

Apex Annual Water Report 2016



DRINKING WATER SYSTEM ANNUAL REPORT

| Reporting Period: | January 1, 2016- December 31, 2016 |
|---------------------------------------|------------------------------------|
| Water System Name: (Facility Name) | Apex Mountain Resort Water System |
| Water Supplier Name: (as per permit) | Apex Mountain Resort Water System |
| Water System Owner: | Apex Mountain Resort |
| Email Address: | shawn@apexresort.com |
| Phone Number: | 250 292-8222 |

Bacteriological Testing Completed During This Reporting Period:

Bacteriological Results attached to this report –Yes

Immediate Reporting Standard Failure (E. coli positive test result)

Immediate Reporting Standard Failure (IRSF) recorded - No positive E. coli test in 2016.

Chemical Testing Completed During This Reporting Period:

Most recent chemical analysis attached to this report – No

Chemical Parameters Measured Above (exceeding) the Guidelines:

Chemical parameters tested exceed the Maximum Acceptable Concentrations (MAC) or Aesthetic Objectives – No

ADDITIONAL TESTING - Yes

| Description of parameter & reason for sampling | Comments |
|--|---|
| February 11, 2016 | Raw water Sample from filtration, unfiltered lake water |
| September 19, 2016 | Raw water Sample from filtration, unfiltered lake water |
| | |

WATER QUALITY COMPLAINTS – NONE

| Date | Water quality complaint | Corrective action taken |
|------|----------------------------------|-------------------------|
| | (i.e. taste, odour, colour, etc) | |
| | | |
| | | |
| | | |

OPERATION PROBLEMS -

| Incident Date | Problem | Actions Taken | Corrected By |
|---------------|------------------|---------------------|---|
| March 6, 2016 | Water main break | Boil water advisory | Water main repaired. 10 feet of pipe was replaced in lower system |
| | | | |

Water System Description

| Sources of Raw Water |
|----------------------|
| Groundwater |
| Surface water |
| Other (specify) |

| ✓ | Does the drinking | Water System | have Disinfection? | x Yes | No |
|---|-------------------|--------------|--------------------------|-------|----|
| | Doco the armining | trace. Oyoce | i iiave bisiiii eetieiii | | |

| Disinfe | ection Methods | | |
|----------|--|--------|----|
| ✓ | Chlorination | | |
| | Ultraviolet light | | |
| | Ozonation | | |
| | Other (specify) | | |
| Does tl | ne drinking Water System have Filtration | _x Yes | Nc |
| | | | |
| Filter T | vpe | | |

- ✓ Cartridge filter (1 micron, 5 micron, 10 micron)
- ✓ Sand Filtration

Reverse Osmosis

Carbon Filter

Other (specify)

MAJOR EXPENSES INCURRED DURING THE PERIOD COVERED BY THE REPORT

| Major Expenses | Details | | |
|---------------------------------|--|--|--|
| Water main repair | Replacement of cracked water main on the lower | | |
| | system | | |
| Water Valve repair | At the intersection of Whitetail Rd and Apex | | |
| | Mountain Rd | | |
| Installed two sampling stations | One was installed at the end of Cahill Rd. the | | |
| | other was installed at Clearview Rd | | |

ADDITIONS / CHANGES TO THE SYSTEM THAT HAVE BEEN MADE FOR THIS REPORTING PERIOD

| Additions/Changes | Details |
|--|---------|
| Shawn Whitty received his Level 2 Filtration | |
| certification | |
| | |
| | |

Water Samples 2014

| Date Sampled | Location | Chlorine Free | Coliforms | E.Coli |
|--------------|----------|---------------|-----------|--------|
| | | | Total | |

| January 6, 2016 | Apex Maintenance | .91 | <1 | <1 |
|-------------------------------|-----------------------------|------|----|----|
| 3411441 7 0, 2010 | Shop | .51 | | 12 |
| January 10, 2016 | Apex Office | .61 | <1 | <1 |
| January 21, 2016 | Apex Filtration Plant | 1.09 | <1 | <1 |
| January 28, 2016 | Apex Maintenance | 1.10 | <1 | <1 |
| | Shop | | | |
| February 11, 2016 | Raw Lake Water | none | <1 | <1 |
| February 11, 2016 | Apex Filtration Plant | 1.37 | <1 | <1 |
| February 18, 2016 | Apex Maintenance | 1.20 | <1 | <1 |
| | Shop | | | |
| February 25, 2016 | Apex Administration | .48 | <1 | <1 |
| | Office | | | |
| February 29, 2016 | Apex Maintenance | 1.12 | <1 | <1 |
| | Shop | | | |
| March 03, 2016 | Apex Filtration Plant | 1.03 | <1 | <1 |
| March 07, 2016 | Apex Maintenance | 1.43 | <1 | <1 |
| | Shop | | | |
| March 07, 2016 | 123 Clearview Cres | 1.21 | <1 | <1 |
| March 07, 2016 | 104 Cahill Cres | .43 | <1 | <1 |
| March 17, 2016 | Apex Administration | .79 | <1 | <1 |
| | office | | | |
| March 24, 2016 | Apex Maintenance | 1.14 | <1 | <1 |
| 14 1 24 2046 | Shop | 70 | | |
| March 31, 2016 | Apex Maintenance | .70 | <1 | <1 |
| Amril 7, 2016 | Shop | 00 | -1 | -1 |
| April 7, 2016 | Apex Administration office | .80 | <1 | <1 |
| April 14, 2016 | Apex Filtration | 1.05 | <1 | <1 |
| April 14, 2016 April 18, 2016 | Apex Maintenance | .86 | <1 | <1 |
| April 16, 2016 | Shop | .00 | \1 | \1 |
| April 26, 2016 | Apex Administration | .32 | <1 | <1 |
| April 20, 2010 | office | .52 | | \1 |
| May 7, 2016 | Apex Maintenance | .44 | <1 | <1 |
| 111477,2010 | Shop | | 12 | 12 |
| May 12 | | | -1 | -1 |
| May 12 | Apex Maintenance | | <1 | <1 |
| May 19, 2016 | Shop Apex Filtration Plant | 1.25 | <1 | <1 |
| May 18, 2016 | <u>'</u> | | <1 | - |
| May 26, 2016 | Apex Administration office | .25 | <1 | <1 |
| June 2, 2016 | Apex Filtration Tank 4 | 1.61 | <1 | <1 |
| June 9, 2016 | Apex Administration | .21 | <1 | <1 |
| | Office | | | |
| June 16, 2016 | Apex Maintenance | .74 | <1 | <1 |
| | Shop | | | |
| June 20, 2016 | Apex Administration | .43 | <1 | <1 |
| | office | | | |

| June 28, 2016 | Apex Maintenance Shop | .64 | <1 | <1 |
|--------------------|----------------------------|---|----|----|
| July 14, 2016 | Apex Maintenance Shop | Sample did not arrive in time | | |
| July 21, 2016 | Apex Filtration | 1.15 | <1 | <1 |
| July 26, 2016 | Apex Maintenance Shop | 1.05 | <1 | <1 |
| August 2, 2016 | Apex Maintenance Shop | .64 | <1 | <1 |
| August 11, 2016 | Did not arrive in time | | | |
| August 17, 2016 | Apex Administration office | .21 | <1 | <1 |
| August 22, 2016 | Apex Maintenance Shop | unavailable | <1 | <1 |
| September 1, 2016 | Apex Administration Office | .21 | <1 | <1 |
| September8, 2016 | Apex Maintenance Shop | .72 | <1 | <1 |
| September 12, 2016 | Apex Filtration | 1.32 | <1 | <1 |
| September 19, 2016 | Apex Filtration Tank #4 | 3.22 | <1 | <1 |
| September 19, 2016 | Raw Lake Water | N/A | <1 | <1 |
| October 6, 2016 | Apex Maintenance Shop | Sample did not arrive in time | | |
| October 13, 2016 | Apex Administration Office | 0.03 | <1 | <1 |
| October 20, 2016 | Apex Maintenance Shop | .54 | <1 | <1 |
| October 26, 2016 | Apex Administration Office | .11 | <1 | <1 |
| November 3, 2016 | Apex Filtration Plant | 0.99 | <1 | <1 |
| November 17, 2016 | Apex Maintenance Shop | 1.42 | <1 | <1 |
| November 24, 2016 | Apex Filtration Plant | 1.32 | <1 | <1 |
| December 9, 2016 | Apex Maintenance Shop | 1.56 | <1 | <1 |
| December 15, 2016 | Apex Administration Office | 1.11 | <1 | <1 |
| December 21, 2016 | Apex Maintenance Shop | 1.45 | <1 | <1 |
| December, 2016 | Apex Administration Office | Due to Christmas holidays closure and shipping schedule shipping not possible for last week of December | | |

MONTHLY WATER VOLUMES

| Month | Creek Gallons | Lake Gallons |
|-----------|---------------|--------------|
| January | 0 | 1377393 |
| February | 0 | 1245043 |
| March | 0 | 1320068 |
| April | 0 | 583291.9 |
| May | 0 | 297986.1 |
| June | 0 | 427430.4 |
| July | 0 | 479208.1 |
| August | 0 | 508531.2 |
| September | 0 | 390182.1 |
| October | 0 | 715113.7 |
| November | 0 | 435883.9 |
| December | 0 | 1600090 |

IMPROVEMENTS/REMEDIAL ACTIONS

Improvements or remedial actions required by the Drinking Water Officer

| Required action | Completion date |
|-----------------|-----------------|
| UV treatment | In future |

FUTURE IMPROVEMENTS

Future water system improvements planned listed below:

| Future Plans | Planned Completion date | |
|------------------------------------|-------------------------|--|
| UV treatment | future | |
| GPS mapping of all valve locations | Summer 2017 | |
| SCADA | Potential Summer 2017 | |
| | | |

EMERGENCY RESPONSE PLAN CAN BE OBTAINED BY APEX MOUNTAIN RESORT OFFICE

Updated in March 2016

METHOD USED TO NOTIFY USER OF ANNUAL REPORT

This is available at Apex Resort Mountain Main Office and the website