 km	0.00 km	61.34 km
Secondary – Images Only	238.31 km	377.78 km	0.83 km	0.00 km
Side Road	3035.66 km	3095.96 km	13.35 km	70.12 km

The discrepancy between the requested and tested Secondary Highway lengths is due to the testing of a recently paved section of Highway 52 from km 146.30 to km 157.57. The extra length of Secondary Highways requiring images only is a result of testing Highway 37 all the way to Dease Lake. The surveyed length of numerous Side Roads were significantly different from the provided test lengths. The major discrepancies were referred to BCMoTI for resolution, resulting in an additional 60 km of Side Roads being tested.

Appendix A includes a tabular list of all the different highway and Side Road surveys conducted during the survey program, including date and time of collection, start and end kilometres and spatial coordinates. A comments field identifies any special issues associated with the road. A separate table lists all the anomalous events encountered on the survey, including bridge decks, railroad crossings, rumble strips, cattle guards, construction zones and lane detours to avoid pedestrians or slow moving vehicles.

4.2.1 Side Road Referencing Issues

During data processing, Tetra Tech noted a number of issues with the Side Road start and end GPS coordinates provided by BCMoTI in the survey schedule. In most cases, the provided end coordinate was located a short distance away from the end of the road. It is surmised that these coordinates may have been compiled from the tabular reports from previous pavement condition data surveys – the tabular reports only contain a single GPS coordinate for the start of each 50 m interval so the end coordinate of the last interval is missing. Tetra Tech has provided BCMoTI with a shape file containing the survey path for all highway and Side Road datasets tested in 2016, including attributes listing the start and end GPS coordinates.

In addition, it was noted that many of the start and end coordinates listed are in the opposite order to the Side Road direction listed in the survey schedule. In those cases, Tetra Tech has assumed that the listed survey direction is correct and that the start and end coordinates should be swapped.

The information regarding pavement surface type was not always up to date with the current condition. In several instances the surface was identified by available sources as being paved, but in truth was gravel. This resulted in lost collection time and potential damage to the sensitive automated equipment. The opposite situation also occurred where roads that were identified as having a gravel or loose surface were paved beyond the lengths identified in the available data.

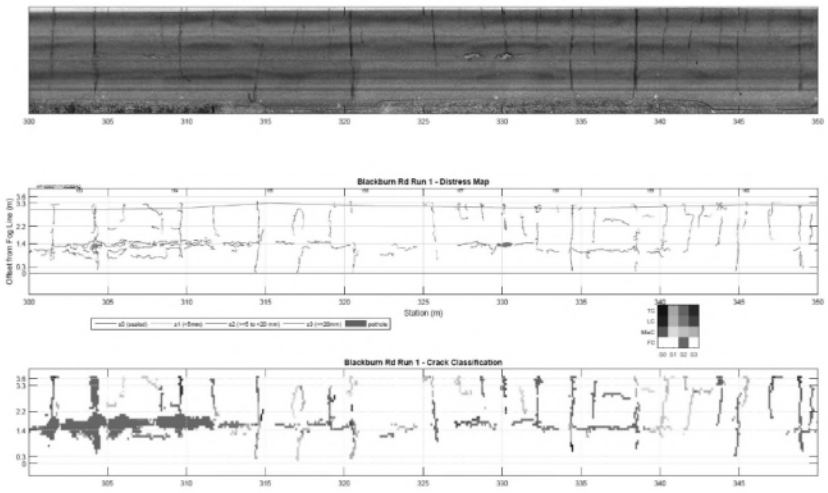
4.3 Quality Assurance/Quality Control

Tetra Tech implemented a multi-level quality management program for this project to ensure that quality data was being collected and reported. This quality management program included field assessment of all collected data to catch many common data collection mistakes, initial review of all data when delivered to Tetra Tech's offices, detailed review of LCMS datasets to ensure that the distress data was being correctly identified by the manufacturer's processing routines, automated spatial correlation between surveyed datasets against the reference roadway alignments provided by BCMoTI, and final review of reported parameters to ensure reasonable consistency of the IRI, rut, and distress rating data.

Tetra Tech has developed a proprietary field QA/QC tool that runs in real-time on the data collection computers. This program monitors each collected dataset during idle periods between data collection surveys checking for many common issues such as image contrast and laser sensor errors. This continual monitoring of data alerts the crew to potential issues that can be easily rectified in the field while the data collection vehicle is still in the vicinity of the survey that needs to be repeated. While this level of assessment cannot complete a thorough analysis of all datasets, it has proved useful in trapping many easy-to-fix issues.

Data processing was commenced as soon as the data disks were delivered to Tetra Tech's offices and uploaded to our data storage servers with the aim of quickly identifying any remaining deficient datasets. The initial processing focused on data referencing and ensuring that all related subsystems contain complete datasets. The start and end points of all surveys were checked both against the reference alignments in the shape files provided by BCMoTI and visually using the collected digital images. Exceptions were noted for further review. In cases where the proper survey segment could not be conclusively determined, the road was referred to BCMoTI for resolution.

The LCMS distress datasets were reviewed extensively to verify that the processing algorithms were correctly identifying and quantifying the level of distress of each road segment. Initially, the BCMoTI pre-qualification and blind site survey sites were used to validate the distress processing algorithms being used. Details of this procedure are discussed above in Section 4.1, and an example plot is shown in the figure above. After this initial review, additional verification of the results was performed through correlation of the distress data with the road conditions observed in the ROW digital images.



Particular attention was given to reviewing the bleeding distress results, as algorithms for detecting this distress were only introduced to the LCMS distress processing library in spring 2016. After extensive review on sections where the LCMS bleeding module reported this distress, it was determined that almost all of the detections were false positives. As a result, a decision was made to suppress the reporting of this distress in 2016. The performance of the LCMS in detecting bleeding will be re-evaluated using 2017 versions of the LCMS library

Prior to delivery, all IRI, rut, and distress rating data was plotted and checked for reasonable consistency. These plots were reviewed in detail looking for anomalous readings. These anomalous readings were cross-checked against the digital images to verify whether the anomalous readings were valid (due to a localized section of poor pavement) or invalid (caused by an anomalous event such a bridge deck or a construction zone).

After the QA/QC procedures were complete, a few remaining deficiencies were noted that could not be resolved:

- The section of Highway 2 between the Mile Zero traffic circle and the junction with Highway 97 was inadvertently omitted.
- A 1 km section of the gravel portion of Highway 20 (at km 96) was not collected due to an equipment failure.
- There are missing digital images on one Side Road, 19-B-@-02159 Nukko Lake Road, plus portions of two others, 18-B-S-00203 Red Bluff Road and 19-B-@-00225 Chief Lake Road, due to corrupted image files.

4.4 Delivered Data

The data delivered to BCMoTI consisted of DBF format tables containing IRI, rut and distress data at 50 m intervals along each tested road, forward looking ROW digital images at 10 m intervals for all highways and Side Roads, a shape file containing image referencing metadata for all images, and another shape file containing the driven path for all data collection survey segments. An interim delivery was sent to BCMoTI, addressed to David Hosick at the Ministry's Victoria offices, on October 3, 2016 and the final delivery was couriered on January 20, 2017. Each delivery was contained on a single external hard drive.

The IRI, rut, and distress datasets were delivered in DBF tabular format according to the specifications in section 7.6 of the British Columbia 2016 Pavement Surface Condition Rating Manual (Rating Manual). Individual DBF files were provided for each different survey segment and amassed files containing results from all datasets (one for

highways, one for Side Roads, and one for the separate project level surveys) were provided for ease of importing data into the provincial pavement management system.

Forward ROW digital images were delivered in JPG format organized by survey segment and named according to the specifications in Section 7.7 of the Rating Manual. An image referencing shape file for use in importing the image metadata to the RPMS and Photolog systems is provided according to the specifications in Section 7.7.9 of the Rating Manual.

5.0 ISSUES AND ASSOCIATED RECOMMENDATIONS

For the most part, the overall data collection process worked fairly well. The pre-qualification and ongoing validation process was efficient and fair, and interactions between BCMoTI and Tetra Tech were prompt, cooperative and informative. One issue of significance with the data collection process was the impact that inclement weather had when collecting some of the geographically constrained regions encountered in the Highway 16, Highway 97 and Highway 37 corridors. Long distances of deadheading occurred when weather did not permit collection in the intended area of testing. Unfortunately there is not much that can be done to improve on this issue and BCMoTI was very understanding of the abnormal 2016 testing season in working with Tetra Tech to repeatedly adjust the collection schedule.

A secondary issue with the collection process was the surface type data available and the actual field condition encountered. Further investigation and updated surface type data would greatly help in the data collection process by reducing time in collection due to confusion and decisions required in the field as well as reducing any potential risk to the highly sensitive automated collection equipment required for this project. Tetra Tech understands the difficulties in locating and updating the surface type for the Side Roads, particularly in remote areas, and is willing to work with BCMoTI to help provide the most accurate data possible.

Tetra Tech encountered some issues with the Side Road collection inventory list and shape file as supplied by BCMoTI. The provided shape file was found to contain a number of errors where the attribute information had been corrupted by being offset by one record from the spatial line work. Tetra Tech conducted a quick review and identified a number of locations where this corruption had occurred. By comparison to online map sources, it was observed that a couple of highway segments were mislabelled, but it appeared that none of the Side Road surveys scheduled for 2016 were affected. However, it is believed that a few of the Side Roads scheduled for testing in 2017 may be affected. Tetra Tech recommends that, if possible, BCMoTI should review the source dataset for this shape file to resolve these issues. If requested, Tetra Tech will provide details of the issues identified to date.

In addition, the shape file representation of the Side Roads that was provided by BCMoTI did not exactly match the schedule of roads to be surveyed.

- In a number of cases, the shape file segment contained large sections of some Side Roads that were not part of the data collection program. Typically, these extra sections of roads were unpaved roadway sections. In a few cases, the field crew lost significant time checking these segments trying to find the location where data collection was required. While start and end coordinates were provided for about 90% of the roads, these coordinates did not prove very helpful as it would have required a substantial amount of work to merge this data with the spatial line work and provide adequate QA/QC prior to the start of data collection.

- In a few cases, it appeared that the shape file line segment was much shorter than the length of road listed in the survey schedule. For example, 08-D-@-01013 Elk Road (in the vicinity of West Kelowna) is listed in the survey schedule with a length of 1.41 km, but the shape file representation of this road is only 0.29 km long, extending from Carrington Road to Louie Drive. A review of online maps for this road suggests that the intended start location is probably at the intersection with Ridge Estates Drive, but the incorrect spatial information

resulted in this road not being collected completely. Additionally, this route crosses Highway 97, but a median barrier prevents direct travel across the highway, so data collection on this road would result in two very short (~100 m) survey segments.

- Many roads on the Side Road schedule do not conform to a single line segment from origin to destination. Some of these roads have multiple discontinuous sections with a missing piece in the middle, either a road section that was never constructed or a section where passage is no longer possible or an unpaved road section. In other cases, there may be multiple branches of the road, for instance a main section parallel to a highway or major Side Road plus one or more access segments between the main section and the parallel major route. When the field crew encounters these roads, it is unclear in which order and in what directions these road segments should be traversed so that the reported data can be properly referenced to match the previous year's survey data. A separate listing of each individual survey segment would be very helpful on these roads.

Tetra Tech recommends that it would be advantageous for BCMoTI to consider ways to improve the delivery of this essential information to future data collection contractors so that the process can be made more efficient and that the resulting data can be as spatially accurate as possible. The form in which the information was provided presented many challenges in compiling accurate information for our data collection crews. Tetra Tech has provided some comments on some of these roads in the survey segment tables in Appendix A.

6.0 CLOSURE

This represents the final report for the 2016 Pavement Surface Condition Data Collection Program in the Province of British Columbia. If you should have any questions, please contact the undersigned.

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APPENDIX A

LISTING OF DATA COLLECTION SURVEYS AND SPECIAL EVENT LOCATIONS

Survey Limits 2016

Route	Route Name	Start km	End km	Date	Start Time	End Time	Start Latitude	Start Longitude	End Latitude	End Longitude	Comments
08-A-@-00014	APEX MOUNTAIN ROAD	0.000	13.617	2016/06/12	08:56:42	09:19:02	49.390930	-119.918573	49.414429	-119.815265	
08-A-@-00031	EASTSIDE ROAD	0.000	9.400	2016/06/09	16:55:51	17:05:37	49.346868	-119.571388	49.423874	-119.573883	
08-A-@-00038	WILLOWBROOK ROAD	0.000	7.286	2016/06/09	16:18:51	16:27:02	49.269685	-119.603259	49.318304	-119.638288	
08-A-@-00039	FARLEIGH LAKE ROAD	0.000	2.402	2016/06/12	08:21:40	08:25:07	49.439740	-119.734704	49.453631	-119.752516	
08-A-@-00063	GREEN LAKE ROAD	0.000	12.533	2016/06/09	16:39:12	16:54:05	49.269695	-119.603260	49.345658	-119.580190	
08-A-@-00066	MCLEAN CREEK ROAD	0.000	8.205	2016/06/09	17:32:07	17:41:51	49.343779	-119.566747	49.380919	-119.560524	
08-A-@-00078	GREEN MOUNTAIN ROAD	0.000	20.085	2016/06/12	09:19:02	09:40:45	49.414429	-119.815265	49.479049	-119.597133	
08-A-@-00079	CARMI ROAD	0.000	7.264	2016/06/09	13:22:51	13:32:13	49.482577	-119.548621	49.484109	-119.509579	
08-A-@-00080	GREYBACK MOUNTAIN ROAD	0.000	1.567	2016/06/09	13:00:23	13:02:40	49.520014	-119.542414	49.522469	-119.524489	
08-A-@-00090	PENTICTON I.R. ROAD	0.000	3.186	2016/06/12	08:05:34	08:09:50	49.450951	-119.609304	49.476534	-119.608468	
08-A-@-00104	WHITE LAKE ROAD	0.000	13.767	2016/06/09	15:14:36	15:30:38	49.376098	-119.613344	49.316781	-119.712841	two segments due to missed turn
08-A-@-00104	WHITE LAKE ROAD	13.767	14.901	2016/06/09	15:32:37	15:34:18	49.316780	-119.712849	49.315494	-119.727399	
08-A-@-00107	PEACHCLIFF DRIVE	0.000	0.647	2016/06/09	17:53:46	17:54:47	49.339027	-119.563262	49.344612	-119.562908	
08-A-@-00109	TAGGERT CRESCENT	0.000	0.690	2016/06/12	10:02:49	10:03:56	49.346591	-119.711969	49.347498	-119.719588	
08-A-@-00111	ALLENDALE LAKE ROAD	0.000	1.654	2016/06/09	17:58:43	18:00:39	49.341638	-119.540392	49.341479	-119.517685	
08-A-@-00147	BOBCAT ROAD	0.000	0.548	2016/06/12	09:57:59	09:58:48	49.363834	-119.687420	49.363066	-119.682080	
08-A-@-00173	PHILPOTT ROAD	0.000	0.380	2016/06/09	17:22:20	17:22:59	49.373034	-119.564819	49.371759	-119.569380	
08-A-@-00180	DEVON DRIVE	0.000	1.046	2016/06/09	17:19:07	17:21:00	49.377220	-119.563037	49.381343	-119.560469	
08-A-@-00234	NOYES ROAD	0.000	0.815	2016/06/09	12:44:59	12:46:22	49.578274	-119.576447	49.584595	-119.574021	
08-A-@-00249	ROBINSON AVENE	0.000	1.940	2016/06/09	12:32:43	12:35:42	49.597734	-119.602944	49.592427	-119.578836	
08-A-@-00250	NARAMATA ROAD	0.000	4.435	2016/06/09	11:19:25	11:24:24	49.556073	-119.569828	49.592531	-119.578720	
08-A-@-00251	NORTH NARAMATA ROAD	0.000	8.885	2016/06/09	11:24:24	11:34:48	49.592486	-119.578681	49.657074	-119.626824	
08-A-@-00255	MILL ROAD	0.000	1.775	2016/06/09	12:11:46	12:14:48	49.599242	-119.599078	49.611908	-119.601055	
08-A-@-00270	GAMMON ROAD	0.000	2.165	2016/06/09	12:40:03	12:42:53	49.568523	-119.574360	49.587745	-119.577335	
08-A-@-00271	FIRST STREET	0.000	0.868	2016/06/09	12:24:50	12:26:52	49.600510	-119.598990	49.594254	-119.601081	
08-A-@-00274	FOURTH STREET	0.000	0.528	2016/06/09	12:04:46	12:05:54	49.592942	-119.599222	49.597685	-119.599060	
08-A-@-00277	RITCHIE AVENUE	0.000	0.680	2016/06/09	12:28:13	12:29:48	49.596920	-119.602948	49.596850	-119.593568	
08-A-@-00278	ELLIS AVENUE	0.000	0.850	2016/06/09	11:59:13	12:00:48	49.595470	-119.600381	49.595298	-119.588637	
08-A-@-00405	BARTLETT DRIVE	0.000	0.550	2016/06/09	10:26:35	10:27:21	49.494694	-119.622780	49.495587	-119.629778	
08-A-@-00406	VEDETTE DRIVE	0.000	0.360	2016/06/09	10:53:10	10:54:07	49.496561	-119.624708	49.493332	-119.624714	
08-A-@-00407	VETERAN DRIVE	0.000	0.470	2016/06/09	10:55:32	10:56:18	49.495525	-119.626464	49.499725	-119.626552	
08-A-@-00409	MOOREPARK DRIVE	0.000	0.410	2016/06/09	10:49:05	10:49:55	49.494720	-119.621348	49.497521	-119.621981	
08-A-@-00417	WEST BENCH HILL ROAD	0.000	0.845	2016/06/09	10:25:19	10:26:37	49.495969	-119.618123	49.494742	-119.622902	
08-A-@-00418	BARTLETT ROAD	0.000	1.350	2016/06/09	10:27:30	10:29:21	49.496104	-119.629907	49.504722	-119.640114	
08-A-@-00422	FORSYTH DRIVE	0.000	2.270	2016/06/09	10:34:01	10:37:12	49.504675	-119.639895	49.517173	-119.639967	
08-A-@-00423	ESTATES PLACE	0.000	0.383	2016/06/09	10:44:23	10:45:10	49.506508	-119.641907	49.507588	-119.637592	
08-A-@-00424	RYAN ROAD	0.000	0.520	2016/06/09	10:39:40	10:40:27	49.511916	-119.640451	49.512573	-119.643583	
08-A-@-00428	PINEHILLS DRIVE	0.000	0.710	2016/06/09	10:17:24	10:18:23	49.509356	-119.624436	49.515644	-119.623860	
08-A-@-00429	SAGE MESA DRIVE	0.000	1.800	2016/06/09	10:07:34	10:10:22	49.513696	-119.617555	49.522536	-119.621284	
08-A-@-00431	SOLANA CRESCENT	0.000	0.500	2016/06/09	10:12:58	10:14:02	49.517945	-119.621615	49.520056	-119.620447	
08-A-@-00434	LINDEN AVENUE	0.000	2.362	2016/06/09	14:55:39	14:59:52	49.374569	-119.581171	49.390302	-119.595410	
08-A-@-00460	PINEVIEW DRIVE	0.000	3.205	2016/06/09	15:00:39	15:05:33	49.388148	-119.589944	49.411209	-119.603128	
08-A-@-00462	JUNIPER AVENUE	0.000	1.012	2016/06/09	14:46:44	14:48:26	49.392065	-119.605315	49.394416	-119.597226	
08-A-@-00486	11TH AVENUE	0.000	0.305	2016/06/09	18:16:53	18:17:32	49.342966	-119.575709	49.342889	-119.571562	
08-A-@-00487	10TH AVENUE	0.130	0.780	2016/06/09	17:51:46	17:52:56	49.343944	-119.575644	49.343767	-119.566704	
08-A-@-00489	8TH AVENUE	0.000	0.462	2016/06/09	18:14:22	18:15:24	49.346020	-119.577790	49.345889	-119.571458	
08-A-@-00490	7TH AVENUE	0.000	0.300	2016/06/09	16:55:22	16:55:51	49.346867	-119.575471	49.346868	-119.571375	
08-A-@-00499	WALNUT CRESCENT	0.000	0.275	2016/06/09	18:06:38	18:07:13	49.342437	-119.565573	49.343826	-119.567808	
08-A-@-00503	BIRCH STREET	0.000	0.510	2016/06/09	17:46:42	17:47:55	49.346833	-119.570078	49.342270	-119.570415	
08-A-@-00505	MAIN STREET	0.000	0.340	2016/06/09	18:17:52	18:18:29	49.344884	-119.571470	49.347938	-119.571324	
08-A-@-00508	CEDAR STREET	0.000	1.257	2016/06/09	18:10:25	18:12:24	49.335604	-119.575982	49.346892	-119.575461	
08-A-@-00962	FISH LAKE ROAD	0.000	12.400	2016/06/09	09:17:20	09:31:41	49.595867	-119.742904	49.674361	-119.817188	
08-A-@-01021	WISEMAN PLACE	0.000	0.275	2016/06/09	11:55:39	11:56:09	49.597622	-119.595939	49.598748	-119.593259	
08-A-@-01046	HIGHLAND DRIVE	0.000	0.766	2016/06/09	17:12:49	17:14:06	49.399013	-119.560900	49.398044	-119.565049	
08-B-@-00030	OLD VERNON ROAD	0.000	5.720	2016/06/21	09:18:09	09:22:59	49.920103	-119.364177	49.970452	-119.370179	
08-B-@-00031	SPENCER ROAD	0.500	0.960	2016/06/21	09:25:44	09:26:25	49.972568	-119.365968	49.976385	-119.363906	
08-B-@-00032	RITTICH ROAD	0.000	1.960	2016/06/21	11:50:51	11:53:09	49.950871	-119.361839	49.968463	-119.362075	
08-B-@-00034	BLACK ROAD	0.000	1.468	2016/06/21	11:57:27	11:59:33	49.942159	-119.361735	49.950805	-119.368754	
08-B-@-00035	BULMAN ROAD	0.000	0.966	2016/06/21	09:13:09	09:14:13	49.939993	-119.377507	49.939929	-119.364068	two separate road segments
08-B-@-00035	BULMAN ROAD	1.018	1.290	2016/06/21	12:05:45	12:06:16	49.939897	-119.359239	49.939455	-119.355605	
08-B-@-00039	TEATHER ROAD	0.000	0.963	2016/06/21	11:33:24	11:34:45	49.961129	-119.368873	49.961240	-119.355500	
08-B-@-00070	GOUDIE ROAD	0.000	3.214	2016/06/21	12:43:21	12:47:10	49.864624	-119.280651	49.880650	-119.254810	two segments due to missed turn
08-B-@-00070	GOUDIE ROAD	3.214	5.870	2016/06/21	13:13:52	13:17:03	49.880646	-119.254809	49.895795	-119.245212	
08-B-@-00099	JUNE SPRINGS ROAD	0.000	3.561	2016/06/15	16:20:50	16:25:21	49.823803	-119.398116	49.810668	-119.383169	
08-B-@-00113	PORCUPINE ROAD	0.000	0.770	2016/06/20	18:35:37	18:36:47	49.722217	-118.931595	49.725483	-118.927465	
08-B-@-00143	PARKDALE CRESCENT	0.000	0.299	2016/06/21	12:08:20	12:08:59	49.937774	-119.355623	49.938505	-119.355608	
08-B-@-00163	WESTON ROAD	0.000	0.785	2016/06/21	12:02:38	12:03:50	49.932677	-119.358972	49.939658	-119.358485	
08-B-@-00171	PARKDALE ROAD	0.000	0.298	2016/06/21	12:12:17	12:12:51	49.936820	-119.355671	49.939470	-119.355686	
08-B-@-00336	ANDERSON ROAD	0.000	3.960	2016/06/21	11:25:04	11:29:42	49.941648	-119.365995	49.967955	-119.353457	
08-B-@-00453	SUN VALLEY ROAD	0.000	4.470	2016/06/21	12:47:11	12:52:12	49.880576	-119.254590	49.872898	-119.202121	
08-B-@-00456	JACK PINE ROAD	0.000	0.948	2016/06/21	13:22:31	13:23:39	49.875527	-119.262672	49.878892	-119.274151	
08-B-@-00532	FALCON RIDGE CRES.	0.000	1.158	2016/06/21	13:03:24	13:05:02	49.864671	-119.230588	49.865514	-119.216441	
08-B-@-00533	CARDINAL CREEK ROAD	0.000	1.580	2016/06/21	13:05:06	13:07:01	49.865628	-119.216122	49.872930	-119.202041	
08-B-@-00548	BIG WHITE ROAD	0.000	23.270	2016/06/20	18:11:34	18:33:18	49.801503	-119.092828	49.722854	-118.928499	
08-B-@-00588	PEREGRINE ROAD	0.000	0.780	2016/06/21	12:58:31	12:59:42	49.865237	-119.213515	49.864742	-119.202919	
08-B-@-00825	WHELAN ROAD	0.000	1.144	2016/06/21	11:40:23	11:42:13	49.950860	-119.365445	49.961133	-119.365518	
08-B-@-00826	LINDLEY ROAD	0.000	0.500	2016/06/21	11:37:09	11:37:55	49.955174	-119.368815	49.955255	-119.361894	
08-B-@-00909	SERATOGA ROAD	0.000	0.358	2016/06/21	12:11:27	12:12:02	49.934445	-119.355658	49.936837	-119.357279	
08-B-@-00910	DARYL ROAD	0.000	0.380	2016/06/21	12:15:40	12:16:20	49.936870	-119.358731	49.936783	-119.353472	
08-B-@-00911	ESQUIRE ROAD	0.000	0.734	2016/06/21	12:18:30	12:19:35	49.933567	-119.359052	49.937010	-119.353442	
08-B-@-01067	POSTILL DRIVE	0.000	1.160	2016/06/21	09:28:25	09:29:53	49.968411	-119.369251	49.967847	-119.353462	
08-B-@-01304	SNOW PINES WAY	0.000	0.600	2016/06/20	18:47:22	18:48:19	49.715905	-118.946681	49.718397	-118.940014	
08-C-@-00024	COPPER MOUNTAIN ROAD	0.000	19.111	2016/06/17	11:10:05	11:27:58	49.460200	-120.497104	49.322694	-120.504086	
08-C-@-00040	PRINCETON/SUMMERLAND	0.000	41.763	2016/06/17	11:58:06	12:32:10	49.480270	-120.486149	49.712548	-120.193000	
08-C-@-00074	AMBERHILL ROAD	0.000	0.680	2016/06/17	11:47:26	11:48:18	49.461847	-120.473629	49.457055	-120.470807	
08-C-@-00397	SUNFLOWER ESTATES	0.000	0.876	2016/06/17	10:41:21	10:42:31	49.487203	-120.501156	49.486992	-120.491988	
08-D-@-00172	WESTSIDE ROAD	0.000	23.030	2016/06/15	17:24:11	17:47:21	49.881369	-119.534096	50.062821	-119.498025	
08-D-@-00193	BUTT ROAD	0.800	1.710	2016/06/16	08:15:41	08:17:19	49.836806	-119.625408	49.835100	-119.613857	
08-D-@-00218	TREPANIER ROAD	0.000	4.760	2016/06/16	08:48:24	08:53:29	49.800310	-119.721697	49.821304	-119.773443	
08-D-@-00224	BRENT ROAD	0.000	0.928	2016/06/16	09:13:46	09:15:19	49.725747	-119.763106	49.717673	-119.760576	
08-D-@-00457	NORTH BEACH ROAD	0.000	1.039	2016/06/16	09:39:12	09:41:05	49.665404	-119.705338	49.669417	-119.705534	
08-D-@-00970	TOMAT AVENUE	0.000	0.930	2016/06/15	18:26:05	18:27:39	49.873236	-119.542323	49.878875	-119.533016	
08-D-@-00972	MICHELLE CRESCENT	0.000	0.570	2016/06/15	18:32:46	18:33:46	49.876759	-119.535524	49.873372	-119.540036	
08-D-@-00974	ABEL STREET	0.000	0.408	2016/06/15	18:27:40	18:28:29	49.878883	-119.532983	49.880602	-119.531959	
08-D-@-01009	CARRINGTON ROAD	0.250	1.420	2016/06/16	08:19:33	08:20:57	49.831452	-119.619345	49.839211	-119.608566	
08-D-@-01012	LOUIE DRIVE	0.000	1.850	2016/06/16	08:08:21	08:10:59	49.833793	-119.621661	49.845494	-119.606812	
08-D-@-01013	ELK ROAD	0.000	1.410								not tested
08-D-@-01014	MOOSE ROAD	0.000	0.265	2016/06/16	08:29:46	08:30:17	49.839701	-119.609873	49.841537	-119.607818	
08-D-@-01015	EAST BOUNDARY ROAD	0.000	2.222	2016/06/15	18:49:19	18:51:52	49.839125	-119.592983	49.856689	-119.589076	
08-D-@-01024	RIDGE ESTATES DRIVE	0.000	0.975	2016/06/15	18:48:08	18:49:21	49.831375	-119.594739	49.839184	-119.592929	
08-D-@-01076	BAYVIEW COURT	0.000	0.479	2016/06/15	18:19:18	18:20:07	49.883478	-119.529500	49.879427	-119.527755	
08-D-@-01101	SNEENA ROAD	0.000	0.410	2016/06/15	18:18:38	18:19:15	49.881232	-119.533969	49.883465	-119.529785	
08-E-@-00038	WILLOWBROOK ROAD	0.000	11.420	2016/06/09	16:07:18	16:18:51	49.174513	-119.598940	49.269685	-119.603259	
08-E-@-00058	KRUGER MOUNTAIN	0.000	1.247	2016/06/12	14:54:46	14:56:29	49.073115	-119.570547	49.066362	-119.559355	
08-E-@-00089	OLD RICHTER PASS RD	4.470	6.700	2016/06/12	15:03:43	15:06:28	49.068413	-119.575851	49.068606	-119.546991	two separate road segments
08-E-@-00089	OLD RICHTER PASS RD	8.010	8.600	2016/06/12	16:01:44	16:02:37	49.053229	-119.511367	49.054171	-119.504745	
08-E-@-00099	ALKALI ROAD	0.000	0.580	2016/06/12	15:00:23	15:01:21	49.072804	-119.561044	49.070175	-119.564535	
08-E-@-00120	BLACK SAGE ROAD	0.500	12.790	2016/06/12	16:11:07	16:22:02	49.091628	-119.530494	49.184497	-119.536989	
08-E-@-00129	VASEUX LAKE CRESCENT	0.000	0.360	2016/06/09	18:26:05	18:27:07	49.293312	-119.527019	49.295467	-119.528127	
08-E-@-00557	TWELFTH AVENUE	0.270	1.375	2016/06/12	15:30:30	15:32:16	49.004260	-119.471768	49.006858	-119.458799	
08-E-@-00565	26TH AVENUE	0.000	0.623	2016/06/12	15:35:39	15:36:40	49.010542	-119.473519	49.010705	-119.465241	
08-E-@-00573	107TH STREET	0.000	2.700	2016/06/12	15:43:39	15:46:52	49.000210	-119.469009	49.023709	-119.474762	
08-E-@-00700	SAWMILL ROAD	0.000	3.775	2016/06/12	16:51:51	16:55:41	49.149803	-119.573024	49.174744	-119.543744	
08-E-@-00744	TUCULNUIT ROAD	0.000	4.650	2016/06/12	16:23:06	16:27:38	49.192535	-119.537280	49.230819	-119.538855	
08-E-@-00777	ISLAND ROAD	0.000	2.560	2016/06/12	16:35:07	16:38:14	49.208190	-119.550927	49.230104	-119.544721	
08-E-@-00929	VINEYARD ROAD	0.000	0.615	2016/06/12	15:12:10	15:13:03	49.044429	-119.505775	49.048362	-119.511390	
08-F-@-00018	ASHNOLA ROAD	0.000	3.526	2016/06/12	10:31:13	10:34:18	49.204710	-119.880800	49.213178	-119.924811	
08-F-@-00056	MIDDLE BENCH ROAD	0.000	1.693	2016/06/12	12:03:38	12:05:43	49.210469	-119.815105	49.211861	-119.793938	
08-F-@-00076	OLIVER CAWSTON ROAD	0.000	0.607	2016/06/12	12:38:11	12:39:00	49.187009	-119.737531	49.189043	-119.730483	
08-F-@-00345	DALY AVENUE	0.000	0.380	2016/06/12	11:31:56	11:32:36	49.355743	-120.077842	49.359124	-120.077659	
08-F-@-00346	SCOTT AVENUE	0.000	0.453	2016/06/12	11:18:23	11:19:10	49.355126	-120.077228	49.358998	-120.076512	
08-F-@-00347	ELLIS AVENUE	0.000	0.320	2016/06/12	11:29:58	11:30:31	49.356164	-120.075470	49.359021	-120.075395	
08-F-@-00349	RICHTER AVENUE	0.110	0.377	2016/06/12	11:27:07	11:27:39	49.358057	-120.073289	49.360348	-120.073539	
08-F-@-00359	WHITE STREET	0.000	0.320	2016/06/12	11:22:36	11:23:19	49.358100	-120.077675	49.358058	-120.073310	
08-F-@-00360	WEBSTER STREET	0.000	0.545	2016/06/12	11:35:07	11:36:02	49.359021	-120.077655	49.359024	-120.070178	
08-F-@-00807	MAIN STREET	0.000	0.817	2016/06/12	10:16:30	10:17:48	49.260356	-119.828615	49.266816	-119.829836	

Survey Limits 2016

Route	Route Name	Start km	End km	Date	Start Time	End Time	Start Latitude	Start Longitude	End Latitude	End Longitude	Comments
08-F-@-00808	MAIN STREET NORTH	0.000	0.313	2016/06/12	10:20:21	10:20:43	49.265229	-119.827872	49.268042	-119.828042	
08-F-@-00813	NEWTON ROAD	0.000	2.266	2016/06/12	12:18:47	12:21:12	49.196432	-119.776329	49.179194	-119.761833	
08-F-@-00814	COULTHARD ROAD	0.000	2.124	2016/06/12	12:43:42	12:46:28	49.188047	-119.747985	49.177047	-119.771755	
08-F-@-00818	LOWE DRIVE	0.000	2.112	2016/06/12	12:33:31	12:36:05	49.172029	-119.749738	49.186919	-119.737590	
08-F-@-00820	AGAR ROAD	0.000	1.236	2016/06/12	12:14:24	12:16:36	49.196551	-119.772273	49.187449	-119.762550	
08-F-@-00838	BEECROFT RIVER ROAD	0.230	1.460	2016/06/12	12:30:12	12:31:37	49.162032	-119.760328	49.168398	-119.746570	
08-F-@-00849	KEREMEOS BYPASS ROAD	0.000	2.490	2016/06/12	11:59:00	12:01:40	49.205294	-119.842894	49.221717	-119.823423	
08-F-@-00879	UPPER BENCH ROAD	0.000	5.146	2016/06/12	12:59:34	13:04:32	49.215759	-119.815656	49.196547	-119.756950	
08-F-@-00880	BARCELO ROAD	0.000	7.600	2016/06/12	13:12:43	13:19:31	49.133650	-119.734512	49.196553	-119.756925	
14-A-@-00025	DOUGLAS LAKE ROAD	0.000	13.050	2016/06/18	08:56:35	09:08:36	50.192238	-120.473416	50.149833	-120.338853	new construction at end of survey
14-A-@-00031	GRIMSHIRE RD	1.920	2.690								not tested - access issues
14-A-@-00051	MONCK PARK RD	0.000	9.390	2016/06/14	11:58:59	12:07:26	50.163361	-120.665763	50.168545	-120.550910	
14-A-@-00067	PLANET MINE RD	0.000	4.270	2016/06/18	08:31:10	08:36:13	50.320404	-120.395737	50.354140	-120.382931	
14-A-@-00161	HARMON ESTATES RD	0.000	0.770	2016/06/14	12:14:55	12:16:06	50.163219	-120.593299	50.161980	-120.583955	
14-A-@-00387	HELMER ROAD	0.000	1.993	2016/06/14	11:07:49	11:10:07	50.318848	-120.638937	50.321341	-120.635975	
14-B-@-00130	LYTTON RANCHERIE RD	0.000	1.139	2016/06/22	09:23:50	09:25:30	50.232705	-121.580827	50.241201	-121.573108	
14-B-@-00151	BOTANIE CREEK RD	0.000	2.486	2016/06/22	08:16:30	08:19:57	50.240068	-121.580440	50.257104	-121.561412	
14-B-@-00152	LYTTON FERRY RD	0.000	0.890	2016/06/22	08:25:03	08:26:39	50.242173	-121.581801	50.247764	-121.590360	
14-C-@-00002	ABERDEEN MINE RD	0.000	13.343	2016/06/14	15:40:48	15:54:02	50.150948	-120.880694	50.255403	-120.869549	
14-C-@-00076	SUNSHINE VALLEY RD	0.000	0.577	2016/06/14	16:53:58	16:54:46	50.143275	-121.006385	50.139232	-121.010477	two paved segments separated by gravel segment
14-C-@-00076	SUNSHINE VALLEY RD	9.032	11.200	2016/06/14	17:09:16	17:11:44	50.136635	-120.941979	50.148116	-120.927018	
14-C-@-00084	WOODWARD RD	0.000	0.553	2016/06/14	16:46:18	16:47:03	50.149526	-120.913222	50.151674	-120.906692	
14-C-@-00178	MEADOW CREEK ROAD	0.000	3.600	2016/06/18	13:02:37	13:05:08	50.486057	-120.540903	50.493651	-120.493814	
14-C-@-00214	DODDING AVE	0.000	0.630	2016/06/14	16:18:42	16:19:48	50.155895	-120.877323	50.156588	-120.885285	
14-C-@-00215	BRENTON AVE	0.000	0.360	2016/06/14	16:30:04	16:30:44	50.157590	-120.880087	50.157508	-120.885098	
14-C-@-00216	WOODWARD AVE	0.000	0.435	2016/06/14	16:33:02	16:33:50	50.158557	-120.880181	50.158471	-120.886273	
14-C-@-00217	MORGAN AVE	0.000	0.366	2016/06/14	16:26:29	16:27:13	50.159500	-120.880276	50.159484	-120.885356	
14-C-@-00218	SMITH ST	0.000	0.575	2016/06/14	16:39:11	16:40:10	50.154486	-120.880365	50.159524	-120.880294	
14-C-@-00219	CORKLE ST	0.000	1.020	2016/06/14	16:21:43	16:23:19	50.156383	-120.882177	50.165052	-120.880486	
14-C-@-00220	PAIGE ST	0.000	0.270	2016/06/14	16:35:37	16:36:03	50.157541	-120.885160	50.159954	-120.885386	
14-C-@-00222	KINVIG ST	0.000	1.100	2016/06/14	16:10:30	16:11:45	50.160555	-120.872922	50.170435	-120.873268	
14-C-@-00224	ANDERSON AVE	0.000	0.270	2016/06/14	16:14:21	16:14:45	50.165202	-120.876873	50.165002	-120.880591	
14-C-@-00290	NICOLLS RD	0.000	1.632	2016/06/14	17:07:17	17:09:15	50.138403	-120.962643	50.136632	-120.941987	
14-C-@-00332	WALLOPER LAKE RD	0.000	0.940	2016/06/18	12:06:07	12:07:18	50.485980	-120.533665	50.484565	-120.544535	
14-C-@-00342	OLD MEADOW CREEK RD	0.000	5.837	2016/06/18	12:26:50	12:33:00	50.498407	-120.786842	50.481019	-120.716161	end of road blocked by barrier
14-C-@-00357	L L JEUNE RD	0.000	3.343	2016/06/18	11:44:21	11:48:01	50.493623	-120.493927	50.471358	-120.484275	
14-C-@-00358	L L JEUNE PK DR E	0.000	2.417	2016/06/18	11:54:59	11:57:26	50.487867	-120.494962	50.483200	-120.465552	
14-C-@-00361	MARMOT RD	0.000	0.220	2016/06/18	11:50:56	11:51:22	50.472838	-120.494560	50.473104	-120.491530	
14-C-@-00449	MILLER ROAD	0.000	3.005	2016/06/14	17:11:44	17:14:58	50.148114	-120.927017	50.152872	-120.926986	
14-D-@-00017	COLDWATER RD	0.000	33.930	2016/06/14	13:11:31	13:40:10	50.098285	-120.763020	49.853133	-120.906987	
14-D-@-00081	VEALE RD	3.570	5.140								not tested - access issues
14-D-@-00202	FOX FARM RD	0.000	2.430	2016/06/14	14:50:11	14:53:13	50.082845	-120.768753	50.075712	-120.763075	
14-D-@-00348	UPPER COLDWATER RD	0.000	1.406	2016/06/17	18:25:32	18:27:04	49.656451	-121.006188	49.653709	-121.018247	
14-D-@-00349	JULIET DRIVE	0.000	2.160	2016/06/17	17:38:49	17:40:43	49.739749	-121.014784	49.757984	-121.007591	
14-D-@-00353	COQUIHALLA LAKES RD	0.000	3.140	2016/06/17	18:03:26	18:06:34	49.656247	-121.007340	49.632107	-121.010189	two segments due to missed turn
14-D-@-00353	COQUIHALLA LAKES RD	3.140	3.434	2016/06/17	18:09:40	18:10:07	49.632134	-121.010270	49.631071	-121.013918	
14-D-@-00393	MINE CREEK EXIT	0.000	0.890	2016/06/17	17:54:58	17:56:10	49.686199	-121.013730	49.684337	-121.013129	
14-D-@-00394	JULIET CREEK RD	0.000	0.888	2016/06/17	17:45:27	17:46:32	49.740000	-121.017087	49.743370	-121.009424	
14-E-@-00045	LOON LK RD	9.600	21.196	2016/06/17	09:34:55	09:49:24	49.909554	-120.564638	49.885145	-120.466722	
14-E-@-00407	HAMILTON HILL RD	0.000	5.340	2016/06/14	15:09:46	15:15:00	50.082643	-120.673079	50.091241	-120.736967	
14-E-@-00424	SUNSET MAIN RD	0.000	0.581	2016/06/17	08:24:56	08:25:56	49.897782	-120.165528	49.899077	-120.170985	
15-A-@-00375K	VALLEYVIEW DRIVE WB	0.000	0.755	2016/06/18	14:53:39	14:54:41	50.672389	-120.295567	50.673044	-120.305953	
15-A-@-00685	BARNHARTVALE ROAD	0.000	16.725	2016/06/13	16:14:40	16:29:53	50.636924	-120.080992	50.579445	-119.887884	
15-A-@-01386	DALLAS DRIVE	1.740	8.480	2016/06/13	15:25:12	15:30:46	50.651416	-120.017800	50.635680	-119.949602	
15-A-@-03347	MONTE CREEK ROAD	0.000	0.872	2016/06/13	15:34:21	15:35:46	50.650266	-119.961998	50.644480	-119.956030	
15-A-@-03389	MOUNT LOLO ROAD	0.000	4.422	2016/06/13	18:12:57	18:18:07	50.753820	-120.201916	50.781219	-120.184710	
15-A-@-03393	MOUNT PAUL WAY	0.000	1.750	2016/06/13	18:39:33	18:41:46	50.693568	-120.321592	50.678234	-120.325020	
15-A-@-03530E	N. THOMPSON RV.EAST	0.000	2.150	2016/06/18	15:13:33	15:15:39	50.711606	-120.356333	50.709578	-120.329726	
15-A-@-03530W	N.THOMPSON RIV CON W	0.000	2.162	2016/06/13	17:12:17	17:14:27	50.709614	-120.329710	50.711686	-120.356459	
15-A-@-03552	OLD FERRY ROAD	0.000	0.859	2016/06/13	15:40:06	15:41:37	50.649909	-119.958923	50.649760	-119.949035	
15-A-@-03688	PAUL LAKE ROAD	0.000	14.518	2016/06/18	15:15:39	15:29:07	50.709578	-120.329726	50.734386	-120.160050	
15-A-@-03748	PINANTAN-PRITCHARD	16.739	0.000	2016/06/13	17:53:38	18:08:58	50.728527	-119.977171	50.741175	-120.187536	
15-A-@-04022	RIVER HEIGHTS DRIVE	0.000	1.033	2016/06/14	09:52:05	09:53:39	50.868597	-120.262354	50.867283	-120.257063	
15-A-@-04412	SHUSWAP ROAD	0.000	27.080	2016/06/13	14:40:23	15:04:20	50.682061	-120.299069	50.650928	-119.941035	
15-B-@-01005	BUCKHORN	0.000	4.275	2016/06/21	18:20:02	18:24:52	50.711958	-120.634619	50.690026	-120.617538	
15-B-@-01009	BUIE STREET	0.000	0.320	2016/06/21	18:46:30	18:47:01	50.752456	-120.844043	50.752541	-120.848569	
15-B-@-01440	DEER DRIVE	0.000	2.592	2016/06/21	18:03:47	18:06:44	50.699871	-120.591783	50.692444	-120.577457	
15-B-@-01656	WATSON DR. W.	0.000	0.520	2016/06/21	19:11:38	19:12:28	50.756134	-120.824781	50.754544	-120.831675	
15-B-@-01946	GARDI	0.000	2.010	2016/06/21	18:15:12	18:17:54	50.717418	-120.639923	50.708548	-120.623198	
15-B-@-02582	JONES	0.000	0.390	2016/06/21	18:48:43	18:49:29	50.751764	-120.848889	50.752387	-120.853679	
15-B-@-02625	KAMLOOPS LAKE DRIVE	0.000	0.280	2016/06/21	18:40:58	18:41:23	50.761109	-120.814067	50.762997	-120.811770	road closed for construction at end of survey
15-B-@-02775	LAC LE JEUNE	0.000	16.151	2016/06/18	11:32:48	11:44:21	50.619097	-120.442588	50.493621	-120.493933	
15-B-@-04262	SAVONA ACCESS	0.000	4.507	2016/06/21	18:58:46	19:04:43	50.754537	-120.867129	50.759413	-120.812480	
15-B-@-04266	SAVONA STATION	0.000	0.061	2016/06/21	18:53:45	18:53:53	50.757546	-120.875519	50.758019	-120.875110	two segments due to missed turn
15-B-@-04266	SAVONA STATION	0.061	0.360	2016/06/21	18:56:18	18:56:44	50.758046	-120.875129	50.758992	-120.871555	
15-B-@-04695	TINGLEY STREET	0.000	0.400	2016/06/21	18:44:51	18:45:26	50.753880	-120.838559	50.754022	-120.844203	
15-B-@-04903	VISTA DRIVE	0.000	0.270	2016/06/21	19:09:36	19:10:07	50.756043	-120.823068	50.755763	-120.819663	
15-B-@-04927	WALHACHIN	0.000	5.200	2016/06/21	19:24:41	19:31:16	50.772707	-121.028326	50.754081	-120.990033	
15-B-@-04970	WATSON DR. EAST	0.000	0.820	2016/06/21	19:06:23	19:07:36	50.756361	-120.824877	50.758371	-120.814733	
15-B-@-05018	WESTSYDE	0.000	20.646	2016/06/14	09:01:15	09:19:01	50.866255	-120.290769	51.041461	-120.242592	
15-C-@-00525	AGATE BAY	0.825	11.444	2016/06/18	17:12:01	17:20:52	51.142454	-120.112652	51.094335	-120.023531	
15-C-@-02010	GLENGROVE	0.000	3.420	2016/06/18	18:01:10	18:05:03	51.116726	-120.066302	51.143317	-120.065354	
15-C-@-03155	MCLURE FERRY	0.000	2.010	2016/06/14	09:33:10	09:35:56	51.032221	-120.223983	51.041087	-120.240054	
15-D-@-00815	BIRCH ISLAND-LOST CR	0.000	4.581	2016/07/05	16:01:29	16:07:11	51.606677	-119.905033	51.588374	-119.876418	two paved segments separated by gravel segment
15-D-@-00815	BIRCH ISLAND-LOST CR	17.299	17.810	2016/08/22	19:06:39	19:07:30	51.581211	-119.719031	51.583559	-119.716241	
15-D-@-00838	BLACKWATER	0.000	0.432	2016/07/05	18:25:44	18:26:30	51.574011	-120.146228	51.574044	-120.150915	two separate road segments
15-D-@-00838	BLACKWATER	0.431	1.260	2016/07/05	18:37:14	18:38:51	51.577022	-120.147219	51.579535	-120.136257	
15-D-@-01017	BURMAN	0.000	0.550	2016/08/22	19:21:49	19:22:43	51.613704	-119.925505	51.616973	-119.930551	
15-D-@-01214	CLEARWATER VALLEY	0.000	42.434	2016/07/06	16:52:57	17:30:30	51.650945	-120.038214	51.969540	-120.138097	
15-D-@-02609	K.P.	0.000	2.520	2016/07/05	17:38:27	17:41:30	51.586982	-119.809656	51.585971	-119.774526	
15-D-@-02854	LAWRENCE	0.000	0.545	2016/06/19	10:55:06	10:55:55	51.426655	-120.211641	51.426407	-120.219178	
15-D-@-03392	MOUNT OLIE STREET	0.000	0.496	2016/06/19	10:49:53	10:50:48	51.424118	-120.209989	51.421615	-120.204148	
15-D-@-03521	NORRIS	0.000	2.490	2016/07/05	17:28:28	17:31:40	51.619185	-119.937270	51.608135	-119.913442	
15-D-@-03554	OLD NORTH THOMPSON	0.000	6.550	2016/07/05	18:04:22	18:10:39	51.580707	-120.134707	51.630878	-120.108288	
15-D-@-03739	PETROL	0.000	1.160	2016/07/05	18:30:34	18:32:47	51.567185	-120.161394	51.573172	-120.149704	
15-D-@-03886	PUMPING STATION	0.000	1.010	2016/07/05	18:40:21	18:41:59	51.569272	-120.156235	51.573082	-120.147249	
16-A-@-00101	PERREY	0.460	1.430	2016/06/29	09:49:55	09:51:10	51.576501	-121.181208	51.585130	-121.180894	
16-A-@-00214	EVERGREEN DR	0.000	1.641	2016/06/29	10:43:10	10:45:03	51.548495	-121.365899	51.549676	-121.389098	
16-A-@-00222	LAKESIDE COURT	0.000	0.250	2016/06/29	09:08:03	09:08:31	51.687515	-121.309233	51.688701	-121.306278	two segments -"T" shaped road
16-A-@-00222	LAKESIDE COURT	0.250	1.095	2016/06/29	09:04:30	09:05:45	51.688697	-121.306281	51.688574	-121.295125	
16-A-@-00282	SPURAWAY DR	0.000	1.140								not tested - rained out
16-A-@-00283	CHUCKWAGON TRAIL	0.000	1.380								not tested - rained out
16-A-@-00307	HILL	0.000	0.361	2016/06/29	10:56:54	10:57:28	51.475758	-121.371067	51.478724	-121.372240	two segments -"T" shaped road
16-A-@-00307	HILL	0.361	1.271	2016/06/29	10:53:10	10:54:11	51.478706	-121.372253	51.486597	-121.369088	
16-A-@-00318	CANIM-HENDRIX LAKE	0.000	32.925	2016/06/19	13:18:39	13:41:46	51.654563	-121.246151	51.785558	-120.899022	two segments due to bug on camera lens
16-A-@-00318	CANIM-HENDRIX LAKE	32.925	42.850	2016/06/19	13:46:04	13:52:49	51.784588	-120.901880	51.862648	-120.863249	
16-A-@-00322	TSQ'ESCEN	0.000	0.786	2016/06/19	15:26:22	15:27:29	51.771915	-120.993600	51.777327	-120.987449	
16-A-@-00332	EAGLE CREEK	0.000	1.940	2016/06/19	15:37:26	15:39:33	51.767091	-121.098248	51.779982	-121.082998	
16-A-@-00334	PLATEAU	0.000	0.250	2016/06/28	17:04:20	17:04:47	51.724169	-121.336526	51.725899	-121.337646	
16-A-@-00339	87 MILE LOOP	0.000	2.500	2016/06/29	11:04:46	11:07:22	51.505382	-121.370118	51.525766	-121.364557	
16-A-@-00340	90 MILE LOOP	0.000	2.588	2016/06/29	11:07:22	11:10:00	51.525766	-121.364557	51.546758	-121.363244	
16-A-@-00341	93 MILE LOOP	0.000	3.729	2016/06/29	11:10:00	11:13:42	51.546758	-121.363240	51.570410	-121.344079	
16-A-@-00342	93 MILE FRONTAGE	0.000	1.020	2016/06/29	10:33:30	10:34:41	51.570925	-121.344594	51.577181	-121.334043	
16-A-@-00344	94 MILE FRONTAGE	0.000	1.310	2016/06/29	10:26:13	10:27:24	51.579056	-121.329916	51.587131	-121.316210	
16-A-@-00345	HORSE LAKE NORTH	0.000	1.755	2016/06/24	12:45:40	12:47:30	51.610774	-121.197306	51.610731	-121.173020	
16-A-@-00347	INMAN ROAD	0.000	2.100	2016/06/24	10:11:04	10:13:33	51.554114	-121.221398	51.568971	-121.238374	
16-A-@-00351	LAC LA HACHE STATION	0.360	4.040	2016/06/28	16:45:39	16:49:29	51.793356	-121.478772	51.810991	-121.459530	
16-A-@-00353	TIMOTHY LAKE	0.000	19.530	2016/06/28	16:02:17	16:20:49	51.812696	-121.472592	51.859507	-121.241587	
16-A-@-00355	LONE-BUTTE-HORSE LK	0.000	4.418	2016/06/24	12:14:11	12:18:13	51.554533	-121.194907	51.576840	-121.143761	
16-A-@-00365	MCMILLAN	0.680	2.197	2016/06/24	12:22:55	12:24:34	51.568122	-121.166862	51.581746	-121.166844	
16-A-@-00371	HORSE LAKE	0.000	14.293	2016/06/24	10:58:54	11:09:14	51.628844	-121.282922	51.576493	-121.120548	
16-A-@-00373	103 MILE LAKE	0.000	1.985	2016/06/29	08:49:45	08:52:18	51.682856	-121.309660	51.691743	-121.294629	
16-A-@-00378	WRIGHT STN RD.	3.935	5.040	2016/06/28	15:30:01	15:31:35	51.864965	-121.664961	51.873588	-121.666078	
16-A-@-00403	TATTON STATION	2.298	7.680	2016/06/29	08:39:11	08:44:56	51.705069	-121.386351	51.705026	-121.318735	
16-A-@-00653	EMERALD	0.000	2.012	2016/06/28	15:53:25	15:56:11	51.832053	-121.545451	51.838977	-121.563060	
16-A-@-00664	DUNSMUIR	0.220	0.980	2016/06/28	15:35:01	15:36:23	51.860059	-121.645151	51.864823	-121.652430	

Survey Limits 2016

Route	Route Name	Start km	End km	Date	Start Time	End Time	Start Latitude	Start Longitude	End Latitude	End Longitude	Comments
16-A-@-00665	DODGE	0.000	2.290	2016/06/29	13:06:05	13:08:47	51.831939	-121.544681	51.846028	-121.568254	two separate road segments
16-A-@-00665	DODGE	2.300	2.620	2016/06/29	13:08:55	13:09:25	51.846506	-121.568971	51.848693	-121.571768	
16-A-@-00668	FERGUSON	0.000	0.600	2016/06/28	15:37:12	15:38:08	51.860603	-121.642306	51.863352	-121.647619	
16-A-@-00680	DAWSON	0.000	0.302	2016/06/29	09:02:11	09:02:38	51.689926	-121.306826	51.692256	-121.309043	two paved segments separated by gravel segment
16-A-@-00680	DAWSON	1.836	1.940	2016/06/29	08:46:55	08:47:31	51.704361	-121.317741	51.705021	-121.318767	
16-A-@-00684	MERCER	0.000	0.894	2016/06/24	13:17:55	13:19:23	51.606609	-121.237030	51.614206	-121.234868	
16-A-@-00712	KENNEDY	0.000	1.420	2016/06/24	13:35:27	13:37:12	51.676052	-121.217385	51.687103	-121.208066	
16-A-@-00713	PERKINS	0.000	1.380								not tested - rained out
16-A-@-00729	CANIM LAKE SOUTH	0.000	5.750	2016/06/19	14:20:31	14:26:36	51.774306	-120.930594	51.781370	-120.864208	
16-A-@-01000	CARIBOO DR.	0.820	1.225	2016/06/29	08:11:28	08:12:18	51.749867	-121.344834	51.751037	-121.349321	
16-A-@-01001	TELQUA DR.	0.000	3.193	2016/06/29	08:01:28	08:05:56	51.727639	-121.330693	51.749842	-121.344893	
16-A-@-01003	SUSSNEE	0.000	0.580	2016/06/28	18:26:01	18:26:58	51.744756	-121.346407	51.748290	-121.340719	
16-A-@-01004	ANZEEON	0.000	0.547	2016/06/28	18:28:43	18:29:41	51.743768	-121.344128	51.746978	-121.338523	
16-A-@-01005	KEMMI CRES	0.000	0.560	2016/06/28	18:32:11	18:33:04	51.734350	-121.335624	51.736902	-121.336733	
16-A-@-01006	PIERREROY CRES	0.000	0.475	2016/06/28	18:33:53	18:34:40	51.734398	-121.338118	51.736221	-121.338601	
16-A-@-01008	EASZEE DRIVE	0.000	0.850	2016/06/28	17:03:23	17:04:20	51.727668	-121.327161	51.724172	-121.336521	missed loop section of road
16-A-@-01009	DONSLEEQUA	0.000	0.575	2016/06/29	08:00:17	08:01:15	51.723841	-121.326726	51.727244	-121.332223	
16-A-@-01010	DONSLEEQUA COURT	0.000	0.334	2016/06/28	18:42:15	18:42:58	51.722049	-121.325190	51.723054	-121.329664	
16-A-@-01012	MONICAL	0.000	0.870	2016/06/28	17:06:32	17:07:45	51.723555	-121.336805	51.728556	-121.345286	
16-A-@-01013	CANIUM	0.000	0.454	2016/06/28	17:56:00	17:56:42	51.724020	-121.346752	51.727019	-121.349156	
16-A-@-01014	CANIUM CT	0.000	0.390	2016/06/28	17:54:15	17:54:53	51.722263	-121.345704	51.725103	-121.348706	
16-A-@-01015	KINNCUM	0.000	0.500	2016/06/28	17:42:12	17:43:07	51.718916	-121.340943	51.719907	-121.343121	
16-A-@-01018	KINNCUM SOUTH	0.000	0.260	2016/06/28	17:47:31	17:47:58	51.716390	-121.339750	51.718064	-121.341945	
16-A-@-01019	HANSEN CT	0.000	0.258	2016/06/28	17:43:21	17:43:55	51.719570	-121.342281	51.721174	-121.342877	
16-A-@-01020	SMITH	0.000	0.975	2016/06/28	17:48:46	17:49:57	51.720431	-121.337700	51.727123	-121.346525	
16-A-@-01022	GLOINNZUN DR	0.000	2.940	2016/06/28	17:58:44	18:02:09	51.721432	-121.346100	51.738881	-121.373300	
16-A-@-01023	KYLLO DR.	0.000	1.470	2016/06/28	18:11:41	18:13:38	51.721139	-121.347591	51.730121	-121.359733	
16-A-@-01025	KITWANGA DR	0.000	5.135	2016/06/28	18:15:04	18:20:13	51.727475	-121.358264	51.750665	-121.349047	
16-A-@-01027	KALLUM DR	0.000	4.460	2016/06/28	17:08:08	17:13:29	51.729225	-121.343480	51.739879	-121.377554	
16-A-@-01029	THOMPSON	0.000	0.530	2016/06/28	17:33:02	17:33:38	51.732093	-121.360937	51.731784	-121.353465	
16-A-@-01030	TATTERSFIELD	0.000	0.520	2016/06/28	17:30:32	17:31:16	51.732342	-121.359563	51.736100	-121.363706	
16-A-@-01031	MEESQUONO	0.000	0.396	2016/06/28	17:28:44	17:29:29	51.732266	-121.365943	51.734804	-121.362405	
16-A-@-01032	STEWART	0.000	0.840	2016/06/28	17:34:07	17:35:18	51.733368	-121.355900	51.738573	-121.362852	
16-A-@-01033	ANNAHAM CRES	0.000	0.265	2016/06/28	17:35:39	17:36:07	51.737576	-121.359801	51.738517	-121.356294	missed loop section of road
16-A-@-01034	BLOCK DRIVE	0.000	2.130	2016/06/28	18:05:03	18:07:45	51.721454	-121.351016	51.726252	-121.357695	
16-A-@-01035	MEIN	0.000	0.270	2016/06/28	18:09:08	18:09:34	51.720007	-121.353529	51.721493	-121.356511	
16-A-@-01037	GLOINNZUN CR	0.000	1.125	2016/06/28	17:25:56	17:27:26	51.731363	-121.365245	51.736382	-121.371865	
16-A-@-01039	BRYAN CRES	0.000	0.556	2016/06/28	17:18:59	17:19:52	51.735346	-121.366158	51.738330	-121.369563	
16-A-@-01040	DAVIS	0.000	0.515	2016/06/28	17:16:05	17:16:57	51.739842	-121.384815	51.741189	-121.378796	
16-A-@-01041	MACKAY CRES	0.000	0.680	2016/06/28	17:19:55	17:20:49	51.738505	-121.369733	51.739325	-121.377039	
16-A-@-01044	CHINTU DR	0.000	0.380	2016/06/28	17:24:03	17:24:41	51.737450	-121.372806	51.736869	-121.367930	
16-A-@-01050	MONEEYAW	0.000	0.520	2016/06/29	08:08:15	08:09:10	51.742754	-121.342412	51.745910	-121.337294	
16-A-@-01054	SAUNDERS CRES	0.000	1.040	2016/06/29	09:10:58	09:12:31	51.683222	-121.309389	51.685913	-121.311379	
16-A-@-01064	NORMAN	0.200	0.930	2016/06/24	12:40:54	12:41:53	51.595040	-121.184191	51.597976	-121.192570	
16-A-@-01065	LAKESHORE DR	0.000	1.994	2016/06/24	13:00:47	13:03:33	51.601251	-121.171278	51.610568	-121.186101	
16-A-@-01066	HIGHLAND CRES	0.000	1.200	2016/06/24	13:09:12	13:10:44	51.614945	-121.208690	51.613524	-121.196545	
16-A-@-01067	VALLEYVIEW DR	0.000	1.250	2016/06/24	13:05:37	13:07:09	51.610766	-121.193802	51.614924	-121.208669	
16-A-@-01069	GREY CRES	0.000	0.899	2016/06/24	13:14:38	13:15:50	51.612197	-121.235723	51.611605	-121.231409	missed loop section of road
16-A-@-01074	ELLIOT LAKE RD	0.000	0.520	2016/06/29	08:19:14	08:20:14	51.703482	-121.327917	51.703442	-121.320638	
16-A-@-01075	CARLSON	0.000	1.060	2016/06/29	08:22:36	08:24:10	51.702221	-121.327681	51.705739	-121.319974	
16-A-@-01102	WATSON LAKE	0.000	0.690	2016/06/29	08:34:38	08:35:38	51.708477	-121.354021	51.712459	-121.359872	
16-A-@-01108	WOLFE	0.000	0.760	2016/06/24	12:05:54	12:07:04	51.578030	-121.130181	51.576489	-121.120556	
16-A-@-01124	SUMMIT	0.000	0.700	2016/06/19	14:15:20	14:16:28	51.785525	-120.915552	51.782658	-120.908674	
16-A-@-01135	CHILCOTIN CR	0.000	0.760	2016/06/28	18:22:28	18:23:37	51.748702	-121.363143	51.750509	-121.359339	
16-A-@-01142	LAKES ROAD	0.000	0.520	2016/06/29	08:29:44	08:30:34	51.711063	-121.337370	51.707427	-121.333163	
16-A-@-01143	SCUFFI	0.000	1.080	2016/06/29	08:25:47	08:27:22	51.708656	-121.334571	51.707662	-121.324785	
16-A-@-01144	FALLSWAY	0.000	1.250	2016/06/24	12:27:07	12:28:52	51.581684	-121.162184	51.591074	-121.163762	
16-A-@-01147	HUNT	0.000	0.940	2016/06/24	12:30:05	12:31:21	51.590765	-121.166085	51.587637	-121.155681	
16-A-@-01164	HYRA	0.180	0.430	2016/06/29	10:06:36	10:06:59	51.603764	-121.291861	51.605154	-121.289032	
16-A-@-01168	BARNETT	0.000	0.270	2016/06/29	10:12:59	10:13:22	51.598174	-121.302703	51.597012	-121.299637	
16-A-@-01169	KEENE	0.000	0.791	2016/06/29	10:22:12	10:23:18	51.587745	-121.316938	51.592938	-121.309504	two segments due to wrong turn
16-A-@-01169	KEENE	0.791	1.460	2016/06/29	10:17:49	10:18:49	51.592933	-121.309429	51.597520	-121.304926	
16-A-@-01170	STOKES	0.000	1.865	2016/06/29	10:34:39	10:37:24	51.577137	-121.334113	51.587408	-121.316630	
16-A-@-01171	CAMPBELL	0.000	0.760	2016/06/29	10:20:12	10:21:22	51.587426	-121.316584	51.591859	-121.310170	
16-A-@-01184	LAMBLEY	0.000	1.304	2016/06/24	12:54:45	12:56:37	51.601303	-121.173825	51.609717	-121.178826	
16-A-@-01186	RANCHETTE	0.000	0.647	2016/06/24	12:51:32	12:52:37	51.605083	-121.179427	51.602884	-121.171134	
16-A-@-01216	KOKANEE	0.000	0.170	2016/06/19	14:08:52	14:09:16	51.780364	-120.917150	51.781034	-120.919234	three segments - "T" shaped road
16-A-@-01216	KOKANEE	0.170	0.731	2016/06/19	14:12:31	14:13:31	51.781051	-120.919212	51.784695	-120.913963	
16-A-@-01216	KOKANEE	0.731	0.815	2016/06/19	14:09:16	14:09:30	51.781038	-120.919262	51.781228	-120.920443	
16-B-@-00040	LILLOOET-PIONEER	104.765	121.560	2016/06/22	15:31:09	15:47:56	50.798592	-122.008345	50.680621	-121.933911	
16-B-@-00128	LOON LAKE	0.000	30.742	2016/06/22	18:03:27	18:33:25	50.967583	-121.459153	51.131085	-121.192089	
16-B-@-02107	BARNES LAKE	0.000	4.982	2016/06/16	15:47:46	15:52:45	50.677619	-121.258849	50.709922	-121.224539	
16-B-@-02124	STEVENS	0.000	1.160	2016/06/22	18:37:33	18:39:08	51.128784	-121.202766	51.131228	-121.187645	
16-B-@-02260	PATTERSON	0.000	1.874	2016/06/16	15:29:26	15:31:41	50.781328	-121.322599	50.766563	-121.313547	
16-B-@-03056	CORNWALL	0.000	4.860	2016/06/16	15:35:26	15:40:06	50.721747	-121.327236	50.727797	-121.282897	
16-C-@-00011	PAVILION-CLINTON	9.350	26.330	2016/06/22	19:42:21	19:55:17	51.010928	-121.778333	51.089332	-121.591136	
16-C-@-00089	GREEN LAKE NORTH	0.000	22.297	2016/06/23	11:57:35	12:18:14	51.345587	-121.305872	51.443003	-121.093600	
16-C-@-00190	BRIDGE LK.BUSI.RTE.	0.000	2.000	2016/06/24	09:36:20	09:38:40	51.483839	-120.732512	51.481666	-120.711477	
16-C-@-00223	SKYLINE DR	0.000	0.505	2016/06/23	12:34:09	12:34:56	51.391675	-121.273388	51.395158	-121.269889	
16-C-@-00319	MAHOOD LAKE	0.000	4.854	2016/06/24	11:31:48	11:37:05	51.584214	-120.926842	51.610881	-120.879650	
16-C-@-00354	WATCH LAKE	0.000	16.470	2016/06/23	12:48:01	13:02:56	51.441503	-121.147064	51.551770	-121.187906	
16-C-@-00371	HORSE LAKE	0.000	20.230	2016/06/24	11:09:14	11:24:52	51.576493	-121.120548	51.546866	-120.915722	
16-C-@-00386	NORTH BONAPARTE	0.000	11.120	2016/06/23	11:42:28	11:52:12	51.303737	-121.397401	51.351528	-121.271676	two paved segments separated by gravel segment
16-C-@-00386	NORTH BONAPARTE	58.560	58.780	2016/06/24	09:42:02	09:42:21	51.475662	-120.725377	51.477565	-120.725722	
16-C-@-00729	CANIM LAKE SOUTH	0.000	9.400	2016/06/19	14:20:31	14:30:22	51.774307	-120.930592	51.808124	-120.850945	
17-A-@-00090	CEDAR CREEK RD	0.000	4.782	2016/06/24	16:03:44	16:08:34	52.573089	-121.531367	52.613349	-121.551378	
17-A-@-00105	KEITHLEY CREEK RD	0.000	2.333	2016/06/24	15:46:56	15:49:13	52.615872	-121.571852	52.611710	-121.541869	
17-A-@-00198	WALTERS DRIVE	0.000	0.687	2016/06/27	09:27:52	09:28:47	52.332706	-121.417627	52.334041	-121.426646	
17-A-@-00381	FOX MOUNTAIN RD	0.000	9.798	2016/06/24	18:08:09	18:17:35	52.152048	-122.145695	52.171957	-122.058798	
17-A-@-00389	PIGEON RD	0.000	7.158	2016/06/27	10:58:20	11:04:43	52.104546	-121.928380	52.102584	-121.838703	
17-A-@-00398	SPOKIN LAKE RD	0.000	6.570	2016/06/27	09:56:02	10:01:36	52.203755	-121.866030	52.183708	-121.783455	
17-A-@-00408	VALLEY RD	0.000	1.330	2016/06/27	10:35:25	10:37:04	52.116901	-121.935730	52.123132	-121.919730	
17-A-@-00419	HORSEFLY RD	0.000	46.400								on highway test list - remove from side road list
17-A-@-00448	BIG LAKE RD	0.000	4.120	2016/06/27	08:00:34	08:04:51	52.397844	-121.877461	52.391786	-121.828074	
17-A-@-00625	HINCHE RD	0.000	0.601	2016/06/28	15:08:17	15:09:05	51.994977	-121.851633	51.992958	-121.843661	
17-A-@-00643	WILDWOOD RD	0.000	1.338	2016/06/27	17:19:44	17:21:50	52.207579	-122.088569	52.219459	-122.091021	
17-A-@-00644	DOUGLAS RD	0.000	0.780	2016/06/27	18:32:56	18:34:10	52.160112	-122.147158	52.163111	-122.139410	
17-A-@-00653	PINE VALLEY RD	0.000	0.870	2016/06/27	17:55:46	17:57:20	52.175669	-122.093917	52.176890	-122.083298	
17-A-@-00662	WHITE RD	0.000	1.009	2016/06/28	14:28:52	14:30:20	52.124535	-122.081350	52.123901	-122.066967	two segments - break at access from highway
17-A-@-00662	WHITE RD	1.009	4.413	2016/06/28	14:16:50	14:20:27	52.123901	-122.066972	52.132333	-122.056288	
17-A-@-00672	HILLSIDE RD	0.000	0.659	2016/06/27	17:33:25	17:34:21	52.187604	-122.082558	52.192619	-122.086319	
17-A-@-00727	BAILEY RD	0.000	1.264	2016/06/27	18:05:17	18:07:22	52.166617	-122.128576	52.168838	-122.114719	
17-A-@-00874	WOLF STREET	0.000	0.260	2016/06/27	18:36:07	18:36:37	52.160504	-122.142868	52.162804	-122.142995	
17-A-@-00881	WESTCOAST RD	0.000	5.152	2016/06/27	16:59:27	17:04:58	52.215562	-122.092200	52.236984	-122.052702	
17-A-@-00882	HICKORY RD	0.000	0.403	2016/06/27	17:16:28	17:17:08	52.211466	-122.091402	52.211891	-122.085542	
17-A-@-00883	PACIFIC RD	0.000	1.083	2016/06/27	17:13:19	17:14:58	52.206834	-122.084971	52.216357	-122.087922	
17-A-@-00923	GLEN DRIVE	0.000	0.368	2016/06/24	18:24:08	18:24:49	52.145708	-122.069096	52.148999	-122.069170	
17-A-@-00935	JACOBSON DRIVE	0.300	2.420	2016/06/27	17:51:55	17:54:36	52.166609	-122.079467	52.178521	-122.079241	
17-A-@-00939	RODNEY RD	0.000	0.484	2016/06/28	15:05:28	15:06:13	51.999631	-121.857083	52.002691	-121.858736	
17-A-@-00977	ACHER RD	0.000	0.830	2016/06/27	18:17:13	18:18:53	52.166257	-122.137802	52.167253	-122.127469	
17-A-@-00980	ROSS RD	0.000	1.375	2016/06/28	13:53:42	13:55:07	52.143806	-122.096766	52.144247	-122.077059	
17-A-@-00981	PALOMINO RD	0.000	0.260	2016/06/28	13:58:29	13:58:59	52.141873	-122.088277	52.144198	-122.088259	
17-A-@-00994	CAMPBELL RD	0.000	1.670	2016/06/27	17:47:15	17:49:23	52.163508	-122.067615	52.175455	-122.073707	
17-A-@-01052	BORLAND DRIVE	0.000	2.230	2016/06/27	11:12:54	11:15:30	52.113645	-121.888425	52.126506	-121.873904	
17-A-@-01053	WISE PLACE	0.000	0.500	2016/06/27	11:31:31	11:32:11	52.114709	-121.887405	52.118793	-121.889622	
17-A-@-01088	BROUSE RD	0.000	1.915	2016/06/27	11:26:16	11:28:35	52.119245	-121.883430	52.113735	-121.863827	
17-A-@-01108	FERGUSON RD	0.000	1.850	2016/06/27	10:17:11	10:19:06	52.121864	-121.940093	52.130758	-121.919667	
17-A-@-01111	HUSTON RD	0.000	2.220	2016/06/27	10:51:59	10:54:44	52.112111	-121.902280	52.122768	-121.920553	
17-A-@-01116	MOORE DRIVE	0.000	0.380	2016/06/27	11:36:10	11:36:46	52.119151	-121.868107	52.121373	-121.863910	
17-A-@-01117	EAGLE WAY RD	0.000	0.470	2016/06/27	11:39:38	11:40:26	52.117060	-121.862440	52.120633	-121.865186	
17-A-@-01118	PTARMIGAN PLACE	0.000	0.275	2016/06/27	11:07:53	11:08:18	52.113683	-121.869889	52.115931	-121.871238	
17-A-@-01129	RUTHERFORD RD	0.000	0.500	2016/06/27	11:49:48	11:50:37	52.100576	-121.922484	52.104987	-121.922755	
17-A-@-01132	EXTON WAY RD	0.000	0.410	2016/06/27	11:46:40	11:47:18	52.102886	-121.922445	52.102085	-121.916808	
17-A-@-01154	PHEASANT DRIVE	0.000	1.250	2016/06/27	18:50:26	18:52:05	52.140664	-122.101880	52.148829	-122.112650	
17-A-@-01156	EIDER DRIVE	0.000	0.810	2016/06/27	18:41:41	18:42:46	52.138914	-122.111884	52.144228	-122.118791	
17-A-@-01160	MURRE RD	0.000	0.678	2016/06/27	18:46:36	18:47:32	52.143364	-122.113823	52.148874	-122.117189	

Survey Limits 2016

Route	Route Name	Start km	End km	Date	Start Time	End Time	Start Latitude	Start Longitude	End Latitude	End Longitude	Comments
17-A-@-01161	GANNET RD	0.000	0.990	2016/06/27	18:43:51	18:45:12	52.142716	-122.116599	52.148896	-122.107968	
17-A-@-01165	WOODCUTTER PLACE	0.000	0.270	2016/06/27	11:20:53	11:21:19	52.123273	-121.880184	52.123273	-121.876437	
17-A-@-01170	DAVISON RD	0.000	0.280	2016/06/27	11:19:58	11:20:30	52.125081	-121.885275	52.125236	-121.881212	
17-A-@-01177	ENGLISH COMPANY RD	0.000	0.320	2016/06/27	11:16:25	11:16:54	52.126518	-121.878947	52.128703	-121.876640	
17-A-@-01199	KEMP RD	0.000	0.610	2016/06/24	18:26:28	18:27:07	52.148946	-122.091257	52.154393	-122.091182	
17-A-@-01200	KOPEKA PLACE	0.000	0.250	2016/06/24	18:27:07	18:27:28	52.154393	-122.091182	52.154577	-122.087573	
17-A-@-01204	JEFFERSON RD	0.000	0.385	2016/06/27	10:20:44	10:21:19	52.129080	-121.922599	52.130243	-121.927446	
17-A-@-01243	SETTLERS PLACE	0.000	0.450	2016/06/27	11:52:29	11:53:22	52.100617	-121.925847	52.104455	-121.926877	
17-A-@-01254	RIDGEWAY PLACE	0.000	0.330	2016/06/27	10:45:27	10:46:05	52.115546	-121.915122	52.115203	-121.910888	
17-A-@-01294	SESAME RD	0.000	0.300	2016/06/27	11:25:26	11:25:52	52.120543	-121.887322	52.120547	-121.882949	
17-A-@-01343	HEINIE PLACE	0.000	0.530	2016/06/27	10:49:01	10:49:45	52.106614	-121.911877	52.108201	-121.905678	
17-A-@-01356	PROSPECTOR ROAD	0.000	1.294	2016/06/27	10:25:10	10:26:36	52.120012	-121.938319	52.123147	-121.955689	
17-A-@-01358	GOLD DIGGER DRIVE	0.000	1.104	2016/06/27	10:31:09	10:32:38	52.119018	-121.940277	52.121415	-121.954491	
17-A-@-01359	PLACER PLACE	0.000	0.330	2016/06/27	10:27:56	10:28:24	52.121887	-121.952582	52.121137	-121.956747	
17-B-@-00137	WMS LAKE-DOG CREEK	63.059	90.325	2016/06/28	09:01:50	09:23:57	51.922685	-122.113713	52.112225	-122.150490	
17-B-@-00360	MISSION RD	0.000	10.565	2016/06/27	13:42:22	13:53:58	52.065139	-121.918019	52.111463	-121.990493	
17-B-@-00379	MILE 136-ENTERPRISE	0.440	1.328	2016/06/28	15:16:48	15:18:07	51.969014	-121.812337	51.975957	-121.806838	
17-B-@-00383	MILE 168-WILLIAMS LK	0.000	1.990	2016/06/27	18:22:59	18:25:48	52.167826	-122.156371	52.174802	-122.141129	
17-B-@-00610	CHIMNEY LAKE ROAD	0.000	24.320	2016/06/28	09:54:00	10:12:46	51.903468	-121.916583	52.061375	-122.099926	
17-B-@-00628	SCHMIDT RD	0.000	0.590	2016/06/28	11:01:03	11:01:59	52.099682	-122.125012	52.102515	-122.129016	
17-B-@-00629	GIBBON RD	0.000	1.336	2016/06/28	11:16:22	11:18:07	52.101424	-122.147069	52.101103	-122.127786	
17-B-@-00630	DENNY RD	0.000	0.480	2016/06/28	10:57:23	10:58:19	52.095576	-122.124900	52.099236	-122.123030	
17-B-@-00642	DALLAS RD	0.000	0.660	2016/06/27	16:50:09	16:51:03	52.241544	-122.114365	52.246471	-122.118830	
17-B-@-00661	BASS RD	0.000	0.320	2016/06/28	14:13:14	14:13:53	52.124236	-122.079476	52.124502	-122.074925	
17-B-@-00671	LYNE RD	0.000	0.418	2016/06/28	12:07:29	12:08:14	52.112753	-122.174046	52.115154	-122.171926	
17-B-@-00675	KRAGBAK RD	0.000	0.260	2016/06/27	16:43:20	16:43:39	52.276028	-122.146899	52.277764	-122.149435	
17-B-@-00694	WINGER RD	0.000	1.605	2016/06/28	11:38:57	11:41:04	52.110915	-122.169172	52.108172	-122.147554	
17-B-@-00697	FIRDALE DRIVE	0.000	1.000	2016/06/27	17:58:58	18:00:16	52.175315	-122.095738	52.177375	-122.081691	
17-B-@-00706	RICHARD STEET	0.000	0.400	2016/06/28	11:03:06	11:03:46	52.101013	-122.137202	52.102541	-122.133704	
17-B-@-00707	BANN RD	0.000	0.360	2016/06/28	11:07:34	11:08:19	52.102766	-122.141895	52.102373	-122.137290	
17-B-@-00799	RICHLAND DRIVE	0.000	1.150	2016/06/27	18:29:58	18:31:38	52.169573	-122.153069	52.167204	-122.138044	
17-B-@-00816	ROBERTS DRIVE	0.000	1.872	2016/06/28	11:25:51	11:28:33	52.112729	-122.159275	52.105300	-122.137378	
17-B-@-00863	CONRAD CRESCENT	0.000	0.330	2016/06/28	11:13:20	11:13:57	52.102620	-122.146396	52.101419	-122.142770	
17-B-@-00864	BALSAM STREET	0.000	0.370	2016/06/28	11:11:37	11:12:12	52.101430	-122.146528	52.104018	-122.144920	
17-B-@-00886	HULL RD	0.000	0.405	2016/06/28	11:31:43	11:32:15	52.110901	-122.169108	52.110988	-122.163222	
17-B-@-00890	MOUNTVIEW DRIVE	0.000	0.260	2016/06/28	11:10:22	11:11:00	52.100464	-122.144204	52.101086	-122.141414	
17-B-@-00916	SNYDER RD	0.000	0.982	2016/06/28	12:20:13	12:21:24	52.100146	-122.189554	52.100135	-122.175240	
17-B-@-00922	ESLER RD	0.000	1.576	2016/06/28	12:28:32	12:31:21	52.098368	-122.182577	52.110323	-122.189212	
17-B-@-00931	ORGNACCO RD	0.000	0.460	2016/06/28	12:10:46	12:11:28	52.115128	-122.173960	52.119229	-122.173865	
17-B-@-00943	CATALINE DRIVE	0.000	0.400	2016/06/28	10:54:15	10:54:54	52.094873	-122.116951	52.096935	-122.112371	
17-B-@-00944	GUN-A-NOOT TRAIL	0.000	0.940	2016/06/28	10:46:03	10:47:34	52.092396	-122.113980	52.099530	-122.117501	
17-B-@-00954	FLETT RD	0.000	1.440	2016/06/28	08:33:23	08:35:03	52.044478	-122.138408	52.042593	-122.119818	
17-B-@-00961	HODGSON RD	0.000	8.148	2016/06/28	11:50:00	11:58:40	52.081350	-122.175917	52.111814	-122.147696	
17-B-@-00986	KALLYN RD	0.000	1.608	2016/06/28	12:23:17	12:25:14	52.098119	-122.176861	52.110254	-122.185838	
17-B-@-00987	CENTAUR DRIVE	0.000	0.340	2016/06/28	10:50:57	10:51:28	52.098273	-122.117594	52.099240	-122.114097	
17-B-@-00989	SELKIRK RD	0.000	0.780	2016/06/28	08:28:49	08:30:05	52.042169	-122.138387	52.049171	-122.138392	
17-B-@-00990	TRIUMPH RD	0.000	0.308	2016/06/28	08:32:38	08:33:08	52.045686	-122.142868	52.045673	-122.138391	
17-B-@-01022	PAMELA PLACE	0.000	0.250	2016/06/27	18:13:51	18:14:26	52.169191	-122.141724	52.168670	-122.138278	
17-B-@-01023	RANSOME PLACE	0.000	0.283	2016/06/27	18:16:09	18:16:49	52.168157	-122.142180	52.167950	-122.138225	
17-B-@-01032	BOND LAKE RD	1.880	2.390	2016/06/28	11:00:03	11:00:53	52.095251	-122.124065	52.099475	-122.124047	
17-B-@-01104	NORTH LAKESIDE DRIVE	0.000	0.860	2016/06/28	14:13:53	14:15:09	52.124501	-122.074902	52.123158	-122.062677	
17-B-@-01207	EAGLEVIEW RD	0.000	1.790	2016/06/28	08:19:06	08:21:15	52.065076	-122.119355	52.070685	-122.096081	
17-B-@-01370	SEIBERT PLACE	0.000	0.250	2016/06/27	18:27:16	18:27:43	52.174876	-122.144709	52.174763	-122.141112	
17-C-@-00508	STACK VALLEY RD	0.000	1.618	2016/06/28	07:25:14	07:26:55	51.968298	-122.532301	51.982084	-122.533116	
17-C-@-00600	CHILKO-NEWTON RD	16.921	17.460	2016/08/23	16:45:48	16:46:31	52.096664	-123.521145	52.099286	-123.525913	
17-C-@-01007	STUM LAKE RD	0.000	0.616	2016/08/23	16:59:59	17:00:45	52.082707	-123.275419	52.087120	-123.270658	
17-C-@-01008	MCCAULEY RD	0.000	0.808	2016/08/23	17:03:54	17:05:00	52.084761	-123.272511	52.085489	-123.261104	
17-C-@-01085	PUNTZI MOUNTAIN RD	0.000	1.854	2016/08/23	16:06:02	16:07:43	52.112313	-124.065150	52.122271	-124.085132	
17-D-@-00157	SALLOOMPT RD	0.000	2.615	2016/08/23	10:50:11	10:53:00	52.398098	-126.504490	52.403215	-126.518017	
17-D-@-00447	CHRISTENSEN RD	0.000	1.850	2016/08/23	13:50:45	13:52:51	52.459933	-125.308537	52.469309	-125.290650	
17-D-@-00823	DOUGLAS DRIVE	0.000	1.510	2016/08/23	11:04:11	11:06:29	52.391913	-126.489112	52.402402	-126.483801	
17-D-@-00828	GRANT RD	0.000	1.390	2016/08/23	10:34:11	10:36:04	52.361565	-126.684974	52.374040	-126.685217	
18-A-H-00003	OLSON WEST	6.401	8.800	2016/08/28	13:40:34	13:43:20	53.217116	-122.446124	53.226543	-122.419729	
18-A-H-00106	LAKE CK RD	0.000	1.090	2016/06/25	09:54:07	09:55:35	53.392413	-122.575408	53.389715	-122.561358	
18-A-H-00176	DUNKLEY	0.000	0.850	2016/06/25	10:10:32	10:11:34	53.274339	-122.476416	53.277222	-122.464657	
18-A-N-00025	PARADISE	0.000	2.980	2016/06/25	16:41:53	16:44:33	53.019042	-122.563742	53.042539	-122.567165	
18-A-N-00038	PINNACLES RD	0.000	8.747	2016/06/25	16:19:56	16:28:24	52.991346	-122.542344	53.021080	-122.605673	
18-A-N-00042	SHAVER	0.000	0.760	2016/06/25	14:55:56	14:56:47	53.028584	-122.421755	53.035409	-122.421707	
18-A-N-00043	AIRD RD	0.000	0.480	2016/06/25	15:38:04	15:38:38	53.019723	-122.469769	53.024021	-122.469715	
18-A-N-00044	QUES-CANYON	0.000	2.800	2016/06/25	15:13:33	15:16:34	53.020285	-122.458247	53.006864	-122.430685	
18-A-N-00048	HILBORN ROAD	0.000	1.136	2016/06/26	12:16:10	12:17:43	53.000764	-122.511852	53.008464	-122.520921	
18-A-N-00052	FANSLAU	0.000	0.340	2016/06/25	15:10:37	15:11:07	53.023314	-122.443437	53.026230	-122.441970	
18-A-N-00054	MCLEAN RD	0.000	1.245	2016/06/25	14:02:17	14:03:44	53.031330	-122.410842	53.042029	-122.413555	two separate road segments
18-A-N-00054	MCLEAN RD	1.296	6.540	2016/06/25	14:19:47	14:24:32	53.043044	-122.409471	53.079126	-122.405037	
18-A-N-00057	BARTKOW	0.000	1.403	2016/06/26	11:16:56	11:18:40	53.026537	-122.599085	53.025103	-122.580807	
18-A-N-00058	BLACKWATER RD	0.000	16.325	2016/06/25	17:13:15	17:25:13	52.996390	-122.520613	53.092647	-122.671249	
18-A-N-00059	NAZKO	0.000	19.600	2016/06/26	08:40:27	08:55:21	53.025877	-122.598879	52.972487	-122.814807	
18-A-N-00088	BAKER CREEK	0.000	2.400	2016/06/26	12:04:52	12:07:43	52.994679	-122.546931	52.987295	-122.516655	
18-A-N-00100	MATTHEWS	0.000	2.637	2016/06/25	14:42:20	14:45:21	53.055032	-122.389548	53.069490	-122.367617	
18-A-N-00142	MOROSOFF	0.000	0.640	2016/06/25	15:02:40	15:03:34	53.027096	-122.427599	53.021522	-122.425608	
18-A-N-00143	BARKER RD	0.000	1.275	2016/06/26	11:36:42	11:38:04	53.027044	-122.614261	53.038131	-122.617769	
18-A-N-00152	HEATON RD	0.000	0.360	2016/06/26	11:32:36	11:33:04	53.031284	-122.598000	53.031243	-122.592664	
18-A-N-00156	BOOTH	0.000	0.330	2016/06/26	11:39:31	11:40:00	53.031481	-122.614476	53.031296	-122.609611	
18-A-N-00165	TEN MILE LAKE RD	0.000	0.988	2016/06/25	11:26:22	11:27:31	53.064555	-122.442028	53.060901	-122.451019	
18-A-N-00168	DRUMMOND RD	0.000	0.500	2016/06/25	15:47:12	15:47:54	53.016250	-122.487689	53.020068	-122.484683	
18-A-N-00177	BJORNSON RD	0.000	5.100	2016/06/25	11:19:05	11:23:54	53.090628	-122.466361	53.071309	-122.424796	
18-A-N-00189	MILBURN LK	0.000	2.470	2016/06/25	18:09:38	18:11:51	53.012898	-122.674111	53.033938	-122.681004	
18-A-N-00190	NORWOOD RD	-0.008	2.982	2016/06/26	11:49:02	11:52:20	53.034871	-122.637985	53.025771	-122.600914	
18-A-N-00197	RAWLINGS	0.000	10.870	2016/06/25	18:16:19	18:27:07	53.014535	-122.657131	53.092899	-122.670577	
18-A-N-00254	FALCON	0.000	0.820	2016/06/25	14:58:52	14:59:54	53.032055	-122.421737	53.032000	-122.433934	
18-A-N-00263	SCHEMENAUR	0.000	1.230	2016/06/25	14:16:51	14:19:45	53.031850	-122.408872	53.042810	-122.409552	
18-A-N-00302	ROBIN ROAD	0.000	0.435	2016/06/26	12:19:34	12:20:21	53.002818	-122.515636	52.999643	-122.514412	
18-A-N-00364	CALLIS	0.000	0.450	2016/06/25	15:21:17	15:22:00	53.017010	-122.481622	53.012981	-122.481604	
18-A-N-00616	ASTRAL RD	0.000	0.470	2016/06/25	15:31:03	15:31:56	53.021315	-122.471975	53.025531	-122.471920	
18-A-N-00617	DESTINY DRV	0.000	0.415	2016/06/25	15:30:28	15:31:02	53.020487	-122.478027	53.021299	-122.471999	
18-A-N-00618	FUTURE DRV	0.000	0.350	2016/06/25	15:34:32	15:35:11	53.021973	-122.477043	53.022613	-122.471935	
18-A-N-00619	SERENITY DRV	0.000	0.496	2016/06/25	15:27:23	15:28:10	53.024079	-122.477066	53.023969	-122.469710	
18-A-N-00620	BERNARD RD	0.000	0.844	2016/06/25	15:24:28	15:25:47	53.018657	-122.476429	53.025185	-122.477078	
18-A-N-00667	BULOVA	0.000	0.465	2016/06/25	14:14:01	14:14:40	53.033551	-122.406319	53.037709	-122.406310	
18-A-N-00668	BIG BEN RD	0.000	0.450	2016/06/25	14:11:12	14:11:49	53.033556	-122.409596	53.033598	-122.402946	
18-A-N-00669	OMEGA	0.000	0.760	2016/06/25	14:07:26	14:08:33	53.037721	-122.413514	53.037700	-122.402215	
18-A-N-00670	ELGIN	0.000	0.285	2016/06/25	14:05:32	14:06:04	53.039074	-122.413842	53.039186	-122.409613	
18-A-N-00671	VERNON	0.000	0.730	2016/06/26	11:41:08	11:42:02	53.031483	-122.611489	53.038044	-122.611556	
18-A-N-00687	GOLDMAN	0.000	0.310	2016/06/25	14:53:11	14:53:37	53.028581	-122.421754	53.025812	-122.421811	
18-A-N-00742	BONNY	0.000	0.419	2016/06/25	16:28:23	16:28:58	53.021047	-122.605631	53.024326	-122.603192	two segments - break at access from Nazko Rd
18-A-N-00742	BONNY	0.419	0.790	2016/06/26	11:16:29	11:16:56	53.024335	-122.603210	53.026529	-122.599121	
18-A-N-00743	POLLARD	0.000	2.100	2016/06/25	11:04:40	11:07:16	53.087249	-122.385295	53.070142	-122.387042	
18-A-N-00750	CARAVELLE RD	0.000	0.460	2016/06/25	14:11:49	14:12:26	53.033593	-122.402953	53.037697	-122.402918	
18-A-N-00960	LANGLEY	0.000	0.784	2016/06/26	11:22:12	11:23:08	53.023374	-122.574455	53.019446	-122.567528	two segments - break at access from Blackwater Rd
18-A-N-00960	LANGLEY	0.784	1.055	2016/06/26	11:24:59	11:25:23	53.019451	-122.567475	53.019399	-122.563493	
18-A-N-00961	BARTKOW CLOS	0.000	0.360	2016/06/26	11:27:59	11:28:27	53.026420	-122.580820	53.024970	-122.576765	
18-A-W-00904	SORUM ROAD	0.000	1.327	2016/06/25	13:44:50	13:46:21	53.055217	-122.174086	53.052867	-122.157036	
18-A-Z-00059	NAZKO ROAD	0.000	13.867	2016/06/26	08:55:21	09:05:45	52.972487	-122.814807	52.984427	-122.991008	two segments - break at Tibbles Rd
18-A-Z-00059	NAZKO ROAD	13.867	70.480	2016/06/26	09:11:07	09:52:35	52.984427	-122.991004	52.950826	-123.595565	
18-A-Z-00098	TIBBLES	0.000	7.518	2016/06/26	10:37:16	10:42:37	52.984435	-122.990857	52.925918	-123.015415	
18-A-Z-00683	PARKINS RD	0.000	1.111	2016/06/26	10:52:50	10:54:01	52.996327	-122.929340	52.988300	-122.936750	
18-B-M-00019	BEAVER LAKE	0.000	3.424	2016/06/27	15:43:18	15:46:52	52.426002	-122.299456	52.442142	-122.274715	
18-B-M-00037	FRIDLINGTON	0.000	0.304	2016/06/27	14:52:54	14:53:25	52.559352	-122.462318	52.557107	-122.460552	
18-B-M-00064	LAGERQUIST	0.000	1.899	2016/06/27	15:35:54	15:38:20	52.425826	-122.305992	52.426226	-122.330727	
18-B-M-00067	WARD	0.000	0.370	2016/06/27	15:38:20	15:39:11	52.426226	-122.330727	52.426384	-122.335687	
18-B-M-00248	SODA CK-MACA	0.000	0.364	2016/06/27	15:09:25	15:09:58	52.450824	-122.402814	52.447961	-122.401638	

Survey Limits 2016

Route	Route Name	Start km	End km	Date	Start Time	End Time	Start Latitude	Start Longitude	End Latitude	End Longitude	Comments
18-B-M-00249	ROBERTSON	8.124	8.990	2016/08/28	11:34:21	11:35:19	52.413797	-122.289057	52.420227	-122.295567	
18-B-M-00655	GIBRALTER	0.000	13.780	2016/06/27	15:48:48	16:00:22	52.442246	-122.275012	52.532462	-122.291714	
18-B-M-00662	SPUR	0.000	0.540	2016/06/27	15:05:08	15:06:00	52.448380	-122.399505	52.451155	-122.401579	
18-B-M-00731	PICARD	0.000	0.302	2016/06/27	15:02:02	15:02:29	52.460972	-122.408617	52.458779	-122.406271	
18-B-M-00909	MCLEESE YARD	0.000	0.270	2016/06/27	15:16:22	15:16:58	52.425075	-122.349155	52.424746	-122.352079	
18-B-M-01017	SUNNY ROAD	0.000	0.440	2016/06/27	15:19:48	15:20:30	52.425437	-122.308705	52.421785	-122.310370	
18-B-S-00015	JOHNSON	0.000	6.996	2016/06/26	15:27:06	15:32:46	52.946143	-122.398227	52.898031	-122.420347	
18-B-S-00017	LUST RD	0.000	2.077	2016/06/26	16:47:54	16:50:19	52.964575	-122.463646	52.956568	-122.445279	
18-B-S-00022	WEST PLYWOOD	0.000	3.618	2016/06/26	16:09:31	16:13:01	52.947768	-122.486910	52.969797	-122.493397	
18-B-S-00030	GOOK RD	0.000	2.340	2016/06/26	16:50:19	16:53:30	52.956568	-122.445291	52.961337	-122.418441	
18-B-S-00032	FRASER RD.	36.240	53.980	2016/06/26	07:19:32	07:35:31	52.810563	-122.488222	52.955135	-122.517868	
18-B-S-00045	DRAGON LAKE	0.000	0.425	2016/06/26	14:47:09	14:47:39	52.919687	-122.436403	52.919681	-122.430087	two segments due to missed turn
18-B-S-00045	DRAGON LAKE	0.425	6.580	2016/06/26	14:52:20	14:59:23	52.919692	-122.430040	52.957440	-122.398635	
18-B-S-00055	KERSLEY RD	0.000	2.733	2016/06/26	18:32:24	18:35:13	52.801712	-122.423663	52.823195	-122.417302	
18-B-S-00060	QUES-HYDRLIC	3.530	14.191	2016/06/26	15:03:45	15:12:08	52.965529	-122.404223	52.897300	-122.304591	
18-B-S-00072	DATOFF	0.000	0.900	2016/06/26	14:47:39	14:48:45	52.919681	-122.430087	52.919681	-122.416722	
18-B-S-00077	DALE LK	0.000	5.670	2016/06/26	17:41:30	17:47:10	52.867268	-122.408170	52.905142	-122.432688	
18-B-S-00082	HIGDON RD.	0.000	1.485	2016/06/26	08:15:41	08:17:41	52.902613	-122.489864	52.891765	-122.498486	
18-B-S-00089	ARNOLDUS	0.000	1.180	2016/06/26	17:55:56	17:57:18	52.837403	-122.416708	52.837553	-122.434187	
18-B-S-00096	WHITE	0.000	0.450	2016/06/26	18:08:42	18:09:17	52.837403	-122.423482	52.833379	-122.423696	
18-B-S-00120	SHORT AVE	0.000	0.350	2016/06/26	14:05:25	14:06:06	52.973317	-122.446063	52.973357	-122.440898	
18-B-S-00126	LAKEVIEW DRV	0.000	0.335	2016/06/26	16:59:21	17:00:01	52.957584	-122.424321	52.955292	-122.426421	
18-B-S-00133	BEACH CRES	0.000	0.645	2016/06/26	17:13:05	17:14:01	52.956577	-122.427978	52.952587	-122.432134	two segments due to missed turn
18-B-S-00133	BEACH CRES	0.645	1.060	2016/06/26	17:15:32	17:16:14	52.952610	-122.432189	52.956329	-122.432009	
18-B-S-00162	DURRELL RD	0.000	3.710	2016/06/26	17:32:21	17:36:41	52.871687	-122.434047	52.874638	-122.396490	
18-B-S-00170	FRENCH	0.000	3.983	2016/06/26	18:19:09	18:22:53	52.822945	-122.418615	52.818950	-122.362310	
18-B-S-00203	RED BLUFF RD	0.000	0.430	2016/06/26	15:38:23	15:38:58	52.883426	-122.438470	52.883439	-122.444841	three segments - no image on second section
18-B-S-00203	RED BLUFF RD	0.430	6.498	2016/06/26	15:40:35	15:45:45	52.883421	-122.444885	52.931556	-122.469095	
18-B-S-00203	RED BLUFF RD	6.498	9.788	2016/06/26	15:53:58	15:57:04	52.931556	-122.469091	52.960121	-122.477116	
18-B-S-00216	KUBE ST	0.000	0.330	2016/06/26	13:54:24	13:54:57	52.964553	-122.451897	52.967492	-122.451970	
18-B-S-00218	EDWARDS	0.000	1.860	2016/06/26	18:14:10	18:16:32	52.831055	-122.418620	52.846990	-122.413471	
18-B-S-00219	MAPLE HEIGHTS RD	0.000	0.890	2016/06/26	14:00:12	14:01:42	52.956588	-122.447076	52.964558	-122.446033	
18-B-S-00223	MAPLE DRIVE	4.010	4.216	2016/06/26	16:18:53	16:19:55	52.964548	-122.446070	52.964533	-122.443009	
18-B-S-00226	VENEER RD	0.000	0.310	2016/06/26	16:02:24	16:02:52	52.961559	-122.500963	52.961509	-122.505550	
18-B-S-00227	MARSH ROAD	0.000	2.990	2016/06/26	07:40:51	07:44:14	52.953769	-122.516768	52.939053	-122.526187	two segments due to missed turn
18-B-S-00227	MARSH ROAD	2.990	7.370	2016/06/26	07:46:31	07:51:05	52.939060	-122.526164	52.943606	-122.574901	
18-B-S-00241	SYMINGTON RD.	0.000	0.303	2016/06/26	14:32:16	14:32:42	52.938733	-122.460830	52.936428	-122.458454	
18-B-S-00242	SALES WEST RD.	0.322	1.980	2016/06/26	14:35:31	14:37:31	52.937509	-122.447882	52.939105	-122.472203	
18-B-S-00244	ALEX SCHOOL N	0.000	0.238	2016/06/26	18:59:40	19:00:12	52.634343	-122.452719	52.633380	-122.450511	
18-B-S-00253	CARAGANA RD	0.000	0.520	2016/06/26	16:04:23	16:05:06	52.959380	-122.500029	52.959343	-122.507732	
18-B-S-00255	YENDRYAS RD.	0.000	0.850	2016/06/26	14:22:33	14:23:44	52.912505	-122.433853	52.919702	-122.437484	
18-B-S-00256	MACDONALD RD.	0.000	0.500	2016/06/26	08:06:45	08:07:36	52.913228	-122.493709	52.910327	-122.490839	
18-B-S-00275	SPRUCE ST	0.000	0.320	2016/06/26	16:33:17	16:33:50	52.964601	-122.460564	52.967464	-122.460652	
18-B-S-00276	POPLAR AVE	0.000	0.585	2016/06/26	16:35:25	16:36:20	52.966615	-122.460613	52.966578	-122.451919	
18-B-S-00280	CEDAR AVE	0.000	0.350	2016/06/26	14:07:23	14:08:10	52.971967	-122.446092	52.971565	-122.441004	
18-B-S-00281	ELM ST	0.000	1.130	2016/06/26	14:01:42	14:03:39	52.964563	-122.446033	52.974704	-122.445992	
18-B-S-00291	OAK AVE	0.000	0.330	2016/06/26	15:58:43	15:59:16	52.959795	-122.480956	52.957519	-122.484091	
18-B-S-00300	CHEW RD	0.000	0.470	2016/06/26	13:29:21	13:29:59	52.956593	-122.444773	52.960745	-122.443589	
18-B-S-00301	SAM TOY AVE	0.000	0.410	2016/06/26	13:37:58	13:38:39	52.956596	-122.442784	52.960224	-122.441858	
18-B-S-00303	FERGUSON ST	0.000	0.380	2016/06/26	13:32:01	13:32:40	52.960269	-122.443816	52.960228	-122.438203	
18-B-S-00304	SING ST	0.000	0.266	2016/06/26	13:33:51	13:34:19	52.958833	-122.442208	52.958792	-122.438287	
18-B-S-00305	WONG ST	0.000	0.295	2016/06/26	13:35:30	13:36:02	52.957427	-122.442606	52.957378	-122.438271	
18-B-S-00306	JASPER ST	0.000	0.760	2016/06/26	17:22:16	17:23:27	52.952455	-122.446166	52.945741	-122.448120	
18-B-S-00307	JADE ST	0.000	1.738	2016/06/26	13:42:34	13:45:16	52.946690	-122.448387	52.962011	-122.444069	
18-B-S-00308	AGATE	0.000	0.400	2016/06/26	13:13:34	13:14:13	52.950038	-122.447125	52.948987	-122.441815	
18-B-S-00311	FLINT RD	0.000	0.500	2016/06/26	13:25:44	13:26:38	52.949938	-122.443613	52.952563	-122.446161	
18-B-S-00314	BASALT RD	0.000	0.259	2016/06/26	13:17:35	13:18:01	52.950022	-122.447166	52.950207	-122.451008	
18-B-S-00343	CARLSON CANYON RD.	0.000	1.544	2016/06/26	08:09:56	08:11:54	52.893734	-122.481120	52.905726	-122.481286	
18-B-S-00351	HAUSAMAN RD	0.000	0.260	2016/06/26	13:48:33	13:48:56	52.956934	-122.462198	52.959263	-122.462135	
18-B-S-00355	LAKEVIEW CRES	0.000	0.290	2016/06/26	17:03:43	17:04:12	52.956556	-122.426437	52.953955	-122.426437	
18-B-S-00361	LAUREL RD	0.000	0.500	2016/06/26	16:32:34	16:33:16	52.960079	-122.460473	52.964567	-122.460555	
18-B-S-00362	LOMBARDIE DRV	0.000	0.580	2016/06/26	16:37:56	16:38:49	52.963142	-122.460518	52.963134	-122.451922	
18-B-S-00363	JAY RD	0.000	0.360	2016/06/26	17:00:23	17:00:52	52.957584	-122.426405	52.960820	-122.426412	
18-B-S-00392	REDWOOD RD	0.000	0.370	2016/06/26	13:50:45	13:51:20	52.956700	-122.454445	52.960005	-122.454309	
18-B-S-00395	EBERG RD.	0.000	0.910	2016/06/26	14:44:40	14:45:48	52.915730	-122.456348	52.919509	-122.450062	
18-B-S-00600	TEOFIL RD.	0.000	0.910	2016/06/26	14:45:49	14:47:08	52.919558	-122.449918	52.919687	-122.436416	
18-B-S-00609	TORCHES RD	0.000	0.330	2016/06/26	18:42:33	18:43:11	52.762893	-122.442802	52.760733	-122.445611	
18-B-S-00622	BUDD	0.000	0.680	2016/06/26	18:07:13	18:08:22	52.838541	-122.433807	52.838368	-122.423739	
18-B-S-00623	PARR	0.000	0.800	2016/06/26	17:58:51	17:59:48	52.837469	-122.428974	52.844639	-122.428712	
18-B-S-00627	SPRUCE RIDGE	0.000	0.659	2016/06/26	17:10:27	17:11:27	52.956585	-122.427848	52.960235	-122.432564	
18-B-S-00628	WINDT RD	0.000	1.867	2016/06/26	18:51:16	18:53:34	52.710827	-122.456828	52.694338	-122.454208	
18-B-S-00629	CYPRESS RD	0.000	0.580	2016/06/26	16:40:45	16:41:46	52.961589	-122.460518	52.961594	-122.451929	
18-B-S-00633	MOUNTAIN ASH	0.000	0.885	2016/06/26	13:53:18	13:54:25	52.956621	-122.451982	52.964564	-122.451897	
18-B-S-00634	TAMARACK RD	0.000	0.535	2016/06/26	16:44:23	16:45:57	52.960976	-122.451954	52.960855	-122.444062	
18-B-S-00635	ARBUTUS RD	0.000	0.690	2016/06/26	13:11:54	13:13:11	52.956613	-122.450526	52.952421	-122.446523	
18-B-S-00645	TIMOTHY RD.	0.000	0.484	2016/06/26	14:17:26	14:18:11	52.912560	-122.433805	52.912358	-122.440951	
18-B-S-00649	BASS RD	0.000	0.490	2016/06/26	13:57:35	13:58:16	52.956592	-122.449555	52.960980	-122.449763	
18-B-S-00677	DOGWOOD RD	0.000	0.580	2016/06/26	16:43:19	16:44:10	52.960119	-122.460510	52.960038	-122.451936	
18-B-S-00691	KEITH RD.	0.000	0.600	2016/06/26	14:19:33	14:20:34	52.912466	-122.436767	52.917643	-122.439103	
18-B-S-00718	ROBERTA	0.000	0.590	2016/06/26	18:01:41	18:02:40	52.842927	-122.433655	52.842871	-122.424913	
18-B-S-00721	LAWLOR RD.	0.000	0.430	2016/06/26	14:29:16	14:30:04	52.928707	-122.475321	52.928743	-122.468946	
18-B-S-00784	BELCARRA RD	0.000	0.280	2016/06/26	17:01:57	17:02:25	52.959869	-122.426429	52.960227	-122.422408	
18-B-S-00839	CROFT RD	0.000	0.480	2016/06/26	17:16:29	17:17:10	52.956589	-122.434490	52.960887	-122.434486	
19-A-@-00303	ISLE PIERRE ROAD	0.000	6.207	2016/07/01	07:45:53	07:51:12	53.865523	-123.266274	53.913663	-123.257877	
19-A-@-00308	UPPER MUD RIVER ROAD	5.790	13.130	2016/07/29	15:53:31	16:00:39	53.758922	-123.019295	53.810559	-122.974443	
19-A-@-00310	LOWER MUD RIVER ROAD	0.000	6.106	2016/07/29	15:32:53	15:38:33	53.810527	-122.960394	53.857603	-122.983592	
19-A-@-00325	BLACKWATER ROAD	20.042	45.029	2016/07/29	14:36:14	14:54:12	53.616695	-122.937264	53.816023	-122.850482	
19-A-@-00330	WEST LAKE ROAD	0.000	6.520	2016/07/29	14:09:31	14:15:42	53.747569	-122.871699	53.699890	-122.833463	
19-A-@-00397	CARMEL DRIVE	0.000	2.100	2016/07/29	15:25:13	15:27:20	53.816100	-122.913296	53.818712	-122.942388	
19-A-@-00411	SHELLEY SOUTH ROAD	0.000	0.820	2016/07/29	12:22:40	12:23:33	53.920164	-122.616949	53.927354	-122.615496	
19-A-@-00415	STEWART ROAD	0.000	0.606	2016/07/29	11:46:55	11:47:48	53.934599	-122.535106	53.939927	-122.536349	
19-A-@-00422	HEDLUND ROAD	0.000	1.030	2016/07/29	12:01:25	12:02:42	53.911183	-122.575047	53.909561	-122.561218	
19-A-@-00423	GEDDES ROAD	0.000	3.010	2016/07/29	11:51:28	11:54:47	53.929371	-122.543057	53.956305	-122.543071	
19-A-@-04062	GISCOME ROAD	0.001	8.650	2016/07/29	12:08:25	12:15:36	53.898436	-122.605005	53.944504	-122.509300	
19-A-@-04069	EAGLEVIEW ROAD	0.000	3.285	2016/07/29	12:40:27	12:43:44	53.953861	-122.599917	53.970789	-122.573764	
19-A-@-04098	SHELLEY ROAD	0.000	10.930	2016/07/29	12:23:33	12:33:10	53.927381	-122.615480	54.003879	-122.619327	
19-B-@-00121	FIFTEEN MILE ROAD	0.230	3.630	2016/06/30	18:57:56	19:01:54	53.750763	-122.692581	53.766330	-122.656086	
19-B-@-00122	DAMMS ROAD	0.730	4.327	2016/06/30	19:08:04	19:12:19	53.795044	-122.706518	53.792835	-122.656267	
19-B-@-00123	BUCKHORN ROAD	0.000	11.220	2016/06/30	19:12:19	19:22:27	53.792837	-122.656307	53.765274	-122.522722	
19-B-@-00125	FOREST NURSERY ROAD	0.000	0.790	2016/06/30	18:54:19	18:55:06	53.750799	-122.692585	53.757892	-122.692731	
19-B-@-00127	BENDIXON ROAD	0.000	4.825	2016/06/30	18:06:11	18:10:40	53.836807	-122.656444	53.836969	-122.583165	
19-B-@-00131	JOHNSON ROAD	0.000	7.410	2016/06/30	18:23:01	18:30:24	53.865783	-122.681124	53.865944	-122.571268	
19-B-@-00140	POOLEY ROAD	0.850	4.070	2016/06/30	17:47:59	17:51:05	53.836882	-122.632055	53.865784	-122.632208	
19-B-@-00147	CUMMINGS ROAD	0.000	7.240	2016/06/30	17:31:33	17:38:31	53.851281	-122.681043	53.851514	-122.571082	
19-B-@-00152	HOLMES ROAD	0.000	1.765	2016/06/30	18:04:20	18:06:11	53.836744	-122.683224	53.836807	-122.656448	
19-B-@-00156	ELLIS ROAD	0.000	4.290	2016/06/30	18:16:51	18:20:50	53.836830	-122.680882	53.874670	-122.676841	
19-B-@-00157	SINTICH ROAD	0.000	1.610	2016/06/30	17:28:35	17:30:07	53.850136	-122.705108	53.851638	-122.681515	
19-B-@-00168	MCKELLAR ROAD	0.000	1.240	2016/06/30	18:50:32	18:51:49	53.739563	-122.692532	53.750706	-122.692591	
19-B-@-00169	OLD CARIBOO HWY	0.001	6.590	2016/06/30	19:42:36	19:47:09	53.819065	-122.656430	53.877951	-122.658472	
19-B-@-00225	CHIEF LAKE ROAD	8.975	36.320	2016/07/13	08:37:20	08:58:28	54.104982	-123.117731	54.010620	-122.850063	Missing images
19-B-@-00250	NESS LAKE ROAD	2.131	15.230	2016/07/13	09:23:41	09:32:35	54.016926	-123.170080	54.011066	-122.980185	
19-B-@-00385	MIWORTH ROAD	0.110	6.152	2016/07/13	10:39:08	10:44:28	53.931965	-122.937947	53.971405	-122.895140	
19-B-@-00410	BLACKBURN ROAD	0.000	1.215	2016/06/30	17:51:43	17:52:56	53.865782	-122.640836	53.876656	-122.640900	
19-B-@-02066	EDELMANN ROAD	0.000	1.910	2016/07/13	09:11:11	09:13:18	54.013438	-123.078381	54.025382	-123.093460	
19-B-@-02159	NUKKO LAKE ROAD	0.000	0.260	2016/07/13	08:24:08	08:24:38	54.078230	-122.990055	54.078136	-122.986214	Missing images
19-B-@-03197	CATHERINE DRIVE	0.000	2.759	2016/07/13	10:28:28	10:31:21	53.943514	-122.902295	53.962489	-122.914218	
19-D-@-00210	OLD SUMMIT LAKE ROAD	0.000	2.120	2016/07/31	12:13:42	12:15:47	54.039470	-122.740401	54.056880	-122.735909	
19-D-@-00272	OLD SUMMIT NORTH ROAD	0.000	0.330	2016/07/31	12:03:33	12:04:03	54.099055	-122.663928	54.100079	-122.667706	
19-D-@-00281	POLAR ROAD	0.000	0.720	2016/07/31	13:23:36	13:24:43	54.492575	-122.680063	54.498561	-122.682439	
19-D-@-02092	KODIAK ROAD	0.000	0.533	2016/07/31	13:13:18	13:14:03	54.493820	-122.677833	54.498322	-122.679924	
19-D-@-02093	GRIZZLY ROAD	0.000	0.490	2016/07/31	13:08:40	13:09:25	54.494907	-122.683476	54.495757	-122.676257	
19-D-@-02094	PANDA ROAD	0.000	0.265	2016/07/31	13:15:20	13:15:43	54.497441	-122.679028	54.497793	-122.675027	
19-D-@-02095	HARTLAKE ROAD	0.000	2.300	2016/07/31	13:17:24	13:20:45	54.497692	-122.685272	54.488283	-122.658295	
19-D-@-02096	CINNAMON ROAD	0.030	0.460	2016/07/31	13:10:58	13:11:37	54.491891	-122.675626	54.495730	-122.676195	
20-A-A-00517	GARRETT ROAD	0.200	1.800								not tested - gravel road
20-A-A-00530	DUNSTER STATION ROAD	0.000	3.680	2016/07/07	14:08:58	14:12:56	53.151723	-119.824392	53.126916	-119.845651	

Survey Limits 2016

Route	Route Name	Start km	End km	Date	Start Time	End Time	Start Latitude	Start Longitude	End Latitude	End Longitude	Comments
20-A-A-00531	DUNSTER-CROYDON ROAD	0.000	0.706	2016/07/07	14:12:57	14:13:49	53.126887	-119.845614	53.123462	-119.836754	
20-A-A-00544	MOUNTAIN VIEW ROAD	0.000	7.500	2016/07/07	16:42:32	16:49:01	53.301921	-120.126350	53.347313	-120.201901	
20-A-A-00552	EDDY ROAD	0.001	5.564	2016/07/07	16:25:28	16:31:34	53.291377	-120.162696	53.251678	-120.114998	
20-A-A-00561	WESTLUND ROAD	0.000	2.247	2016/07/07	17:07:20	17:09:53	53.315822	-120.183901	53.319584	-120.214558	
20-A-A-00562	ZEIDLER DRIVE	0.000	0.976	2016/07/07	17:10:45	17:11:48	53.322702	-120.226090	53.331048	-120.223010	
20-A-A-00563	PLANTWAY ROAD	0.000	0.415	2016/07/07	17:19:57	17:20:36	53.330815	-120.246009	53.331172	-120.239888	
20-A-A-00565	DORE RIVER ROAD	0.000	1.820	2016/07/07	17:15:43	17:17:56	53.322752	-120.226358	53.313233	-120.247010	
20-A-A-00579	LAMMING PIT ROAD	0.000	2.010	2016/07/07	17:28:20	17:30:44	53.330817	-120.246074	53.313172	-120.246942	
20-A-B-00016C	HWY16 AT TJ JUNCTION (NORTH	0.000	0.861	2016/07/05	10:58:09	10:58:59	52.976489	-119.415888	52.974280	-119.427837	
20-A-B-00448	ROBSON FRONTAGE ROAD	0.000	0.750	2016/07/07	13:24:32	13:25:32	53.034440	-119.231138	53.033036	-119.242039	
20-A-B-00522	HARGREAVES ROAD	0.000	0.675	2016/07/07	13:29:07	13:29:59	53.034026	-119.231231	53.028189	-119.230823	
20-A-B-00523	KINNEY LAKE ROAD	0.000	2.510	2016/07/07	13:18:23	13:21:57	53.034044	-119.231200	53.049115	-119.216788	
20-A-B-00583	HORSEY CREEK ROAD	0.000	2.300								not tested - gravel road
20-B-B-00507	CEDARSIDE ROAD	0.000	2.622	2016/07/05	11:56:34	11:59:15	52.800116	-119.261778	52.803112	-119.229104	
20-B-B-00510	PINE ROAD (V)	0.000	1.870	2016/07/05	11:48:48	11:50:48	52.831123	-119.279744	52.832111	-119.306317	
20-B-B-00575	BLACKMAN ROAD	0.000	13.374	2016/07/05	11:14:04	11:25:30	52.893608	-119.321021	52.977187	-119.438379	
20-B-B-00578	TETE JAUNE ACCESS ROAD	0.000	0.355	2016/07/05	11:02:48	11:03:21	52.969377	-119.425483	52.969436	-119.430535	
20-B-C-00102	HERB BILTON WAY	0.000	0.480	2016/07/05	13:28:18	13:29:08	52.112139	-119.297387	52.108571	-119.295876	
20-B-C-00105	AVOLA VILLAGE ROAD	0.000	0.350	2016/07/05	14:58:19	14:59:00	51.783366	-119.325393	51.782537	-119.320775	
20-B-C-00106	BRAZIER ROAD	0.000	0.255	2016/07/05	14:55:50	14:56:23	51.781871	-119.325449	51.781805	-119.321765	
20-B-C-00107	DIAMOND DRIVE	0.000	0.580	2016/07/05	14:51:54	14:52:57	51.784995	-119.323631	51.779909	-119.322465	
20-B-C-00110	AVOLA EAST FRONTAGE ROAD	0.000	1.335	2016/07/05	14:48:10	14:49:54	51.773620	-119.325639	51.784880	-119.323543	
20-B-C-00111	AVOLA WEST FRONTAGE ROAD	0.000	0.423	2016/07/05	14:45:12	14:46:00	51.785207	-119.323835	51.782245	-119.326268	
20-B-C-00113	BLUE RIVER AIRPORT SKYWAY	0.000	1.599	2016/07/05	13:03:31	13:05:07	52.118626	-119.298574	52.131106	-119.287003	
20-B-C-00119	MAPLE STREET	0.000	0.550	2016/07/05	13:33:42	13:34:28	52.111229	-119.307264	52.115786	-119.307634	
20-B-C-00121	ANGUS HORNE STREET	0.000	1.110	2016/07/05	13:20:06	13:28:18	52.108947	-119.309116	52.112143	-119.297412	
20-B-C-00122	CEDAR STREET	0.000	1.900	2016/07/05	14:01:03	14:03:29	52.094002	-119.310812	52.110226	-119.307706	
20-B-C-00124	FIRST AVENUE (BR)	0.000	0.200	2016/07/05	14:08:24	14:08:46	52.103503	-119.307768	52.103065	-119.304965	
20-B-C-00127	HARRWOOD DRIVE	0.000	0.620	2016/07/05	13:32:19	13:33:20	52.108510	-119.303542	52.113266	-119.305284	
20-B-C-00129	MAIN STREET	0.200	0.836	2016/07/05	14:08:46	14:09:56	52.103066	-119.304960	52.108533	-119.302500	
20-B-C-00132	SPRUCE STREET	0.000	0.605	2016/07/05	14:14:28	14:15:34	52.103295	-119.306494	52.108507	-119.304287	
20-B-C-00133	STEWART STREET	0.000	0.242	2016/07/05	13:56:25	13:56:51	52.101259	-119.311262	52.101244	-119.307733	
20-B-C-00134	THIRD AVENUE (BR)	0.000	0.440	2016/07/05	14:12:42	14:13:33	52.105908	-119.301558	52.106823	-119.307746	
20-B-C-00135	BLUE RIVER EAST FRTGE RD	0.000	0.934	2016/07/05	14:17:11	14:18:31	52.101275	-119.310641	52.109332	-119.308225	two separate road segments
20-B-C-00135	BLUE RIVER EAST FRTGE RD	0.941	1.750	2016/07/05	14:03:29	14:04:44	52.110232	-119.307704	52.116458	-119.301955	
20-B-C-00136	BLUE RIVER WEST FRTGE RD	0.000	1.760	2016/07/05	13:10:00	13:12:35	52.101292	-119.311290	52.115639	-119.303492	
20-B-C-00288	MURTLE LAKE ROAD	0.000	0.450	2016/07/05	13:14:05	13:14:37	52.115748	-119.303429	52.115769	-119.309984	
20-B-C-00330	GOSNELL ROAD	0.000	0.360	2016/07/05	12:30:00	12:30:32	52.480952	-119.129593	52.483087	-119.133376	
21-A-1-00003	ROLLA RD	0.000	0.424	2016/09/07	15:55:35	15:56:14	55.737566	-120.146777	55.741376	-120.146795	two segments - road closed for construction
21-A-1-00003	ROLLA RD	1.617	8.259	2016/09/07	16:25:28	16:30:06	55.752224	-120.146964	55.810613	-120.143250	
21-A-1-00041A	EAST ARRAS	0.000	1.692	2016/09/07	14:44:29	14:46:17	55.742405	-120.541101	55.754133	-120.524424	
21-A-1-00063A	POUCE COUPE SCALE	0.000	0.219	2016/09/07	17:49:35	17:50:07	55.703873	-120.125572	55.705524	-120.125280	
21-A-1-00094	DANGEROUS GOODS RTE	0.000	8.302	2016/09/07	14:17:15	14:25:00	55.737969	-120.223026	55.782258	-120.279029	
21-A-1-00206L	LOISELLE	0.000	0.909	2016/09/07	14:10:48	14:11:50	55.723196	-120.264368	55.723132	-120.249944	
21-A-1-00206M	BACK ROAD	3.250	4.862	2016/09/23	13:58:15	13:59:38	55.723143	-120.198586	55.723063	-120.172958	
21-A-1-00208	OLD HART HIGHWAY	0.000	16.855	2016/09/07	15:10:53	15:23:34	55.751362	-120.528705	55.752179	-120.260789	
21-A-1-00210B	MCQUEENS	0.000	6.502	2016/09/07	12:54:00	12:59:01	55.781291	-120.250542	55.781263	-120.146969	
21-A-1-00213C	COSINS ROAD	0.000	0.375	2016/09/07	17:31:10	17:31:47	55.752937	-120.172863	55.756284	-120.172721	
21-A-1-00215	PEDERSON	0.000	4.048	2016/09/07	16:10:21	16:13:59	55.701432	-120.198739	55.737610	-120.199469	
21-A-1-00217	EIGHTH	0.001	1.839	2016/09/07	12:17:27	12:19:10	55.773997	-120.224571	55.790503	-120.224585	
21-A-1-00219	NORTH ROLLA	0.000	4.295	2016/09/07	12:27:43	12:31:19	55.773621	-120.250534	55.810614	-120.246646	
21-A-1-00219P	SKI HILL	0.160	3.246	2016/09/07	14:00:30	14:03:30	55.717283	-120.250447	55.744968	-120.250456	
21-A-1-00343	LEER SUBDIVISION	0.000	0.798	2016/09/07	14:07:35	14:08:30	55.723191	-120.264305	55.730276	-120.265311	
21-A-1-00347	LOISELLE SUBDIVISION	0.000	2.459	2016/09/07	13:55:00	13:57:50	55.723103	-120.276457	55.717298	-120.250469	
21-A-1-00350	ROCKY MOUNTAIN SUB	0.000	0.810	2016/09/07	16:09:20	16:10:21	55.701381	-120.211564	55.701429	-120.198744	
21-A-1-00351	PARADISE VALLEY RD	0.000	0.644	2016/09/07	16:05:31	16:06:29	55.705013	-120.208820	55.705003	-120.198611	
21-A-2-00003	ROLLA ROAD	0.000	39.124	2016/09/07	16:30:06	16:57:15	55.810614	-120.143235	56.108799	-120.036087	
21-A-2-00003	ROLLA ROAD	42.420	43.060								not tested
21-A-2-00006	SWEETWATER	0.001	11.665	2016/09/07	11:51:56	12:00:07	55.898007	-120.322978	55.898017	-120.136571	
21-A-2-00219	NORTH ROLLA	0.000	9.787	2016/09/07	12:31:19	12:38:05	55.810615	-120.246634	55.897990	-120.244838	
21-A-2-00220B	COLEMAN CREEK	0.000	8.732	2016/09/07	11:14:26	11:20:16	55.927059	-120.140627	55.927069	-120.000966	
21-A-2-00307B	403 STREET	0.000	0.348	2016/09/07	11:40:20	11:41:18	55.896444	-120.142034	55.899566	-120.142009	
21-A-2-00307C	405 STREET	0.000	0.500	2016/09/07	11:34:11	11:35:11	55.896636	-120.143721	55.901120	-120.143734	
21-A-2-00307D	407 STREET	0.000	0.327	2016/09/07	11:37:25	11:38:08	55.897218	-120.145489	55.900151	-120.145489	
21-A-2-00307F	404 AVE	0.078	0.390	2016/09/07	11:31:22	11:32:12	55.899542	-120.145512	55.899554	-120.140541	
21-B-1-00007	PARKLAND	1.570	5.611	2016/09/07	19:01:02	19:04:22	55.912581	-120.584166	55.912823	-120.519646	
21-B-1-00022	BRADEN	0.000	7.741	2016/09/07	19:24:37	19:30:12	55.984670	-120.739444	55.985287	-120.615876	
21-B-1-00063	DAWSON SCALES	0.000	0.281	2016/09/07	14:25:22	14:25:58	55.783498	-120.282170	55.782626	-120.278332	
21-B-1-00064	OLD ALASKA HIGHWAY	0.000	9.856	2016/09/07	19:06:48	19:15:39	55.927081	-120.535906	55.980953	-120.615342	
21-B-1-00225W	WILFORD RD	0.450	3.720	2016/09/07	18:16:04	18:18:43	55.810679	-120.323896	55.839856	-120.323050	
21-B-1-00237	SEMPLE RD	0.000	5.924	2016/09/07	18:42:18	18:46:50	55.758018	-120.483246	55.810603	-120.479893	
21-B-1-00237M	MASON RD	0.001	8.972	2016/09/07	18:46:50	18:53:18	55.810614	-120.479892	55.891058	-120.479134	
21-B-1-00318	WIDMARK	0.238	0.540	2016/09/07	18:39:26	18:40:02	55.758331	-120.488040	55.758368	-120.483253	
21-C-1-00012	JACKFISH LAKE	0.000	16.066	2016/08/03	13:02:49	13:14:18	55.718839	-121.590803	55.822454	-121.442180	
21-C-1-00012	JACKFISH LAKE	16.051	0.000	2016/08/03	13:38:30	13:49:52	55.822434	-121.442219	55.718819	-121.590928	PL Survey
21-C-1-00026	HASLER	0.000	1.215	2016/09/10	11:32:26	11:34:01	55.605282	-121.973009	55.611845	-121.962396	
21-C-1-00030	MOBERLY LAKE SOUTH	7.660	11.170	2016/08/03	12:48:23	12:51:25	55.808694	-121.693503	55.821354	-121.644196	
21-C-1-00031	BOUCHER LAKE	0.000	4.387	2016/08/03	12:33:12	12:37:24	55.837560	-121.672476	55.864099	-121.626257	
21-C-1-00034	1-A, LP PULP MILL	0.000	0.691	2016/08/01	08:31:02	08:31:55	55.718999	-121.259167	55.725190	-121.259360	
21-C-1-00063	CHETWYND SCALES	0.000	0.250	2016/08/03	14:13:25	14:13:56	55.712103	-121.612354	55.710453	-121.614678	
21-C-1-00089	WEST FRASER	0.000	0.870	2016/08/03	13:51:06	13:52:01	55.720332	-121.581667	55.720735	-121.568834	
21-C-1-00316E	PIONEER ROAD	0.000	3.070	2016/08/03	12:22:45	12:26:22	55.832773	-121.828255	55.834321	-121.784128	
21-C-1-00316G	LAKESHORE DRIVE	0.000	1.915	2016/08/03	12:27:08	12:29:29	55.834248	-121.772016	55.834667	-121.743333	
21-D-2-00041	WEST ARRAS	0.000	1.624	2016/09/07	14:49:50	14:51:34	55.752788	-120.607330	55.742671	-120.591407	two separate road segments - bridge removed
21-D-2-00041	WEST ARRAS	1.723	5.010	2016/09/07	15:01:49	15:05:03	55.742238	-120.590470	55.741567	-120.542267	
22-A-H-00000	CLARKE AVENUE	0.000	0.296	2016/08/03	11:51:36	11:51:56	56.031159	-121.905390	56.032910	-121.901830	PL Survey
22-A-H-00000	CLARKE AVENUE	0.296	0.000	2016/08/03	11:07:37	11:08:06	56.032916	-121.901856	56.031199	-121.905461	PL Survey - No Route number supplied
22-A-H-00190	TWELVE MILE RD	0.000	2.967	2016/08/03	11:32:39	11:35:42	56.028781	-122.133196	56.048688	-122.161441	
22-A-H-00520R	CANYON DR	0.000	19.829	2016/08/03	11:08:35	11:27:07	56.030312	-121.908959	56.008663	-122.193368	end of road blocked by access gate
22-A-H-00520R	CANYON DR	8.969	0.001	2016/08/03	11:44:49	11:51:19	56.029852	-122.045920	56.030299	-121.908888	PL Survey
22-A-J-00101	ROAD 101	0.002	3.709	2016/09/06	17:30:19	17:33:03	56.267996	-120.847586	56.301240	-120.847122	
22-A-J-00103A	OLD CECIL LAKE	0.000	7.160	2016/08/03	17:20:40	17:27:15	56.246435	-120.821076	56.253487	-120.715911	
22-A-J-00103A	OLD CECIL LAKE ROAD	7.160	3.290	2016/08/03	17:12:03	17:15:41	56.253492	-120.715839	56.246930	-120.768871	PL Survey
22-A-J-00107	BALDONNEL RD	0.000	9.920	2016/08/03	17:36:10	17:44:09	56.217465	-120.715717	56.216053	-120.557645	
22-A-J-00119	OLD HOPE RD	0.000	4.635	2016/08/04	10:16:45	10:21:02	56.276247	-120.955727	56.275488	-121.029958	
22-A-J-00119	OLD HOPE RD	4.632	0.000	2016/08/04	10:22:07	10:26:27	56.275471	-121.029916	56.276221	-120.955723	PL Survey
22-A-J-00120	SUNNYSIDE DR	0.000	0.220	2016/08/04	10:40:14	10:40:34	56.273936	-120.950425	56.275178	-120.947792	
22-A-J-00145	WEST BYPASS RD	0.000	4.443	2016/09/06	17:20:28	17:24:45	56.246519	-120.871535	56.275508	-120.847565	
22-A-J-00146	EAST BYPASS RD	3.536	0.001	2016/09/07	08:53:14	08:56:12	56.246462	-120.808047	56.264636	-120.834215	two separate survey sections
22-A-J-00146	EAST BYPASS RD	7.227	5.833	2016/09/07	08:49:14	08:50:35	56.219317	-120.795299	56.231767	-120.794869	
22-A-J-00148	OLD FORT ROAD	0.000	5.648	2016/08/03	18:50:10	18:56:11	56.245726	-120.872737	56.203603	-120.862734	
22-A-J-00148	OLD FORT ROAD	5.637	0.000	2016/08/03	19:03:59	19:10:53	56.203612	-120.862740	56.245765	-120.872833	PL Survey
22-A-J-00240T	240 ROAD	0.000	1.641	2016/08/03	18:40:09	18:41:56	56.217263	-120.900213	56.217411	-120.873865	
22-A-J-00240T	240 ROAD	1.641	0.000	2016/08/03	18:20:56	18:22:32	56.217511	-120.873853	56.217334	-120.900170	PL Survey
22-A-J-00242	GRANDHAVEN RD	0.000	3.364	2016/08/03	08:16:05	08:19:55	56.245793	-120.872939	56.246469	-120.926518	
22-A-J-00244D	GUNRANGE RD	0.000	0.824	2016/08/04	10:45:34	10:46:23	56.297255	-120.926400	56.297311	-120.939658	
22-A-J-00255	UNDERPASS ROAD NORTH	0.000	4.459	2016/08/03	16:59:57	17:03:52	56.214719	-120.712799	56.253810	-120.715811	
22-A-J-00255	UNDERPASS ROAD NORTH	4.424	0.000	2016/08/03	17:27:14	17:31:15	56.253533	-120.715985	56.214683	-120.712692	PL Survey
22-A-J-00257B	FOREST LAWN ROAD	0.000	0.596	2016/08/03	16:53:43	16:54:30	56.217517	-120.749015	56.222836	-120.748858	
22-A-J-00259	SWANSON LUMBER RD	0.000	3.290	2016/08/03	17:57:21	18:00:35	56.217236	-120.768549	56.246738	-120.768433	
22-A-J-00259	SWANSON LUMBER RD	3.320	0.000	2016/08/03	18:05:03	18:08:19	56.246824	-120.769062	56.217168	-120.768358	PL Survey
22-A-J-00269	RIVERVIEW RD	0.000	4.226	2016/08/03	18:32:53	18:36:53	56.255309	-120.900338	56.217394	-120.900222	
22-A-J-00269	RIVERVIEW RD	4.215	0.000	2016/08/03	18:27:35	18:31:21	56.217428	-120.900198	56.255248	-120.900293	PL Survey
22-A-J-00269N	RIVERVIEW NORTH RD	0.001	2.932	2016/09/07	08:33:53	08:37:03	56.255283	-120.900265	56.281060	-120.900158	
22-A-J-00271	BEATTON/MONTNEY RD	0.000	14.302	2016/08/03	08:23:34	08:34:51	56.264338	-120.926425	56.392693	-120.926473	
22-A-J-00271	BEATTON/MONTNEY RD	4.487	0.000	2016/08/04	10:52:04	10:55:46	56.304606	-120.926394	56.264340	-120.926454	PL Survey
22-A-J-00277	GOLF COURSE RD	0.000	2.634	2016/08/04	10:03:05	10:05:27	56.305685	-121.005048	56.329077	-121.005583	
22-A-J-00602A	LAKESHORE DRIVE	0.000	0.750	2016/08/04	10:26:27	10:27:31	56.276226	-120.955716	56.281388	-120.961047	
22-A-J-00602C	CHARLIE LK CRESC	0.000	4.093	2016/09/08	08:35:00	08:40:13	56.282795	-120.966871	56.303873	-121.002060	
22-A-J-00611A	85TH AVENUE	0.000	2.495	2016/08/03	18:43:43	18:47:16	56.231827	-120.873775	56.232292	-120.834025	
22-A-J-00611A	85TH AVENUE	2.495	0.000	2016/08/03	18:16:19	18:19:18	56.232223	-120.833801	56.231850	-120.873798	PL Survey
22-A-J-00619A	ALCAN FRONTAGE ROAD	0.000	0.240	2016/08/03	16:50:07	16:50:38	56.210062	-120.710488	56.211858	-120.711174	
22-A-J-00702	CLAIRMONT FRONTAGE	0.000	1.508	2016/09/08	08:26:30	08:28:43	56.248538	-120.879563	56.255648	-120.900178	
22-A-J-00707B	PNG ROAD	0.000	0.199	2016/09/08	08:48:18	08:48:46	56.281091	-120.966756	56.282261	-120.969186	
22-A-J-00708	PARK FRONTAGE RD 708	1.970	2.293	2016/09/08	08:56:06	08:56:41	56.303516	-121.001522	56.305879	-121.004550	
22-A-M-00121	MONTNEY	0.000	13.521	2016/09/07	09:00:35	09:11:28	56.301214	-120.847239	56.392693	-120.926499	

Survey Limits 2016

Route	Route Name	Start km	End km	Date	Start Time	End Time	Start Latitude	Start Longitude	End Latitude	End Longitude	Comments
22-B-C-00103	CECIL LAKE ROAD	0.000	61.294	2016/09/07	09:34:13	10:16:05	56.289905	-120.847579	56.317048	-120.001674	
22-B-C-00111	CLAYHURST RD	0.000	18.111	2016/09/07	10:25:11	10:37:11	56.319302	-120.109639	56.188239	-120.057067	
22-B-M-00101	ROAD 101	0.000	18.628	2016/09/06	17:33:03	17:47:01	56.301248	-120.847114	56.450044	-120.820888	
22-B-M-00271	BEATTON MONTNEY HWY	0.001	6.421	2016/08/03	08:34:51	08:40:09	56.392704	-120.926473	56.450019	-120.926521	
22-B-R-00101	ROAD 101	0.000	6.445	2016/09/06	17:47:01	17:51:14	56.450056	-120.820888	56.507901	-120.820481	
22-C-M-00114	MONTNEY HWY	0.000	24.783	2016/09/06	18:22:49	18:40:54	56.420884	-121.172468	56.450029	-120.820926	
22-C-M-00193	ANDERSON ROAD	0.000	14.239	2016/08/03	08:43:04	08:53:37	56.450138	-120.978877	56.569923	-120.953441	
22-C-R-00101	ROAD 101	0.001	6.549	2016/09/06	17:51:14	17:55:38	56.507909	-120.820478	56.566715	-120.820456	two paved sections separated by gravel road
22-C-R-00101	ROAD 101	20.656	59.040	2016/09/08	14:04:02	14:32:21	56.653704	-120.951558	56.950138	-121.060319	
22-C-R-00151	BEATTON RIVER RD	0.000	29.144	2016/09/08	13:09:50	13:37:47	56.541825	-121.253059	56.760189	-121.281225	
22-C-R-00154	BUICK CRK ROAD	0.000	18.280	2016/09/08	14:53:09	15:07:46	56.762290	-120.981477	56.758492	-121.277849	
22-C-R-00193	ANDERSON ROAD	0.000	9.325	2016/08/03	08:53:37	09:00:27	56.569932	-120.953436	56.653655	-120.953334	
22-D-N-00504A	AIRPORT CONNECTOR ROAD	0.000	8.138	2016/08/01	16:05:15	16:11:18	58.800761	-122.669571	58.840811	-122.574419	
23-A-@-00002	KENNEY DAM	0.000	12.657	2016/07/23	08:45:50	08:55:46	53.998639	-124.046093	53.925026	-124.144362	
23-A-@-00004	BEARHEAD	0.000	0.610	2016/07/13	12:14:54	12:15:43	54.025998	-124.310594	54.023669	-124.316255	
23-A-@-00010	BLACKWATER ROAD	0.000	13.953	2016/07/23	09:30:56	09:41:57	53.962071	-123.972157	53.867292	-123.873440	
23-A-@-00101	STONEY CREEK	0.000	1.334	2016/07/23	09:01:10	09:02:50	53.945979	-124.108961	53.935474	-124.101674	
23-A-@-00127	STURGEON POINT	0.000	11.440	2016/07/23	08:02:52	08:12:35	54.041869	-123.996998	54.056448	-123.845891	
23-A-@-00182	LOOP	0.001	4.020	2016/07/23	07:53:01	07:56:10	54.034764	-124.070685	54.070870	-124.070766	
23-A-@-00229	MACDONALD	0.000	2.459	2016/07/23	09:24:28	09:26:46	53.962109	-123.972148	53.984097	-123.972328	
23-A-@-00505	NORTHSIDE	0.001	6.296	2016/07/23	08:25:36	08:30:39	54.056342	-124.033836	54.070906	-124.107668	
23-A-@-00705	HIGHWAY 27 SCALE	0.000	0.220	2016/07/23	08:36:42	08:37:09	54.012914	-124.121615	54.013672	-124.119631	
23-A-@-00763	CHAMBERLAIN AVE (F.F	0.000	0.610	2016/07/13	12:31:11	12:32:15	54.060428	-124.547310	54.059093	-124.556328	
23-B-@-00023	ROBERTS	0.000	1.619	2016/07/22	16:26:50	16:28:59	54.417419	-124.266888	54.406402	-124.259364	
23-B-@-00078	NECOSLIE	0.000	1.410	2016/07/22	17:07:01	17:08:40	54.429969	-124.257938	54.424344	-124.239828	
23-B-@-00110	SOWCHEA	0.000	11.880	2016/07/22	16:36:34	16:47:21	54.416711	-124.274426	54.419312	-124.443700	
23-B-@-00207	TACHIE	0.000	44.177	2016/07/22	17:30:05	18:05:19	54.473643	-124.189632	54.655353	-124.710100	
23-B-@-00242	GARVIE	0.000	0.675	2016/07/22	16:32:07	16:33:13	54.418043	-124.266151	54.422408	-124.262432	
23-B-@-00307	HUFFMAN DRIVE	0.000	0.798	2016/07/22	16:51:44	16:52:57	54.424489	-124.429696	54.424610	-124.417704	
23-C-@-00037	STELLA	0.440	10.344	2016/07/20	17:05:27	17:14:54	54.060726	-124.912054	54.102691	-124.821032	
23-C-@-00042	FRANCOIS LAKE	0.000	31.750	2016/07/13	13:57:53	14:29:16	54.046879	-124.897506	54.018440	-125.303658	
23-C-@-00048	NAUTLEY	0.000	4.315	2016/07/13	12:38:38	12:43:16	54.061248	-124.604270	54.088358	-124.592643	
23-C-@-00210	ENDAKO MINE	0.000	8.650	2016/07/13	15:13:31	15:21:01	54.083916	-125.007075	54.039448	-125.083897	
24-A-@-00036	TINTAGEL	0.000	7.200	2016/07/01	10:11:26	10:19:15	54.212192	-125.689060	54.204164	-125.603042	
24-A-@-00040	GEROW ISLAND	0.000	0.980	2016/07/01	10:52:00	10:53:22	54.219649	-125.765333	54.214714	-125.753801	
24-A-@-00061	ROWLAND	0.000	0.732	2016/07/20	18:58:30	18:59:26	54.300585	-125.838507	54.294530	-125.836431	
24-A-@-00079	TIBBETS CREEK	0.000	1.070	2016/07/01	09:58:41	09:59:50	54.190007	-125.504915	54.184563	-125.495100	
24-A-@-00104	DEERHORN PLACE	0.000	0.370	2016/07/01	10:21:57	10:22:36	54.210350	-125.611236	54.209570	-125.605903	
24-A-@-00159	LEWIS ROAD	0.000	1.831	2016/07/20	19:07:11	19:09:12	54.339403	-125.903629	54.349601	-125.924019	
24-A-@-00160	MILLER SOUTH	0.000	1.310	2016/07/20	18:31:55	18:34:01	54.247452	-125.778726	54.245019	-125.764012	
24-A-@-00174	MURPHY	0.000	1.773	2016/07/20	18:23:36	18:26:06	54.245672	-125.780857	54.258719	-125.786680	
24-A-@-00176	BREWER AVENUE	0.000	0.630	2016/07/20	18:45:27	18:46:29	54.292016	-125.830856	54.297436	-125.832852	
24-A-@-00191	NASH	0.070	0.669	2016/07/20	18:21:09	18:21:51	54.240347	-125.776120	54.245088	-125.779729	
24-A-@-00200	BABINE ROAD	0.000	3.682	2016/07/20	18:10:43	18:14:11	54.234016	-125.765795	54.265085	-125.757526	
24-A-@-00202	SHERATON SUB'D	0.000	0.945	2016/07/01	09:49:36	09:51:09	54.146916	-125.386287	54.144584	-125.380114	
24-A-@-00216	BAKER DRIVE	0.000	1.240	2016/07/20	18:48:19	18:49:55	54.292025	-125.829186	54.301868	-125.834915	
24-A-@-00217	NEVILLE DRIVE	0.000	0.229	2016/07/20	18:51:15	18:51:36	54.296920	-125.829814	54.296777	-125.826442	
24-A-@-00218	ARCHIE DRIVE	0.000	0.645	2016/07/20	18:54:01	18:54:47	54.296843	-125.826302	54.301893	-125.823764	
24-A-@-00242	RUFFLE	0.000	0.470	2016/07/01	10:26:45	10:27:21	54.221573	-125.649231	54.225779	-125.649367	
24-A-@-00252	KERR	0.000	0.492	2016/07/01	10:46:57	10:47:43	54.227433	-125.733835	54.231580	-125.734869	
24-A-@-00253	PETERSON	0.000	0.454	2016/07/01	10:44:40	10:45:21	54.227590	-125.723345	54.225411	-125.729053	
24-A-@-00254	BOBCAT	0.000	0.460	2016/07/01	10:41:04	10:41:47	54.227556	-125.723385	54.227748	-125.730288	
24-A-@-00304	WILDWOOD DRIVE	0.000	1.050	2016/07/20	18:40:58	18:42:16	54.282109	-125.820762	54.285754	-125.807100	
24-A-@-00332	LAUREL DRIVE	0.000	0.330	2016/07/01	10:27:24	10:27:49	54.225876	-125.649552	54.225877	-125.654600	
24-A-@-00377	MILLER NORTH	0.000	0.844	2016/07/20	18:28:10	18:29:16	54.250117	-125.780345	54.248104	-125.769692	
24-B-@-00002	BARRETT STATION	0.000	1.260	2016/07/30	13:29:16	13:30:41	54.443454	-126.746950	54.438629	-126.762096	
24-B-@-00017	GUN RANGE	0.000	1.700	2016/07/30	14:43:47	14:45:54	54.435019	-126.612918	54.445307	-126.602102	
24-B-@-00063	PEROW LOOP	0.000	1.205	2016/07/30	15:59:48	16:01:24	54.517397	-126.443629	54.519129	-126.427935	
24-B-@-00064	BYE	0.000	0.950	2016/07/30	15:55:18	15:56:35	54.513685	-126.463538	54.512867	-126.475468	
24-B-@-00070	JARMAN	0.000	1.850	2016/07/30	15:48:05	15:50:24	54.519386	-126.440514	54.532174	-126.456485	
24-B-@-00117	HOWELLS	0.000	1.953	2016/07/30	15:15:21	15:17:42	54.504307	-126.293118	54.500669	-126.265149	
24-B-@-00145	MORGAN	0.000	1.815	2016/07/30	14:50:03	14:52:31	54.426607	-126.623841	54.437015	-126.605180	
24-B-@-00147	SNIDER	0.000	1.469	2016/07/30	14:05:05	14:06:54	54.591684	-126.827757	54.594199	-126.809205	
24-B-@-00152	SUNSET LAKE ROAD	0.000	2.020	2016/07/30	15:35:31	15:38:08	54.507085	-126.301043	54.494339	-126.312213	
24-B-@-00153	WALCOTT	0.000	7.750	2016/07/30	13:48:36	13:55:40	54.577046	-126.808882	54.517129	-126.834437	
24-B-@-00209	HOUSTON AIRPORT	0.000	1.201	2016/07/30	13:32:28	13:34:09	54.438981	-126.761839	54.436708	-126.774304	
24-B-@-00292	RENO AVENUE	0.000	0.355	2016/07/30	15:30:27	15:31:01	54.505515	-126.301245	54.504718	-126.296000	
24-B-@-00293	TAYLOR AVENUE	0.000	0.500	2016/07/30	15:32:20	15:33:11	54.504569	-126.301248	54.503443	-126.293800	
24-B-@-00294	RAILWAY AVENUE	0.000	0.310	2016/07/30	15:27:52	15:28:22	54.503691	-126.301513	54.503024	-126.296918	
24-B-@-00295	MAIN STREET	0.000	0.240	2016/07/30	15:23:52	15:24:17	54.505068	-126.295740	54.503055	-126.296867	
24-C-@-00025	EAKIN SETTLEMENT	0.000	4.520	2016/07/01	13:28:54	13:32:42	53.920879	-125.885467	53.884473	-125.872458	
24-C-@-00059	KEEFE'S LANDING	0.161	38.639	2016/07/01	12:46:10	13:13:49	54.025056	-125.770483	53.818454	-126.088722	
24-C-@-00122	UNCHA	0.000	6.280	2016/07/01	12:34:46	12:39:42	54.025036	-125.770441	53.990485	-125.706333	
25-A-@-00019	SNAKE	0.000	1.248	2016/07/30	11:42:40	11:44:01	54.799153	-127.113216	54.806054	-127.127653	
25-A-@-00021	MIDDLE	0.000	0.350	2016/07/22	09:43:03	09:43:37	54.831481	-127.199902	54.831392	-127.205228	
25-A-@-00024	BEACH	0.000	0.360	2016/07/22	09:50:17	09:50:46	54.817851	-127.209592	54.821079	-127.209660	
25-A-@-00025	OWENS	0.000	0.620	2016/07/21	07:57:35	07:58:34	54.888362	-127.259534	54.889793	-127.267157	
25-A-@-00035	HUDSON BAY MOUNTAIN	0.630	4.920	2016/07/22	10:21:12	10:25:46	54.762262	-127.165318	54.729056	-127.176810	
25-A-@-00046	MUIR	0.000	0.813	2016/07/22	08:39:33	08:40:45	54.803190	-127.208920	54.796145	-127.207607	
25-A-@-00057	HIGHLAND ROAD	0.000	2.133	2016/07/30	11:35:33	11:38:03	54.789203	-127.109088	54.781116	-127.099711	
25-A-@-00090	TATLOW	0.000	1.482	2016/07/22	10:38:23	10:40:08	54.745844	-127.135982	54.733639	-127.133730	
25-A-@-00103	GLACIER GULCH	0.000	1.660	2016/07/22	09:56:47	09:59:05	54.822559	-127.219958	54.828178	-127.243308	
25-A-@-00104	LAKE KATHLYN	0.000	4.030	2016/07/22	08:51:53	08:57:00	54.808369	-127.203045	54.835540	-127.209959	
25-A-@-00107	TELKWA HIGH	42.285	38.420	2016/07/30	10:58:05	11:01:40	54.709838	-127.052898	54.743309	-127.062630	
25-A-@-00142	SLACK	0.000	1.647	2016/07/22	08:20:13	08:22:41	54.804116	-127.197233	54.802931	-127.221780	
25-A-@-00156	LAIDLAW	0.000	0.739	2016/07/30	11:16:24	11:17:22	54.747122	-127.108921	54.748852	-127.119776	
25-A-@-00163	OLD BABINE	0.000	7.179	2016/07/21	19:26:55	19:33:30	54.768751	-127.128521	54.801724	-127.074580	
25-A-@-00173	ALDER	0.000	1.050	2016/07/21	08:17:04	08:18:25	54.983699	-127.331075	54.984243	-127.315112	
25-A-@-00187	HORLINGS	0.000	2.930	2016/07/22	09:27:42	09:31:22	54.832302	-127.225461	54.849207	-127.246426	
25-A-@-00188	KROEKER	0.000	2.736	2016/07/22	09:18:31	09:22:11	54.828175	-127.217113	54.844293	-127.227911	
25-A-@-00189	PINECREST	0.000	0.400	2016/07/22	09:25:06	09:25:48	54.839403	-127.231812	54.839382	-127.225604	
25-A-@-00190	BANFF	0.000	0.350	2016/07/22	08:10:35	08:11:15	54.798504	-127.189207	54.801577	-127.189046	
25-A-@-00195	SIMCOE AVE	0.000	0.756	2016/07/22	08:43:19	08:44:22	54.803625	-127.198000	54.797140	-127.196861	
25-A-@-00196	CALGARY	0.000	0.380	2016/07/22	08:47:55	08:48:36	54.798475	-127.196892	54.798061	-127.192662	
25-A-@-00200	DUNLOP	0.000	0.320	2016/07/21	07:58:55	07:59:31	54.889884	-127.270227	54.892227	-127.273097	
25-A-@-00215	BALSAM	0.000	0.495	2016/07/22	08:32:21	08:33:02	54.803030	-127.211193	54.798629	-127.210972	
25-A-@-00225	SIMCOE LOOP	0.000	0.955	2016/07/22	08:45:44	08:47:31	54.797748	-127.196882	54.800378	-127.196945	
25-A-@-00253	HETHERINGTON	0.000	0.268	2016/07/22	09:44:53	09:45:20	54.829220	-127.197176	54.826824	-127.197192	
25-A-@-00273	ELGIN	0.000	0.836	2016/07/22	08:16:04	08:17:15	54.799769	-127.190870	54.807216	-127.190629	
25-A-@-00275	LUND	0.000	0.740	2016/07/22	08:12:46	08:14:02	54.801953	-127.193746	54.806840	-127.190689	
25-A-@-00286	STATION	0.000	0.640	2016/07/21	08:35:00	08:36:05	55.037794	-127.334224	55.042865	-127.336428	
25-A-@-00297	RACEWAY	0.000	1.100	2016/07/22	08:59:27	09:00:58	54.857195	-127.226680	54.858295	-127.210199	
25-A-@-00304	VAN GAALEN ROAD	0.000	1.945	2016/07/21	19:55:37	19:58:33	54.754475	-127.108951	54.760347	-127.094050	
25-A-@-00305	BOYLE	0.000	0.374	2016/07/22	08:29:13	08:29:51	54.802531	-127.218807	54.799290	-127.218978	
25-A-@-00308	NOUCH FRONTAGE	0.000	0.793	2016/07/22	09:04:01	09:05:14	54.853027	-127.224272	54.846756	-127.218852	
25-A-@-00316	MORICETOWN LOOP	0.000	0.661	2016/07/21	08:24:38	08:25:47	55.018821	-127.331643	55.013419	-127.331064	
25-A-@-00317	NIELSEN	0.060	1.420	2016/07/22	08:24:46	08:26:23	54.802968	-127.221826	54.814612	-127.224688	
25-A-@-00321	WHALEN	0.000	0.760	2016/07/22	08:34:27	08:35:34	54.803152	-127.209586	54.809568	-127.213516	
25-A-@-00324	VAN HORN FRONTAGE	0.150	0.460	2016/07/30	10:43:37	10:44:20	54.686679	-127.037790	54.685543	-127.033993	
25-A-@-00373	ASPEN	0.000	0.380	2016/07/22	08:36:57	08:37:40	54.805591	-127.211006	54.805488	-127.216835	
25-A-@-00380	ST. ANNE	0.000	0.232	2016/07/22	09:40:27	09:40:49	54.832249	-127.205383	54.830186	-127.205248	
25-A-@-00383	VIEWMOUNT	0.000	2.975	2016/07/30	11:21:39	11:24:35	54.753415	-127.109632	54.778815	-127.115877	two separate pavement sections
25-A-@-00383	VIEWMOUNT	3.000	5.022	2016/07/30	11:25:07	11:27:19	54.782338	-127.119165	54.783636	-127.134327	
25-A-@-00388	KITSEQUECLA LOOP	0.000	1.780	2016/07/21	08:11:07	08:13:26	54.967427	-127.325531	54.957283	-127.337453	
25-A-@-00391	GELLEY	0.000	1.090	2016/07/22	09:53:01	09:54:45	54.812793	-127.209684	54.815106	-127.210349	
25-A-@-00399	LK. KATHLYN JUNCTION	0.000	0.590	2016/07/22	09:16:27	09:17:31	54.832403	-127.201207	54.832240	-127.210185	
25-A-@-00407	WILLOW	0.000	1.658	2016/07/22	09:06:48	09:08:53	54.834989	-127.209822	54.846665	-127.221074	
25-A-@-00471	HISLOP ROAD	0.000	1.727	2016/07/30	08:17:25	08:19:47	54.702584	-127.017544	54.704245	-126.996547	
25-A-@-00472	DONALDSON	0.000	0.400	2016/07/30	11:09:58	11:10:32	54.716521	-127.095984	54.712966	-127.096151	
25-A-@-00481	KERR	0.000	0.280	2016/07/30	14:11:37	14:12:04	54.620670	-126.854151	54.620989	-126.850084	
25-A-@-00485	TELKWA COAL MINE	0.000	2.594	2016/07/30	10:48:46	10:51:50	54.696917	-127.050635	54.679089	-127.072633	
25-A-@-00491	BABINE LAKE	0.000	16.168	2016/07/22	11:17:33	11:30:26	54.743335	-127.108913	54.772385	-126.876967	
25-B-@-00017	CEDARVALE-KITWANGA	0.000	0.509	2016/07/17	13:59:41	14:00:25	55.104034	-128.072541	55.106392	-128.079094	
25-B-@-00022	ROSS LAKE	0.000	2.985	2016/07/21	09:05:10	09:09:00	55.245025	-127.542834	55.259322	-127.512241	
25-B-@-00034	SKEENA	0.510	0.790	2016/07/21	09:34:13	09:34:44	55.268389	-127.622981	55.268304	-127.618656	
25-B-@-00036	SIX MILE	0.000	1.199	2016/07/21	09:34:47	09:36:11	55.268112	-127.618616	55.268424	-127.599838	

Survey Limits 2016

Route	Route Name	Start km	End km	Date	Start Time	End Time	Start Latitude	Start Longitude	End Latitude	End Longitude	Comments
25-B-@-00038	FOURTH	0.000	0.260	2016/07/21	09:40:01	09:40:34	55.266024	-127.618615	55.268353	-127.618626	
25-B-@-00047	BARCALOW	0.000	0.780	2016/07/17	14:05:15	14:06:18	55.107805	-128.032886	55.114461	-128.032147	
25-B-@-00049	KISPIOX VALLEY	0.000	13.840	2016/07/17	15:33:29	15:45:03	55.257108	-127.660575	55.352543	-127.693263	
25-B-@-00062	N.HAZELTON HI-LEVEL	0.000	7.329	2016/07/17	15:22:38	15:30:43	55.246839	-127.592939	55.250492	-127.677632	
25-B-@-00113	HAZELTON-KITWANGA	0.000	2.059	2016/07/17	14:18:04	14:20:20	55.122520	-128.004262	55.124203	-127.972562	
25-B-@-00134	HALL	0.000	0.390	2016/07/21	10:37:15	10:37:58	55.239111	-127.648705	55.237525	-127.652496	
25-B-@-00137	DEWAR	0.000	0.311	2016/07/21	10:11:22	10:11:59	55.236643	-127.654110	55.239358	-127.653623	
25-B-@-00138	ALDOUS	0.000	2.970	2016/07/21	10:33:21	10:36:18	55.211706	-127.660673	55.238290	-127.661123	
25-B-@-00146	SILVER STANDARD	0.000	1.320	2016/07/21	09:21:56	09:23:40	55.264825	-127.627227	55.274898	-127.622674	
25-B-@-00147	OMINECA	0.000	0.840	2016/07/21	10:05:28	10:06:27	55.239131	-127.648677	55.238353	-127.661075	
25-B-@-00148	TWENTY FIRST	0.000	0.619	2016/07/21	10:10:18	10:11:21	55.236547	-127.663850	55.236632	-127.654135	
25-B-@-00198	RICHMOND	0.000	0.370	2016/07/21	10:45:01	10:45:36	55.214578	-127.660945	55.214493	-127.655172	
25-B-@-00251	SUNNYSIDE	0.150	0.940	2016/07/21	09:46:05	09:47:27	55.270460	-127.612334	55.265008	-127.615273	
25-B-@-00257	KITSEQUECLA AVENUE	0.000	0.350	2016/07/17	14:42:02	14:42:39	55.086223	-127.832792	55.089142	-127.831798	
25-B-@-00277	BROADWAY	0.000	0.500	2016/07/21	10:23:30	10:24:16	55.234137	-127.658695	55.238620	-127.658649	
25-B-@-00278	TWENTIETH	0.000	0.489	2016/07/21	10:06:47	10:07:31	55.237503	-127.661303	55.237526	-127.653630	
25-B-@-00279	WILLAN	0.000	0.619	2016/07/21	10:27:18	10:28:27	55.232618	-127.664292	55.232624	-127.654573	
25-B-@-00281	THIRD	0.000	0.420	2016/07/21	09:30:59	09:31:50	55.265974	-127.623045	55.269734	-127.623013	
25-B-@-00282	CORDOVA	0.000	0.518	2016/07/21	09:52:17	09:53:14	55.266752	-127.631109	55.266815	-127.622997	
25-B-@-00283	HAZELTON	0.000	0.540	2016/07/21	09:27:24	09:28:13	55.267605	-127.627097	55.267588	-127.618647	
25-B-@-00284	POWELL (S.HAZ.)	0.000	0.420	2016/07/21	10:42:27	10:43:04	55.217492	-127.660881	55.217377	-127.654326	
25-B-@-00290	TWENTY FOURTH AVE	0.000	0.330	2016/07/21	10:22:35	10:23:29	55.233908	-127.663852	55.234045	-127.658736	
25-B-@-00314	SEATON	0.000	1.270	2016/07/21	08:45:46	08:47:23	55.111056	-127.382790	55.121612	-127.390268	
25-B-@-00362	WEST	0.000	0.445	2016/07/21	10:30:41	10:31:25	55.224977	-127.661018	55.224930	-127.654114	
25-B-@-00364	KITWANGA NORTH	0.000	2.540	2016/07/17	14:14:50	14:18:04	55.108112	-128.029486	55.122520	-128.004246	
25-B-@-00393	SCHOOL	0.000	0.488	2016/07/17	14:09:56	14:10:39	55.118034	-128.018948	55.117496	-128.011690	
25-B-@-00424	BENCH	0.000	0.405	2016/07/21	09:43:45	09:44:20	55.270433	-127.612346	55.270480	-127.606023	
25-B-@-00492	SKEENA CROSSING	0.000	2.034	2016/07/17	14:46:16	14:48:49	55.092812	-127.818502	55.106386	-127.798059	two separate pavement sections
25-B-@-00492	SKEENA CROSSING	2.038	5.409	2016/07/17	15:03:06	15:10:47	55.126577	-127.782184	55.154553	-127.766458	
25-C-@-00402	GITANYOW	0.000	2.068	2016/07/21	11:26:49	11:28:58	55.246162	-128.050623	55.262531	-128.062467	two sections due to missed turn
25-C-@-00402	GITANYOW	2.068	3.150	2016/07/21	11:31:00	11:32:40	55.262547	-128.062466	55.268176	-128.074260	
26-A-@-00002	QUEENSWAY DRIVE	0.000	6.320	2016/07/16	16:38:32	16:44:38	54.474619	-128.596534	54.513769	-128.559729	
26-A-@-00007	OLD REMO ROAD	1.400	9.462	2016/07/16	16:26:49	16:33:37	54.468480	-128.708442	54.485247	-128.598998	
26-A-@-00011	KRUMM ROAD	0.000	2.115	2016/07/21	14:45:40	14:48:05	54.499467	-128.552641	54.499295	-128.520782	
26-A-@-00013	CLARK STREET	0.000	0.810	2016/07/18	18:27:30	18:28:41	54.507074	-128.541668	54.513866	-128.541256	
26-A-@-00017	PINE AVENUE	0.000	0.755	2016/07/18	18:46:17	18:47:27	54.509471	-128.540748	54.509418	-128.529137	
26-A-@-00019	SANDE AVENUE	0.000	0.435	2016/07/18	18:26:14	18:27:22	54.507117	-128.548604	54.507050	-128.541885	
26-A-@-00023	RIVER DRIVE	0.000	2.119	2016/07/21	15:54:27	15:56:40	54.512156	-128.547472	54.526871	-128.529262	
26-A-@-00024	NOVOTNY STREET	0.020	0.240	2016/07/21	15:46:14	15:46:44	54.527271	-128.525949	54.529172	-128.526170	
26-A-@-00026	KIRKALDY STREET	0.000	0.520	2016/07/21	15:43:25	15:44:09	54.526915	-128.519799	54.531524	-128.519947	
26-A-@-00027	CENTURY STREET	0.000	0.700	2016/07/18	18:38:22	18:39:32	54.508202	-128.534540	54.514469	-128.534386	
26-A-@-00028	DESJARDINS AVENUE	0.000	0.408	2016/07/18	18:33:43	18:34:31	54.514351	-128.547377	54.513877	-128.541359	two separate pavement sections
26-A-@-00028	DESJARDINS AVENUE	0.410	0.761	2016/07/18	18:34:51	18:35:22	54.514755	-128.539802	54.514550	-128.534453	
26-A-@-00029	KOFOED DRIVE	0.000	1.100	2016/07/18	18:17:26	18:19:04	54.511786	-128.548741	54.519787	-128.540650	
26-A-@-00031	MARK AVENUE	0.090	0.360	2016/07/16	16:00:37	16:01:04	54.499649	-128.566482	54.498885	-128.569926	
26-A-@-00032	DOBBIE STREET	0.000	0.790	2016/07/21	15:38:48	15:40:06	54.525018	-128.517981	54.530031	-128.519767	
26-A-@-00033	CREEK STREET	0.000	0.600	2016/07/21	14:40:17	14:41:29	54.494272	-128.531498	54.499188	-128.532912	
26-A-@-00034	THORNHILL FRONTAGE N	0.000	0.793	2016/07/21	16:10:32	16:12:02	54.513093	-128.558484	54.512157	-128.547019	
26-A-@-00043	SUBSTATION AVENUE	0.000	0.370	2016/07/16	16:48:16	16:48:59	54.510608	-128.562849	54.510594	-128.557191	
26-A-@-00044	KENWORTH STREET	0.120	0.510	2016/07/16	16:12:44	16:13:29	54.491469	-128.579939	54.494974	-128.579826	
26-A-@-00045	LAKELSE LK LODGE RD	0.090	1.265	2016/07/21	13:52:24	13:53:59	54.372847	-128.544607	54.370674	-128.529908	
26-A-@-00048	THORNHILL STREET	0.000	1.450	2016/07/21	14:29:50	14:31:40	54.502578	-128.516460	54.515108	-128.517483	
26-A-@-00051	LOWRIE AVENUE	0.000	0.645	2016/07/16	16:05:56	16:06:43	54.491602	-128.589924	54.491483	-128.579997	
26-A-@-00053	OLD LAKELSE LAKE RD	0.000	17.142	2016/07/18	18:02:19	18:17:26	54.402752	-128.516296	54.511786	-128.548741	
26-A-@-00056	FIRST AVENUE	0.000	2.803	2016/07/21	13:43:56	13:47:27	54.362006	-128.555488	54.383631	-128.544616	
26-A-@-00057	MERKLEY ROAD	0.000	3.838	2016/07/18	15:55:29	15:59:59	54.542256	-128.598078	54.571216	-128.607386	
26-A-@-00058	JOHNSTON ROAD	0.000	1.440	2016/07/18	16:04:58	16:06:38	54.545699	-128.603424	54.549618	-128.615712	
26-A-@-00064	PENNER STREET	0.000	0.410	2016/07/21	14:34:13	14:34:48	54.506975	-128.518460	54.510630	-128.518366	
26-A-@-00067	SIMPSON CRESCENT	0.000	0.450	2016/07/21	15:21:32	15:22:26	54.531211	-128.513640	54.530004	-128.513662	
26-A-@-00068	SKINNER STREET	0.000	0.310	2016/07/21	15:34:36	15:35:10	54.526859	-128.515793	54.528793	-128.513768	
26-A-@-00069	CLORE AVENUE	0.000	0.400	2016/07/21	15:41:29	15:42:12	54.526899	-128.519809	54.526738	-128.513726	
26-A-@-00070	FURLONG AVENUE	0.000	0.480	2016/07/21	15:35:38	15:36:19	54.527689	-128.512535	54.531151	-128.508135	
26-A-@-00072	MCNEIL STREET	0.000	0.260	2016/07/21	15:31:58	15:32:33	54.528896	-128.511039	54.531183	-128.511132	
26-A-@-00073	HAGEN STREET	0.000	0.395	2016/07/21	15:30:15	15:30:53	54.527700	-128.512261	54.531201	-128.512321	
26-A-@-00074	CHURCHILL DRIVE	0.000	0.740	2016/07/21	14:44:23	14:45:40	54.502425	-128.560986	54.499467	-128.552651	
26-A-@-00075	SKEENA DRIVE	0.000	1.490	2016/07/21	16:28:39	16:30:47	54.570173	-128.426402	54.576409	-128.420449	
26-A-@-00076	BULKLEY STREET	0.000	0.680	2016/07/21	16:35:02	16:36:01	54.572018	-128.428315	54.577475	-128.423696	
26-A-@-00087	CENTENNIAL DRIVE	0.000	2.468	2016/07/18	15:48:38	15:51:18	54.544688	-128.633114	54.549943	-128.625290	
26-A-@-00107	MOUNTAINVIEW AVENUE	0.000	0.470	2016/07/18	18:43:46	18:44:35	54.505815	-128.548022	54.505862	-128.540776	
26-A-@-00112	GOSSEN CREEK STREET	0.000	0.925	2016/07/21	16:32:38	16:33:55	54.570281	-128.426465	54.576711	-128.419233	
26-A-@-00116	CRESCENT STREET	0.000	2.240	2016/07/18	18:51:24	18:53:59	54.508084	-128.526759	54.526934	-128.529266	
26-A-@-00118	RIFLE RANGE ROAD	0.000	0.730	2016/07/21	15:09:07	15:10:14	54.520004	-128.523945	54.520751	-128.513097	
26-A-@-00120	COPPER RIVER ROAD	0.000	1.870	2016/07/21	16:23:27	16:26:03	54.536901	-128.455113	54.551080	-128.469665	
26-A-@-00126	WALKER STREET	0.001	0.486	2016/07/21	15:20:52	15:21:32	54.526839	-128.513697	54.531197	-128.513638	
26-A-@-00127	EDLUND AVENUE	0.000	0.370	2016/07/21	15:26:01	15:26:36	54.531254	-128.513638	54.531158	-128.507942	
26-A-@-00128	DOUGLAS ROAD	0.000	0.610	2016/07/18	15:46:00	15:46:50	54.541293	-128.636396	54.546729	-128.635971	
26-A-@-00141	SCOTTON AVENUE	0.000	0.250	2016/07/16	16:10:29	16:10:53	54.492719	-128.579921	54.492687	-128.576101	
26-A-@-00142	SEATON AVENUE	0.000	0.340	2016/07/21	15:48:15	15:48:58	54.527808	-128.528971	54.528868	-128.527734	
26-A-@-00149	PARMENTER AVENUE	0.000	0.250	2016/07/21	15:28:26	15:28:56	54.527668	-128.513705	54.528282	-128.510309	
26-A-@-00168	THORNHILL FRONTAGE S	0.000	3.500	2016/07/21	15:59:54	16:04:09	54.510780	-128.547779	54.533340	-128.513571	
26-A-@-00175	HEMLOCK STREET	0.000	0.770	2016/07/21	15:03:58	15:05:25	54.499067	-128.524584	54.505769	-128.522723	
26-A-@-00185	LARCH AVENUE	0.000	0.310	2016/07/21	14:58:57	14:59:31	54.504063	-128.522788	54.504087	-128.518058	
26-A-@-00186	COTTONWOOD CRESCENT	0.000	0.600	2016/07/21	14:56:20	14:57:29	54.499626	-128.524457	54.503212	-128.521258	
26-A-@-00191	ALDER AVENUE	0.000	0.305	2016/07/21	15:00:54	15:01:23	54.503284	-128.522827	54.503126	-128.518171	
26-A-@-00192	DOGWOOD AVENUE	0.001	0.390	2016/07/21	14:27:16	14:27:48	54.502295	-128.520137	54.502458	-128.514327	
26-A-@-00200	KITIMAAT VILLAGE RD.	0.000	11.080	2016/07/17	08:41:20	08:51:26	53.974891	-128.645857	54.052690	-128.618656	
26-A-@-00204	WOESTE AVENUE	0.000	0.975	2016/07/21	14:16:50	14:18:07	54.461459	-128.494484	54.460686	-128.480446	
26-A-@-00205	SOCKEYE CREEK ROAD	0.000	1.490	2016/07/21	14:14:03	14:15:43	54.447392	-128.490525	54.460736	-128.490272	
26-A-@-00208	WILLIAMS CREEK AVE	0.000	1.845	2016/07/21	14:07:09	14:09:03	54.446629	-128.510386	54.457645	-128.490345	
26-A-@-00213	HAWTHORN STREET	0.000	0.420	2016/07/21	14:55:09	14:55:51	54.502328	-128.529494	54.501987	-128.523138	
26-A-@-00214	WALNUT STREET	0.000	0.420	2016/07/21	14:51:13	14:52:01	54.499745	-128.529509	54.501438	-128.525853	
26-A-@-00215	CYPRESS STREET	0.000	0.290	2016/07/21	14:53:23	14:53:52	54.499745	-128.528848	54.502323	-128.528888	
26-A-@-00222	HAALAND AVENUE	0.000	1.010	2016/07/21	15:19:42	15:20:50	54.525238	-128.528041	54.526653	-128.513727	
26-A-@-00231	MOTZ ROAD	0.000	0.280	2016/07/16	16:48:59	16:49:23	54.510594	-128.557196	54.510534	-128.552893	
26-A-@-00244	ATTREE ROAD	0.000	0.955	2016/07/21	14:11:24	14:12:46	54.447487	-128.499610	54.447458	-128.484896	
27-A-@-00599R	PORT EDWARD ARTERIAL	0.000	13.890	2016/07/16	08:18:22	08:32:56	54.178177	-130.176255	54.252518	-130.257921	
27-A-@-00730R	RIDLEY ISLAND ARTERIAL	0.000	6.340	2016/07/16	07:51:30	07:57:13	54.236678	-130.329201	54.275417	-130.271653	
27-B-@-00032	QCC CEMETERY RD	0.000	1.980	2016/07/14	18:09:35	18:12:10	53.254195	-132.096011	53.250592	-132.117289	
27-B-@-00033	QCC-SKIDEGATE RD	0.000	6.261	2016/07/14	18:03:03	18:09:35	53.247416	-132.013542	53.254195	-132.095999	
27-B-@-00034	SKIDEGATE ONE-WAY	0.000	0.400	2016/07/14	18:02:25	18:03:07	53.247238	-132.009558	53.247027	-132.013712	
27-B-@-00051	TOWHILL ROAD	0.000	12.937	2016/07/15	08:30:59	08:42:28	54.009646	-132.136016	54.032887	-131.954181	
27-B-@-00061	ALLIFORD BAY ROAD	0.000	14.080	2016/07/15	14:08:31	14:23:07	53.254067	-131.821345	53.212564	-131.986087	
27-B-@-00062	COPPER BAY ROAD	0.000	3.670	2016/07/15	13:41:38	13:45:54	53.243584	-131.827929	53.227102	-131.792121	
27-B-@-00063	TACAN ROAD	0.000	0.407	2016/07/15	13:51:51	13:52:28	53.250475	-131.821188	53.250457	-131.815160	
27-B-@-00064	KWUNA POINT ROAD	0.000	0.700	2016/07/15	14:25:09	14:26:22	53.213291	-131.985641	53.215425	-131.991083	
27-B-@-00065	PARK ROAD	0.000	0.380	2016/07/15	13:15:38	13:16:17	53.243050	-131.828869	53.242635	-131.823308	
27-B-@-00079	RAVEN ROAD	0.000	2.550	2016/07/15	08:09:49	08:13:10	54.040709	-132.192033	54.025223	-132.164596	
27-B-@-00095	OLD COAST ROAD	0.000	1.825	2016/07/14	18:24:21	18:27:10	53.260481	-131.991446	53.273320	-131.980019	
27-B-@-00096	CHRISTINA PLACE	0.000	0.533	2016/07/15	13:17:06	13:18:09	53.243314	-131.820923	53.243239	-131.815915	
27-B-@-00494R	MASSET ARTERIAL	0.000	3.075	2016/07/15	08:13:10	08:17:23	54.025217	-132.164590	54.009610	-132.136051	
27-B-@-00509	BLAINE SHAW ROAD	0.000	0.310	2016/07/15	13:40:00	13:40:43	53.247241	-131.823385	53.245227	-131.822751	
27-B-@-00744R	PORT CLEMENTS ARTERIAL	0.000	4.100	2016/07/15	10:51:32	10:56:09	53.685592	-132.169810	53.665502	-132.200692	
28-A-@-00074	RIVERVIEW DRIVE	0.000	2.712	2016/07/19	17:37:04	17:40:00	58.417425	-130.041311	58.429989	-130.016845	
28-A-@-00095	FIRST AVENUE	0.000	0.500	2016/07/19	17:11:21	17:12:22	58.435469	-129.992373	58.439931	-129.992669	
28-A-@-00096	SECOND AVENUE	0.000	0.096	2016/07/19	17:24:44	17:24:59	58.436575	-129.995888	58.437422	-129.995991	
28-A-@-00097	THIRD AVENUE	0.000	0.160	2016/07/19	17:17:59	17:18:20	58.437403	-129.999252	58.438804	-129.999489	
28-A-@-00098	FOURTH AVENUE	0.000	0.168	2016/07/19	17:27:09	17:27:38	58.435900	-130.002896	58.437371	-130.002913	
28-A-@-00099	FIFTH AVENUE	0.000	0.252	2016/07/19	17:29:11	17:29:44	58.435833	-130.006274	58.438081	-130.006286	
28-A-@-00100	BOULDER STREET	0.000	1.410	2016/07/19	17:40:59	17:42:33	58.437025	-130.012563	58.437518	-129.988629	
28-A-@-00101	COMMERCIAL DRIVE	0.000	0.494	2016/07/19	17:04:51	17:05:43	58.431818	-129.986609	58.436148	-129.988404	two separate pavement sections
28-A-@-00101	COMMERCIAL DRIVE	0.495	0.671	2016/07/19	17:07:25	17:08:13	58.437700	-129.989181	58.439098	-129.989317	
28-A-@-00104	TATCHO STREET	0.000	0.485	2016/07/19	17:19:53	17:20:53	58.438732	-130.000191	58.438975	-129.992482	
28-A-@-00108	TANZILLA PLACE	0.000	0.120	2016/07/19	17:34:38	17:35:00	58.419488	-130.025151	58.420493	-130.025480	
28-A-@-00168	ELASGENZE DRIVE	0.000	0.570	2016/07/19	17:14:57	17:15:51	58.439465	-129.995341	58.439839	-129.992586	
28-A-@-00171	WILLIAMS ROAD	0.000	0.850								not tested - gravel road
28-D-@-00165	STIKINE AVENUE	0.000	0.310								not tested - too remote

Survey Limits 2016

Route	Route Name	Start km	End km	Date	Start Time	End Time	Start Latitude	Start Longitude	End Latitude	End Longitude	Comments
H113	Highway 113	0.000	27.519	2016/07/18	10:08:13	10:29:07	54.517189	-128.623861	54.719441	-128.765071	
H113	Highway 113	27.519	74.589	2016/07/18	10:35:01	11:09:35	54.719434	-128.765069	55.057382	-128.971188	
H113	Highway 113	74.590	96.163	2016/07/18	11:15:55	11:34:05	55.057412	-128.971199	55.210579	-129.109746	
H113T	Highway 113T	0.000	65.945	2016/07/18	13:00:57	13:53:22	54.993132	-129.954341	55.186913	-129.199485	
H113T	Highway 113T	65.946	84.884	2016/07/18	13:56:40	14:10:28	55.186916	-129.199475	55.283162	-128.990137	
H113V	Highway 113V	0.000	2.298	2016/07/18	11:39:16	11:41:13	55.198589	-129.103723	55.208485	-129.134996	
H115	Highway 115	0.000	25.523	2016/06/24	14:42:13	15:01:22	52.114989	-121.936273	52.313968	-121.898045	
H115	Highway 115	25.523	48.532	2016/06/27	07:12:19	07:28:54	52.313962	-121.898057	52.478285	-121.842888	
H115	Highway 115	48.532	82.880	2016/06/24	15:21:03	15:46:56	52.478297	-121.842902	52.615886	-121.571819	
H118	Highway 118	0.000	48.860	2016/07/29	18:51:55	19:26:01	54.507068	-126.300984	54.888627	-126.206474	
H12	Highway 12	0.000	61.912	2016/06/22	09:30:18	10:22:36	50.223646	-121.576746	50.685717	-121.919456	
H16	Highway 16	0.000	50.749	2016/07/16	09:03:19	09:40:35	54.292908	-130.353262	54.232387	-129.805308	
H16	Highway 16	50.751	123.664	2016/07/16	09:45:35	10:32:19	54.232386	-129.805303	54.413606	-128.886823	
H16	Highway 16	123.665	173.735	2016/07/16	10:40:28	11:16:49	54.413595	-128.886806	54.663083	-128.374930	
H16	Highway 16	173.735	225.137	2016/07/21	17:04:38	17:40:26	54.663091	-128.374932	55.033448	-128.283246	
H16	Highway 16	225.138	298.897	2016/07/21	17:45:10	18:37:15	55.033458	-128.283236	55.190819	-127.400750	
H16	Highway 16	298.898	349.315	2016/07/21	18:43:44	19:19:43	55.190809	-127.400734	54.799105	-127.190037	
H16	Highway 16	349.315	354.354	2016/07/22	11:04:50	11:12:17	54.799111	-127.190056	54.769779	-127.133570	
H16	Highway 16	354.356	404.678	2016/07/30	12:45:18	13:21:45	54.769780	-127.133547	54.443556	-126.746923	
H16	Highway 16	404.680	420.784	2016/07/30	14:28:44	14:40:36	54.443548	-126.746925	54.437025	-126.605141	
H16	Highway 16	420.785	440.454	2016/07/30	14:58:27	15:11:42	54.437030	-126.605125	54.521117	-126.367035	
H16	Highway 16	440.456	496.340	2016/07/30	16:07:05	16:46:32	54.521106	-126.367020	54.224843	-125.754135	
H16	Highway 16	496.341	565.405	2016/07/30	17:39:23	18:26:03	54.224837	-125.754116	54.055131	-124.849584	
H16	Highway 16	565.406	623.866	2016/07/30	18:30:21	19:10:31	54.055132	-124.849569	54.013860	-124.009205	
H16	Highway 16	623.866	698.862	2016/07/23	11:45:50	12:38:18	54.013858	-124.009178	53.809226	-123.012650	
H16	Highway 16	698.864	734.194	2016/07/23	12:45:49	13:18:01	53.809211	-123.012629	53.927313	-122.615536	
H16	Highway 16	734.195	812.086	2016/07/23	13:57:25	14:50:10	53.927312	-122.615537	53.868105	-121.544993	
H16	Highway 16	812.088	842.348	2016/07/23	14:55:11	15:15:59	53.868105	-121.544970	53.733215	-121.161870	
H16	Highway 16	842.350	927.339	2016/07/23	15:22:10	16:22:27	53.733208	-121.161854	53.322121	-120.224281	
H16	Highway 16	927.340	960.129	2016/07/07	17:33:08	17:55:42	53.322126	-120.224292	53.158542	-119.845588	
H16	Highway 16	960.130	993.650	2016/07/07	14:29:02	14:50:52	53.158537	-119.845560	52.981601	-119.450044	
H16	Highway 16	993.651	1029.234	2016/07/07	11:28:32	11:52:54	52.981596	-119.450016	52.985904	-118.995272	
H16	Highway 16	1029.235	1072.693	2016/07/07	12:04:53	12:32:55	52.985900	-118.995269	52.882548	-118.444232	
H16Q	Highway 16Q	0.000	39.979	2016/07/15	10:18:57	10:46:16	53.999952	-132.141416	53.681702	-132.170696	
H16Q	Highway 16Q	39.979	94.760	2016/07/15	11:04:10	11:41:50	53.681707	-132.170714	53.286358	-131.970096	
H16Q	Highway 16Q	94.761	101.038	2016/07/15	11:52:18	11:58:31	53.286355	-131.970095	53.247375	-132.013257	
H2	Highway 2	0.001	39.431	2016/09/23	13:13:53	13:45:04	55.480912	-120.001584	55.758630	-120.224193	
H2	Highway 2	39.431	41.521								missed - stopped at traffic circle
H20	Highway 20	0.000	78.050	2016/08/23	11:32:00	12:31:34	52.374648	-126.795249	52.411150	-125.894542	
H20	Highway 20	78.051	95.452	2016/08/23	12:37:37	13:00:45	52.411377	-125.894398	52.517051	-125.825201	
H20	Highway 20	95.452	96.280								missed - equipment failure
H20	Highway 20	96.280	137.841	2016/08/23	13:17:55	13:50:12	52.522783	-125.822078	52.461030	-125.315909	
H20	Highway 20	137.841	217.976	2016/08/23	14:19:38	15:13:30	52.461030	-125.315902	51.935665	-124.802557	
H20	Highway 20	217.978	280.283	2016/08/23	15:22:00	16:06:02	51.935676	-124.802538	52.112315	-124.065148	
H20	Highway 20	280.284	323.200	2016/08/23	16:13:35	16:41:23	52.112299	-124.065133	52.099270	-123.525981	
H20	Highway 20	323.200	343.120	2016/08/23	16:46:30	16:59:59	52.099257	-123.525965	52.082709	-123.275403	
H20	Highway 20	343.121	396.807	2016/08/23	17:08:24	17:44:18	52.082692	-123.275400	51.968580	-122.667953	
H20	Highway 20	396.808	404.344	2016/08/23	17:47:33	17:52:33	51.968593	-122.667894	51.983561	-122.571535	
H20	Highway 20	404.345	454.968	2016/08/23	17:55:51	18:34:09	51.983424	-122.571121	52.127387	-122.127734	
H24	Highway 24	0.000	48.370	2016/06/19	16:51:05	17:23:21	51.576919	-121.333614	51.481646	-120.711513	
H24	Highway 24	48.370	97.507	2016/06/19	17:28:01	18:01:21	51.481646	-120.711525	51.423931	-120.205310	
H26	Highway 26	0.000	43.667	2016/06/25	11:52:54	12:24:39	53.015479	-122.495133	53.065729	-121.941626	
H26	Highway 26	43.667	81.104	2016/06/25	12:29:08	12:58:22	53.065724	-121.941638	53.070163	-121.514024	
H27	Highway 27	0.000	52.205	2016/07/22	15:07:16	15:42:25	54.012840	-124.119499	54.430045	-124.257875	
H27	Highway 27	52.205	61.235	2016/07/22	17:18:44	17:27:57	54.430052	-124.257868	54.474143	-124.188642	
H29	Highway 29	0.000	76.170	2016/09/22	15:00:57	15:50:19	55.111423	-120.970480	55.540536	-121.598236	
H29	Highway 29	76.110	93.566	2016/09/22	15:55:25	16:07:12	55.540545	-121.598227	55.684876	-121.592598	
H29	Highway 29	96.560	161.762	2016/08/03	14:17:49	15:02:50	55.697651	-121.629574	56.030219	-121.908765	
H29	Highway 29	100.185	96.573	2016/08/03	13:56:24	13:59:47	55.718845	-121.590976	55.697735	-121.629898	
H29	Highway 29	161.762	222.640	2016/08/03	15:14:09	16:01:27	56.030222	-121.908768	56.291283	-121.194059	
H29	Highway 29	191.996	160.338	2016/08/03	10:31:16	10:56:31	56.182783	-121.562776	56.025245	-121.927055	
H29	Highway 29	222.640	236.034	2016/08/04	09:52:39	10:03:05	56.291287	-121.194051	56.305676	-121.005076	
H29	Highway 29	222.767	191.997	2016/08/04	08:58:31	09:22:58	56.292016	-121.192575	56.182793	-121.562766	
H29	Highway 29	236.036	222.768	2016/08/03	09:52:20	10:01:56	56.305615	-121.005041	56.292024	-121.192578	
H35	Highway 35	0.012	23.348	2016/07/30	17:17:59	17:36:07	54.051281	-125.756777	54.224855	-125.754084	
H37	Highway 37	0.001	57.691	2016/07/17	08:54:05	09:32:41	54.052663	-128.618631	54.511696	-128.557910	
H37	Highway 37	148.297	169.441	2016/07/17	10:39:32	10:53:43	55.095893	-128.076617	55.246256	-128.050559	
H37	Highway 37	169.443	237.249	2016/07/19	07:45:27	08:29:15	55.246270	-128.050578	55.656456	-128.694076	
H37	Highway 37	237.251	258.076	2016/07/19	08:38:27	08:52:07	55.656475	-128.694092	55.794866	-128.888269	
H37	Highway 37	258.076	305.046	2016/07/19	08:56:16	09:27:00	55.794877	-128.888291	56.100556	-129.307118	
H37	Highway 37	305.046	369.291	2016/07/19	11:37:21	12:20:31	56.100576	-129.307127	56.546442	-129.548775	
H37	Highway 37	369.291	436.870	2016/07/19	12:28:41	13:17:21	56.546448	-129.548779	56.923381	-130.171015	
H37	Highway 37	436.871	505.446	2016/07/19	13:39:39	14:25:36	56.923386	-130.171028	57.467811	-130.231579	
H37	Highway 37	505.447	571.614	2016/07/19	14:29:33	15:14:47	57.467817	-130.231588	57.969734	-130.074674	
H37	Highway 37	571.615	636.932	2016/07/19	15:21:46	16:07:14	57.969733	-130.074680	58.437488	-129.988596	
H37A	Highway 37A	0.000	65.087	2016/07/19	10:30:16	11:22:02	55.911999	-130.017391	56.100666	-129.307286	
H39	Highway 39	0.000	36.410	2016/07/31	14:41:24	15:08:22	55.119386	-122.958741	55.394659	-123.145736	
H419	Highway 419	0.000	46.340	2016/06/27	08:44:45	09:22:29	52.152661	-121.949339	52.333542	-121.414926	
H49	Highway 49	0.000	15.213	2016/09/23	14:53:01	15:03:31	55.758538	-120.224116	55.777157	-120.001347	
H5	Highway 5	0.000	51.444	2016/06/17	16:54:27	17:28:44	49.361645	-121.361916	49.656404	-121.006516	
H5	Highway 5	51.444	109.371	2016/06/15	09:53:54	10:31:56	49.656401	-121.006515	50.089777	-120.748751	
H5	Highway 5	109.371	160.416	2016/06/15	10:54:37	11:29:08	50.089772	-120.748756	50.486534	-120.541879	
H5	Highway 5	160.416	186.503	2016/06/15	11:43:19	12:00:22	50.486530	-120.541873	50.666301	-120.442646	
H5	Highway 5	197.055	248.944	2016/06/18	16:22:14	16:58:27	50.668296	-120.307907	51.088988	-120.174799	
H5	Highway 5	248.944	290.621	2016/06/19	09:00:22	09:28:48	51.088992	-120.174803	51.423960	-120.205285	
H5	Highway 5	290.621	320.818	2016/07/06	16:27:44	16:48:14	51.423963	-120.205282	51.650786	-120.038522	
H5	Highway 5	320.818	388.044	2016/07/07	08:08:26	08:52:17	51.650787	-120.038515	51.785688	-119.321688	
H5	Highway 5	388.045	460.322	2016/07/07	08:59:12	09:54:46	51.785692	-119.321678	52.384926	-119.180102	
H5	Highway 5	460.323	513.040	2016/07/07	10:01:26	10:35:26	52.384937	-119.180095	52.800046	-119.261721	
H5	Highway 5	513.041	536.580	2016/07/07	11:01:54	11:20:42	52.800054	-119.261728	52.976477	-119.415836	
H52	Highway 52	0.000	66.837	2016/09/23	10:07:11	10:50:43	55.757412	-120.558296	55.295116	-120.897630	
H52	Highway 52	66.835	129.601	2016/09/23	10:55:57	11:37:57	55.295112	-120.897622	54.929356	-120.748882	
H52	Highway 52	129.603	198.742	2016/09/23	11:41:54	12:33:32	54.929348	-120.748863	55.158438	-120.211415	
H52	Highway 52	198.742	242.933	2016/09/23	12:40:48	13:09:34	55.158437	-120.211416	55.485575	-120.031314	
H5A	Highway 5A	0.000	28.585	2016/06/17	13:49:30	14:11:28	49.458118	-120.505275	49.680803	-120.604974	
H5A	Highway 5A	28.585	62.527	2016/06/17	14:16:40	14:41:38	49.680801	-120.604975	49.951724	-120.617159	
H5A	Highway 5A	92.980	134.255	2016/06/18	07:57:07	08:26:38	50.122821	-120.756759	50.315266	-120.384294	
H5A	Highway 5A	134.255	182.806	2016/06/18	10:21:03	10:56:57	50.315262	-120.384297	50.654274	-120.368783	
H5R	Highway 5	0.000	25.548	2016/06/15	12:05:44	12:23:33	50.666703	-120.450656	50.486677	-120.542233	
H5R	Highway 5	25.548	76.599	2016/06/15	12:32:00	13:05:51	50.486710	-120.542004	50.089822	-120.749027	
H5R	Highway 5	76.599	134.538	2016/06/15	07:48:36	08:27:52	50.089818	-120.749021	49.656332	-121.007033	
H5R	Highway 5	134.538	186.560	2016/06/17	15:48:28	16:22:27	49.656330	-121.007043	49.362231	-121.368238	
H77	Highway 77	0.000	73.770	2016/08/02	08:07:00	09:00:14	58.901363	-123.125552	59.478996	-123.194740	
H77	Highway 77	73.770	137.820	2016/08/02	09:08:34	09:51:41	59.478995	-123.194736	60.000305	-122.933186	
H8	Highway 8	0.000	60.342	2016/06/14	18:02:50	18:57:26	50.413945	-121.358604	50.137035	-120.837859	
H97	Highway 97	0.200	46.140	2016/06/12	17:22:04	18:00:38	49.000760	-119.463669	49.345314	-119.579102	
H97	Highway 97	46.140	108.972	2016/06/12	18:06:28	18:54:16	49.345315	-119.579102	49.804548	-119.664960	
H97	Highway 97	108.972	132.273	2016/06/21	10:35:42	11:04:14	49.804546	-119.664959	49.889440	-119.420422	
H97	Highway 97	132.273	146.745	2016/06/21	14:27:38	14:39:54	49.889436	-119.420436	50.007541	-119.402844	
H97	Highway 97	146.745	178.921	2016/07/06	09:43:00	10:07:19	50.007552	-119.402847	50.260944	-119.273643	
H97	Highway 97	178.921	190.358	2016/07/06	10:38:55	10:51:50	50.260941	-119.273640	50.341004	-119.264420	
H97	Highway 97	190.358	238.406	2016/07/06	13:45:30	14:18:50	50.341020	-119.264433	50.466093	-119.738859	
H97	Highway 97	238.408	269.285	2016/07/06	14:34:23	14:56:14	50.466096	-119.738865	50.649983	-119.956809	
H97	Highway 97	378.720	399.753	2016/06/22	17:46:22	18:00:45	50.808857	-121.325306	50.966856	-121.456484	
H97	Highway 97	399.753	418.710	2016/06/22	19:11:23	19:24:41	50.966860	-121.456480	51.092383	-121.585891	
H97	Highway 97	418.710	433.733	2016/06/23	11:15:10	11:25:26	51.092393	-121.585894	51.193576	-121.529906	
H97	Highway 97	433.733	468.081	2016/06/23	15:10:45	15:33:13	51.193576	-121.529909	51.458583	-121.369878	
H97	Highway 97	468.081	529.218	2016/06/29	12:01:47	12:47:56	51.458583	-121.369881	51.852762	-121.627600	
H97	Highway 97	529.218	581.503	2016/06/29	13:14:52	13:51:58	51.852764	-121.627597	52.127531	-122.127356	
H97	Highway 97	581.503	649.375	2016/06/29	14:53:22	15:39:29	52.127534	-122.127380	52.573801	-122.468280	
H97	Highway 97	649.375	705.794	2016/06/29	16:01:03	16:45:43	52.573801	-122.468281	53.015494	-122.495012	
H97	Highway 97	705.794	781.742	2016/07/31	09:35:59	10:27:47	53.015505	-122.495008	53.589299	-122.670541	
H97	Highway 97	781.743	818.112	2016/07/31	10:34:43	10:59:47	53.589304	-122.670537	53.889072	-122.745742	
H97	Highway 97	818.113	847.592	2016/07/31	11:36:10	12:02:33	53.889071	-122.745737	54.096540	-122.679892	
H97	Highway 97	847.593	905.380	2016/07/31	12:19:47	12:58:24	54.096546	-122.679885	54.573824	-122.714742	
H97	Highway 97	905.381	951.367	2016/07/31	13:32:53	14:03:49	54.573823	-122.714741	54.931135	-122.963587	

Survey Limits 2016

Route	Route Name	Start km	End km	Date	Start Time	End Time	Start Latitude	Start Longitude	End Latitude	End Longitude	Comments
H97	Highway 97	951.369	976.290	2016/07/31	14:10:09	14:26:50	54.931152	-122.963608	55.119325	-122.958673	
H97	Highway 97	976.292	1050.462	2016/07/31	15:35:45	16:26:24	55.119329	-122.958650	55.503775	-122.605147	
H97	Highway 97	1050.462	1099.515	2016/09/10	10:54:27	11:26:50	55.503773	-122.605146	55.611838	-121.962223	
H97	Highway 97	1099.516	1124.320	2016/09/10	11:35:46	11:52:52	55.611841	-121.962241	55.697587	-121.629650	
H97	Highway 97	1099.517	1050.463	2016/09/10	15:29:54	16:02:41	55.611869	-121.962265	55.503812	-122.605187	
H97	Highway 97	1124.321	1157.033	2016/07/31	18:09:57	18:33:29	55.697584	-121.629656	55.720336	-121.210339	
H97	Highway 97	1124.358	1099.518	2016/09/10	14:56:00	15:22:20	55.697672	-121.629658	55.611867	-121.962257	
H97	Highway 97	1157.034	1222.742	2016/08/01	08:39:00	09:23:57	55.720330	-121.210332	55.766692	-120.276403	
H97	Highway 97	1222.743	1239.582	2016/08/01	09:30:48	09:43:17	55.766688	-120.276389	55.868871	-120.413009	
H97	Highway 97	1239.583	1308.326	2016/08/01	09:53:39	10:45:19	55.868885	-120.413034	56.305692	-121.004978	
H97	Highway 97	1308.327	1290.290	2016/08/03	16:28:45	16:43:44	56.305665	-121.005126	56.217116	-120.768392	
H97	Highway 97	1308.328	1355.167	2016/08/01	11:17:44	11:48:55	56.305683	-121.004961	56.594687	-121.458202	
H97A	Highway 97A	0.000	65.605	2016/07/06	11:00:11	11:49:59	50.337330	-119.242092	50.838087	-118.976365	
H97B	Highway 97B	0.000	14.433	2016/07/06	12:33:01	12:43:40	50.601885	-119.152651	50.710177	-119.229675	
H97C	Highway 97C	0.000	68.698	2016/06/16	16:23:38	17:14:36	50.773077	-121.311133	50.444345	-120.806705	
H97C	Highway 97C	68.698	113.898	2016/06/16	17:19:45	17:53:21	50.444340	-120.806706	50.089870	-120.749309	
H97C	Highway 97C	113.898	165.077	2016/06/16	18:13:26	18:48:03	50.089868	-120.749309	49.875697	-120.311570	
H97C	Highway 97C	165.077	220.125	2016/06/16	18:59:11	19:34:34	49.875686	-120.311553	49.810455	-119.659904	
H97CR	Highway 97C	0.000	52.691	2016/06/16	12:04:13	12:39:12	49.809479	-119.661147	49.868503	-120.289866	
H97CR	Highway 97C	52.691	82.345	2016/06/16	12:48:40	13:08:00	49.868502	-120.289868	49.951693	-120.616882	
H97D	Highway 97D	0.000	24.268	2016/06/18	12:45:46	13:02:38	50.488432	-120.832002	50.486047	-120.540879	

Survey Events 2016

Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
08-A-@-00014	APEX MOUNTAIN ROAD	3.756		CattleGuard	49.402555	-119.895078		
08-A-@-00014	APEX MOUNTAIN ROAD	10.182		CattleGuard	49.420715	-119.851669		
08-A-@-00014	APEX MOUNTAIN ROAD	12.49		CattleGuard	49.417301	-119.822244		
08-A-@-00038	WILLOWBROOK ROAD	1.496		CattleGuard	49.280229	-119.615184		
08-A-@-00039	FARLEIGH LAKE ROAD	0.707		CattleGuard	49.444574	-119.739073		
08-A-@-00078	GREEN MOUNTAIN ROAD	7.124	7.14	Bridge	49.439938	-119.734485	49.440059	-119.734378
08-A-@-00078	GREEN MOUNTAIN ROAD	10.981	10.997	Bridge	49.4677	-119.713346	49.467757	-119.713153
08-A-@-00078	GREEN MOUNTAIN ROAD	14.375	14.384	Bridge	49.473276	-119.670339	49.473293	-119.670219
08-A-@-00078	GREEN MOUNTAIN ROAD	20.002	20.052	Bridge	49.478753	-119.598179	49.47894	-119.597547
08-A-@-00104	WHITE LAKE ROAD	0.266		CattleGuard	49.374625	-119.616073		
08-A-@-00111	ALLENDALE LAKE ROAD	1.597		CattleGuard	49.341467	-119.518464		
08-A-@-00111	ALLENDALE LAKE ROAD	1.654		Gravel	49.341479	-119.517685		
08-A-@-00249	ROBINSON AVENE	1.525	1.603	Lane Detour	49.594159	-119.583317	49.593629	-119.58264
08-A-@-00250	NARAMATA ROAD	1.045	1.141	Lane Detour	49.563854	-119.575688	49.564651	-119.576182
08-A-@-00251	NORTH NARAMATA ROAD	4.923		CattleGuard	49.627229	-119.604711		
08-A-@-00251	NORTH NARAMATA ROAD	7.348		CattleGuard	49.646795	-119.613564		
08-A-@-00251	NORTH NARAMATA ROAD	8.8		Gravel	49.656664	-119.625841		
08-A-@-00418	BARTLETT ROAD	0.15		CattleGuard	49.496025	-119.631951		
08-A-@-00418	BARTLETT ROAD	1.345		Gravel	49.5047	-119.640051		
08-A-@-00460	PINEVIEW DRIVE	3.205		Gravel	49.411209	-119.603128		
08-A-@-00962	FISH LAKE ROAD	5.814		CattleGuard	49.629184	-119.781106		
08-A-@-00962	FISH LAKE ROAD	7.444		CattleGuard	49.643275	-119.783275		
08-A-@-00962	FISH LAKE ROAD	12.4		Gravel	49.674358	-119.817187		
08-B-@-00099	JUNE SPRINGS ROAD	1.742	1.801	Lane Detour	49.821268	-119.384215	49.821286	-119.383391
08-B-@-00548	BIG WHITE ROAD	1.148		CattleGuard	49.799084	-119.07916		
08-B-@-00548	BIG WHITE ROAD	5.52	5.55	Bridge	49.788952	-119.03578	49.788761	-119.035487
08-C-@-00024	COPPER MOUNTAIN ROAD	1.992		CattleGuard	49.445782	-120.50862		
08-C-@-00024	COPPER MOUNTAIN ROAD	4.041		CattleGuard	49.434567	-120.494821		
08-C-@-00024	COPPER MOUNTAIN ROAD	6.819		CattleGuard	49.41173	-120.487782		
08-C-@-00024	COPPER MOUNTAIN ROAD	8.505		CattleGuard	49.397284	-120.491376		
08-C-@-00024	COPPER MOUNTAIN ROAD	11.806		CattleGuard	49.37766	-120.496482		
08-C-@-00024	COPPER MOUNTAIN ROAD	16.538		CattleGuard	49.344921	-120.499529		
08-C-@-00040	PRINCETON/SUMMERLAND	0.541	0.56	Bridge	49.484145	-120.48203	49.484286	-120.481894
08-C-@-00040	PRINCETON/SUMMERLAND	25.828	25.845	Bridge	49.662667	-120.33575	49.662715	-120.335524
08-C-@-00040	PRINCETON/SUMMERLAND	39.335	39.354	Lane Detour	49.709973	-120.220371	49.710072	-120.220154
08-C-@-00040	PRINCETON/SUMMERLAND	41.763		Gravel	49.712548	-120.193006		
08-D-@-00172	WESTSIDE ROAD	0.093	0.137	Bridge	49.881941	-119.535041	49.882118	-119.535315
08-D-@-00172	WESTSIDE ROAD	0.23	0.374	Lane Detour	49.882783	-119.536416	49.883246	-119.538256
08-D-@-00172	WESTSIDE ROAD	6.865	6.885	Bridge	49.928215	-119.512142	49.928377	-119.51202
08-D-@-00172	WESTSIDE ROAD	16.421	16.461	Lane Detour	50.005542	-119.494546	50.005891	-119.494418
08-D-@-00218	TREPANIER ROAD	4.76		Gravel	49.821304	-119.773443		
08-D-@-00970	TOMAT AVENUE	0.103		Speed Bump	49.873786	-119.541168		
08-D-@-00970	TOMAT AVENUE	0.229		Speed Bump	49.874404	-119.5397		
08-D-@-00970	TOMAT AVENUE	0.377		Speed Bump	49.875132	-119.537978		
08-D-@-00970	TOMAT AVENUE	0.534		Speed Bump	49.876051	-119.536361		
08-D-@-00970	TOMAT AVENUE	0.68		Speed Bump	49.8771	-119.535131		
08-E-@-00038	WILLOWBROOK ROAD	1.265	1.355	Lane Detour	49.185302	-119.595786	49.186082	-119.595504
08-E-@-00058	KRUGER MOUNTAIN	1.247		Gravel	49.066362	-119.559355		
08-E-@-00120	BLACK SAGE ROAD	1.071		CattleGuard	49.095851	-119.534197		
08-E-@-00120	BLACK SAGE ROAD	5.52		Lane Detour	49.129141	-119.563276		
08-E-@-00120	BLACK SAGE ROAD	5.734		Lane Detour	49.131055	-119.563539		
08-E-@-00120	BLACK SAGE ROAD	7.399		CattleGuard	49.145686	-119.559383		
08-E-@-00120	BLACK SAGE ROAD	12.398	12.41	Bridge	49.180978	-119.537011	49.181088	-119.537005
08-E-@-00557	TWELFTH AVENUE	0.264	0.274	Gravel	49.004266	-119.471852	49.004256	-119.471719
08-F-@-00018	ASHNOLA ROAD	0.524	0.667	Bridge	49.204027	-119.887702	49.203884	-119.889656
08-F-@-00018	ASHNOLA ROAD	2.899		CattleGuard	49.210629	-119.917204		
08-F-@-00056	MIDDLE BENCH ROAD	1.078	1.083	Bridge	49.210489	-119.800311	49.210489	-119.800243
08-F-@-00076	OLIVER CAWSTON ROAD	0.607		Gravel	49.189043	-119.730483		
08-F-@-00360	WEBSTER STREET	0.376	0.402	Bridge	49.359022	-120.072479	49.359019	-120.072115
08-F-@-00820	AGAR ROAD	0.692	0.703	Bridge	49.19145	-119.766834	49.191371	-119.766751
14-A-@-00025	DOUGLAS LAKE ROAD	12.929	20.753	Construction Zone	50.150296	-120.340385	50.15522	-120.244548
14-A-@-00051	MONCK PARK RD	0.931		CattleGuard	50.169304	-120.658324		
14-A-@-00051	MONCK PARK RD	2.964		CattleGuard	50.166018	-120.631921		
14-A-@-00051	MONCK PARK RD	4.119		CattleGuard	50.161845	-120.617882		
14-A-@-00051	MONCK PARK RD	6.978		CattleGuard	50.16266	-120.5793		
14-A-@-00051	MONCK PARK RD	9.389		CattleGuard	50.168543	-120.550926		
14-A-@-00067	PLANET MINE RD	0.024		CattleGuard	50.3206	-120.395613		
14-A-@-00067	PLANET MINE RD	4.27		Gravel	50.35414	-120.382931		
14-A-@-00161	HARMON ESTATES RD	0.023		CattleGuard	50.163064	-120.593151		
14-B-@-00130	LYTTON RANCHERIE RD	0.438	0.486	Lane Detour	50.236121	-121.578349	50.236484	-121.577991
14-B-@-00130	LYTTON RANCHERIE RD	0.781		Railroad Crossing	50.238757	-121.576022		
14-B-@-00151	BOTANIE CREEK RD	2.486		Gravel	50.257102	-121.561412		
14-C-@-00002	ABERDEEN MINE RD	8.376		CattleGuard	50.214217	-120.877367		
14-C-@-00076	SUNSHINE VALLEY RD	0.383	0.447	Bridge	50.140361	-121.008567	50.140093	-121.009364
14-C-@-00076	SUNSHINE VALLEY RD	10.005	10.04	Bridge	50.138488	-120.929538	50.138789	-120.929672
14-C-@-00178	MEADOW CREEK ROAD	0.401		CattleGuard	50.485679	-120.535542		
14-C-@-00219	CORKLE ST	0.879	0.963	Lane Detour	50.163832	-120.880945	50.164569	-120.880725
14-C-@-00220	PAIGE ST		0.27	Gravel			50.159953	-120.885386
14-C-@-00332	WALLOPER LAKE RD	0.471		CattleGuard	50.485227	-120.539129		
14-C-@-00342	OLD MEADOW CREEK RD	0		CattleGuard	50.498407	-120.786842		
14-C-@-00342	OLD MEADOW CREEK RD	3.96		CattleGuard	50.486708	-120.738845		
14-C-@-00357	L L JEUNE RD	0.069		CattleGuard	50.493095	-120.494408		
14-C-@-00357	L L JEUNE RD	2.065	2.07	Bridge	50.476672	-120.497197	50.476629	-120.497169
14-C-@-00357	L L JEUNE RD	2.328		CattleGuard	50.474535	-120.495878		
14-C-@-00358	L L JEUNE PK DR E	0.414		CattleGuard	50.487051	-120.489498		

Survey Events 2016

Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
14-C-@-00361	MARMOT RD	0.054	0.115	Lane Detour	50.473011	-120.493851	50.473108	-120.493009
14-D-@-00017	COLDWATER RD	27.185		CattleGuard	49.909327	-120.913283		
14-D-@-00017	COLDWATER RD	27.461	27.48	Bridge	49.906944	-120.912978	49.906794	-120.912857
14-D-@-00017	COLDWATER RD	32.092	32.142	Bridge	49.868817	-120.911927	49.868372	-120.911994
14-D-@-00017	COLDWATER RD	33.175	33.221	Bridge	49.859629	-120.908789	49.859221	-120.908649
14-D-@-00017	COLDWATER RD	33.93		CattleGuard	49.853133	-120.906987		
14-D-@-00348	UPPER COLDWATER RD	0	0.088	Bridge	49.656451	-121.006188	49.656264	-121.007379
14-D-@-00348	UPPER COLDWATER RD	0.326		CattleGuard	49.657339	-121.009302		
14-D-@-00348	UPPER COLDWATER RD	0.444	0.47	Bridge	49.658373	-121.009626	49.658599	-121.00973
14-D-@-00349	JULIET DRIVE	0.431		CattleGuard	49.743554	-121.014087		
14-D-@-00353	COQUIHALLA LAKES RD	0	0.089	Bridge	49.656247	-121.00734	49.656433	-121.006149
14-D-@-00393	MINE CREEK EXIT	0.215		CattleGuard	49.684305	-121.014114		
14-D-@-00393	MINE CREEK EXIT	0.653		CattleGuard	49.682241	-121.012668		
14-E-@-00045	LOON LK RD	14.392		CattleGuard	49.892531	-120.537518		
14-E-@-00407	HAMILTON HILL RD	0.06		CattleGuard	50.082662	-120.673881		
14-E-@-00424	SUNSET MAIN RD	0.021		CattleGuard	49.89796	-120.165614		
14-E-@-00424	SUNSET MAIN RD	0.211		CattleGuard	49.89962	-120.166269		
15-A-@-00685	BARNHARTVALE ROAD	0.468		CattleGuard	50.6371	-120.074504		
15-A-@-00685	BARNHARTVALE ROAD	4.395		CattleGuard	50.628682	-120.024346		
15-A-@-00685	BARNHARTVALE ROAD	16.271		CattleGuard	50.57905	-119.894217		
15-A-@-00685	BARNHARTVALE ROAD	16.299		Railroad Crossing	50.579069	-119.893826		
15-A-@-00685	BARNHARTVALE ROAD	16.324	16.343	Bridge	50.57909	-119.893482	50.579105	-119.893213
15-A-@-03347	MONTE CREEK ROAD	0.872		Gravel	50.64448	-119.95603		
15-A-@-03389	MOUNT LOLO ROAD	0		CattleGuard	50.75382	-120.201916		
15-A-@-03389	MOUNT LOLO ROAD	3.419		CattleGuard	50.773148	-120.189293		
15-A-@-03389	MOUNT LOLO ROAD	4.422		Gravel	50.781219	-120.18471		
15-A-@-03393	MOUNT PAUL WAY	1.354	1.729	Bridge	50.681791	-120.32484	50.678418	-120.325042
15-A-@-03530E	N. THOMPSON RV.EAST	0	0.448	Bridge	50.711606	-120.356333	50.712928	-120.350347
15-A-@-03530E	N. THOMPSON RV.EAST	0.618	0.674	Bridge	50.713426	-120.348081	50.713593	-120.34733
15-A-@-03530W	N.THOMPSON RIV CON W	1.712	2.162	Bridge	50.713017	-120.350433	50.711686	-120.356459
15-A-@-03552	OLD FERRY ROAD	0.475		Railroad Crossing	50.650741	-119.953995		
15-A-@-03552	OLD FERRY ROAD	0.859		Gravel	50.64976	-119.949035		
15-A-@-03688	PAUL LAKE ROAD	2.4	2.46	Lane Detour	50.713083	-120.296785	50.713292	-120.295998
15-A-@-03688	PAUL LAKE ROAD	10.15		CattleGuard	50.743066	-120.206435		
15-A-@-03688	PAUL LAKE ROAD	12.665		CattleGuard	50.743645	-120.177448		
15-A-@-03748	PINANTAN-PRITCHARD	1.159		CattleGuard	50.748235	-120.176748		
15-A-@-03748	PINANTAN-PRITCHARD	7.069		CattleGuard	50.749568	-120.100084		
15-A-@-03748	PINANTAN-PRITCHARD	10.786		CattleGuard	50.738279	-120.054258		
15-A-@-04412	SHUSWAP ROAD	1.252		CattleGuard	50.685075	-120.282528		
15-A-@-04412	SHUSWAP ROAD	6.718		CattleGuard	50.677447	-120.208782		
15-A-@-04412	SHUSWAP ROAD	8.297		CattleGuard	50.67463	-120.187278		
15-A-@-04412	SHUSWAP ROAD	10.849		CattleGuard	50.673191	-120.15361		
15-A-@-04412	SHUSWAP ROAD	13.767		CattleGuard	50.664844	-120.115394		
15-A-@-04412	SHUSWAP ROAD	15.229		CattleGuard	50.662724	-120.095458		
15-A-@-04412	SHUSWAP ROAD	16.085		CattleGuard	50.661093	-120.083945		
15-A-@-04412	SHUSWAP ROAD	16.834		CattleGuard	50.659898	-120.073696		
15-A-@-04412	SHUSWAP ROAD	17.532	17.579	Lane Detour	50.658685	-120.064136	50.658749	-120.063487
15-A-@-04412	SHUSWAP ROAD	18.171		CattleGuard	50.659488	-120.055214		
15-B-@-01005	BUCKHORN	0.416		CattleGuard	50.708274	-120.635166		
15-B-@-01005	BUCKHORN	2.09		CattleGuard	50.69988	-120.640827		
15-B-@-01005	BUCKHORN	2.628		CattleGuard	50.697764	-120.634619		
15-B-@-01440	DEER DRIVE	0.09		CattleGuard	50.700547	-120.591227		
15-B-@-04262	SAVONA ACCESS	4.401	4.443	Bridge	50.760307	-120.812967	50.759954	-120.812745
15-B-@-04927	WALHACHIN	0.035		CattleGuard	50.772426	-121.028442		
15-B-@-04927	WALHACHIN	1.129		Railroad Crossing	50.765554	-121.035306		
15-B-@-04927	WALHACHIN	1.38	1.521	Bridge	50.765152	-121.032146	50.763888	-121.032041
15-B-@-05018	WESTSYDE	2.202	2.212	Bridge	50.883029	-120.275025	50.88311	-120.274965
15-B-@-05018	WESTSYDE	12.35		CattleGuard	50.968845	-120.25136		
15-B-@-05018	WESTSYDE	16.507		CattleGuard	51.005309	-120.243226		
15-B-@-05018	WESTSYDE	20.4		CattleGuard	51.039308	-120.243377		
15-C-@-00525	AGATE BAY	2.088		CattleGuard	51.145319	-120.100432		
15-C-@-03155	MCLURE FERRY	0.108		Railroad Crossing	51.032461	-120.225463		
15-C-@-03155	MCLURE FERRY	0.124	0.169	Lane Detour	51.032475	-120.225693	51.032444	-120.226323
15-D-@-00815	BIRCH ISLAND-LOST CR	1.29	1.394	Bridge	51.602596	-119.913525	51.601745	-119.914162
15-D-@-00815	BIRCH ISLAND-LOST CR	3.251		Railroad Crossing	51.59386	-119.892899		
15-D-@-00838	BLACKWATER	0.881	1.007	Lane Detour	51.578526	-120.141202	51.578943	-120.139522
15-D-@-01214	CLEARWATER VALLEY	1.189	1.268	Lane Detour	51.661128	-120.041274	51.661635	-120.042049
15-D-@-01214	CLEARWATER VALLEY	10.169	10.189	Bridge	51.733978	-120.007124	51.734156	-120.007084
15-D-@-01214	CLEARWATER VALLEY	13.501	13.548	Bridge	51.763738	-120.007111	51.764141	-120.007305
15-D-@-01214	CLEARWATER VALLEY	16.174	16.22	Bridge	51.787222	-120.012465	51.787632	-120.012558
15-D-@-01214	CLEARWATER VALLEY	24.234	24.256	Bridge	51.855998	-120.016343	51.856182	-120.016219
15-D-@-01214	CLEARWATER VALLEY	26.148	26.157	Bridge	51.872856	-120.019396	51.872936	-120.019416
15-D-@-01214	CLEARWATER VALLEY	28.006	28.017	Bridge	51.888439	-120.024197	51.888537	-120.024177
15-D-@-01214	CLEARWATER VALLEY	32.721	32.738	Bridge	51.923996	-120.043798	51.924052	-120.044022
15-D-@-01214	CLEARWATER VALLEY	41.329	41.375	Bridge	51.963812	-120.130533	51.964217	-120.130633
15-D-@-02609	K.P.	2.1		Railroad Crossing	51.586324	-119.780419		
15-D-@-03521	NORRIS	0.564	0.641	Lane Detour	51.614517	-119.934681	51.613947	-119.934065
16-A-@-00222	LAKESIDE COURT	0.302	0.343	Lane Detour	51.689034	-121.305769	51.689305	-121.305371
16-A-@-00318	CANIM-HENDRIX LAKE	20.754	20.984	Lane Detour	51.763463	-121.053479	51.764285	-121.050433
16-A-@-00318	CANIM-HENDRIX LAKE	21.628	21.647	Bridge	51.765339	-121.041394	51.765326	-121.041129
16-A-@-00318	CANIM-HENDRIX LAKE	28.761	28.98	Lane Detour	51.771351	-120.951032	51.771369	-120.947868
16-A-@-00318	CANIM-HENDRIX LAKE	30.775	30.798	Bridge	51.777004	-120.924553	51.777129	-120.924278
16-A-@-00318	CANIM-HENDRIX LAKE	39.024	39.091	Lane Detour	51.828564	-120.86864	51.829161	-120.868537
16-A-@-00318	CANIM-HENDRIX LAKE	42.482	42.523	Bridge	51.859336	-120.863299	51.859704	-120.863256
16-A-@-00322	TSQ'ESCEN	0.4	0.417	Bridge	51.774196	-120.989477	51.77433	-120.989367

Survey Events 2016

Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
16-A-@-00339	87 MILE LOOP	0.381		CattleGuard	51.508443	-121.370789		
16-A-@-00339	87 MILE LOOP	2.435		CattleGuard	51.525775	-121.365484		
16-A-@-00340	90 MILE LOOP	0.168		CattleGuard	51.526855	-121.363467		
16-A-@-00340	90 MILE LOOP	2.327		CattleGuard	51.544761	-121.362343		
16-A-@-00341	93 MILE LOOP	0.149		CattleGuard	51.547548	-121.364828		
16-A-@-00341	93 MILE LOOP	3.693		CattleGuard	51.57066	-121.344415		
16-A-@-00345	HORSE LAKE NORTH	1.755		Gravel	51.610731	-121.17302		
16-A-@-00345	HORSE LAKE NORTH	1.755		CattleGuard	51.610731	-121.17302		
16-A-@-00347	INMAN ROAD	0.296	0.351	Lane Detour	51.555949	-121.224335	51.556157	-121.225045
16-A-@-00347	INMAN ROAD	1.098		CattleGuard	51.561861	-121.230511		
16-A-@-00351	LAC LA HACHE STATION	0.355	0.375	Gravel	51.793332	-121.478832	51.793395	-121.478565
16-A-@-00351	LAC LA HACHE STATION	1.414	1.424	Bridge	51.792841	-121.463897	51.792875	-121.463769
16-A-@-00351	LAC LA HACHE STATION	3.953		CattleGuard	51.810211	-121.459595		
16-A-@-00353	TIMOTHY LAKE	4.139		CattleGuard	51.837397	-121.439737		
16-A-@-00353	TIMOTHY LAKE	6.351	6.373	Bridge	51.846578	-121.413428	51.846735	-121.413238
16-A-@-00353	TIMOTHY LAKE	12.43		CattleGuard	51.855348	-121.334913		
16-A-@-00353	TIMOTHY LAKE	15.273		CattleGuard	51.861301	-121.299407		
16-A-@-00355	LONE-BUTTE-HORSE LK	0.342		Railroad Crossing	51.556823	-121.192085		
16-A-@-00371	HORSE LAKE	7.278	7.322	Bridge	51.60444	-121.19776	51.604045	-121.197779
16-A-@-00378	WRIGHT STN RD.	4.873		CattleGuard	51.872765	-121.668097		
16-A-@-00378	WRIGHT STN RD.	4.881		Railroad Crossing	51.872807	-121.66799		
16-A-@-00378	WRIGHT STN RD.	4.893	4.91	Bridge	51.872861	-121.667851	51.872939	-121.66763
16-A-@-00403	TATTON STATION	2.266	2.298	Gravel	51.704892	-121.386711	51.705069	-121.386351
16-A-@-00403	TATTON STATION	3.225		CattleGuard	51.709086	-121.374986		
16-A-@-00403	TATTON STATION	3.245		Railroad Crossing	51.709084	-121.374696		
16-A-@-00403	TATTON STATION	7.509		CattleGuard	51.706032	-121.320608		
16-A-@-00653	EMERALD	1.171	1.187	Lane Detour	51.832049	-121.560648	51.832196	-121.56069
16-A-@-00680	DAWSON	0.302		Gravel	51.692256	-121.309043		
16-A-@-01022	GLOINNZUN DR	2.584	2.653	Lane Detour	51.735992	-121.3715	51.736526	-121.371983
16-A-@-01025	KITWANGA DR	1.626	1.696	Lane Detour	51.738733	-121.371014	51.738857	-121.372005
16-A-@-01064	NORMAN	0.196	0.216	Gravel	51.595072	-121.184197	51.594896	-121.184186
16-A-@-01074	ELLIOT LAKE RD	0.116	0.146	Lane Detour	51.703581	-121.326274	51.703639	-121.325854
16-A-@-01075	CARLSON	0.318		CattleGuard	51.700558	-121.324795		
16-A-@-01170	STOKES	0.019	0.054	Lane Detour	51.577256	-121.333921	51.577444	-121.33353
16-A-@-01170	STOKES	1.722		CattleGuard	51.587743	-121.318434		
16-B-@-00040	LILLOOET-PIONEER	112.628	112.693	Bridge	50.752938	-121.935384	50.752418	-121.935791
16-B-@-00040	LILLOOET-PIONEER	114.127	114.175	Lane Detour	50.740376	-121.934752	50.739949	-121.934819
16-B-@-00040	LILLOOET-PIONEER	114.738	114.757	Bridge	50.735282	-121.932341	50.735129	-121.932221
16-B-@-00040	LILLOOET-PIONEER	120.861		Railroad Crossing	50.686276	-121.935404		
16-B-@-00128	LOON LAKE	0.092		CattleGuard	50.96839	-121.459287		
16-B-@-00128	LOON LAKE	6.861	6.875	Bridge	51.021152	-121.448283	51.02114	-121.448084
16-B-@-00128	LOON LAKE	9.318	9.356	Lane Detour	51.038816	-121.435415	51.039132	-121.435216
16-B-@-00128	LOON LAKE	10.841		CattleGuard	51.044342	-121.421417		
16-B-@-00128	LOON LAKE	11.737		CattleGuard	51.049548	-121.412207		
16-B-@-00128	LOON LAKE	15.946		CattleGuard	51.060107	-121.359592		
16-B-@-00128	LOON LAKE	16.813		CattleGuard	51.065564	-121.35192		
16-B-@-00128	LOON LAKE	25.81		CattleGuard	51.108015	-121.249428		
16-B-@-02107	BARNES LAKE	0.418		CattleGuard	50.680132	-121.254571		
16-B-@-02107	BARNES LAKE	4.129		CattleGuard	50.707588	-121.234808		
16-B-@-02107	BARNES LAKE	4.961		CattleGuard	50.709784	-121.224743		
16-B-@-02260	PATTERSON	1.85		CattleGuard	50.766623	-121.313866		
16-C-@-00011	PAVILION-CLINTON	13.225		CattleGuard	51.022878	-121.730338		
16-C-@-00011	PAVILION-CLINTON	13.885		Railroad Crossing	51.024274	-121.72123		
16-C-@-00089	GREEN LAKE NORTH	2.623		CattleGuard	51.367882	-121.31172		
16-C-@-00089	GREEN LAKE NORTH	7.35		CattleGuard	51.395255	-121.269441		
16-C-@-00089	GREEN LAKE NORTH	9.247		CattleGuard	51.405454	-121.249741		
16-C-@-00089	GREEN LAKE NORTH	15.064		CattleGuard	51.437254	-121.188194		
16-C-@-00089	GREEN LAKE NORTH	16.391		CattleGuard	51.44379	-121.174194		
16-C-@-00089	GREEN LAKE NORTH	17.263		CattleGuard	51.443719	-121.162308		
16-C-@-00089	GREEN LAKE NORTH	22.297		Gravel	51.443003	-121.0936		
16-C-@-00223	SKYLINE DR	0.492		CattleGuard	51.395047	-121.269822		
16-C-@-00319	MAHOOD LAKE	0.043		CattleGuard	51.584495	-120.926536		
16-C-@-00319	MAHOOD LAKE	0.298	0.318	Bridge	51.586696	-120.927103	51.586866	-120.927192
16-C-@-00354	WATCH LAKE	0.418	0.483	Lane Detour	51.444353	-121.143612	51.444927	-121.143423
16-C-@-00354	WATCH LAKE	7.762		CattleGuard	51.49798	-121.111033		
16-C-@-00354	WATCH LAKE	15.659		CattleGuard	51.546297	-121.180645		
16-C-@-00354	WATCH LAKE	15.676		Railroad Crossing	51.546406	-121.180812		
16-C-@-00371	HORSE LAKE	20.108		CattleGuard	51.547955	-120.915612		
16-C-@-00386	NORTH BONAPARTE	1.598		Railroad Crossing	51.307082	-121.376082		
16-C-@-00386	NORTH BONAPARTE	1.674		CattleGuard	51.307327	-121.375066		
16-C-@-00386	NORTH BONAPARTE	9.623		CattleGuard	51.349484	-121.292404		
16-C-@-00386	NORTH BONAPARTE	11.12		Gravel	51.351528	-121.271676		
16-C-@-00386	NORTH BONAPARTE	58.35	58.56	Gravel	51.473815	-120.725008	51.475662	-120.725377
16-C-@-00729	CANIM LAKE SOUTH	4.677	4.687	Lane Detour	51.775364	-120.874677	51.775448	-120.874618
17-A-@-00090	CEDAR CREEK RD	0.441	0.459	Bridge	52.576751	-121.533269	52.576897	-121.533398
17-A-@-00105	KEITHLEY CREEK RD	2.333		Gravel	52.61171	-121.541869		
17-A-@-00198	WALTERS DRIVE	0.687		Gravel	52.334041	-121.426646		
17-A-@-00389	PIGEON RD	1.977	2.001	Bridge	52.111722	-121.903824	52.111824	-121.903515
17-A-@-00389	PIGEON RD	5.11		CattleGuard	52.113315	-121.862048		
17-A-@-00389	PIGEON RD	7.158		Gravel	52.102584	-121.838703		
17-A-@-00398	SPOKIN LAKE RD	0.064		CattleGuard	52.203508	-121.865194		
17-A-@-00398	SPOKIN LAKE RD	6.544		CattleGuard	52.183688	-121.783836		
17-A-@-00398	SPOKIN LAKE RD	6.57		Gravel	52.183708	-121.783455		
17-A-@-00881	WESTCOAST RD	1.785		CattleGuard	52.217785	-122.071992		
17-A-@-00882	HICKORY RD	0.356		Lane Detour	52.21184	-122.08623		

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Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
17-A-@-00935	JACOBSON DRIVE	0.181	0.3	Gravel	52.165841	-122.080637	52.166609	-122.079467
17-A-@-00939	RODNEY RD	0.484		Gravel	52.002691	-121.858736		
17-A-@-00980	ROSS RD	1.375		Gravel	52.144247	-122.077059		
17-B-@-00360	MISSION RD	0.121		CattleGuard	52.064766	-121.919671		
17-B-@-00360	MISSION RD	1.853		CattleGuard	52.057407	-121.938797		
17-B-@-00360	MISSION RD	3.326		CattleGuard	52.064525	-121.95367		
17-B-@-00360	MISSION RD	4.761		CattleGuard	52.070836	-121.970225		
17-B-@-00360	MISSION RD	4.836	4.861	Gravel	52.071094	-121.971226	52.071169	-121.971568
17-B-@-00360	MISSION RD	5.115	5.215	Gravel	52.072254	-121.974819	52.072374	-121.976251
17-B-@-00360	MISSION RD	5.344	5.375	Gravel	52.072681	-121.978045	52.072847	-121.978408
17-B-@-00360	MISSION RD	5.685	5.697	Gravel	52.074018	-121.982402	52.074046	-121.982567
17-B-@-00360	MISSION RD	5.706		CattleGuard	52.074072	-121.9827		
17-B-@-00360	MISSION RD	5.839	5.85	Gravel	52.074747	-121.984274	52.074817	-121.984386
17-B-@-00360	MISSION RD	6.005	6.015	Gravel	52.076072	-121.985306	52.076159	-121.985344
17-B-@-00360	MISSION RD	6.366	6.4	Gravel	52.077895	-121.98878	52.077933	-121.989275
17-B-@-00360	MISSION RD	6.665	6.69	Gravel	52.08015	-121.989785	52.080375	-121.989772
17-B-@-00360	MISSION RD	7.092		CattleGuard	52.083642	-121.991835		
17-B-@-00360	MISSION RD	7.802	7.825	Gravel	52.089335	-121.995015	52.089521	-121.99488
17-B-@-00360	MISSION RD	8.007	8.03	Gravel	52.0911	-121.994373	52.091309	-121.994356
17-B-@-00360	MISSION RD	9.618	9.625	Bridge	52.10445	-121.995883	52.104509	-121.995916
17-B-@-00360	MISSION RD	10.514		CattleGuard	52.111134	-121.990959		
17-B-@-00379	MILE 136-ENTERPRISE	0.526		CattleGuard	51.969761	-121.812017		
17-B-@-00379	MILE 136-ENTERPRISE	0.563		Railroad Crossing	51.970039	-121.811729		
17-B-@-00379	MILE 136-ENTERPRISE	0.872	0.896	Bridge	51.972685	-121.810548	51.972881	-121.810401
17-B-@-00610	CHIMNEY LAKE ROAD	0		CattleGuard	51.903468	-121.916583		
17-B-@-00610	CHIMNEY LAKE ROAD	17.53	17.596	Lane Detour	52.023871	-122.037732	52.024334	-122.038334
17-B-@-00706	RICHARD STEET	0.256	0.294	Lane Detour	52.102538	-122.135792	52.10254	-122.135244
17-B-@-00706	RICHARD STEET	0.352	0.366	Lane Detour	52.102544	-122.134396	52.102544	-122.134196
17-B-@-00747	BIRCH LANE	0.403	0.429	Lane Detour	52.117496	-122.179117	52.117683	-122.179335
17-B-@-00816	ROBERTS DRIVE	0.179	0.215	Lane Detour	52.11136	-122.158362	52.111151	-122.157961
17-B-@-00886	HULL RD	0.405		Gravel	52.110988	-122.163222		
17-B-@-00890	MOUNTVIEW DRIVE	0.205	0.222	Lane Detour	52.100608	-122.141471	52.100757	-122.141478
17-B-@-00922	ESLER RD	0.637	0.71	Lane Detour	52.103999	-122.184142	52.104638	-122.184322
17-B-@-00922	ESLER RD	0.746	0.823	Lane Detour	52.104958	-122.184416	52.105637	-122.184617
17-B-@-01032	BOND LAKE RD	1.875	1.88	Gravel	52.095243	-122.124004	52.095251	-122.124065
17-B-@-01104	NORTH LAKESIDE DRIVE	0.8	0.822	Lane Detour	52.123202	-122.063551	52.123197	-122.063233
17-B-@-01207	EAGLEVIEW RD	0.856		CattleGuard	52.067448	-122.108053		
17-B-@-01207	EAGLEVIEW RD	1.77		CattleGuard	52.070536	-122.096215		
17-C-@-00508	STACK VALLEY RD	0.637		CattleGuard	51.973525	-122.530105		
17-C-@-00600	CHILKO-NEWTON RD	16.92		CattleGuard	52.096662	-123.521148		
17-C-@-01007	STUM LAKE RD	0.616		Gravel	52.087121	-123.270658		
17-C-@-01085	PUNTZI MOUNTAIN RD	0.076		CattleGuard	52.112763	-124.065892		
17-C-@-01085	PUNTZI MOUNTAIN RD	1.854		Gravel	52.122273	-124.085137		
17-D-@-00157	SALLOOMPT RD	0.909	0.927	Bridge	52.405697	-126.49965	52.40584	-126.499552
17-D-@-00157	SALLOOMPT RD	1.267	1.334	Bridge	52.408121	-126.500566	52.408213	-126.501536
17-D-@-00447	CHRISTENSEN RD	1.607	1.621	Bridge	52.467258	-125.291285	52.467346	-125.291139
17-D-@-00447	CHRISTENSEN RD	1.85		Gravel	52.469313	-125.290651		
17-D-@-00828	GRANT RD	0.07	0.08	Bridge	52.362191	-126.68494	52.362282	-126.684938
17-D-@-00828	GRANT RD	0.366	0.376	Bridge	52.364843	-126.685055	52.364932	-126.685054
18-A-H-00003	OLSON WEST	8.8		Railroad Crossing	53.226545	-122.419727		
18-A-H-00106	LAKE CK RD	0.411		Railroad Crossing	53.391229	-122.570357		
18-A-H-00106	LAKE CK RD	1.021	1.065	Bridge	53.389947	-122.562323	53.389802	-122.561699
18-A-H-00106	LAKE CK RD	1.09		Gravel	53.389715	-122.561358		
18-A-H-00176	DUNKLEY	0.328	0.336	Bridge	53.275565	-122.471962	53.27559	-122.47185
18-A-N-00038	PINNACLES RD	2.177	2.224	Lane Detour	52.984757	-122.563201	52.984773	-122.563892
18-A-N-00100	MATTHEWS	2.634		Gravel	53.069466	-122.367621		
18-A-N-00143	BARKER RD	0.367	0.371	Bridge	53.030319	-122.614682	53.030354	-122.614674
18-A-N-00190	NORWOOD RD	0.705	0.711	Bridge	53.030312	-122.632646	53.030317	-122.632557
18-A-N-00254	FALCON	0.574	0.631	Lane Detour	53.032022	-122.430266	53.032025	-122.431119
18-A-N-00263	SCHEMENAUR	1.195		Railroad Crossing	53.042498	-122.409555		
18-A-Z-00059	NAZKO ROAD	54.526	54.535	Bridge	52.941415	-123.428909	52.941434	-123.42904
18-A-Z-00059	NAZKO ROAD	66.396	66.428	Bridge	52.925295	-123.553482	52.925463	-123.553863
18-A-Z-00098	TIBBLES	7.163	7.185	Bridge	52.929073	-123.015199	52.928872	-123.015254
18-A-Z-00098	TIBBLES	7.518		Gravel	52.925918	-123.015415		
18-A-Z-00683	PARKINS RD	0.048		CattleGuard	52.995903	-122.929407		
18-B-M-00019	BEAVER LAKE	2.799		CattleGuard	52.441558	-122.283222		
18-B-M-00019	BEAVER LAKE	3.424		Gravel	52.442142	-122.274715		
18-B-M-00037	FRIDLINGTON	0.304		Gravel	52.557108	-122.460552		
18-B-M-00249	ROBERTSON	8.013	8.127	Gravel	52.413203	-122.287748	52.413814	-122.28908
18-B-M-00249	ROBERTSON	8.124		CattleGuard	52.413796	-122.289055		
18-B-M-00655	GIBRALTER	8.122		CattleGuard	52.506528	-122.309764		
18-B-M-00655	GIBRALTER	9.69		CattleGuard	52.519272	-122.31659		
18-B-M-00731	PICARD	0.302		Gravel	52.458779	-122.406271		
18-B-S-00032	FRASER RD.	36.156	36.24	Gravel	52.809959	-122.48897	52.810563	-122.488222
18-B-S-00032	FRASER RD.	36.289	36.319	Bridge	52.810902	-122.48776	52.811109	-122.487475
18-B-S-00045	DRAGON LAKE	3.205	3.245	Lane Detour	52.936153	-122.411532	52.936488	-122.41131
18-B-S-00055	KERSLEY RD	2.733		CattleGuard	52.823195	-122.417302		
18-B-S-00060	QUES-HYDRLIC	3.541	3.568	Lane Detour	52.965442	-122.404154	52.965219	-122.403984
18-B-S-00060	QUES-HYDRLIC	3.631	3.656	Lane Detour	52.964704	-122.403591	52.964502	-122.403435
18-B-S-00060	QUES-HYDRLIC	14.191		Gravel	52.8973	-122.304591		
18-B-S-00089	ARNOLDUS	0.265	0.312	Lane Detour	52.837382	-122.420618	52.837388	-122.421322
18-B-S-00089	ARNOLDUS	1.18		Gravel	52.837553	-122.434187		
18-B-S-00120	SHORT AVE	0.113	0.154	Lane Detour	52.973323	-122.444377	52.973319	-122.443778
18-B-S-00162	DURRELL RD	0.98	1.165	Gravel	52.869569	-122.420353	52.868494	-122.418358
18-B-S-00162	DURRELL RD	3.71		Gravel	52.874638	-122.39649		

Survey Events 2016

Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
18-B-S-00170	FRENCH	0.511		Railroad Crossing	52.822779	-122.411064		
18-B-S-00170	FRENCH	3.951		CattleGuard	52.818998	-122.362767		
18-B-S-00170	FRENCH	3.971		Gravel	52.818968	-122.362484		
18-B-S-00203	RED BLUFF RD	3.369	3.417	Lane Detour	52.906382	-122.45082	52.906816	-122.450776
18-B-S-00218	EDWARDS	1.117		Railroad Crossing	52.840455	-122.4143		
18-B-S-00244	ALEX SCHOOL N	0.179		CattleGuard	52.633438	-122.451365		
18-B-S-00253	CARAGANA RD	0.419	0.442	Lane Detour	52.959316	-122.50623	52.959318	-122.506572
18-B-S-00256	MACDONALD RD.	0.235	0.258	Lane Detour	52.912699	-122.490787	52.912486	-122.490788
18-B-S-00275	SPRUCE ST	0.225	0.266	Lane Detour	52.966616	-122.460605	52.966983	-122.4606
18-B-S-00307	JADE ST	1.738		Gravel	52.962011	-122.444069		
18-B-S-00355	LAKEVIEW CRES	0.261		Lane Detour	52.954215	-122.426453		
18-B-S-00361	LAUREL RD	0.42	0.48	Lane Detour	52.963847	-122.46052	52.964387	-122.460538
18-B-S-00362	LOMBARDIE DRV	0.432	0.482	Lane Detour	52.963102	-122.454108	52.963109	-122.453366
18-B-S-00629	CYPRESS RD	0.353	0.401	Lane Detour	52.96156	-122.45528	52.961562	-122.454568
18-B-S-00645	TIMOTHY RD.	0.484		Gravel	52.912358	-122.440948		
19-A-@-00308	UPPER MUD RIVER ROAD	7.902	7.913	Bridge	53.772467	-123.00257	53.772555	-123.002502
19-A-@-00310	LOWER MUD RIVER ROAD	2.692	2.729	Bridge	53.831193	-122.969848	53.831506	-122.970001
19-A-@-04098	SHELLEY ROAD	10.877		Railroad Crossing	54.003816	-122.618585		
19-B-@-00121	FIFTEEN MILE ROAD	1.438		Railroad Crossing	53.759222	-122.682939		
19-B-@-00122	DAMMS ROAD	0.687	0.747	Gravel	53.795413	-122.706668	53.794893	-122.706487
19-B-@-00127	BENDIXON ROAD	4.275	4.29	Bridge	53.836957	-122.591513	53.836958	-122.591299
19-B-@-00147	CUMMINGS ROAD	6.212	6.225	Bridge	53.851473	-122.586694	53.851474	-122.586496
19-B-@-00225	CHIEF LAKE ROAD	17.148	17.16	Bridge	54.097733	-123.001965	54.097733	-123.001783
19-B-@-00385	MIWORTH ROAD	4.345		Railroad Crossing	53.961662	-122.916623		
19-D-@-02095	HARTLAKE ROAD	1.383		Railroad Crossing	54.493523	-122.668601		
20-A-A-00530	DUNSTER STATION ROAD	1.402	1.562	Bridge	53.143389	-119.833781	53.142873	-119.83601
20-A-A-00544	MOUNTAIN VIEW ROAD	7.422	7.453	Bridge	53.346923	-120.200943	53.347076	-120.201322
20-A-A-00552	EDDY ROAD	4.368		Railroad Crossing	53.259539	-120.125735		
20-A-B-00016C	HWY16 AT TJ JUNCTION (NORTH LE	0.225		Rumble Strips	52.976085	-119.419158		
20-B-B-00507	CEDARSIDE ROAD	2.569		Railroad Crossing	52.803111	-119.229879		
20-B-B-00575	BLACKMAN ROAD	4.414		Railroad Crossing	52.91839	-119.369124		
20-B-B-00575	BLACKMAN ROAD	12.965	13.016	Bridge	52.974572	-119.436996	52.97497	-119.436619
20-B-C-00102	HERB BILTON WAY	0		Railroad Crossing	52.112139	-119.297388		
20-B-C-00102	HERB BILTON WAY	0.004		Railroad Crossing	52.11213	-119.297337		
20-B-C-00121	ANGUS HORNE STREET	0.454	0.524	Lane Detour	52.108508	-119.302644	52.108515	-119.301636
20-B-C-00121	ANGUS HORNE STREET	0.843	0.911	Lane Detour	52.109983	-119.298733	52.110569	-119.29846
21-A-1-00003	ROLLA RD	0.149		Construction Zone	55.738901	-120.146783		
21-A-1-00003	ROLLA RD	0.365		Railroad Crossing	55.740842	-120.14679		
21-A-1-00094	DANGEROUS GOODS RTE	4.512	4.555	Bridge	55.748975	-120.276362	55.74936	-120.276362
21-A-1-00094	DANGEROUS GOODS RTE	7.256	7.282	Bridge	55.773629	-120.276344	55.773861	-120.276348
21-A-1-00206M	BACK ROAD	0.005	3.25	Gravel	55.723132	-120.250433	55.723143	-120.198587
21-A-1-00213C	COSINS ROAD	0.226		Railroad Crossing	55.754946	-120.17273		
21-A-2-00003	ROLLA ROAD	25.581	25.662	Lane Detour	56.014662	-120.088313	56.01539	-120.088326
21-A-2-00006	SWEETWATER	4.59		Rumble Strips	55.897992	-120.249635		
21-A-2-00219	NORTH ROLLA	6.409	6.593	Lane Detour	55.867628	-120.244809	55.869281	-120.244813
21-A-2-00219	NORTH ROLLA	9.479		Rumble Strips	55.895206	-120.244842		
21-A-2-00307B	403 STREET	0.27	0.33	Lane Detour	55.89887	-120.142019	55.899405	-120.142008
21-A-2-00307D	407 STREET	0.132	0.162	Lane Detour	55.898396	-120.145495	55.898667	-120.145516
21-A-2-00307F	404 AVE	0.315	0.356	Lane Detour	55.899545	-120.141735	55.89954	-120.141078
21-B-1-00064	OLD ALASKA HIGHWAY	4.744	4.906	Bridge	55.957386	-120.563221	55.957423	-120.565736
21-B-1-00237	SEMPLE RD	0.276		Railroad Crossing	55.760498	-120.483244		
21-C-1-00012	JACKFISH LAKE	14.836		Railroad Crossing	55.812217	-121.44831		
21-C-1-00026	HASLER	0.095		Railroad Crossing	55.606131	-121.972929		
21-C-1-00026	HASLER	0.521	0.61	Bridge	55.608477	-121.970134	55.608487	-121.968725
21-C-1-00030	MOBERLY LAKE SOUTH	9.226	9.236	Bridge	55.812663	-121.670175	55.812696	-121.670026
21-C-1-00034	1-A, LP PULP MILL	0.335	0.452	Gravel	55.722	-121.259343	55.72304	-121.259361
21-C-1-00316E	PIONEER ROAD	1.575	1.582	Bridge	55.830299	-121.805834	55.830329	-121.805737
22-A-J-00103A	OLD CECIL LAKE	1.658		Railroad Crossing	56.246446	-120.794334		
22-A-J-00120	SUNNYSIDE DR	0.124	0.139	Bridge	56.274665	-120.94902	56.274742	-120.948835
22-A-J-00145	WEST BYPASS RD	1.539		Railroad Crossing	56.259486	-120.873704		
22-A-J-00145	WEST BYPASS RD	3.787	3.886	Lane Detour	56.271089	-120.853646	56.271872	-120.852872
22-A-J-00259	SWANSON LUMBER RD	1.753		Railroad Crossing	56.232946	-120.768398		
22-A-J-00707B	PNG ROAD	0.2		Gravel	56.282263	-120.969191		
22-A-J-00708	PARK FRONTAGE RD 708	1.211	1.97	Gravel	56.298006	-120.994301	56.303516	-121.001521
22-A-M-00121	MONTNEY	1.578		Railroad Crossing	56.304625	-120.868336		
22-B-C-00103	CECIL LAKE ROAD	5.04	5.23	Bridge	56.288216	-120.767333	56.287831	-120.764341
22-B-C-00103	CECIL LAKE ROAD	5.847	5.878	Bridge	56.284156	-120.75701	56.284016	-120.756573
22-B-C-00103	CECIL LAKE ROAD	5.925	5.958	Bridge	56.28383	-120.755893	56.283714	-120.755408
22-B-C-00103	CECIL LAKE ROAD	6.242	6.28	Bridge	56.282902	-120.751074	56.282839	-120.750482
22-B-C-00103	CECIL LAKE ROAD	6.434	6.477	Bridge	56.282603	-120.748017	56.282612	-120.747324
22-B-C-00103	CECIL LAKE ROAD	6.836	6.999	Bridge	56.283614	-120.741845	56.283878	-120.739255
22-B-C-00103	CECIL LAKE ROAD	50.128	50.165	Bridge	56.333686	-120.15566	56.333687	-120.155068
22-B-C-00111	CLAYHURST RD	7.846	7.935	Lane Detour	56.250243	-120.119167	56.249555	-120.118433
22-B-M-00271	BEATTON MONTNEY HWY	2.83		Railroad Crossing	56.418131	-120.926513		
22-B-M-00271	BEATTON MONTNEY HWY	3.527	3.564	Bridge	56.424382	-120.926329	56.424702	-120.926169
22-C-M-00114	MONTNEY HWY	0.348	0.504	Lane Detour	56.420864	-121.166837	56.420882	-121.164326
22-C-M-00114	MONTNEY HWY	6.7	6.732	Bridge	56.420885	-121.063815	56.420883	-121.063299
22-C-M-00114	MONTNEY HWY	17.023		Railroad Crossing	56.450115	-120.94659		
22-C-M-00114	MONTNEY HWY	17.367	17.398	Bridge	56.450118	-120.941036	56.450118	-120.940528
22-C-M-00193	ANDERSON ROAD	2.306		Railroad Crossing	56.47082	-120.979137		
22-C-M-00193	ANDERSON ROAD	2.604	2.634	Bridge	56.473491	-120.979149	56.47376	-120.979148
22-C-R-00101	ROAD 101	30.099	30.225	Bridge	56.727602	-120.969969	56.728657	-120.969224
22-C-R-00101	ROAD 101	55.26	55.321	Lane Detour	56.91622	-121.06036	56.916769	-121.060375
22-C-R-00151	BEATTON RIVER RD	10.39		Railroad Crossing	56.620298	-121.182179		
22-C-R-00151	BEATTON RIVER RD	12.748	14.932	Construction Zone	56.638285	-121.181096	56.649193	-121.210057

Survey Events 2016

Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
22-C-R-00151	BEATTON RIVER RD	13.347	14.861	Lane Detour	56.641244	-121.189265	56.648568	-121.20978
22-C-R-00151	BEATTON RIVER RD	15.868		Railroad Crossing	56.656513	-121.216558		
22-C-R-00151	BEATTON RIVER RD	18.466	18.531	Bridge	56.677669	-121.221009	56.678249	-121.221045
22-C-R-00154	BUICK CRK ROAD	3.174	3.232	Bridge	56.762305	-121.033389	56.762302	-121.034343
22-C-R-00154	BUICK CRK ROAD	14.674	14.703	Bridge	56.762193	-121.221344	56.762194	-121.221811
22-C-R-00154	BUICK CRK ROAD	15.392		Railroad Crossing	56.762231	-121.23305		
23-A-@-00010	BLACKWATER ROAD	6.714	6.741	Bridge	53.909794	-123.953725	53.909723	-123.953331
23-A-@-00010	BLACKWATER ROAD	13.953		Gravel	53.867292	-123.873438		
23-A-@-00127	STURGEON POINT	11.44		Gravel	54.056448	-123.845886		
23-B-@-00110	SOWCHEA	9.537	9.567	Bridge	54.420357	-124.409161	54.42035	-124.409621
23-B-@-00207	TACHIE	2.551		Railroad Crossing	54.489393	-124.205509		
23-B-@-00207	TACHIE	9.817	9.963	Lane Detour	54.532702	-124.270871	54.53312	-124.272991
23-B-@-00207	TACHIE	10.585		Railroad Crossing	54.534774	-124.282156		
23-B-@-00207	TACHIE	26.184	26.21	Bridge	54.575556	-124.490683	54.57556	-124.491093
23-C-@-00042	FRANCOIS LAKE	6.267	6.347	Lane Detour	54.014467	-124.968106	54.013874	-124.968791
23-C-@-00042	FRANCOIS LAKE	6.457	6.527	Lane Detour	54.013062	-124.969763	54.012587	-124.970449
23-C-@-00048	NAUTLEY	3.528	3.651	Bridge	54.084933	-124.601151	54.086036	-124.600965
23-C-@-00210	ENDAKO MINE	0.103		Railroad Crossing	54.083031	-125.007447		
23-C-@-00210	ENDAKO MINE	0.207	0.263	Bridge	54.08229	-125.008256	54.081793	-125.008209
24-A-@-00040	GEROW ISLAND	0.62	0.664	Lane Detour	54.216669	-125.75784	54.216427	-125.757319
24-A-@-00061	ROWLAND	0.053		Railroad Crossing	54.30029	-125.8391		
24-A-@-00159	LEWIS ROAD	0		Railroad Crossing	54.339404	-125.903629		
24-A-@-00200	BABINE ROAD	3.682		Gravel	54.265088	-125.757527		
24-B-@-00152	SUNSET LAKE ROAD	0.429		Railroad Crossing	54.503292	-126.301794		
24-B-@-00152	SUNSET LAKE ROAD	0.742	0.778	Bridge	54.502728	-126.306231	54.50259	-126.306734
24-B-@-00209	HOUSTON AIRPORT	0.976		CattleGuard	54.435335	-126.772057		
24-C-@-00025	EAKIN SETTLEMENT	3.087	3.096	Bridge	53.896386	-125.871059	53.896306	-125.871085
24-C-@-00059	KEEFE'S LANDING	35.631		CattleGuard	53.820224	-126.043404		
25-A-@-00025	OWENS	0.311	0.33	Bridge	54.889053	-127.263734	54.888983	-127.263995
25-A-@-00025	OWENS	0.413		Railroad Crossing	54.888615	-127.265129		
25-A-@-00046	MUIR	0.149	0.209	Lane Detour	54.801892	-127.208667	54.801502	-127.208024
25-A-@-00090	TATLOW	0.46	0.537	Lane Detour	54.741822	-127.134362	54.741152	-127.13409
25-A-@-00090	TATLOW	1.428		Railroad Crossing	54.733872	-127.13301		
25-A-@-00103	GLACIER GULCH	0.334	0.405	Lane Detour	54.824144	-127.224314	54.824567	-127.225131
25-A-@-00104	LAKE KATHLYN	1.67		Railroad Crossing	54.818341	-127.215985		
25-A-@-00104	LAKE KATHLYN	3.044		Railroad Crossing	54.828268	-127.215954		
25-A-@-00142	SLACK	0.627		Railroad Crossing	54.80336	-127.206517		
25-A-@-00142	SLACK	1.503	1.51	Bridge	54.802684	-127.219628	54.802707	-127.219729
25-A-@-00163	OLD BABINE	4.066	4.094	Bridge	54.797046	-127.1152	54.797237	-127.114914
25-A-@-00163	OLD BABINE	6.436	6.584	Lane Detour	54.801707	-127.086107	54.801738	-127.083815
25-A-@-00196	CALGARY	0.307	0.32	Bridge	54.798575	-127.193364	54.798482	-127.193244
25-A-@-00275	LUND	0.334	0.342	Bridge	54.804946	-127.193704	54.805016	-127.193704
25-A-@-00286	STATION	0.028	0.058	Lane Detour	55.037878	-127.334615	55.037979	-127.33502
25-A-@-00383	VIEWMOUNT	4.511	4.628	Lane Detour	54.788226	-127.134387	54.787175	-127.134378
25-A-@-00388	KITSEQUECLA LOOP	0.907	1.032	Lane Detour	54.963642	-127.337423	54.962789	-127.338664
25-A-@-00391	GELLEY	0.871	0.93	Lane Detour	54.815659	-127.207212	54.81557	-127.208118
25-A-@-00399	LK. KATHLYN JUNCTION	0.454	0.495	Lane Detour	54.832244	-127.208101	54.832242	-127.208721
25-A-@-00485	TELKWA COAL MINE	0.277	0.332	Bridge	54.695405	-127.052569	54.695135	-127.053296
25-A-@-00485	TELKWA COAL MINE	0.529		Railroad Crossing	54.693556	-127.053097		
25-A-@-00491	BABINE LAKE	12.211	12.23	Bridge	54.768409	-126.936278	54.768496	-126.936024
25-B-@-00049	KISPIOX VALLEY	4.96	5.038	Bridge	55.281392	-127.696224	55.281796	-127.697219
25-B-@-00049	KISPIOX VALLEY	13.089	13.182	Bridge	55.348103	-127.701871	55.348579	-127.700679
25-B-@-00062	N.HAZELTON HI-LEVEL	1.65	1.846	Bridge	55.257422	-127.603092	55.257267	-127.606171
25-B-@-00492	SKEENA CROSSING	4.334		Railroad Crossing	55.146276	-127.773936		
25-C-@-00402	GITANYOW	1.708	1.735	Bridge	55.260248	-128.058504	55.260406	-128.058828
25-C-@-00402	GITANYOW	2.212	2.268	Lane Detour	55.26291	-128.064464	55.263211	-128.065167
25-C-@-00402	GITANYOW	2.905	2.921	Construction Zone	55.266097	-128.073582	55.266188	-128.073778
26-A-@-00002	QUEENSWAY DRIVE	5.385	5.43	Bridge	54.506223	-128.564231	54.506627	-128.564231
26-A-@-00002	QUEENSWAY DRIVE	6.278		Railroad Crossing	54.513648	-128.560331		
26-A-@-00007	OLD REMO ROAD	8.132		Railroad Crossing	54.478293	-128.613743		
26-A-@-00011	KRUMM ROAD	1.084	1.109	Bridge	54.498574	-128.536374	54.498646	-128.536007
26-A-@-00017	PINE AVENUE	0.486	0.591	Lane Detour	54.509471	-128.533268	54.509457	-128.531662
26-A-@-00043	SUBSTATION AVENUE	0.027		Railroad Crossing	54.510573	-128.562444		
26-A-@-00051	LOWRIE AVENUE	0.529	0.583	Lane Detour	54.491463	-128.581777	54.491451	-128.580941
26-A-@-00053	OLD LAKELSE LAKE RD	5.306	5.362	Bridge	54.442123	-128.478903	54.442417	-128.478202
26-A-@-00053	OLD LAKELSE LAKE RD	8.683	8.696	Bridge	54.470415	-128.478367	54.470526	-128.478442
26-A-@-00053	OLD LAKELSE LAKE RD	13.851	13.861	Bridge	54.502182	-128.507831	54.502225	-128.507966
26-A-@-00056	FIRST AVENUE	2.241	2.269	Bridge	54.378594	-128.54476	54.378849	-128.544789
26-A-@-00075	SKEENA DRIVE	1.089	1.155	Lane Detour	54.578317	-128.425682	54.577994	-128.424823
26-A-@-00192	DOGWOOD AVENUE	0.304	0.344	Lane Detour	54.502541	-128.515629	54.502532	-128.51502
26-A-@-00200	KITIMAAT VILLAGE RD.	0.203	0.261	Bridge	53.97646	-128.6467	53.976935	-128.646327
26-A-@-00200	KITIMAAT VILLAGE RD.	4.96	4.975	Bridge	54.012418	-128.630848	54.01246	-128.630631
26-A-@-00200	KITIMAAT VILLAGE RD.	7.297	7.312	Bridge	54.027104	-128.607015	54.027234	-128.606955
26-A-@-00200	KITIMAAT VILLAGE RD.	8.969	8.991	Bridge	54.040089	-128.607491	54.040279	-128.607609
26-A-@-00200	KITIMAAT VILLAGE RD.	9.303	9.322	Bridge	54.04272	-128.609201	54.042885	-128.609236
27-A-@-00599R	PORT EDWARD ARTERIAL	12.298	12.33	Bridge	54.241454	-130.272984	54.241698	-130.272735
27-A-@-00730R	RIDLEY ISLAND ARTERIAL	0.278	0.312	Bridge	54.239086	-130.330294	54.239382	-130.330426
27-B-@-00033	QCC-SKIDEGATE RD	1.015	1.101	Lane Detour	53.24574	-132.023215	53.246284	-132.02413
27-B-@-00033	QCC-SKIDEGATE RD	3.778	3.843	Lane Detour	53.252362	-132.059954	53.252674	-132.060765
27-B-@-00051	TOWHILL ROAD	0.818	0.868	Lane Detour	54.01422	-132.127292	54.014311	-132.126548
27-B-@-00051	TOWHILL ROAD	9.963	9.999	Bridge	54.025793	-131.994817	54.025553	-131.994457
27-B-@-00051	TOWHILL ROAD	10.53	10.606	Bridge	54.02492	-131.98673	54.025561	-131.986329
27-B-@-00061	ALLIFORD BAY ROAD	2.259	2.329	Lane Detour	53.238435	-131.839246	53.238158	-131.840196
27-B-@-00061	ALLIFORD BAY ROAD	4.265	4.301	Bridge	53.23738	-131.868238	53.2375	-131.86874
27-B-@-00061	ALLIFORD BAY ROAD	8.945	8.958	Bridge	53.232026	-131.927214	53.231954	-131.927369

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Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
27-B-@-00061	ALLIFORD BAY ROAD	13.831	13.869	Bridge	53.21365	-131.983589	53.213761	-131.984125
27-B-@-00095	OLD COAST ROAD	0.914	0.918	Bridge	53.267867	-131.987754	53.267874	-131.987691
27-B-@-00096	CHRISTINA PLACE	0.235	0.267	Lane Detour	53.244247	-131.8188	53.244252	-131.818324
27-B-@-00494R	MASSET ARTERIAL	2.915	2.95	Bridge	54.010262	-132.138201	54.010125	-132.137724
27-B-@-00744R	PORT CLEMENTS ARTERIAL	0.338	0.345	Bridge	53.684707	-132.173624	53.684707	-132.173732
27-B-@-00744R	PORT CLEMENTS ARTERIAL	1.774	1.831	Lane Detour	53.684536	-132.187323	53.684019	-132.187311
H113	Highway 113	7.318	7.354	Bridge	54.571869	-128.648167	54.572183	-128.648007
H113	Highway 113	15.397	15.439	Bridge	54.639868	-128.669793	54.640182	-128.670168
H113	Highway 113	19.651	19.663	Bridge	54.662803	-128.715523	54.662909	-128.715572
H113	Highway 113	20.691	20.701	Bridge	54.670882	-128.720746	54.67095	-128.720838
H113	Highway 113	27.519	27.537	Bridge	54.719433	-128.765069	54.719587	-128.765138
H113	Highway 113	33.388	33.425	Bridge	54.770031	-128.771858	54.770362	-128.771881
H113	Highway 113	37.828	37.867	Bridge	54.808285	-128.767018	54.808509	-128.767486
H113	Highway 113	39.066	39.079	Bridge	54.818388	-128.773441	54.818491	-128.773559
H113	Highway 113	40.811	40.849	Bridge	54.832219	-128.783636	54.832326	-128.784194
H113	Highway 113	50.989	51.039	Bridge	54.906424	-128.858464	54.906337	-128.859228
H113	Highway 113	51.934	51.956	Bridge	54.907158	-128.871121	54.907356	-128.871169
H113	Highway 113	53.428	53.518	Lane Detour	54.920323	-128.873671	54.921036	-128.874302
H113	Highway 113	58.15	58.169	Bridge	54.949425	-128.921709	54.949552	-128.92192
H113	Highway 113	63.677	63.688	Bridge	54.970225	-128.995064	54.970311	-128.995126
H113	Highway 113	74.589	74.6	Bridge	55.057407	-128.971198	55.057507	-128.971218
H113	Highway 113	75.901	76.19	Construction Zone	55.068961	-128.970605	55.071291	-128.972448
H113	Highway 113	76.054	76.068	Bridge	55.070264	-128.971321	55.070374	-128.971436
H113	Highway 113	81.161	81.182	Bridge	55.113883	-128.976922	55.114044	-128.977104
H113	Highway 113	84.214	84.225	Bridge	55.139573	-128.987646	55.139643	-128.987768
H113	Highway 113	88.182	88.194	Bridge	55.169083	-129.017706	55.169132	-129.017874
H113	Highway 113	90.604	91.21	Construction Zone	55.176982	-129.052176	55.179201	-129.060866
H113	Highway 113	91.033	91.053	Bridge	55.178497	-129.058403	55.178562	-129.058695
H113T	Highway 113T	10.776	10.841	Bridge	55.00755	-129.808401	55.007281	-129.807505
H113T	Highway 113T	22.38	22.412	Bridge	54.999448	-129.657358	54.999627	-129.656964
H113T	Highway 113T	28.485		Rumble Strips	55.031065	-129.58557		
H113T	Highway 113T	29.019	29.055	Bridge	55.035776	-129.584081	55.036089	-129.584021
H113T	Highway 113T	33.375	33.394	Bridge	55.05586	-129.541693	55.055843	-129.541393
H113T	Highway 113T	39.258	39.501	Bridge	55.064454	-129.47295	55.062323	-129.47217
H113T	Highway 113T	43.009	43.056	Bridge	55.067063	-129.430979	55.067356	-129.430459
H113T	Highway 113T	45.228	45.27	Bridge	55.083352	-129.414762	55.083679	-129.414438
H113T	Highway 113T	46.651	46.694	Bridge	55.095591	-129.4104	55.095942	-129.410086
H113T	Highway 113T	52.653	52.679	Bridge	55.138978	-129.361187	55.139083	-129.360825
H113T	Highway 113T	54.751	54.788	Bridge	55.149693	-129.336906	55.150006	-129.336715
H113T	Highway 113T	59.655	59.691	Bridge	55.165767	-129.273391	55.165869	-129.272854
H113T	Highway 113T	61.075	61.096	Bridge	55.164026	-129.252031	55.164018	-129.251701
H113T	Highway 113T	72.909	72.933	Bridge	55.211004	-129.10226	55.211016	-129.101885
H113T	Highway 113T	83.906	83.923	Bridge	55.275628	-128.998098	55.275754	-128.997937
H113T	Highway 113T	84.727		Construction Zone	55.282049	-128.991607		
H113T	Highway 113T	84.778	84.858	Lane Detour	55.282476	-128.991267	55.283	-128.990434
H115	Highway 115	36.083	36.14	Bridge	52.390306	-121.884519	52.390735	-121.884073
H115	Highway 115	47.489	47.52	Bridge	52.478816	-121.853197	52.47901	-121.85286
H115	Highway 115	82.726	82.859	Bridge	52.614956	-121.573509	52.615773	-121.572067
H118	Highway 118	6.772	6.799	Bridge	54.565557	-126.298536	54.565741	-126.298272
H118	Highway 118	39.442	39.472	Bridge	54.813354	-126.161091	54.813579	-126.161347
H118	Highway 118	39.705	39.788	Bridge	54.814834	-126.164203	54.815238	-126.165292
H12	Highway 12	1.558	1.781	Bridge	50.235302	-121.580707	50.237132	-121.581853
H16	Highway 16	0		Railroad Crossing	54.292908	-130.353263		
H16	Highway 16	2.6	2.879	Construction Zone	54.310355	-130.330631	54.312163	-130.327678
H16	Highway 16	2.636	2.899	Lane Detour	54.310594	-130.330241	54.312289	-130.327456
H16	Highway 16	3.091	3.144	Lane Detour	54.313527	-130.325423	54.313867	-130.324858
H16	Highway 16	4.246	4.275	Bridge	54.310631	-130.312472	54.310578	-130.312045
H16	Highway 16	10.667	10.936	Lane Detour	54.291297	-130.272931	54.288891	-130.273301
H16	Highway 16	15.139	15.263	Bridge	54.254475	-130.259079	54.253386	-130.258678
H16	Highway 16	23.487	23.524	Bridge	54.237851	-130.14866	54.237758	-130.148113
H16	Highway 16	37.284	37.339	Bridge	54.209621	-129.983332	54.20926	-129.982757
H16	Highway 16	40.125	40.222	Bridge	54.203061	-129.946522	54.203382	-129.945135
H16	Highway 16	42.596	42.624	Bridge	54.215318	-129.916043	54.215365	-129.915617
H16	Highway 16	46.565	46.586	Bridge	54.235139	-129.867377	54.235235	-129.86711
H16	Highway 16	47.412	47.442	Bridge	54.237494	-129.855133	54.237513	-129.854675
H16	Highway 16	48.002	48.03	Bridge	54.237289	-129.846093	54.237267	-129.845658
H16	Highway 16	48.635	48.664	Bridge	54.236816	-129.836391	54.236794	-129.835951
H16	Highway 16	50.75	50.835	Bridge	54.23239	-129.805315	54.232023	-129.804171
H16	Highway 16	52.087	52.125	Bridge	54.225988	-129.788101	54.225762	-129.787659
H16	Highway 16	56.9	56.92	Bridge	54.216247	-129.717579	54.216235	-129.717277
H16	Highway 16	58.587	58.606	Bridge	54.212464	-129.692726	54.212416	-129.692443
H16	Highway 16	59.709	59.739	Bridge	54.207347	-129.678042	54.207195	-129.67767
H16	Highway 16	69.448	69.487	Bridge	54.22188	-129.57724	54.222078	-129.576758
H16	Highway 16	70.433	70.461	Bridge	54.224665	-129.563094	54.224713	-129.562662
H16	Highway 16	74.669	74.689	Bridge	54.244299	-129.516926	54.244386	-129.516674
H16	Highway 16	75.277	75.306	Bridge	54.247092	-129.508939	54.247225	-129.508554
H16	Highway 16	75.632	75.661	Bridge	54.248452	-129.504028	54.248533	-129.503606
H16	Highway 16	77.412	77.432	Bridge	54.247518	-129.477445	54.247503	-129.477146
H16	Highway 16	79.397	79.425	Bridge	54.250971	-129.447803	54.251074	-129.447402
H16	Highway 16	83.415	83.434	Bridge	54.280709	-129.421506	54.280852	-129.421337
H16	Highway 16	85.359	85.508	Bridge	54.293338	-129.401656	54.293859	-129.399538
H16	Highway 16	86.044	86.149	Bridge	54.297056	-129.393765	54.2979	-129.393034
H16	Highway 16	93.598	93.717	Bridge	54.332291	-129.297535	54.333065	-129.296252
H16	Highway 16	104.501		Rumble Strips	54.364247	-129.15241		
H16	Highway 16	104.702		Railroad Crossing	54.364355	-129.149341		

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Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
H16	Highway 16	107.098	107.126	Bridge	54.379045	-129.12624	54.379232	-129.125941
H16	Highway 16	108.097	108.117	Bridge	54.382911	-129.112542	54.38297	-129.112256
H16	Highway 16	112.282	112.386	Bridge	54.400291	-129.057235	54.400436	-129.055651
H16	Highway 16	116.277	116.336	Bridge	54.411148	-128.998917	54.411361	-128.998077
H16	Highway 16	123.665	123.692	Bridge	54.413594	-128.886807	54.413686	-128.886424
H16	Highway 16	127.594	127.615	Bridge	54.433634	-128.840349	54.433773	-128.840114
H16	Highway 16	136.87	136.949	Bridge	54.48704	-128.733466	54.487258	-128.732285
H16	Highway 16	143.156		Railroad Crossing	54.52213	-128.664197		
H16	Highway 16	143.308	143.425	Bridge	54.521502	-128.662121	54.5209	-128.660654
H16	Highway 16	145.683		Railroad Crossing	54.517331	-128.626923		
H16	Highway 16	147.715	147.773	Bridge	54.515271	-128.596315	54.514753	-128.596411
H16	Highway 16	149.271	149.511	Bridge	54.512018	-128.576416	54.511946	-128.57271
H16	Highway 16	149.843	150.223	Bridge	54.511849	-128.567601	54.511737	-128.561741
H16	Highway 16	150.273		Rumble Strips	54.511721	-128.560976		
H16	Highway 16	157.114	157.237	Bridge	54.541874	-128.477906	54.542592	-128.476467
H16	Highway 16	165.45	165.531	Bridge	54.597555	-128.402416	54.598279	-128.402612
H16	Highway 16	173.735	173.794	Bridge	54.663091	-128.374933	54.663274	-128.374078
H16	Highway 16	179.36	179.406	Bridge	54.698778	-128.319742	54.699123	-128.319349
H16	Highway 16	187.096	187.18	Bridge	54.748719	-128.258643	54.749432	-128.25821
H16	Highway 16	193.283	193.327	Bridge	54.802105	-128.276583	54.802493	-128.276766
H16	Highway 16	194.787	194.825	Bridge	54.814947	-128.283358	54.815174	-128.283793
H16	Highway 16	219.895	219.914	Bridge	54.999992	-128.338564	55.000099	-128.338326
H16	Highway 16	232.863	232.92	Bridge	55.074405	-128.193284	55.074447	-128.19239
H16	Highway 16	237.331	237.365	Bridge	55.086108	-128.129882	55.085974	-128.129404
H16	Highway 16	258.59	258.745	Bridge	55.090134	-127.824337	55.09131	-127.823005
H16	Highway 16	281.091	281.16	Bridge	55.240456	-127.638968	55.240535	-127.63787
H16	Highway 16	284.291	284.344	Bridge	55.246733	-127.590478	55.246703	-127.589643
H16	Highway 16	295.372	295.415	Bridge	55.210757	-127.441606	55.210782	-127.440932
H16	Highway 16	306.802	306.849	Bridge	55.122751	-127.382614	55.122331	-127.382621
H16	Highway 16	308.754	308.789	Bridge	55.105477	-127.381199	55.105222	-127.380884
H16	Highway 16	316.826	316.886	Bridge	55.04378	-127.336493	55.043286	-127.336117
H16	Highway 16	317.622	317.653	Bridge	55.03687	-127.334323	55.036593	-127.334342
H16	Highway 16	329.51	329.543	Bridge	54.941054	-127.32508	54.94091	-127.324643
H16	Highway 16	354.355	354.481	Bridge	54.769783	-127.13356	54.769397	-127.131724
H16	Highway 16	357.048	357.258	Lane Detour	54.75141	-127.108999	54.749525	-127.108995
H16	Highway 16	409.984	410.059	Bridge	54.399287	-126.720328	54.398767	-126.719605
H16	Highway 16	410.673	410.726	Bridge	54.394523	-126.714035	54.394056	-126.713871
H16	Highway 16	415.146	415.186	Bridge	54.398389	-126.653204	54.398565	-126.652679
H16	Highway 16	416.176	416.385	Bridge	54.403305	-126.641246	54.405171	-126.641516
H16	Highway 16	525.284	525.382	Bridge	54.143799	-125.378461	54.143235	-125.377308
H16	Highway 16	547.888	547.98	Bridge	54.085589	-125.083774	54.085843	-125.082432
H16	Highway 16	548.069	548.138	Bridge	54.08609	-125.081141	54.086281	-125.080137
H16	Highway 16	552.946	552.963	Bridge	54.084104	-125.008537	54.084078	-125.008281
H16	Highway 16	560.79	560.911	Bridge	54.057684	-124.902794	54.056716	-124.901973
H16	Highway 16	561.844	561.929	Bridge	54.04846	-124.899674	54.047803	-124.899029
H16	Highway 16	581.507	581.549	Bridge	54.057185	-124.617212	54.057532	-124.616958
H16	Highway 16	584.661	584.867	Bridge	54.061092	-124.572554	54.061079	-124.569418
H16	Highway 16	602.724	602.76	Bridge	54.027104	-124.31852	54.026947	-124.318039
H16	Highway 16	616.808	616.855	Bridge	54.012823	-124.11621	54.012825	-124.115493
H16	Highway 16	637.755	639.477	Construction Zone	53.955037	-123.869751	53.950584	-123.846801
H16	Highway 16	700.276	700.335	Bridge	53.808904	-122.991899	53.808856	-122.990997
H16	Highway 16	716.612	716.651	Bridge	53.866454	-122.784498	53.866595	-122.783948
H16	Highway 16	724.883		Railroad Crossing	53.91522	-122.731155		
H16	Highway 16	725.423	725.926	Bridge	53.91228	-122.725051	53.908186	-122.721922
H16	Highway 16	758.528	758.643	Bridge	53.885579	-122.284941	53.884754	-122.283874
H16	Highway 16	779.906	780.05	Bridge	53.896816	-121.988535	53.895747	-121.987297
H16	Highway 16	842.35	842.474	Bridge	53.733209	-121.161857	53.732665	-121.160205
H16	Highway 16	848.525		Rumble Strips	53.711258	-121.080405		
H16	Highway 16	850.719	850.765	Bridge	53.708361	-121.052014	53.708204	-121.051352
H16	Highway 16	864.35	864.401	Bridge	53.653053	-120.885759	53.652676	-120.886194
H16	Highway 16	873.176		Rumble Strips	53.596586	-120.806726		
H16	Highway 16	891.947	892.06	Bridge	53.493997	-120.606579	53.494451	-120.605047
H16	Highway 16	902.862	903.069	Bridge	53.440052	-120.515762	53.43851	-120.514028
H16	Highway 16	927.34	927.393	Bridge	53.322127	-120.224295	53.321905	-120.223597
H16	Highway 16	928.092	928.202	Lane Detour	53.319546	-120.213957	53.319515	-120.21231
H16	Highway 16	929.318	929.434	Bridge	53.321001	-120.195749	53.321163	-120.194021
H16	Highway 16	933.872	934.055	Bridge	53.301884	-120.141089	53.301885	-120.138332
H16	Highway 16	943.525	943.601	Bridge	53.25119	-120.029503	53.250648	-120.028802
H16	Highway 16	972.158	972.231	Bridge	53.091017	-119.706839	53.090492	-119.706176
H16	Highway 16	979.524	979.594	Bridge	53.058729	-119.614961	53.058332	-119.614152
H16	Highway 16	1008.026	1008.09	Bridge	53.016064	-119.277327	53.016503	-119.276708
H16	Highway 16	1010.408	1010.48	Bridge	53.031293	-119.253024	53.031421	-119.251969
H16	Highway 16	1018.866	1018.936	Lane Detour	53.020424	-119.133463	53.020495	-119.132413
H16	Highway 16	1039.508	1039.657	Bridge	52.946107	-118.860828	52.944923	-118.859794
H16	Highway 16	1044.418	1044.476	Bridge	52.919966	-118.80248	52.919686	-118.801738
H16	Highway 16	1048.931	1048.953	Bridge	52.895171	-118.750015	52.895039	-118.749768
H16	Highway 16	1055.069	1055.142	Bridge	52.867464	-118.673771	52.867069	-118.672888
H16	Highway 16	1056.866	1056.879	Bridge	52.86285	-118.64888	52.86284	-118.648696
H16	Highway 16	1059.956	1060.029	Bridge	52.852767	-118.606987	52.852649	-118.605915
H16	Highway 16	1065.672	1065.694	Bridge	52.862697	-118.52912	52.862806	-118.528845
H16Q	Highway 16Q	0.138	0.208	Lane Detour	53.998759	-132.14084	53.998193	-132.140392
H16Q	Highway 16Q	0.452	0.556	Lane Detour	53.99635	-132.138395	53.99559	-132.137476
H16Q	Highway 16Q	12.746	12.786	Bridge	53.898949	-132.085816	53.898592	-132.085756
H16Q	Highway 16Q	37.689	37.741	Bridge	53.692493	-132.14536	53.692444	-132.14614
H16Q	Highway 16Q	43.082	43.091	Gravel	53.665134	-132.133055	53.665083	-132.132936

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Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
H16Q	Highway 16Q	43.437	43.482	Lane Detour	53.66327	-132.12868	53.663041	-132.12812
H16Q	Highway 16Q	43.682	43.703	Lane Detour	53.662014	-132.125648	53.661907	-132.125384
H16Q	Highway 16Q	47.132	47.15	Bridge	53.644473	-132.08267	53.644381	-132.082444
H16Q	Highway 16Q	49.497	49.515	Bridge	53.632026	-132.053682	53.63193	-132.053463
H16Q	Highway 16Q	53.729	53.736	Bridge	53.609261	-132.00241	53.609225	-132.00233
H16Q	Highway 16Q	56.01	56.017	Bridge	53.596951	-131.974833	53.596917	-131.974758
H16Q	Highway 16Q	57.391	57.397	Bridge	53.589584	-131.958076	53.589555	-131.957994
H16Q	Highway 16Q	58.669	58.76	Bridge	53.58221	-131.943432	53.581577	-131.942545
H16Q	Highway 16Q	72.427	72.523	Lane Detour	53.471514	-131.935165	53.470675	-131.934863
H16Q	Highway 16Q	90.285	90.302	Bridge	53.324164	-131.955159	53.324011	-131.955126
H2	Highway 2	3.1	3.13	Bridge	55.494147	-120.040496	55.4944	-120.04064
H2	Highway 2	5.889	5.917	Bridge	55.517913	-120.054287	55.518155	-120.054427
H2	Highway 2	10.366	10.398	Bridge	55.556109	-120.076572	55.556384	-120.076735
H2	Highway 2	21.593	22.096	Construction Zone	55.652887	-120.120516	55.656968	-120.117115
H2	Highway 2	26.735	31.65	Construction Zone	55.695814	-120.127321	55.736112	-120.137239
H2	Highway 2	28.3	28.355	Bridge	55.70983	-120.125266	55.710316	-120.12542
H2	Highway 2	32.94	33.002	Lane Detour	55.737663	-120.15683	55.737652	-120.157829
H20	Highway 20	3.15	3.174	Bridge	52.369408	-126.752723	52.369306	-126.752417
H20	Highway 20	7.875	7.886	Bridge	52.367406	-126.699647	52.367431	-126.699501
H20	Highway 20	8.275	8.334	Bridge	52.366753	-126.694197	52.36644	-126.693501
H20	Highway 20	8.685	8.706	Bridge	52.364955	-126.689018	52.364906	-126.688722
H20	Highway 20	9.475	9.49	Bridge	52.364773	-126.677634	52.364796	-126.677427
H20	Highway 20	14.58	14.625	Bridge	52.376852	-126.606979	52.376982	-126.606354
H20	Highway 20	17.144	17.182	Bridge	52.387394	-126.574155	52.387542	-126.573656
H20	Highway 20	17.548	17.576	Bridge	52.38928	-126.569114	52.389375	-126.568729
H20	Highway 20	25.871	25.902	Bridge	52.388509	-126.46104	52.388665	-126.460662
H20	Highway 20	35.616	35.798	Bridge	52.432145	-126.390318	52.433075	-126.388131
H20	Highway 20	40.886	40.906	Bridge	52.444439	-126.320508	52.444395	-126.320222
H20	Highway 20	46.565	46.585	Bridge	52.442349	-126.244962	52.442323	-126.244669
H20	Highway 20	47.408	47.422	Bridge	52.440939	-126.233377	52.440844	-126.233258
H20	Highway 20	50.438	50.467	Bridge	52.435901	-126.191424	52.435842	-126.191003
H20	Highway 20	55.392	55.416	Bridge	52.412386	-126.13485	52.41218	-126.13472
H20	Highway 20	71.336	71.36	Bridge	52.393076	-125.972897	52.393236	-125.972665
H20	Highway 20	72.891	72.908	Bridge	52.40349	-125.95904	52.403511	-125.958787
H20	Highway 20	74.504	74.515	Bridge	52.409305	-125.937657	52.409289	-125.937496
H20	Highway 20	74.777	74.792	Bridge	52.408856	-125.933713	52.408851	-125.933494
H20	Highway 20	75.73	75.753	Bridge	52.4103	-125.920928	52.41016	-125.920683
H20	Highway 20	77.467	77.475	Bridge	52.406923	-125.899316	52.40698	-125.89925
H20	Highway 20	78.033		Gravel	52.411001	-125.894597		
H20	Highway 20	90.833	90.864	Bridge	52.491489	-125.845961	52.491737	-125.845744
H20	Highway 20	96.11	143.411	Gravel	52.52132	-125.822062	52.492957	-125.315051
H20	Highway 20	106.789	106.794	Bridge	52.543679	-125.692634	52.543633	-125.692656
H20	Highway 20	111.065	111.068	Bridge	52.53558	-125.636038	52.535572	-125.635987
H20	Highway 20	128.694	128.71	Bridge	52.510196	-125.407183	52.510119	-125.406971
H20	Highway 20		137.841	Gravel			52.461031	-125.315906
H20	Highway 20	152.126	152.155	Bridge	52.376254	-125.177489	52.376127	-125.177112
H20	Highway 20	167.507		CattleGuard	52.259866	-125.089644		
H20	Highway 20	191.753	191.807	Bridge	52.058451	-124.987192	52.058015	-124.987519
H20	Highway 20	202.037	202.067	Bridge	51.978864	-124.996989	51.97873	-124.996605
H20	Highway 20	206.99		CattleGuard	51.968987	-124.932236		
H20	Highway 20	217.977	218.015	Bridge	51.935672	-124.802545	51.935922	-124.802168
H20	Highway 20	234.763		CattleGuard	51.897506	-124.592977		
H20	Highway 20	253.678		CattleGuard	51.981481	-124.373342		
H20	Highway 20	309.917	309.982	Bridge	52.126057	-123.684837	52.125818	-123.683971
H20	Highway 20	351.903	351.918	Bridge	52.030121	-123.186155	52.030032	-123.186002
H20	Highway 20	430.258	430.561	Bridge	51.983053	-122.277386	51.984589	-122.273749
H20	Highway 20	454.021	454.078	Bridge	52.119328	-122.131871	52.119805	-122.131567
H20	Highway 20	454.359	454.446	Bridge	52.122155	-122.130054	52.122892	-122.129587
H24	Highway 24	13.119		Railroad Crossing	51.552616	-121.167043		
H24	Highway 24	93.79	93.842	Bridge	51.453396	-120.216906	51.45308	-120.216355
H24	Highway 24	96.254	96.282	Bridge	51.432557	-120.207783	51.432329	-120.207951
H26	Highway 26	24.099	24.201	Bridge	53.05394	-122.177342	53.054456	-122.176068
H26	Highway 26	26.567	26.734	Lane Detour	53.046248	-122.147123	53.04522	-122.145303
H26	Highway 26	61.414	61.453	Bridge	53.049676	-121.705792	53.049901	-121.705345
H26	Highway 26	74.186	74.211	Bridge	53.102217	-121.571012	53.10226	-121.570653
H27	Highway 27	3.097	3.135	Bridge	54.039361	-124.124644	54.039672	-124.124383
H27	Highway 27	3.948	4.179	Bridge	54.046432	-124.120043	54.048508	-124.120057
H27	Highway 27	16.729	16.903	Lane Detour	54.146141	-124.161284	54.147645	-124.161925
H27	Highway 27	50.278	50.458	Bridge	54.416916	-124.272543	54.416904	-124.269777
H27	Highway 27	51.838	51.906	Bridge	54.427091	-124.260065	54.427685	-124.259844
H27	Highway 27	61.096		Railroad Crossing	54.473303	-124.190217		
H29	Highway 29	3.963	4.057	Bridge	55.119289	-121.017999	55.11857	-121.018783
H29	Highway 29	5.076	5.187	Bridge	55.114052	-121.032459	55.113643	-121.034048
H29	Highway 29	7.528	7.662	Bridge	55.130132	-121.052326	55.131259	-121.053053
H29	Highway 29	8.404	8.501	Lane Detour	55.136455	-121.060177	55.137103	-121.061181
H29	Highway 29	9.507	9.64	Bridge	55.142886	-121.071883	55.143045	-121.073926
H29	Highway 29	16.703	16.813	Lane Detour	55.18133	-121.141349	55.18111	-121.143033
H29	Highway 29	25.703	25.775	Bridge	55.214549	-121.25809	55.215079	-121.258728
H29	Highway 29	76.109	76.146	Bridge	55.540537	-121.598238	55.540805	-121.597887
H29	Highway 29	80.024	80.576	Construction Zone	55.575352	-121.592457	55.580145	-121.590073
H29	Highway 29	80.18	80.52	Gravel	55.576703	-121.591725	55.579648	-121.590215
H29	Highway 29	84.513	84.673	Bridge	55.612524	-121.571633	55.613872	-121.570781
H29	Highway 29	93.247		Rumble Strips	55.682253	-121.594685		
H29	Highway 29	116.304	116.36	Bridge	55.823871	-121.649476	55.824324	-121.649857
H29	Highway 29	121.322	121.34	Bridge	55.835093	-121.716247	55.835128	-121.716529

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Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
H29	Highway 29	131.588	131.598	Gravel	55.840898	-121.871308	55.840978	-121.871384
H29	Highway 29	131.812	131.837	Gravel	55.842667	-121.87302	55.842865	-121.873212
H29	Highway 29	133.118	133.132	Gravel	55.852969	-121.882982	55.85308	-121.883089
H29	Highway 29	133.203	133.229	Gravel	55.85364	-121.88363	55.853846	-121.883827
H29	Highway 29	154.266	154.474	Bridge	55.987978	-121.984473	55.98917	-121.987036
H29	Highway 29	161.194	161.333	Lane Detour	56.02791	-121.914503	56.027904	-121.912277
H29	Highway 29	167.729	167.778	Bridge	56.067301	-121.843217	56.067704	-121.842873
H29	Highway 29	173.355	174.499	Construction Zone	56.109597	-121.805393	56.115037	-121.790549
H29	Highway 29	178.582	178.631	Bridge	56.121969	-121.73386	56.121536	-121.733676
H29	Highway 29	199.792	200.894	Construction Zone	56.214771	-121.456236	56.216994	-121.438968
H29	Highway 29	200.503	200.723	Lane Detour	56.21654	-121.445178	56.216854	-121.441699
H29	Highway 29	200.661	200.797	Bridge	56.216824	-121.442712	56.216913	-121.440524
H29	Highway 29	216.499	216.546	Bridge	56.2706	-121.237587	56.270727	-121.236861
H29	Highway 29	229.581	230.531	Lane Detour	56.299732	-121.098856	56.305911	-121.088608
H35	Highway 35	22.31	22.526	Bridge	54.220191	-125.765183	54.222101	-125.764641
H35	Highway 35	23.045	23.107	Bridge	54.224098	-125.75821	54.224038	-125.757267
H37	Highway 37	1.856	1.933	Bridge	54.063443	-128.60245	54.06409	-128.602874
H37	Highway 37	7.12	7.156	Bridge	54.109579	-128.601984	54.1099	-128.602004
H37	Highway 37	11.776	11.814	Bridge	54.14977	-128.585428	54.150108	-128.585339
H37	Highway 37	15.951	15.989	Bridge	54.185594	-128.567532	54.185935	-128.567477
H37	Highway 37	24.854	24.966	Bridge	54.259829	-128.52317	54.260829	-128.522969
H37	Highway 37	39.196	39.214	Bridge	54.375052	-128.526508	54.375204	-128.526395
H37	Highway 37	44.84	44.889	Bridge	54.420195	-128.53255	54.420642	-128.532561
H37	Highway 37	148.387	148.635	Bridge	55.096675	-128.076309	55.098834	-128.075433
H37	Highway 37	149.101		Railroad Crossing	55.102806	-128.073243		
H37	Highway 37	178.784	178.822	Bridge	55.32307	-128.089965	55.323421	-128.089965
H37	Highway 37	211.328	211.383	Bridge	55.555514	-128.361997	55.555591	-128.362846
H37	Highway 37	224.709	224.751	Bridge	55.600518	-128.54545	55.600584	-128.546118
H37	Highway 37	290.973	291.101	Bridge	56.033667	-129.152618	56.033808	-129.15465
H37	Highway 37	299.532	299.563	Bridge	56.06221	-129.2664	56.062476	-129.266539
H37	Highway 37	301.833	301.866	Bridge	56.082076	-129.276377	56.082353	-129.276564
H37	Highway 37	312.422	312.454	Bridge	56.152673	-129.3041	56.152966	-129.304201
H37	Highway 37	336.783	336.892	Bridge	56.326554	-129.301495	56.32736	-129.300461
H37	Highway 37	340.246	340.29	Bridge	56.350853	-129.283835	56.351193	-129.284207
H37	Highway 37	354.081	354.096	Bridge	56.455003	-129.382856	56.455142	-129.382835
H37	Highway 37	360.108	360.176	Bridge	56.498386	-129.431065	56.498761	-129.431934
H37	Highway 37	360.663	360.75	Lane Detour	56.500641	-129.438879	56.500617	-129.440303
H37	Highway 37	369.291	369.325	Bridge	56.546446	-129.548778	56.546722	-129.548992
H37	Highway 37	378.78	378.82	Gravel	56.605626	-129.655775	56.605984	-129.655955
H37	Highway 37	379.079	379.099	Gravel	56.608217	-129.657064	56.608395	-129.65715
H37	Highway 37	379.154	379.174	Gravel	56.608871	-129.657385	56.60905	-129.657474
H37	Highway 37	381.559	381.594	Bridge	56.62631	-129.679479	56.626546	-129.679843
H37	Highway 37	397.982	398.168	Bridge	56.746129	-129.799569	56.7474	-129.801544
H37	Highway 37	406.867	406.903	Bridge	56.752217	-129.927525	56.752281	-129.928096
H37	Highway 37	424.196	424.234	Bridge	56.880822	-130.033468	56.881149	-130.033292
H37	Highway 37	424.733	424.777	Bridge	56.885426	-130.032926	56.885728	-130.033358
H37	Highway 37	428.742	428.781	Bridge	56.909921	-130.0738	56.910233	-130.074097
H37	Highway 37	435.528	435.564	Bridge	56.921442	-130.151314	56.921249	-130.151784
H37	Highway 37	436.372	436.45	Lane Detour	56.922569	-130.16303	56.922683	-130.164284
H37	Highway 37	441.108	441.153	Lane Detour	56.945773	-130.221743	56.945994	-130.22234
H37	Highway 37	457.216	457.286	Bridge	57.079422	-130.26422	57.080044	-130.263964
H37	Highway 37	462.64	462.685	Bridge	57.125571	-130.28047	57.125948	-130.28075
H37	Highway 37	481.225	481.268	Bridge	57.270242	-130.271227	57.270622	-130.271375
H37	Highway 37	482.035	482.092	Gravel	57.27729	-130.273426	57.277797	-130.273433
H37	Highway 37	488.26	488.28	Gravel	57.327973	-130.250658	57.328153	-130.250672
H37	Highway 37	489.953	489.995	Gravel	57.343184	-130.249148	57.343562	-130.249107
H37	Highway 37	490.06	490.089	Gravel	57.344143	-130.249037	57.344408	-130.249008
H37	Highway 37	491.1	491.17	Gravel	57.353467	-130.247953	57.354097	-130.247896
H37	Highway 37	498.936	498.98	Bridge	57.419703	-130.234106	57.420086	-130.233947
H37	Highway 37	502.142	502.186	Bridge	57.442022	-130.218193	57.442406	-130.21804
H37	Highway 37	519.678	520.02	Lane Detour	57.578335	-130.142297	57.581077	-130.139798
H37	Highway 37	526.301	526.381	Lane Detour	57.61452	-130.079069	57.61518	-130.078544
H37	Highway 37	527.19	527.239	Bridge	57.622065	-130.07452	57.622439	-130.074091
H37	Highway 37	541.79	541.943	Gravel	57.734464	-129.986525	57.73581	-129.986171
H37	Highway 37	585.855	586.045	Bridge	58.042182	-129.949808	58.043887	-129.949579
H37A	Highway 37A	0.761	0.852	Bridge	55.917244	-130.010584	55.918017	-130.010138
H37A	Highway 37A	4.527	4.583	Lane Detour	55.942869	-129.988328	55.943376	-129.988301
H37A	Highway 37A	6.261	6.373	Bridge	55.95363	-129.975963	55.954059	-129.974353
H37A	Highway 37A	17.134	17.185	Bridge	56.036525	-129.905079	56.036715	-129.904336
H37A	Highway 37A	18.871	18.897	Bridge	56.047396	-129.917778	56.047577	-129.918055
H37A	Highway 37A	24.806	24.884	Lane Detour	56.089916	-129.885411	56.090551	-129.884899
H37A	Highway 37A	25.55	25.593	Bridge	56.096087	-129.880941	56.096433	-129.880633
H37A	Highway 37A	35.956	35.975	Bridge	56.117755	-129.729178	56.117703	-129.728881
H37A	Highway 37A	43.605	43.621	Bridge	56.102953	-129.611193	56.102974	-129.610926
H37A	Highway 37A	44.553	44.569	Bridge	56.103957	-129.596057	56.103976	-129.595797
H37A	Highway 37A	45.683	45.7	Bridge	56.104417	-129.577942	56.104412	-129.577662
H37A	Highway 37A	46.762	46.781	Bridge	56.105626	-129.56092	56.105612	-129.560616
H37A	Highway 37A	52.786	52.857	Bridge	56.092836	-129.471159	56.092904	-129.470014
H39	Highway 39	5.484		Railroad Crossing	55.163478	-122.987988		
H39	Highway 39	11.796	11.839	Bridge	55.203941	-123.040344	55.204329	-123.040388
H39	Highway 39	19.193	19.209	Bridge	55.260271	-123.09879	55.260398	-123.098902
H419	Highway 419	3.455	3.48	Lane Detour	52.174016	-121.913843	52.174206	-121.913645
H49	Highway 49	0.936		Railroad Crossing	55.753871	-120.211958		
H49	Highway 49	4.043		Railroad Crossing	55.752229	-120.163809		
H49	Highway 49	7.659	7.719	Bridge	55.751416	-120.106617	55.751333	-120.105674

Survey Events 2016

Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
H5	Highway 5	0.626	0.809	Bridge	49.364851	-121.355667	49.366479	-121.355618
H5	Highway 5	6.068	6.165	Bridge	49.384696	-121.318727	49.385571	-121.318708
H5	Highway 5	12.517	12.554	Bridge	49.438888	-121.301608	49.439053	-121.301151
H5	Highway 5	15.037	15.123	Bridge	49.447281	-121.270529	49.447786	-121.269631
H5	Highway 5	18.431	18.466	Bridge	49.474177	-121.25389	49.474495	-121.253845
H5	Highway 5	18.61	18.683	Bridge	49.475779	-121.253672	49.476437	-121.253581
H5	Highway 5	20.729	20.992	Bridge	49.493315	-121.244236	49.49437	-121.241052
H5	Highway 5	24.803	24.927	Bridge	49.505566	-121.19943	49.506646	-121.199028
H5	Highway 5	35.908	36.005	Bridge	49.596157	-121.15968	49.596568	-121.158502
H5	Highway 5	36.716	37.08	Lane Detour	49.597845	-121.148944	49.598235	-121.143985
H5	Highway 5	45.423	45.7	Bridge	49.616258	-121.045689	49.618273	-121.043411
H5	Highway 5	51.76	51.803	Bridge	49.658777	-121.008909	49.659097	-121.009244
H5	Highway 5	61.04	61.129	Bridge	49.73968	-121.012326	49.740481	-121.012349
H5	Highway 5	63.642	63.726	Bridge	49.760559	-121.001678	49.76119	-121.00104
H5	Highway 5	67.668	67.737	Bridge	49.790099	-120.971099	49.790712	-120.970939
H5	Highway 5	68.978	69.043	Bridge	49.79951	-120.961465	49.799866	-120.960738
H5	Highway 5	70.436	70.509	Bridge	49.809489	-120.948631	49.810066	-120.94815
H5	Highway 5	79.041	79.436	Lane Detour	49.878627	-120.909216	49.880896	-120.904973
H5	Highway 5	79.248	79.325	Bridge	49.879828	-120.907009	49.880275	-120.906182
H5	Highway 5	79.753	79.856	Bridge	49.882786	-120.901696	49.883531	-120.900848
H5	Highway 5	91.738	91.87	Lane Detour	49.982732	-120.899491	49.983465	-120.89805
H5	Highway 5	111.84	111.944	Bridge	50.110706	-120.756897	50.11152	-120.757609
H5	Highway 5	127.568	127.839	Lane Detour	50.221536	-120.644197	50.22356	-120.64213
H5	Highway 5	132.883	133.193	Lane Detour	50.264539	-120.627511	50.267111	-120.625959
H5	Highway 5	137.222	137.501	Lane Detour	50.301702	-120.63835	50.303898	-120.640226
H5	Highway 5	180.084	180.111	Bridge	50.627011	-120.476514	50.6272	-120.476765
H5	Highway 5	183.762	183.788	Bridge	50.656091	-120.47631	50.65623	-120.476013
H5	Highway 5	185.469	185.536	Bridge	50.665146	-120.456849	50.665434	-120.456015
H5	Highway 5	197.436	197.533	Bridge	50.670119	-120.303463	50.670963	-120.303167
H5	Highway 5	197.78	197.872	Bridge	50.673099	-120.302287	50.673865	-120.301796
H5	Highway 5	197.952	198.133	Bridge	50.674531	-120.301381	50.67604	-120.300418
H5	Highway 5	217.681	219.195	Construction Zone	50.832444	-120.279264	50.844624	-120.27209
H5	Highway 5	220.886	220.917	Bridge	50.859414	-120.271909	50.859622	-120.27161
H5	Highway 5	255.946	255.968	Bridge	51.135336	-120.124053	51.135532	-120.124093
H5	Highway 5	261.218	261.263	Bridge	51.178245	-120.133716	51.178579	-120.134065
H5	Highway 5	262.687	262.916	Bridge	51.188177	-120.147399	51.189628	-120.14972
H5	Highway 5	291.096	291.115	Bridge	51.427479	-120.201971	51.427575	-120.201744
H5	Highway 5	317.435	317.614	Bridge	51.637365	-120.081084	51.638021	-120.078717
H5	Highway 5	325.609	325.673	Bridge	51.639698	-119.977202	51.639346	-119.976467
H5	Highway 5	360.089	360.126	Bridge	51.672945	-119.607586	51.672916	-119.60706
H5	Highway 5	388.044	388.104	Bridge	51.78569	-119.321686	51.785925	-119.3209
H5	Highway 5	388.128	388.267	Bridge	51.786017	-119.320587	51.786556	-119.318771
H5	Highway 5	416.331	416.572	Bridge	52.018893	-119.339814	52.020656	-119.341827
H5	Highway 5	428.172	428.23	Bridge	52.116559	-119.302235	52.117011	-119.301815
H5	Highway 5	433.055	437.086	Construction Zone	52.156258	-119.272396	52.186138	-119.240953
H5	Highway 5	436.745	436.778	Bridge	52.183237	-119.242515	52.183506	-119.242318
H5	Highway 5	441.682	441.703	Bridge	52.223759	-119.217085	52.223938	-119.216973
H5	Highway 5	448.921	448.943	Bridge	52.284659	-119.185256	52.284851	-119.185164
H5	Highway 5	467.08	467.215	Bridge	52.440696	-119.146604	52.441583	-119.145242
H5	Highway 5	470.027	470.142	Bridge	52.464023	-119.133095	52.465054	-119.133265
H5	Highway 5	471.613	471.706	Bridge	52.477963	-119.132998	52.478646	-119.132211
H5	Highway 5	472.566	472.622	Bridge	52.484986	-119.124951	52.485393	-119.124484
H5	Highway 5	474.135	474.159	Bridge	52.497073	-119.113355	52.497273	-119.113229
H5	Highway 5	477.564	477.605	Bridge	52.526156	-119.113432	52.526473	-119.113751
H5	Highway 5	486.649	486.756	Bridge	52.602461	-119.110408	52.603187	-119.111452
H5	Highway 5	505.428	505.447	Bridge	52.733617	-119.267313	52.733783	-119.267292
H5	Highway 5	509.14	509.18	Bridge	52.766613	-119.260816	52.76696	-119.260636
H5	Highway 5	511.536	511.594	Bridge	52.787246	-119.254499	52.787741	-119.254776
H5	Highway 5	516.982	517.033	Bridge	52.833558	-119.280687	52.833985	-119.280927
H5	Highway 5	528.53	528.714	Lane Detour	52.923611	-119.360739	52.9249	-119.36245
H5	Highway 5	533.761	535.022	Construction Zone	52.958834	-119.41185	52.966733	-119.424818
H5	Highway 5	534.174	534.964	Lane Detour	52.961147	-119.416683	52.966242	-119.424523
H5	Highway 5	535.565		Rumble Strips	52.971577	-119.425305		
H5	Highway 5	535.811	535.969	Bridge	52.973785	-119.425121	52.975121	-119.424375
H52	Highway 52	20.977	21.249	Construction Zone	55.580899	-120.592929	55.578611	-120.594354
H52	Highway 52	26.497	26.54	Bridge	55.562645	-120.668713	55.562364	-120.669167
H52	Highway 52	101.955	101.998	Bridge	55.089982	-120.940976	55.089642	-120.941289
H52	Highway 52	117.831	117.874	Bridge	54.991609	-120.857046	54.991738	-120.856404
H52	Highway 52	129.602	129.621	Bridge	54.929354	-120.748875	54.929236	-120.748659
H52	Highway 52	130.403	130.473	Lane Detour	54.927324	-120.744367	54.927949	-120.744446
H52	Highway 52	157.573	193.608	Gravel	54.876501	-120.451146	55.118193	-120.219052
H52	Highway 52	177.871	177.889	Bridge	54.980105	-120.22523	54.980262	-120.225166
H52	Highway 52	198.742	198.752	Bridge	55.158436	-120.211417	55.158489	-120.2113
H52	Highway 52	230.12	230.13	Bridge	55.409084	-120.104439	55.409173	-120.104458
H52	Highway 52	232.909	232.93	Bridge	55.433513	-120.108708	55.433684	-120.108565
H5A	Highway 5A	0.521	0.592	Bridge	49.462312	-120.504903	49.462948	-120.504996
H5A	Highway 5A	8.05	8.063	Bridge	49.526751	-120.513668	49.526853	-120.513764
H5A	Highway 5A	9.055	9.07	Bridge	49.534986	-120.517819	49.535102	-120.517922
H5A	Highway 5A	31.761	31.778	Bridge	49.707515	-120.605937	49.707667	-120.605962
H5A	Highway 5A	62.473		CattleGuard	49.951681	-120.61791		
H5A	Highway 5A	92.915	92.98	Bridge	50.122947	-120.757649	50.122821	-120.756759
H5A	Highway 5A	100.85	100.864	Bridge	50.163239	-120.669922	50.163231	-120.669721
H5A	Highway 5A	112.696	112.716	Bridge	50.158565	-120.515833	50.158661	-120.515585
H5A	Highway 5A	119.19	119.226	Bridge	50.203999	-120.480409	50.204308	-120.480517
H5A	Highway 5A	168.017	168.137	Lane Detour	50.547283	-120.275092	50.547583	-120.2767

Survey Events 2016

Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
H5A	Highway 5A	182.727	182.778	Bridge	50.653592	-120.368468	50.654035	-120.368674
H5R	Highway 5	0.429	0.494	Bridge	50.665554	-120.456413	50.665272	-120.457224
H5R	Highway 5	2.188	2.214	Bridge	50.656266	-120.476519	50.656127	-120.476814
H5R	Highway 5	5.85	5.881	Bridge	50.627248	-120.477213	50.627033	-120.476931
H5R	Highway 5	8.923	9.354	Lane Detour	50.600716	-120.4764	50.596912	-120.477408
H5R	Highway 5	20.984	21.109	Lane Detour	50.506366	-120.491187	50.505364	-120.491989
H5R	Highway 5	33.853	34.223	Lane Detour	50.432008	-120.608536	50.429268	-120.611463
H5R	Highway 5	74.014	74.118	Bridge	50.111596	-120.758008	50.110783	-120.757297
H5R	Highway 5	79.964	80.206	Lane Detour	50.071887	-120.784735	50.070403	-120.787192
H5R	Highway 5	106.085	106.186	Bridge	49.88377	-120.900869	49.883027	-120.90166
H5R	Highway 5	106.643	106.721	Bridge	49.880306	-120.906435	49.879857	-120.907265
H5R	Highway 5	109.952	110.29	Lane Detour	49.853813	-120.917081	49.851213	-120.919447
H5R	Highway 5	115.459	115.533	Bridge	49.810148	-120.948414	49.809564	-120.948898
H5R	Highway 5	116.906	116.972	Bridge	49.80006	-120.960828	49.799698	-120.961564
H5R	Highway 5	118.223	118.293	Bridge	49.79085	-120.971202	49.79023	-120.971372
H5R	Highway 5	122.23	122.316	Bridge	49.761357	-121.001231	49.760715	-121.001877
H5R	Highway 5	124.885	124.975	Bridge	49.740161	-121.012811	49.739352	-121.01279
H5R	Highway 5	140.258	140.526	Bridge	49.618338	-121.043554	49.616399	-121.045749
H5R	Highway 5	149.949	150.047	Bridge	49.596726	-121.158637	49.596308	-121.159827
H5R	Highway 5	161.008	161.136	Bridge	49.50684	-121.199138	49.505724	-121.199538
H5R	Highway 5	164.947	165.206	Bridge	49.494461	-121.24122	49.493395	-121.244352
H5R	Highway 5	167.264	167.339	Bridge	49.476414	-121.253755	49.475743	-121.253843
H5R	Highway 5	167.477	167.513	Bridge	49.474505	-121.254015	49.474187	-121.25406
H5R	Highway 5	170.783	170.873	Bridge	49.448061	-121.269644	49.447529	-121.27059
H5R	Highway 5	173.369	173.405	Bridge	49.439146	-121.301257	49.438985	-121.301696
H5R	Highway 5	179.781	179.876	Bridge	49.385505	-121.318878	49.384651	-121.318898
H5R	Highway 5	185.313	185.49	Bridge	49.366461	-121.355782	49.364876	-121.355834
H77	Highway 77	41.625	42.368	Construction Zone	59.229563	-123.247409	59.23506	-123.254703
H77	Highway 77	41.816	42.245	Bridge	59.230956	-123.24933	59.234184	-123.253456
H77	Highway 77	112.08	112.12	Bridge	59.7947	-122.985621	59.795025	-122.985319
H77	Highway 77	128.842	128.944	Lane Detour	59.943016	-122.953337	59.943932	-122.953132
H77	Highway 77	134.061	134.272	Bridge	59.981072	-122.924477	59.98089	-122.9207
H8	Highway 8	2.336		Railroad Crossing	50.421461	-121.328734		
H8	Highway 8	3.348	3.428	Bridge	50.424772	-121.316317	50.424534	-121.315255
H8	Highway 8	5.491	5.64	Bridge	50.411381	-121.298347	50.410632	-121.296623
H8	Highway 8	5.766	5.866	Bridge	50.409759	-121.295495	50.408954	-121.294864
H8	Highway 8	24.044	24.076	Bridge	50.292358	-121.17531	50.292076	-121.175402
H8	Highway 8	30.222	30.33	Lane Detour	50.268132	-121.113301	50.267407	-121.11231
H8	Highway 8	56.918	56.939	Bridge	50.149948	-120.878183	50.149845	-120.877937
H97	Highway 97	30.721	30.757	Bridge	49.229643	-119.542015	49.229673	-119.541516
H97	Highway 97	33.114	33.152	Bridge	49.245354	-119.524886	49.245691	-119.524957
H97	Highway 97	45.189	45.202	Bridge	49.341332	-119.571625	49.341449	-119.571619
H97	Highway 97	46.14	46.226	Bridge	49.345315	-119.579102	49.345669	-119.580162
H97	Highway 97	60.318	60.368	Bridge	49.452826	-119.59785	49.452908	-119.597178
H97	Highway 97	63.1	63.119	Bridge	49.477113	-119.596564	49.477289	-119.596568
H97	Highway 97	66.175	66.224	Bridge	49.495697	-119.616505	49.495813	-119.617159
H97	Highway 97	74.919	74.939	Bridge	49.567862	-119.631235	49.568041	-119.63117
H97	Highway 97	80.693	80.732	Bridge	49.605915	-119.674138	49.606083	-119.6746
H97	Highway 97	98.093	98.105	Bridge	49.741112	-119.761801	49.741181	-119.761677
H97	Highway 97	104.495	104.545	Bridge	49.784121	-119.714747	49.784282	-119.714095
H97	Highway 97	117.808	117.817	Bridge	49.859937	-119.590292	49.859996	-119.590207
H97	Highway 97	123.623	123.642	Bridge	49.884017	-119.526507	49.883875	-119.52636
H97	Highway 97	124.26	124.283	Bridge	49.878752	-119.523794	49.878579	-119.523624
H97	Highway 97	124.675	125.741	Bridge	49.87811	-119.518665	49.880711	-119.504403
H97	Highway 97	137.928	137.979	Bridge	49.932429	-119.38828	49.932744	-119.388792
H97	Highway 97	152.66	152.685	Bridge	50.058357	-119.407993	50.058582	-119.408006
H97	Highway 97	154.241	154.427	Lane Detour	50.071887	-119.409371	50.073516	-119.408868
H97	Highway 97	170.868	170.997	Lane Detour	50.199448	-119.319218	50.200527	-119.318554
H97	Highway 97	182.802	182.926	Bridge	50.289888	-119.263382	50.290159	-119.261704
H97	Highway 97	188.951		Railroad Crossing	50.340263	-119.245064		
H97	Highway 97	199.629		Railroad Crossing	50.401217	-119.317659		
H97	Highway 97	207.187	207.223	Bridge	50.455946	-119.372133	50.456231	-119.37239
H97	Highway 97	224.179	224.203	Bridge	50.500397	-119.5622	50.500399	-119.562541
H97	Highway 97	227.277	227.31	Bridge	50.489477	-119.600254	50.489252	-119.600544
H97	Highway 97	227.334		Railroad Crossing	50.48908	-119.600762		
H97	Highway 97	238.407	238.429	Bridge	50.46609	-119.738858	50.466238	-119.739054
H97	Highway 97	245.846		Railroad Crossing	50.484142	-119.827606		
H97	Highway 97	268.676	268.788	Bridge	50.648273	-119.949	50.648995	-119.950102
H97	Highway 97	379.333	379.349	Bridge	50.814062	-121.327114	50.814182	-121.327237
H97	Highway 97	384.815	384.831	Bridge	50.845115	-121.383322	50.845259	-121.383344
H97	Highway 97	399.753	399.786	Bridge	50.96686	-121.45648	50.967026	-121.456857
H97	Highway 97	403.022	403.351	Lane Detour	50.979357	-121.498113	50.979902	-121.50268
H97	Highway 97	427.308	427.336	Bridge	51.141291	-121.499879	51.141514	-121.500067
H97	Highway 97	433.1	433.177	Lane Detour	51.188887	-121.524761	51.189458	-121.525391
H97	Highway 97	487.926	488.021	Bridge	51.617962	-121.290243	51.618797	-121.290535
H97	Highway 97	490.87	490.97	Lane Detour	51.641922	-121.297329	51.642798	-121.297075
H97	Highway 97	519.877	520.682	Construction Zone	51.822486	-121.512351	51.825404	-121.522834
H97	Highway 97	520.02	520.43	Lane Detour	51.822705	-121.514385	51.824157	-121.519791
H97	Highway 97	566.654	566.671	Bridge	52.110573	-121.930068	52.110709	-121.930195
H97	Highway 97	569.037	569.99	Construction Zone	52.116734	-121.959313	52.114837	-121.97282
H97	Highway 97	569.07	569.771	Lane Detour	52.116642	-121.959777	52.115516	-121.969847
H97	Highway 97	572.308	572.408	Lane Detour	52.116479	-122.001744	52.116948	-122.002988
H97	Highway 97	603.603	603.752	Lane Detour	52.274807	-122.145694	52.27599	-122.146742
H97	Highway 97	689.136	692.4	Construction Zone	52.918459	-122.43579	52.946208	-122.448215
H97	Highway 97	689.35	692.346	Lane Detour	52.920322	-122.436614	52.945729	-122.448353

Survey Events 2016

Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
H97	Highway 97	698.286	698.324	Bridge	52.986271	-122.471089	52.986186	-122.471633
H97	Highway 97	698.979	699.197	Bridge	52.9841	-122.480618	52.982758	-122.482978
H97	Highway 97	699.303	699.362	Bridge	52.982099	-122.484131	52.981739	-122.484768
H97	Highway 97	718.749	718.887	Bridge	53.094877	-122.366761	53.095759	-122.365301
H97	Highway 97	729.954	729.977	Bridge	53.184493	-122.386989	53.184666	-122.387195
H97	Highway 97	734.795	734.846	Bridge	53.220391	-122.425831	53.220624	-122.426481
H97	Highway 97	760.894	760.955	Bridge	53.420314	-122.586018	53.420761	-122.586539
H97	Highway 97	761.884	761.927	Bridge	53.427536	-122.59435	53.427921	-122.594334
H97	Highway 97	786.75	790.118	Construction Zone	53.632983	-122.663848	53.660563	-122.677282
H97	Highway 97	786.868	786.929	Bridge	53.634047	-122.663783	53.634599	-122.663738
H97	Highway 97	815.556	815.583	Bridge	53.867536	-122.733783	53.867777	-122.733854
H97	Highway 97	818.113	818.506	Bridge	53.889069	-122.745734	53.89187	-122.749374
H97	Highway 97	820.6	820.664	Bridge	53.899849	-122.777898	53.900111	-122.778776
H97	Highway 97	823.631	823.863	Bridge	53.926112	-122.780762	53.928135	-122.779876
H97	Highway 97	824.18	824.232	Bridge	53.930681	-122.777936	53.930954	-122.777286
H97	Highway 97	847.019	847.043	Bridge	54.092962	-122.686123	54.093145	-122.685921
H97	Highway 97	847.593	847.649	Bridge	54.096546	-122.679887	54.096868	-122.679223
H97	Highway 97	850.329	850.411	Bridge	54.108697	-122.649844	54.109316	-122.649176
H97	Highway 97	889.185		Railroad Crossing	54.437802	-122.643096		
H97	Highway 97	891.609		Railroad Crossing	54.458499	-122.654171		
H97	Highway 97	905.38	905.425	Bridge	54.573814	-122.714742	54.574214	-122.714694
H97	Highway 97	967.707	967.738	Bridge	55.061074	-123.029627	55.061329	-123.029418
H97	Highway 97	968.989	969.092	Lane Detour	55.070688	-123.019421	55.071605	-123.019146
H97	Highway 97	975.557	975.744	Bridge	55.118905	-122.970019	55.118885	-122.967094
H97	Highway 97	976.838		Railroad Crossing	55.120693	-122.95053		
H97	Highway 97	997.745	997.761	Bridge	55.222783	-122.718377	55.222873	-122.71818
H97	Highway 97	1000.952		Railroad Crossing	55.242536	-122.687155		
H97	Highway 97	1003.812	1003.824	Bridge	55.267737	-122.686212	55.267848	-122.686244
H97	Highway 97	1039.253	1039.403	Lane Detour	55.51365	-122.758497	55.514279	-122.756409
H97	Highway 97	1039.583	1039.674	Bridge	55.515121	-122.753988	55.515553	-122.752758
H97	Highway 97	1040.089	1040.146	Bridge	55.517492	-122.7472	55.517616	-122.746324
H97	Highway 97	1041.935	1041.948	Bridge	55.521694	-122.720981	55.521691	-122.720775
H97	Highway 97	1046.954	1046.982	Bridge	55.501232	-122.655961	55.501218	-122.655517
H97	Highway 97	1050.462	1050.552	Bridge	55.503774	-122.605148	55.503322	-122.603972
H97	Highway 97	1051.124	1051.199	Bridge	55.501711	-122.595486	55.501582	-122.594323
H97	Highway 97	1052.776	1052.814	Bridge	55.507976	-122.577587	55.5082	-122.577134
H97	Highway 97	1057.136	1057.142	Bridge	55.517191	-122.519894	55.517203	-122.519801
H97	Highway 97	1061.564	1061.57	Bridge	55.543278	-122.471974	55.543313	-122.471902
H97	Highway 97	1063.016	1063.024	Bridge	55.550652	-122.453281	55.550677	-122.453163
H97	Highway 97	1064.192	1064.21	Bridge	55.554423	-122.435923	55.55448	-122.435652
H97	Highway 97	1073.461	1073.479	Bridge	55.602404	-122.31722	55.602469	-122.316958
H97	Highway 97	1077.303	1077.358	Gravel	55.621989	-122.269549	55.622157	-122.26874
H97	Highway 97	1079.397	1079.41	Bridge	55.633965	-122.245426	55.634007	-122.245234
H97	Highway 97	1103.792	1105.634	Construction Zone	55.612086	-121.895064	55.616424	-121.866842
H97	Highway 97	1103.862	1103.901	Gravel	55.612252	-121.893982	55.612346	-121.893387
H97	Highway 97	1104.215	1104.275	Gravel	55.613084	-121.888578	55.613222	-121.88766
H97	Highway 97	1104.398	1104.506	Gravel	55.613517	-121.885774	55.61377	-121.884111
H97	Highway 97	1104.945	1105.092	Gravel	55.614806	-121.877391	55.615154	-121.875132
H97	Highway 97	1114.706	1114.751	Bridge	55.64674	-121.741577	55.647143	-121.741602
H97	Highway 97	1117.402	1117.435	Bridge	55.668069	-121.725275	55.668294	-121.724935
H97	Highway 97	1124.081	1124.088	Bridge	55.696887	-121.633209	55.696922	-121.633111
H97	Highway 97	1124.645		Railroad Crossing	55.697047	-121.624585		
H97	Highway 97	1125.845	1125.891	Bridge	55.692976	-121.607179	55.692896	-121.606467
H97	Highway 97	1145.866		Railroad Crossing	55.711836	-121.331604		
H97	Highway 97	1157.033	1157.248	Bridge	55.720335	-121.210338	55.718639	-121.208718
H97	Highway 97	1204.906	1205.029	Bridge	55.756663	-120.55283	55.756267	-120.550998
H97	Highway 97	1207.077	1207.098	Gravel	55.754861	-120.519247	55.754939	-120.51895
H97	Highway 97	1223.634	1223.647	Bridge	55.766552	-120.262154	55.766552	-120.261941
H97	Highway 97	1226.352	1226.758	Construction Zone	55.781207	-120.276874	55.783426	-120.281995
H97	Highway 97	1226.927		Railroad Crossing	55.784242	-120.284281		
H97	Highway 97	1255.838	1256.086	Bridge	55.95679	-120.612955	55.959012	-120.613166
H97	Highway 97	1261.859	1266.399	Construction Zone	56.009551	-120.62879	56.049712	-120.635868
H97	Highway 97	1274.253	1276.955	Construction Zone	56.112387	-120.645715	56.131908	-120.671
H97	Highway 97	1277.281	1277.994	Bridge	56.134751	-120.672049	56.141147	-120.672426
H97	Highway 97	1280.282		Railroad Crossing	56.159476	-120.688317		
H97	Highway 97	1314.63	1314.78	Lane Detour	56.340336	-121.083493	56.341183	-121.085384
H97A	Highway 97A	0.326	0.35	Bridge	50.34014	-119.243372	50.340354	-119.243422
H97A	Highway 97A	5.024	5.05	Bridge	50.379936	-119.230733	50.380151	-119.230591
H97A	Highway 97A	15.065	15.082	Bridge	50.454559	-119.166532	50.454632	-119.166322
H97A	Highway 97A	37.142	37.307	Bridge	50.626842	-119.11875	50.626712	-119.11642
H97A	Highway 97A	45.545	45.555	Bridge	50.682783	-119.05182	50.682848	-119.051722
H97A	Highway 97A	56.151	56.168	Bridge	50.766397	-119.00741	50.766529	-119.007289
H97A	Highway 97A	61.746	61.786	Bridge	50.807782	-118.971354	50.80814	-118.971404
H97A	Highway 97A	65.283		Construction Zone	50.835774	-118.978905		
H97A	Highway 97A	65.295		Lane Detour	50.835857	-118.978802		
H97B	Highway 97B	2.696	2.887	Lane Detour	50.617883	-119.175761	50.618335	-119.178321
H97C	Highway 97C	5.995	6.234	Bridge	50.727742	-121.282866	50.726094	-121.280702
H97C	Highway 97C	6.477		Railroad Crossing	50.725944	-121.277428		
H97C	Highway 97C	18.235	18.524	Lane Detour	50.656868	-121.23892	50.654295	-121.239278
H97C	Highway 97C	109.19	109.214	Bridge	50.113936	-120.796536	50.113843	-120.796233
H97C	Highway 97C	113.898	113.962	Bridge	50.089868	-120.749309	50.089729	-120.748436
H97C	Highway 97C	128.393	128.414	Bridge	50.02742	-120.6261	50.027234	-120.626054
H97C	Highway 97C	149.734	149.831	Bridge	49.900952	-120.495122	49.90041	-120.494074
H97C	Highway 97C	182.103	182.199	Bridge	49.906607	-120.095302	49.90678	-120.093992
H97C	Highway 97C	213.231	213.276	Bridge	49.808595	-119.744983	49.808515	-119.744373

Survey Events 2016

Route	Route Name	Start km	End km	Event	Start Latitude	Start Longitude	End Latitude	End Longitude
H97C	Highway 97C	219.219	219.293	Bridge	49.804554	-119.665575	49.804511	-119.664558
H97CR	Highway 97C	3.068	3.337	Lane Detour	49.800397	-119.699103	49.800966	-119.70272
H97CR	Highway 97C	3.477	3.769	Lane Detour	49.801418	-119.704531	49.802652	-119.708113
H97CR	Highway 97C	6.522	6.57	Bridge	49.808701	-119.744372	49.808789	-119.74502
H97CR	Highway 97C	7.341	7.65	Lane Detour	49.810862	-119.755153	49.812317	-119.758795
H97CR	Highway 97C	21.505	21.725	Lane Detour	49.872671	-119.916475	49.87237	-119.919485
H97CR	Highway 97C	27.681	27.855	Lane Detour	49.894762	-119.962393	49.894826	-119.96481
H97CR	Highway 97C	37.621	37.718	Bridge	49.906974	-120.093992	49.906796	-120.095313
H97CR	Highway 97C	69.948	70.048	Bridge	49.900568	-120.493913	49.90113	-120.494996
H97CR	Highway 97C	71.021	71.24	Lane Detour	49.906602	-120.50556	49.907834	-120.507937
H97D	Highway 97D	23.22		CattleGuard	50.485872	-120.554681		
H97D	Highway 97D	24.121	24.204	Bridge	50.486788	-120.54259	50.486369	-120.541625
21-C-1-00012	JACKFISH LAKE	14.829		Railroad Crossing	55.812243	-121.448312		
22-A-J-00259	SWANSON LUMBER RD	1.759		Rumble Strips	56.232947	-120.768437		
H29	Highway 29	167.777	167.727	Bridge	56.067707	-121.842902	56.067301	-121.843245
H29	Highway 29	174.641	173.759	Construction Zone	56.115371	-121.788306	56.112334	-121.801178
H29	Highway 29	178.639	178.59	Bridge	56.121556	-121.733662	56.121983	-121.733836
H29	Highway 29	216.584	216.537	Bridge	56.270731	-121.236914	56.27061	-121.237639
H97	Highway 97	1050.552	1050.462	Bridge	55.503365	-122.604013	55.503815	-122.605195
H97	Highway 97	1051.202	1051.128	Bridge	55.501608	-122.594335	55.501737	-122.595482
H97	Highway 97	1052.812	1052.774	Bridge	55.508205	-122.577203	55.507981	-122.577655
H97	Highway 97	1057.144	1057.137	Bridge	55.517231	-122.519847	55.517217	-122.519955
H97	Highway 97	1061.572	1061.566	Bridge	55.543322	-122.471969	55.543287	-122.47204
H97	Highway 97	1063.029	1063.021	Bridge	55.550698	-122.453241	55.550673	-122.45336
H97	Highway 97	1064.213	1064.194	Bridge	55.554504	-122.435706	55.554443	-122.435987
H97	Highway 97	1073.485	1073.465	Bridge	55.602481	-122.317012	55.602408	-122.317304
H97	Highway 97	1079.414	1079.4	Bridge	55.634018	-122.245305	55.633973	-122.245512
H97	Highway 97	1104.53	1104.204	Gravel	55.61382	-121.883928	55.613048	-121.888944
H97	Highway 97	1105.099	1104.955	Gravel	55.615161	-121.87521	55.614821	-121.877425
H97	Highway 97	1107.688	1107.65	Gravel	55.61759	-121.834656	55.617563	-121.835262
H97	Highway 97	1108.108	1108.066	Gravel	55.618074	-121.828057	55.617989	-121.828712
H97	Highway 97	1108.138	1103.588	Construction Zone	55.618137	-121.827594	55.611609	-121.898377
H97	Highway 97	1114.76	1114.715	Bridge	55.647122	-121.741639	55.646722	-121.741612
H97	Highway 97	1117.449	1117.415	Bridge	55.668298	-121.724982	55.668067	-121.725335
H97	Highway 97	1124.117	1124.109	Bridge	55.696926	-121.633164	55.696887	-121.633271

Memorandum

To	Todd Nakazawa, Contractor, Rehabilitation & Construction
Copy	John Marchesan, Senior Manager, Rehabilitation & Construction
From	Shawn Landers
Office	Vancouver Office
Date	December 21, 2017
File	H-V0233.00
Subject	2017 RPMS Survey QA

Opus International Consultants Limited was retained by the British Columbia Ministry of Transportation and Infrastructure (BCMoTI) to provide Quality Assurance (QA) services for the 2017 Roadway Pavement Management System (RPMS) high speed pavement surface condition contract surveys. This memorandum provides a summary of the QA processes and results.

QA Scope of Testing

The scope of the QA testing is summarized in Table 1.

Table 1: 2017 QA Scope

QA	Scope of Services	Details and Requirements
Initial	• Site Planning • Site Reconnaissance • Manual Field Surveys • IRI/Rut QA • Distress QA	• 4 initial QA Sites located near Kamloops • On-site participation by Opus during initial IRI/Rutting QA • Surface distress QA performed remotely following processing of data by the survey contractor
Blind Site	• Site Planning • Reconnaissance • Manual Field Surveys • Distress QA	• 6 manually surveyed blinds sites - 2 Sites in Region 1 and 4 sites in Region 2 • Surface distress QA performed remotely
Additional	• Repeat Initial IRI/Rut QA • Memorandum	• Repeat initial IRI/Rut QA at survey midpoint and end of surveys • Limited review of collected images with reliance on the survey contractor's internal QC

Overview of 2017 Surveys

The planned 2017 RPMS pavement surface condition quantities are listed in Table 2.

The field surveys were completed over from mid-May to mid-September, with delays due to the forest fires this past summer. The survey contractor provided survey status updates to the Ministry.

Table 2: 2017 Survey Quantities

Road Class	Highway Routes	Lane Length (km)
Primary Highways	1V, 1, 3, 4, 7B, 7, 9, 10, 11, 13, 14, 15, 17V, 17, 19, 91A, 91 and 99	3290
Secondary Highways	3A, 3B, 4A, 6, 7, 14, 17V, 17, 18, 19A, 21, 22A, 22, 23, 28, 30, 31A, 31, 33, 41 ,43, 93, 95A, 95, 99, 101, 115, 395 and 419	2690
Side Roads	Districts – 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13	3170
	Planned Total	9150

Initial QA Testing and Results

The initial QA testing was conducted as follows:

- Roughness / Rutting Equipment – May 17, 2017 in Kamloops
- Surface Distress Rating – June 5 with follow up discussions

Table 3 lists the test sites that were used for the initial QA to provide a representative sample of distresses, wheel track rutting and roughness conditions.

Table 3: Initial QA Test Sites

Site	Location	Direction	Lane
1	Highway 5 NB	North	3
2	Highway 5 SB	North	4
3	Hook Road	East	1
4	Shuswap Road	East	1

Manual control surveys for surface distress, roughness and rutting were conducted by the Opus team at each of the 500m test sites in advance of the initial QA testing as follows:

- Surface Distress - crack mapping and visually rating the distress types present for each 50 metre segment according to the Ministry's Pavement Surface Condition Rating Manual, 5th Edition (2016);
- Roughness - longitudinal profile and IRI measurements in outside wheel path using a Ministry supplied ICC SurPRO Class 1 profiler; and
- Rut Depths - transverse profile measurements in each wheel path at 10 metre intervals using a two metre rut measuring gauge.

a) Roughness and Rutting

The roughness and rutting QA test results are summarized in Tables 4 and 5. As shown, all sites passed the roughness acceptance criteria for both accuracy (within 10% of manual survey) and repeatability (0.1 mm/m standard deviation for 5 runs). All sites also passed the rutting acceptance criteria for accuracy (+/- 3 mm of the manual survey) and repeatability (3 mm/m standard deviation for 5 runs)

Table 4: Roughness QA Test Results (mm/m)

Site	Manual	Run 1	Run 2	Run 3	Run 4	Run 5	Avg	Error	Std Dev
1	1.01	0.96	0.93	0.98	0.98	0.98	0.97	3.9%	0.02
2	0.81	0.86	0.84	0.85	0.86	0.83	0.85	-4.7%	0.01
3	1.04	1.02	1.01	1.03	1.01	1.02	1.02	2.1%	0.01
4	2.39	2.47	2.42	2.39	2.43	2.39	2.42	-1.3%	0.03

Table 5: Rutting QA Test Results (mm)

Site	Manual	Run 1	Run 2	Run 3	Run 4	Run 5	Avg	Error	Std Dev
1	5	5	5	5	5	5	5	1	0
2	7	6	6	6	6	6	6	1	0.2
3	4	3	3	3	3	3	3	1	0
5	7	9	9	9	8	8	8	-1	0

b) Surface Distress

This was the second year that 3D LCMS, fully automated crack detection technology was used for the surface distress surveys. Appendix A contains the LCMS zones that were defined in consultation with the survey contractor to align with the Ministry's Pavement Surface Condition Rating Manual. Transverse cracks were also defined as being within 10 degrees of perpendicular to the travel lane and crossing through 3 zones..

The initial distress QA results are summarized in Table 6.

Table 6: Distress QA Test Results (PDI)

Site	Series	Manual	Automated	Error	Std. Dev
1	1	6.7	7.5	7.2	7.4
2	1	6.0	7.4	7.3	7.3
3	1	5.4	6.7	7.1	7.4
4	1	5.4	6.7	6.6	6.6

While all sites passed the accuracy (+/- 1 PDI) and repeatability (+/- 1 standard deviation for 5 runs) criteria, there were some issues identified with specific distress types that required further attention. The detailed manual distress ratings, station by station comparison of the ratings by distress type and a series of pictures that were recorded at each site that showed a chalked the portion of the cracks that were at a higher severity that would trigger the 10% rule were provided to the survey contractor.

Over the course of the following month, there was a series of discussions related to the identified issues (see Appendix A). Table 7 summarizes the issues, resolutions and actions.

Table 7: Distress Rating Issues

Distress	Issue	Resolution	Action
Missed Alligator Cracking	AC classification algorithms have a minimum consolidated area parameter which is currently set to 1m2. This parameter could be adjusted to allow for smaller areas to be kept, but last year refined the AC detection to be less aggressive due to the results of the Prince George validation sites regarding multiple parallel cracks that were not interconnected. The current algorithms focus on a crack density measurement, but that can be tripped up by multiple parallel cracks as noted in the Prince George sites last year.	After review, agreed not to change the algorithms due to likely over-rating.	No action
Transverse Cracking	There were a number of cases where a crack labeled as transverse in the manual surveys was judged to be not transverse by the automated processing software because the crack was oriented more than 10 degrees away from transverse.	Agreed to maintain the 10% as agreed last year which seems more that reasonable for a true TC and liked the suggestion that it will be classified as a TC if continuous through 3 zones	No action Add requirement that TC must pass thru 3 zones to be rated as TC
	On the Hook Road site, several of the low severity transverse cracks were at the borderline of detection for the LCMS, resulting in inconsistent density results.	Understand as very light cracking and actually surprised how much was detected.	No action
Crack Severity	Reviewed the cracks highlighted where the LCMS calculated severity does not match the manual rating and in all cases the severity is correctly calculated based on the raw crack widths that are being reported by the LCMS algorithms	Manual survey used a 20mm wide rod that placed inside the top of the crack to determine whether >10% and did not measure the cumulative length exactly so could be slightly off. Could not be confirmed how Pavemetrics measures crack width.	During manual surveys, record exactly the crack lengths by severity for each crack
Missed Longitudinal Joint Cracking	LJC discrepancies are largely due to the vehicle positioning on the road.	The field crew have been instructed to ensure they test in the centre of lane the next time they visit these sites. Confirmed that LCJ is measured 10 cm beyond the inside edge of the centreline and this should be added to the manual.	Ensure QA manual update stresses this point.

Blind Site QA Testing and Results

The blind site QA testing is based on the comparison of manual field surveys of the pavement deterioration to the survey contractor's distress ratings. The manual surveys were conducted in June/July by the same Opus rater throughout the province to ensure consistent distress ratings. Table 8 lists the 2017 blind control sites.

Table 8: 2017 Survey QA Sites

No	Region	Control Site Name	Highway / Road	Lane
1	1	Cameron Taggart	01-AC-26	1
2	1	Fanny Bay	19A	1
3	2	Walker Bridge	3	1
4	2	Skaist River	3	3
5	2	Hwy 33	33	1
6	2	Hwy 95A	95A	1

The survey contractor was provided with mapping, GPS coordinates, kilometre chainages, nearby landmark references and digital images depicting the start location for each site. The results of the blind site QA are summarized in Table 9. As shown, the average difference in PDI for all 6 sites was 0.4, with all sites passing the accuracy criteria.

Table 9: Blind Site Survey QA Results – Surface Distress

Site	Manual PDI	Auto PDI	Error PDI	Comments
1	1.3	2.2	0.9	AC rated high in manual survey in few locations
2	4.5	4.3	0.1	More LJC rated by LCMS
3	4.0	4.6	0.6	-
4	4.1	3.9	0.1	more localized potholes rated by LCMS due to ravelling
5	6.4	6.4	0.0	-
6	5.1	5.7	0.6	very small areas of AC @ v170 and 210

Repeat of Initial QA Testing and Results

Tables 10 and 11 summarize the survey contractor's roughness / rutting re-testing results at the initial QA sites at approximately the mid-point and towards the end of the surveys. An additional re-testing was required in July, following the vehicle leaving the province for a short period of time.

Table 10: Production Survey Roughness Test Results (mm/m) – Mid and End Point

Date	Site	Manual	R1	R2	R3	R4	R5	Avg	Error	Std Dev
June 30	1	1.01	0.98	1.03	0.95	0.98	0.95	0.98	2.7%	0.03
	2	0.81	0.90	0.87	0.80	0.91	0.84	0.86	-6.7%	0.05
	3	1.04	0.99	1.02	0.98	1.00	1.17	1.03	0.8%	0.08
	4	2.39	2.45	2.50	2.50	2.38	2.46	2.46	-2.8%	0.05
July 13	1	1.01	1.01	0.88	0.81	0.88	0.85	0.91	0.87	13.8%
	2	0.81	0.81	0.75	0.73	0.74	0.73	0.74	0.74	8.9%
	3	1.04	1.04	0.98	0.96	0.96	0.96	0.95	0.96	7.5%
	4	2.39	2.39	2.26	2.31	2.35	2.39	2.35	2.33	2.4%
Sept 15	1	1.01	1.01	0.87	0.87	0.89	0.90	0.88	0.88	12.2%
	2	0.81	0.81	0.74	0.73	0.70	0.70	0.82	0.74	8.9%
	3	1.04	1.04	0.96	0.96	0.95	0.99	0.97	0.97	7.1%
	4	2.39	2.39	2.39	2.38	2.34	2.38	2.52	2.40	-0.5%

As shown, all sites passed the accuracy and repeatability criteria for the June 30 IRI re-testing. One site failed the repeatability criteria on the July 13 and September 15 retesting, which was confirmed to be due to vehicle tracking. While the outside wheel path is marked with white dots using spray paint for the initial QA, it was noted that by the time the retesting was performed, the paint was not visible. All sites passed the accuracy and repeatability criteria for rutting as shown in Table 11.

Table 11: Production Survey Rutting Test Results (mm) – Mid and End Point

Date	Site	Manual	R1	R2	R3	R4	R5	Avg	Error	Std Dev
June 30	1	5	4	4	5	4	5	4	1	0
	2	7	6	6	6	6	6	6	1	0.3
	3	4	3	3	4	4	4	3	0	1
	4	7	8	8	8	8	8	8	0	0
July 13	1	5	5	5	5	5	5	5	1	0
	2	7	7	6	6	6	6	6	1	0.2
	3	4	4	4	4	4	4	4	0	0
	4	7	8	8	8	8	8	8	-1	0
Sept 15	1	5	5	5	5	5	5	5	1	0
	2	7	7	7	7	6	6	6	1	0.3
	3	4	4	4	4	3	4	3	0	0
	4	7	8	8	8	8	8	8	0	0

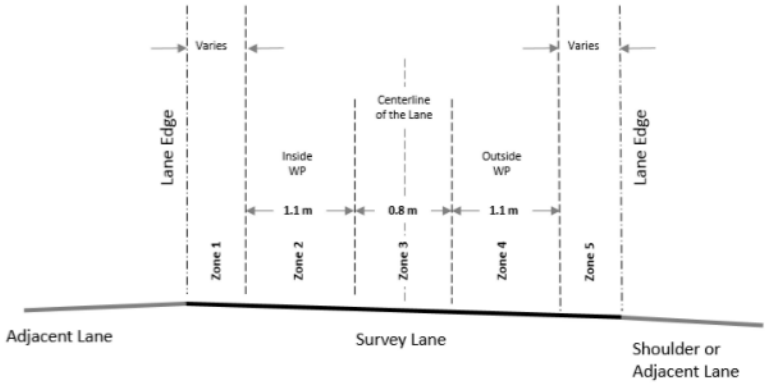
Summary

- The initial QA was advanced to mid-May this year at the request of the contractor. This introduced scheduling challenges for the advanced manual surveys and QA testing due to poor and unpredictable weather, which is typical at this time of year. It is recommended that the initial QA testing be undertaken in June, at the earlies for future surveys.
- All sites passed the roughness and rutting acceptance criteria for both accuracy and repeatability during the initial QA. Retesting of the initial QA sites during the production surveys at the mid-point and end-point also resulted in all sites passing both the accuracy and repeatability criteria, with the exception of 2 runs due to vehicle tracking and inability of the driver to see the painted wheel-path markings. It is recommended that a different process be considered for next year for marking the right wheel-path
- This was the second year that 3D LCMS, fully automated crack detection technology was used for the surface distress surveys. As in 2016, specific issues were identified during the initial and blind site surveys and were resolved working in consultation with the survey contractor, who was very cooperative and pro-active in response. The results from the QA showed the LCMS ratings to be sufficiently accurate for rating surface distresses present within the travel lane. This technology will continue to be deployed by survey contractors, replacing other methodologies.
- Based on the combined QA test results from 2016 and 2017, it is recommended that moving forward the Ministry only use the initial control sites for the surface distress QA and eliminate the blind site testing process. The 3D LCMS process is fully automated and based on knowledge gained over the past two years, as long as the initial control sites have a well-represented set of distress types, then the process can be sufficiently tested. It is recommended that the number of initial control sites be increased to five to ensure this is the case.
- The Ministry's Pavement Surface Condition Rating Guideline's LCMS survey specifications and QA procedures for LCMS surveys should be updated to incorporate findings from the 2016/2017 QA test results.

Appendix A – Surface Distress QA

1. LCMS Distress Zones

Figure 1: British Columbia Ministry of Transportation and Infrastructure LCMS Measurement Zones



Detected pattern cracks and longitudinal cracks (not transverse) are separated into five measurement zones across the survey lane consistent with AASHTO PP-67 (2016). The zone dimensions were defined based on field testing.

- Zone 1 - adjacent lane edge to the inside wheel path
- Zone 2 - inside wheel path
- Zone 3 – between the wheel paths
- Zone 4 - outside wheel path
- Zone 5 - outside wheel path to the outside lane edge

Note: For typical 3.6 m lane width, Zones 1 and 5 would each be 0.3 m wide

2. Initial QA – Detailed Site Comparison Results

Note: Black text is observation and Red text was response from the contractor

Site 1 - Hwy 5 NB:

- Missed LJC in 500200m (see Pics 1,2,4,6,7) and 350-500m (see Pics 14,15 – hard to see in paint) – some cracks not detected as not in sensor field of view
- TC at 50-100 m should be density 3 for high speed surveys as there are 3 cracks shown on crack map - crack at 66 m fails +/-10-degree orientation test and is classed as MLC, thus only 2 TC remain – density = 1
- TC at 150-200 m should be density 3 as there are 3 cracks shown on crack map map - crack at 163 m fails +/-10-degree orientation test and is classed as MLC, thus only 2 TC remain – density = 1
- Pls check severity of TC @ 124m as manual had high (see Pic5) – widest part of crack near west edge averages 15.4 mm, only 1 node above 20 mm – not enough to trigger 10% rule
- Pls check severity of TC @ 192m as manual had high (see Pic9) – widest parts of crack in LWP and in centre of lane average 17 mm and 19 mm, respectively

Site 2 Hwy 5 SB:

- manual survey had AC at 42m (see pic40 as quite clear) and this would bump LWT to high – algorithm initially detects AC, but subsequently discards instance as consolidated area is too small.
- LJC missed from 0-200m other than few spots and see run 5 which must have been closer to centerline – run 5 was closer to the centreline, this is a vehicle positioning issue

- See TetraTech ROW images 94 to 108 for missed LJC
- TC at 172m and 184m was rated as moderate (see Pics 24 and 25) – crack at 172 m is correctly assigned as moderate but is classed as MLC, not TC (see below), crack at 184 m has a few nodes greater than 5 mm width but not enough to trigger 10% rule
- TC at 415m, 433m and 442m rated as moderate – all three cracks are reported as predominantly < 5mm width with some isolated nodes above 5 mm
- TC at 467m rated as moderate (see Pic 39) – same as above
- TC at 150 to 200 m should be density 3 as there are 3 cracks shown on crack map - crack at 172 m fails +/-10-degree orientation test and is classed as MLC, thus only 2 TC remain– density = 1

Site 3 - Hook Road:

- Cannot see the yellow centerline markings? – appears that vehicle path is tracking a little too far to the right as previously noted, will instruct crew to ensure testing in centre of lane for re tests of these sites.
- Manual survey had moderate LJC from 0 -200m(see Pics 4,5,6,7)
- Manual survey had density 4/5 throughout other than 350-400m – middle series of crack maps shows more?
- LJC severity and density ratings varying from run to run – will vary considerably depending on where the crack is visible in the LCMS field of view, hopefully next set of data will consistently show centreline so LJC will be more consistent
- Manual survey had high severity LJC from 200-300m (see pic 9) – LCMS shows mostly width < 20 mm with isolated locations measuring above 20 mm, not sufficient to trigger 10% rule
- Manual survey had higher density ratings in and out of painted centerline (see Tetratech images for entire site) TC at 50-100 m should be density 3 as there are 3 cracks shown on crack map – density = 3 for the run matching the provided LCMS crack map, however on some other runs the crack at 76 m is not fully detected (see next comment)
- Inconsistent TC density ratings from 0-200m for runs 2,3, and 5 – there are a number of low severity TC on this site that appear to be on the borderline of detection for the LCMS system. In this case, the detection will depend on the micro-positioning of the LCMS scan lines. In one run, a scan line may hit the deepest portion of the crack resulting in detection, while on the next run, consecutive scan lines may pick up the leading and trailing edges of the crack resulting in a much lower calculated crack depth which may result in non-detection. The varying numbers of crack detected will result in inconsistent density calculations.

Site 4 - Shuswap Road:

- Missed pothole in centerline markings at 75m (see Pic 3) – likely Pavemetrics algorithms are ignoring this pothole because it is determined to be outside the lane (the Pavemetrics algorithms define the lane edge at the inner edge of the painted line). For some distresses, there is an override to detect distresses outside the lane (and we enable all these parameters where available), but there are separate parameters to set for each distress instead of one parameter to set for all distress types. It is likely that there is currently no override parameter for potholes because no one has yet asked for it.
- Difficult site with lighting conditions and fine AC
- AC is along wheel track and sometimes right to the edge resulting in both being bumped to high severity where present – I have looked at AC algorithm in detail for this site. AC is initially being detected along portions of the right WP but much of it is subsequently being filtered out in the consolidation of area portion of the algorithm. I can experiment by reducing the minimum consolidated area parameter but am concerned that it may reintroduce AC where not actually present (see discussion of 2016 prequalification site data)
- Missed AC in outside WP from 150-250m, 300-500m, 400-500m (see Pics 9,10,11,12,13,15, 23, 25,26) – looks like AC on crack maps?

2016 RPMS Survey – Surface Distress Initial QA Review Summary and Tracker

1. Alligator Cracking(AC)

Item	Discussion
Initial Observation	Alligator cracking is being overly rated – see Site 1 has sections rated as AC where just multiple cracks now and not yet reached alligator. I had Rhett go out yesterday and take pictures as an additional reference for you. We ended up changing two sections to AC (300-400) based on 10% rule as alligator pattern starting, but for the remaining stations it looks to be just multiple cracks. Want to make sure we nail down the AC as this is the highest weighted distress type in the PDI model calculations.
TetraTech Response	a) We do not have an automated algorithm capable of recognizing the distinctive pattern of alligator cracking. Our processing approach to detect algorithm is largely based on measurements of crack density, and this has proved quite effective for detecting the presence of alligator cracking. We have a few parameters that we can tune, but I have not yet looked into this. b) There are a few cases in these sites where LWP or TC cracks have been rated as moderate in the manual survey, but have been bumped to high severity in the LCMS survey due to the detection of alligator cracking. Further tuning of the alligator cracking algorithm will, of course, resolve these discrepancies in the LWP and TC ratings.
BCMoT Follow-up	Look forward to seeing results of fine tuning as this is really important. Please advise when it is completed and you are able to reprocess Sites 1 and 3, which had AC and Site 2 which did not, but was rated. We also have a few blind sites this year with AC, that will assist.
TetraTech Response	We have decreased the sensitivity of the alligator crack detection routines which has eliminated some of the AC detection differences. However, before locking off the parameters, we should look at the examples on the blind site sections to ensure they also are correctly rated. There is still one area on site 2 (LWP @ 320 m) that registers as AC. At this location, there is a note on Rhett's crack map "Not really cracked, more ravelled". It appears that the crack detection routines are finding crack events in the ravelling and the volume of cracks is triggering the AC classification (and I verified that the measured parameters are well above the trigger level in this case, so minor tweaking will not address this)
BCMoT Follow-up	Agree and understand – this would very likely be picked up as AC by visual rating as well.

2016 RPMS Survey – Surface Distress Initial QA Review Summary and Tracker

2. Longitudinal Joint Crack (LJC)

Item	Discussion
Initial Observation	Not sure if all LJC within 0.3m of centerline getting picked up (see Site 1 @ 350-450, Site 2 @ 400-450)
TetraTech Response	a) In reviewing the data from Sites 1 and 2 at the locations you noted, I observe that the LJC is on the outside edge of the painted line. Looking at the LCMS data, it appears that this location is outside the LCMS 4.0 m field-of-view for many of the data collection runs. While in Prince George, we had discussed with you the possibility that the LCMS may not be able to see the 0.3 m beyond the lane borders in both directions, and that as a result some of the LJC or PEC may be missed. In the Site 1 and Site 2 runs, the vehicle positioning is such that the line is only just visible in the LCMS field-of-view, so the LJC cracks are not visible.
BCMoT Follow-up	a) Yes, we anticipated that it would not be possible to pick up everything beyond the 0.3m, but were hoping that cracks on the line or just adjacent would be possible given the measured lane widths. In comparing the LCMS to manual ratings, we checked for specific locations that were missed or where the density level from the LCMS was lower by >2 density levels. Attached are images of specific locations in a zip file called "Missed LJC". As shown, almost all of the cracks were on or just beyond the painted centerline, within about 0.1m, but not being picked up. We also took measurements of the distance from the outside of the centreline to outside of fogline at these locations (Site 1 – 3.75 to 3.80 m, Site 2 – 3.75 to 3.80 m) – pls see zip file "July31". With the 4.0 m filed of view, I would have anticipated that these cracks would still be detected, but clear from LCMS mapping this was not the case. Is it fair to conclude that generally with vehicle tracking, the 4.0 metre range will tend to be orientated more towards the fogline than the centerline (images all look to pick up around 300mm outside the fogline) and crack must be within or inside the painted line portion or ithey will not generally be picked up? b) Can you also please check Site 4, as we could not detect any LJC in the last 100 metres of the site from 400-500 other, whereas LCMS had from 1-3 to 2-4 depending upon the run. In looking at the LCMS crack map, there are colored lines noted at 3.60 m, which just appears to the line marking degradation perhaps?
TetraTech Response	a) Our drivers are asked to attempt to drive the centre of lane, which would equally cover both edges of the travel lane. However, we have come to realise that a small amount of variance is expected due to a number of factors including level of rutting (challenging to hold to the centre of road in deep ruts), intensity of opposing traffic flow (driver tends to favour right side on high volume roads), proximity of road edge (driver tends to favour left side to stay away from road edge), etc. b) The LCMS is detecting a "crack" on the edge of the left line of the double solid paint line. I think this is an edge effect scenario, where there is not enough of the line visible for the system to identify it as such, then the thickness of the paint coupled with the inability to establish the plane of the road on the left side causes the system to identify it as a crack. We have seen this before on previous versions of the Pavemetrics LCMS crack detection routines, but it is much less prevalent than it used

2016 RPMS Survey – Surface Distress Initial QA Review Summary and Tracker

Item	Discussion
	to be. We continue to feed this information back to Pavemetrics so that they can incrementally improve their algorithms.
BCMoT Follow-up	a) Understand b) This is somewhat of a concern, more so than (a) as involves false readings – should be monitored specifically on upcoming blind sites. We also intend to do a comparison of 2016 to 2014 surveys to see if anything significant pops out.

2016 RPMS Survey – Surface Distress Initial QA Review Summary and Tracker

3. Pavement Edge Cracking (PEC)

Item	Discussion
Initial Observation	Severity ratings are not consistent and may be due to those painted cracks, also see sealed cracks on Site 4 were all rated as moderate and Site 5, which has no paved shoulder had mod/sev from 300-450 where manual survey had none (perhaps picking up pavement edge?)
TetraTech Response	a) On the shoulder-less sites, the algorithm currently is picking up some cracking on the edge of pavement because we have told it to search 0.3 m beyond the edge of the lane. My initial thoughts are that this should be fairly easy to rectify by modifying the rules to differentiate painted line edges from edge of pavement (and potentially curbs) where the search should stop at the lane edge. b) On the sites with paved shoulders, I identified a bug last week in the LCMS sealed crack detection routines, whereby sealed cracks are not being detected outside the lane lines, even though I have explicitly set a parameter to request this. I have identified this issue to the manufacturer, and they are working on a solution but we do not expect to be able to implement this solution in time for the 2016 data processing.
BCMoT Follow-up	a) Understand –sounds reasonable approach – will be keen to see if this addresses Sites 3/4/5 discrepancies. b) Please see LCMS results for Site 4 – PEC is being detected throughout the site, but rated at moderate when it is clearly fully sealed (see pictures).
TetraTech Response	b) Two things happening here: a. In the first part of the site there are a few false detections along the outside edge of the fog line. These appear to be at locations where a new fresh paint line has been applied slightly offset from the old faded line and it appears that the double paint edge is confusing the crack detection routine. b. There are also a few sealed cracks outside the fog line which are not getting detected due to the bug in Pavemetrics library that I discussed with you earlier, but the small breaks in the seal are being detected as open cracks. As only the open portion is being detected, the severity calculation is being biased toward the moderate rating.
BCMoT Follow-up	Understand

4. Sealed Cracks

Item	Discussion
Initial Observation	Will need to look at sealed cracks as some being rated as moderate (see Site 4 TC/MLC)
TetraTech Response	a) Anything identified as a sealed crack by the LCMS crack detection routines is automatically identified as a low severity crack. In cases where the rating is moderate, it is because the crack detection routines have identified open cracks greater than 5 mm wide to a sufficient extent to invoke the 10% rule. b) Please review the Site 4 manual crack map at station 290-300 m. If I understand Rhett's notation correctly, he has rated the MLC here as moderate severity, suggesting the seal has been broken.
BCMoT Follow-up	a) We rechecked Site 4 and the site had been recently resealed so cannot confirm whether 10% of cracks wee open. Are you able to actually go into the calculations for individual cracks for each 50 metre section to see how much has been identified as open? b) Yes, 250-300m should have been rated as moderate overall, as that 13m crack, bumps rest of the low severity MLC up with 10% rule. Stationing may also be a reason as well for the adjacent sections also being rated at moderate by the LCMS – if you look at the preceding and following sections, the MLC is a continuation of the MLC in 250-300m.
TetraTech Response	a) It should be fairly easy to estimate that from the plots. For example there is a 4-5 m open crack at 25m that the LCMS has measured as >5mm (coloured blue on the plot) so that is sufficient to rate the LWT as. Same thing at 90 m. You provided us with pictures of both these cracks. I will double check the logic to verify that it is working correctly. Also, can you please take a look at 420m. In the mid lane region, there are two sealed cracks which overlap for about 1 m. While in this case the overlap is too short to matter (i.e. less than 10%), if the overlap of these cracks were longer would this qualify as multiple cracks with an automatic promotion to moderate severity, even though the cracks are sealed?
BCMoT Follow-up	No

2016 RPMS Survey – Surface Distress Initial QA Review Summary and Tracker

5. Potholes (POT)

<table>
<tr><th>Item</th><th>Discussion</th></tr>
<tr><td>Initial Observation</td><td>Will need to look at the Potholes algorithm (see Site 3 ratings)</td></tr>
<tr><td>TetraTech Response</td><td>a) We have implemented the potholes algorithm using the parameters specified in the rating manual (p43) based on the pothole depths and surface areas reported by the manufacturer's processing algorithms. I identified a few cases where the LCMS algorithms had identified potholes that only just exceeded the minimum surface area – these would likely have been judged as too small in the manual survey. One thing I noted was that there was no minimum depth specification for low severity potholes, so I will add a minimum depth threshold of 15 mm (unless you prefer a different number).
b) I noted that the manual survey used a five stage density scale whereas the rating manual calls for a three stage (1-3-5) density scale for network surveys.</td></tr>
<tr><td>BCMoT Follow-up</td><td>a) I can see with irregular shapes, that algorithm is likely more accurate in determining 175 cm2 versus visually. Depth is <25mm for low severity, 25-50mm for moderate and >50 for high (see page 43). There is also a typo in the manual however – moderate severity should be 175 cm2 to 250 cm2 for area.
b) Yes, that was our mistake –should have been density 3 for the two sections where 2/4 were indicated, which matched with LCMS and had no bearing on overall PDI for the site as still 3.7.</td></tr>
<tr><td>TetraTech Response</td><td>a) Can you clarify the pothole rules a little further? We have two independent measures – area and depth – which affect severity. I am assuming that in cases where the independent measures fall into different severity ranges we choose the more severe rating. For example, if we have a pothole that is 200cm2 in area (MODERATE) but only 20 mm in depth (LOW) then the final rating of that pothole would be MODERATE.</td></tr>
<tr><td>BCMoT Follow-up</td><td>Please use the following severity rating criteria as per the 2012 guide, which will result in JUST the depth being used as the criteria for assigning severity.
<table><tr><th>Level</th><th>Description</th></tr><tr><td>Low</td><td>Pothole > 175 cm² in area and less than 25mm deep. (~15cm Ø)</td></tr><tr><td>Moderate</td><td>Pothole > 175 cm² in area and 25 to 50mm deep. (~15cm Ø)</td></tr><tr><td>High</td><td>Pothole > 175 cm² in area and greater than 50mm deep. (~15cm Ø)</td></tr></table>
An updated version of the Ministry's rating condition guide will be posted shortly with the change.</td></tr>
</table>

ORACLE
Transportation and Infrastructure
Requestor: HANNWADE

Purchase Order Detail Report

Report Date:29-MAY-2018 16:30

Report Parameters	
Sort 1	Service Line
Sort 2	Project
Sort 3	Responsibility
Title	
Entered Date From	2010/04/01
To	2018/05/29
Account From	
To	
Buyer Name	
Vendor From	
To	
Header Status	
Line Status	
Show Invoices?	Yes
Category From	
To	
PO Numbers From	711CS4925A
To	711CS4925A
Display Distribution Supplier?	Yes

Purchase Order Detail Report

Service Line	62165 Betterments Program				
Project	5501007 711 RPMS - Operating and Betterments				
Responsibility	55711 711 - Snr Rehab & Constr & Pavement Project Manager				
PO Number	**711CS4925A**	**Creation Date**	2018/03/15	**Procurement Process**	Competitive process among selected vendors (Construction and Services under $75,000)
Rev	1	**Revised Date**	2018/04/25	**Trade Agreement Code**	Purchase below applicable AIT threshold
Buyer	GENTILE, ALICIA ELBA	**Status**	Approved	**PO Class**	TH-CS
Vendor	TETRA TECH CANADA INC.	**PO Total**	1,266,301.24	**Start Date**	2018/02/09
Site	001			**End Date**	2018/03/31
Address	1000-885 DUNSMUIR ST VANCOUVER BC V6C1N5	**Type**	Standard Purchase Order	**Original Total Amount**	792,000.00
Doc. Control				**Amended Total**	1,584,000.00

Line	Line Type	Category	Status	Cancelled?	UOM	Quantity	Price	Item Description
1	Receipt - Amount	BN.BN02	OPEN	N	$$	1,266,301.24	1.00	AMDT #1 - COMPANY NAME CH

Ship #	Charge Account		PO Line Amount	Amount Invoiced	Tax Code	Tax Amount	Line Balance
1	s.21		1,266,301.24	264,640.00		0.00	1,001,661.24
		Line Totals:	1,266,301.24	264,640.00		0.00	1,001,661.24

Invoice Batch Number	Invoice Number	Invoice Date	Invoice Status	Line #	Dist #	Line Amount
TH180601CRD	60544137	2017/09/28	Validated	1	1	131,361.00
TH180601CRD	6560203	2018/02/22	Validated	1	1	133,279.00
			Total Amount Invoiced:			264,640.00

	PO Amount	Amount Invoiced	Balance
Total Responsibility: 55711 711 - Snr Rehab & Constr & Pavement Project Manager	1,266,301.24	264,640.00	1,001,661.24
Total Project: 5501007 711 RPMS - Operating and Betterments	1,266,301.24	264,640.00	1,001,661.24
Total Service Line: 62165 Betterments Program	1,266,301.24	264,640.00	1,001,661.24

End of Report

Purchase Order Detail Report

Report Parameters	
Sort 1	Service Line
Sort 2	Project
Sort 3	Responsibility
Title	
Entered Date From	2010/04/01
To	2018/05/29
Account From	
To	
Buyer Name	
Vendor From	
To	
Header Status	
Line Status	
Show Invoices?	Yes
Category From	
To	
PO Numbers From	711CS4925
To	711CS4925
Display Distribution Supplier?	Yes

Purchase Order Detail Report

Service Line	62165 Betterments Program				
Project	5501007 711 RPMS - Operating and Betterments				
Responsibility	55711 711 - Snr Rehab & Constr & Pavement Project Manager				
PO Number	**711CS4925**	**Creation Date**	2016/04/15	**Procurement Process**	Open competitive process
Rev	3	**Revised Date**	2018/03/15	**Trade Agreement Code**	Purchase subject to Agreement on Internal Trade (AIT)
Buyer	HALIDAY, TODD J	**Status**	Approved, Finally Closed	**PO Class**	TH-CS
Vendor	TETRA TECH EBA INC.	**PO Total**	317,698.76	**Start Date**	2016/04/01
Site	003			**End Date**	2018/03/31
Address	1000-10TH FLOOR VANCOUVER BC V6C1N5	**Type**	Standard Purchase Order	**Original Total Amount**	792,000.00
Doc. Control	Finally closed to be re-opened under new company name			**Amended Total**	

Line	Line Type	Category	Status	Cancelled?	UOM	Quantity	Price	Item Description
1	Receipt - Amount	BN.BN02	FINALLY CLOSED	Y	$$	272,810.10	1.00	FY 16/17 - AS AND WHEN REQUI

Ship #	Charge Account	PO Line Amount	Amount Invoiced	Tax Code	Tax Amount	Line Balance
1	s.21	272,810.10	272,810.10		0.00	0.00
	Line Totals:	272,810.10	272,810.10		0.00	0.00

Invoice Batch Number	Invoice Number	Invoice Date	Invoice Status	Line #	Dist #	Line Amount
TH170695KKM	60516186	2016/10/14	Validated	1	1	211,163.20
TH170811TJH	60523248	2016/12/22	Validated	1	1	6,280.10
TH171018CRD	6058319	2017/03/10	Validated	1	1	55,366.80
			Total Amount Invoiced:			272,810.10

Line	Line Type	Category	Status	Cancelled?	UOM	Quantity	Price	Item Description
2	Receipt - Amount	BN.BN02	FINALLY CLOSED	Y	$$	44,888.66	1.00	FY 17/18 - AS AND WHEN REQUI

Ship #	Charge Account	PO Line Amount	Amount Invoiced	Tax Code	Tax Amount	Line Balance
1	s.21	44,888.66	44,888.66		0.00	0.00
	Line Totals:	44,888.66	44,888.66		0.00	0.00

Invoice Batch Number	Invoice Number	Invoice Date	Invoice Status	Line #	Dist #	Line Amount
TH180184CRD	60536636	2017/06/23	Validated	1	1	44,888.66
TH180308CRD	60544137	2017/09/28	Cancelled	1	2	-131,361.00
TH180308CRD	60544137	2017/09/28	Cancelled	1	1	131,361.00
			Total Amount Invoiced:			44,888.66

Purchase Order Detail Report

	PO Amount	Amount Invoiced	Balance
Total Responsibility: 55711 711 - Snr Rehab & Constr & Pavement Project Manager	317,698.76	317,698.76	0.00
Total Project: 5501007 711 RPMS - Operating and Betterments	317,698.76	317,698.76	0.00
Total Service Line: 62165 Betterments Program	317,698.76	317,698.76	0.00

End of Report