Sample\_ID: WYDEQ20LV001

# WYOMING DEQ PHYTOPLANKTON BENCHSHEET

RAI Sample: WYDEQ20LV001 WYDEQ #: TCE-20-175-1PVD

Waterbody and Location: Brooks Lake- Outlet Quad

**Collector/Agency:** Eric Hargett/WYDEQ **Analyst/Laboratory:** him /Rhithron

**Date Collected:** 6/23/2020 **Analysis Date:** 1/14/2021

**Dilution/Concentration factor:** 0.015 **Concentration:** 1.5:100 Concentratio

**Subsample Volume (L):** 0.1 **Original Volume (L):** 0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	8	8	8	0	9780	9780	9780	0	9780
Gomphonema	1	1	1	0	1222	1222	1222	0	1222
Nitzschia	1	1	0	1	1222	1222	0	1222	1222
Stephanodiscus	1	1	1	0	1222	1222	1222	0	1222
Chlorophyta									
Chlamydomonas	30	30	30	0	36675	36675	36675	0	36675
Monoraphidium	1	1	1	0	1222	1222	1222	0	1222
Oocystis	11	44	44	0	13447	53790	53790	0	53790
Planktosphaeria	1	1	1	0	1222	1222	1222	0	1222
Cryptophyta									
Cryptomonas	41	41	41	0	50122	50122	50122	0	50122
Cyanophyta									
Dolichospermum	1	4	4	0	1222	4890	4890	0	4890
Pyrrhophyta									

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Sample\_ID: WYDEQ20LV001

### WYOMING DEQ PHYTOPLANKTON BENCHSHEET

WYDEQ #:

RAI Sample: WYDEQ20LV001

TCE-20-175-1PVD

Waterbody and Location: Brooks Lake- Outlet Quad

**Collector/Agency:** Eric Hargett/WYDEQ **Analyst/Laboratory:** him /Rhithron

**Date Collected:** 6/23/2020 **Analysis Date:** 1/14/2021

**Dilution/Concentration factor:** 0.015 **Concentration:** 1.5:100 Concentratio

Subsample Volume (L): 0.1 Original Volume (L): 0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Peridinium	21	21	21	0	25672	25672	25672	0	25672
TOTAL:	117	153	152	1	143,028	187,039	185,817	1,222	187,039

100 FOV of counted for maximum effort. 100ml sample concentrated to 1.5ml DCF=0.015 Small flagellates present. Large and rare at 20x for 20 FOV Dolichospermum(natural unit=1 cell count=20)

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Sample\_ID: WYDEQ20LV002

# **WYOMING DEQ PHYTOPLANKTON BENCHSHEET**

**RAI Sample:** 

WYDEQ20LV002

WYDEQ #:

TCE-20-203-1PVD

Waterbody and Location: Brooks Lake- Outlet Quad

Collector/Agency:

Eric Hargett/WYDEQ

**Analyst/Laboratory:** 

him /Rhithron

**Date Collected:** 

7/21/2020

**Analysis Date:** 

1/15/2021

**Dilution/Concentration factor:** 0.015

**Concentration:** 

1.5:100 Concentratio

**Subsample Volume (L):** 0.1 Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Asterionella	22	22	19	3	26895	26895	23227	3667	26894
Aulacoseira	1	5	5	0	1222	6112	6112	0	6112
Navicula	5	5	3	2	6112	6112	3667	2445	6112
Nitzschia	3	3	1	2	3667	3667	1222	2445	3667
Stephanodiscus	27	27	27	0	33007	33007	33007	0	33007
Ulnaria	1	1	1	0	1222	1222	1222	0	1222
Cryptophyta									
Cryptomonas	9	9	9	0	11002	11002	11002	0	11002
Cyanophyta									
Aphanocapsa	1	30	30	0	1222	36675	36675	0	36675
Euglenophyta									
Undetermined Euglenophyte	1	1	1	0	1222	1222	1222	0	1222
Rotifera									
Polyarthra	1	1	1	0	1222	1222	1222	0	1222

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Sample\_ID: WYDEQ20LV002

### WYOMING DEQ PHYTOPLANKTON BENCHSHEET

RAI Sample: WYDEQ20LV002

**WYDEQ #:** TCE-20-203-1PVD

Waterbody and Location: Brooks Lake- Outlet Quad

**Collector/Agency:** Eric Hargett/WYDEQ **Analyst/Laboratory:** him /Rhithron

**Date Collected:** 7/21/2020 **Analysis Date:** 1/15/2021

**Dilution/Concentration factor:** 0.015 **Concentration:** 1.5:100 Concentratio

Subsample Volume (L): 0.1 Original Volume (L): 0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
TOTAL:	71	104	97	7	86,793	127,136	118,578	8,557	127,135

100 FOV of counted for maximum effort. 100ml sample concentrated to 1.5ml DCF=0.015 Small flagellates present. Large and rare at 20x for 20 FOV Planktosphaeria (1)

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Sample\_ID: WYDEQ20LV003

### WYOMING DEQ PHYTOPLANKTON BENCHSHEET

WYDEQ #:

RAI Sample: WYDEQ20LV003

TCE-20-238-2PVD

Waterbody and Location: Brooks Lake- Outlet Quad

**Collector/Agency:** Eric Hargett/WYDEQ **Analyst/Laboratory:** him /Rhithron

**Date Collected:** 8/25/2020 **Analysis Date:** 1/15/2021

**Dilution/Concentration factor:** 0.015 **Concentration:** 1.5:100 Concentratio

**Subsample Volume (L):** 0.1 **Original Volume (L):** 0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	38	38	38	0	46455	46455	46455	0	46455
Stephanodiscus	64	64	62	2	78240	78240	75795	2445	78240
Chlorophyta									
Oocystis	1	1	1	0	1222	1222	1222	0	1222
Cryptophyta									
Cryptomonas	4	4	4	0	4890	4890	4890	0	4890
Cyanophyta									
Aphanizomenon	103	2575	2575	0	125917	3147922	3147922	0	3147922
Aphanocapsa	30	3600	3600	0	36675	4400978	4400978	0	4400978
TOTAL:	240	6,282	6,280	2	293,399	7,679,707	7,677,262	2,445	7,679,707

100 FOV of counted for maximum effort. 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV=0

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Sample\_ID: WYDEQ20LV004

# WYOMING DEQ PHYTOPLANKTON BENCHSHEET

RAI Sample: WYDEQ20LV004 WYDEQ #: TCE-20-266-2PVD

Waterbody and Location: Brooks Lake- Outlet Quad

**Collector/Agency:** Eric Hargett/WYDEQ **Analyst/Laboratory:** him /Rhithron

**Date Collected:** 9/22/2020 **Analysis Date:** 1/15/2021

**Dilution/Concentration factor:** 0.015 **Concentration:** 1.5:100 Concentratio

Subsample Volume (L): 0.1 Original Volume (L): 0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	20	20	20	0	37615	37615	37615	0	37615
Stephanodiscus	42	42	42	0	78992	78992	78992	0	78992
Cyanophyta									
Aphanizomenon	234	5850	5850	0	440098	11002445	11002445	0	11002445
Aphanocapsa	3	600	600	0	5642	1128456	1128456	0	1128456
Dolichospermum	1	60	60	0	1881	112846	112846	0	112846
TOTAL:	300	6,572	6,572	0	564,228	12,360,354	12,360,354	0	12,360,354

FOV=65 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV Cryptomonas (2)

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Sample\_ID: WYDEQ20LV005

# WYOMING DEQ PHYTOPLANKTON BENCHSHEET

RAI Sample: WYDEQ20LV005 WYDEQ #: TCE-20-266-3PVD

Waterbody and Location: Brooks Lake- Outlet Quad DUP

**Collector/Agency:** Eric Hargett/WYDEQ **Analyst/Laboratory:** him /Rhithron

**Date Collected:** 9/22/2020 **Analysis Date:** 1/15/2021

**Dilution/Concentration factor:** 0.015 **Concentration:** 1.5:100 Concentratio

Subsample Volume (L): 0.1 Original Volume (L): 0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	17	17	17	0	32988	32988	32988	0	32988
Stephanodiscus	39	39	39	0	75678	75678	75678	0	75678
Cryptophyta									
Cryptomonas	2	2	2	0	3881	3881	3881	0	3881
Cyanophyta									
Aphanizomenon	237	6636	6636	0	459891	12876936	12876936	0	12876936
Aphanocapsa	3	450	450	0	5821	873210	873210	0	873210
Dolichospermum	2	44	44	0	3881	85381	85381	0	85381
TOTAL:	300	7,188	7,188	0	582,140	13,948,074	13,948,074	0	13,948,074

FOV=63 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV Cymbella (1) Oocystis (natural unit=1) (cell count=1)

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Sample\_ID: WYDEQ20LV006

## **WYOMING DEQ PHYTOPLANKTON BENCHSHEET**

**RAI Sample:** 

WYDEQ20LV006

WYDEQ #:

TCE-20-175-3PVD

Waterbody and Location: Brooks Lake- LPD

Collector/Agency:

Eric Hargett/WYDEQ

**Analyst/Laboratory:** 

him /Rhithron

**Date Collected:** 

6/23/2020

**Analysis Date:** 

1/15/2021

**Dilution/Concentration factor:** 0.015

**Concentration:** 

1.5:100 Concentratio

**Subsample Volume (L):** 

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	4	4	4	0	4890	4890	4890	0	4890
Stephanodiscus	5	5	5	0	6112	6112	6112	0	6112
Chlorophyta									
Chlamydomonas	10	10	10	0	12225	12225	12225	0	12225
Dictyosphaerium	1	8	8	0	1222	9780	9780	0	9780
Oocystis	4	16	16	0	4890	19560	19560	0	19560
Copepoda									
Copepoda: nauplius	1	1	1	0	1222	1222	1222	0	1222
Cryptophyta									
Cryptomonas	44	44	44	0	53790	53790	53790	0	53790
Pyrrhophyta									
Peridinium	24	24	24	0	29340	29340	29340	0	29340
TOTAL:	93	112	112	0	113,691	136,919	136,919	0	136,919

FOV for max effort=100 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV=0

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Sample\_ID: WYDEQ20LV007

# WYOMING DEQ PHYTOPLANKTON BENCHSHEET

**RAI Sample:** WYDEQ20LV007

WYDEQ #:

TCE-20-175-4PVD

Waterbody and Location: Brooks Lake- LPD DUP

**Collector/Agency:** Eric Hargett/WYDEQ

**Analyst/Laboratory:** 

him /Rhithron

**Date Collected:** 6/23/2020

**Analysis Date:** 

1/20/2021

**Dilution/Concentration factor:** 0.015

**Concentration:** 

1.5:100 Concentratio

Subsample Volume (L):

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	1	1	1	0	1222	1222	1222	0	1222
Sellaphora	1	1	1	0	1222	1222	1222	0	1222
Stephanodiscus	2	2	2	0	2445	2445	2445	0	2445
Chlorophyta									
Chlamydomonas	14	14	14	0	17115	17115	17115	0	17115
Monoraphidium	1	1	1	0	1222	1222	1222	0	1222
Oocystis	2	8	8	0	2445	9780	9780	0	9780
Sphaerocystis	11	33	33	0	13447	40342	40342	0	40342
Copepoda									
Copepoda: nauplius	1	1	1	0	1222	1222	1222	0	1222
Cryptophyta									
Cryptomonas	56	56	56	0	68460	68460	68460	0	68460
Pyrrhophyta									
Peridinium	37	37	33	4	45232	45232	40342	4890	45232

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Sample\_ID: WYDEQ20LV007

# WYOMING DEQ PHYTOPLANKTON BENCHSHEET

RAI Sample: WYDEQ20LV007 WYDEQ #:

TCE-20-175-4PVD

Waterbody and Location: Brooks Lake- LPD DUP

**Collector/Agency:** Eric Hargett/WYDEQ **Analyst/Laboratory:** him /Rhithron

**Date Collected:** 6/23/2020 **Analysis Date:** 1/20/2021

**Dilution/Concentration factor:** 0.015 **Concentration:** 1.5:100 Concentratio

Subsample Volume (L): 0.1 Original Volume (L): 0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
TOTAL:	126	154	150	4	154,032	188,262	183,372	4,890	188,262

FOV for max effort=100 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV Staurosira (8)

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Sample\_ID: WYDEQ20LV008

# **WYOMING DEQ PHYTOPLANKTON BENCHSHEET**

**RAI Sample:** 

WYDEQ20LV008

WYDEQ #:

TCE-20-203-3PVD

Waterbody and Location: Brooks Lake- LPD

Collector/Agency:

Eric Hargett/WYDEQ

**Analyst/Laboratory:** 

him /Rhithron

**Date Collected:** 

7/21/2020

**Analysis Date:** 

1/20/2021

**Dilution/Concentration factor:** 0.015

**Concentration:** 

1.5:100 Concentratio

**Subsample Volume (L):** 

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Asterionella	23	23	23	0	28117	28117	28117	0	28117
Navicula	1	1	1	0	1222	1222	1222	0	1222
Stephanodiscus	17	17	17	0	20782	20782	20782	0	20782
Copepoda									
Copepoda: nauplius	1	1	1	0	1222	1222	1222	0	1222
Cryptophyta									
Cryptomonas	15	15	15	0	18337	18337	18337	0	18337
TOTAL:	57	57	57	0	69,680	69,680	69,680	0	69,680

FOV for max effort=100 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV=0

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Sample\_ID: WYDEQ20LV009

#### **WYOMING DEQ PHYTOPLANKTON BENCHSHEET**

**RAI Sample:** 

WYDEQ20LV009

WYDEQ #:

TCE-20-238-3PVD

Waterbody and Location: Brooks Lake- LPD

Collector/Agency:

Eric Hargett/WYDEQ

**Analyst/Laboratory:** 

him /Rhithron

**Date Collected:** 

8/25/2020

**Analysis Date:** 

1/20/2021

**Dilution/Concentration factor:** 0.015

**Concentration:** 

1.5:100 Concentratio

**Subsample Volume (L):** 

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	25	25	25	0	33958	33958	33958	0	33958
Stephanodiscus	109	109	107	2	148058	148058	145341	2717	148058
Chlorophyta									
Ankyra	1	1	1	0	1358	1358	1358	0	1358
Oocystis	1	1	1	0	1358	1358	1358	0	1358
Sphaerocystis	3	22	22	0	4075	29883	29883	0	29883
Cryptophyta									
Cryptomonas	2	2	2	0	2717	2717	2717	0	2717
Cyanophyta									
Aphanizomenon	112	2800	2800	0	152133	3803314	3803314	0	3803314
Aphanocapsa	43	6450	6450	0	58408	8761206	8761206	0	8761206
Dolichospermum	4	640	640	0	5433	869329	869329	0	869329
ТОТА	<b>L:</b> 300	10,050	10,048	2	407,498	13,651,181	13,648,464	2,717	13,651,181

FOV=90 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV Cymbella (1) Planktosphaeria (1)

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Sample\_ID: WYDEQ20LV010

# **WYOMING DEQ PHYTOPLANKTON BENCHSHEET**

**RAI Sample:** 

WYDEQ20LV010

WYDEQ #:

TCE-20-266-4PVD

Waterbody and Location: Brooks Lake- LPD

Collector/Agency:

Eric Hargett/WYDEQ

**Analyst/Laboratory:** 

him /Rhithron

**Date Collected:** 

9/22/2020

**Analysis Date:** 

1/19/2021

**Dilution/Concentration factor:** 0.015

**Concentration:** 

1.5:100 Concentratio

**Subsample Volume (L):** 

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	18	18	18	0	38605	38605	38605	0	38605
Stephanodiscus	22	22	22	0	47184	47184	47184	0	47184
Cyanophyta									
Aphanizomenon	256	6400	6400	0	549050	13726247	13726247	0	13726247
Aphanocapsa	5	550	550	0	10724	1179599	1179599	0	1179599
Dolichospermum	2	42	42	0	4289	90078	90078	0	90078
TOTAL:	303	7,032	7,032	0	649,852	15,081,713	15,081,713	0	15,081,713

FOV=57 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV Cryptomonas (1)

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Sample\_ID: WYDEQ20LV011

# WYOMING DEQ PHYTOPLANKTON BENCHSHEET

RAI Sample: WYDEQ20LV011 WYDEQ #: TCE-20-175-2PVD

Waterbody and Location: Brooks Lake- Inlet Quad

**Collector/Agency:** Eric Hargett/WYDEQ **Analyst/Laboratory:** him /Rhithron

**Date Collected:** 6/23/2020 **Analysis Date:** 1/19/2021

**Dilution/Concentration factor:** 0.015 **Concentration:** 1.5:100 Concentratio

Subsample Volume (L): 0.1 Original Volume (L): 0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Asterionella	2	2	2	0	2445	2445	2445	0	2445
Cymbella	1	1	1	0	1222	1222	1222	0	1222
Fragilaria	1	1	1	0	1222	1222	1222	0	1222
Frustulia	1	1	1	0	1222	1222	1222	0	1222
Gomphonema	1	1	1	0	1222	1222	1222	0	1222
Nitzschia	3	3	3	0	3667	3667	3667	0	3667
Stephanodiscus	3	3	2	1	3667	3667	2445	1222	3667
Chlorophyta									
Chlamydomonas	14	14	14	0	17115	17115	17115	0	17115
Monoraphidium	3	3	3	0	3667	3667	3667	0	3667
Oocystis	1	3	3	0	1222	3667	3667	0	3667
Sphaerocystis	3	9	9	0	3667	11002	11002	0	11002
Cryptophyta									
Cryptomonas	17	17	17	0	20782	20782	20782	0	20782

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Sample\_ID: WYDEQ20LV011

### **WYOMING DEQ PHYTOPLANKTON BENCHSHEET**

**RAI Sample:** 

WYDEQ20LV011

WYDEQ #:

TCE-20-175-2PVD

Waterbody and Location: Brooks Lake- Inlet Quad

Collector/Agency:

Eric Hargett/WYDEQ

**Analyst/Laboratory:** 

him /Rhithron

**Date Collected:** 

6/23/2020

**Analysis Date:** 

1/19/2021

**Dilution/Concentration factor:** 0.015

**Concentration:** 

1.5:100 Concentratio

**Subsample Volume (L):** 

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Pyrrhophyta									
Peridinium	12	12	10	2	14670	14670	12225	2445	14670
TOTAL:	62	70	67	3	75,790	85,570	81,903	3,667	85,570

FOV for max effort=100 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV Encyonema (1)

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Sample\_ID: WYDEQ20LV012

# WYOMING DEQ PHYTOPLANKTON BENCHSHEET

RAI Sample: WYDEQ20LV012 WYDEQ #: TCE-20-203-2PVD

**Waterbody and Location:** Brooks Lake- Inlet Quad

**Collector/Agency:** Eric Hargett/WYDEQ **Analyst/Laboratory:** him /Rhithron

**Date Collected:** 7/21/2020 **Analysis Date:** 1/19/2021

**Dilution/Concentration factor:** 0.015 **Concentration:** 1.5:100 Concentratio

**Subsample Volume (L):** 0.1 **Original Volume (L):** 0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Asterionella	13	13	13	0	15892	15892	15892	0	15892
Nitzschia	1	1	1	0	1222	1222	1222	0	1222
Stephanodiscus	9	9	9	0	11002	11002	11002	0	11002
Chlorophyta									
Dictyosphaerium	1	8	8	0	1222	9780	9780	0	9780
Cryptophyta									
Cryptomonas	1	1	1	0	1222	1222	1222	0	1222
Rotifera									
Polyarthra	1	1	1	0	1222	1222	1222	0	1222
TOTAL:	26	33	33	0	31,782	40,340	40,340	0	40,340

FOV for max effort=100 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV=0

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Sample\_ID: WYDEQ20LV013

#### **WYOMING DEQ PHYTOPLANKTON BENCHSHEET**

**RAI Sample:** 

WYDEQ20LV013

WYDEQ #:

TCE-20-238-1PVD

Waterbody and Location: Brooks Lake- Inlet Quad

Collector/Agency:

Eric Hargett/WYDEQ

**Analyst/Laboratory:** 

him /Rhithron

**Date Collected:** 

8/25/2020

**Analysis Date:** 

1/19/2021

**Dilution/Concentration factor:** 0.015

**Concentration:** 

1.5:100 Concentratio

**Subsample Volume (L):** 

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	27	27	27	0	36675	36675	36675	0	36675
Stephanodiscus	80	80	80	0	108666	108666	108666	0	108666
Cyanophyta									
Aphanizomenon	146	4088	4088	0	198316	5552839	5552839	0	5552839
Aphanocapsa	47	13113	13113	0	63841	17811736	17811736	0	17811736
TOTAL	300	17,308	17,308	0	407,498	23,509,916	23,509,916	0	23,509,916

FOV=90 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV Dolichospermum (Natural unit-1) (cell count=120)

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Sample\_ID: WYDEQ20LV014

## WYOMING DEQ PHYTOPLANKTON BENCHSHEET

RAI Sample: WYDEQ20LV014 WYDEQ #: TCE-20-266-1PVD

Waterbody and Location: Brooks Lake- Inlet Quad

**Collector/Agency:** Eric Hargett/WYDEQ **Analyst/Laboratory:** him /Rhithron

**Date Collected:** 9/22/2020 **Analysis Date:** 1/19/2021

**Dilution/Concentration factor:** 0.05 **Concentration:** 5:100 Concentration

Subsample Volume (L): 0.1 Original Volume (L): 0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	23	23	23	0	156208	156208	156208	0	156208
Stephanodiscus	18	18	18	0	122249	122249	122249	0	122249
Cyanophyta									
Aphanizomenon	256	7168	7168	0	1738658	48682423	48682423	0	48682423
Aphanocapsa	2	200	200	0	13583	1358327	1358327	0	1358327
Dolichospermum	1	7	7	0	6792	47541	47541	0	47541
TOTAL:	300	7,416	7,416	0	2,037,490	50,366,748	50,366,748	0	50,366,748

FOV=60 100ml sample concentrated to 5ml DCF=0.05 Large and rare at 20x for 20 FOV Cryptomonas (1) Oocystis (1)

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Sample\_ID: WYDEQ20LV015

# WYOMING DEQ PHYTOPLANKTON BENCHSHEET

**RAI Sample:** WYDEQ20LV015

WYDEQ #:

TCE-20-261-1PVD

Waterbody and Location: Lake Cameahwait- LPD

**Collector/Agency:** Eric Hargett/WYDEQ

Analyst/Laboratory:

him /Rhithron

**Date Collected:** 9/17/2020

/2020

1/19/2021

**Dilution/Concentration factor: 0.015** 

**Concentration:** 

**Analysis Date:** 

1.5:100 Concentratio

**Subsample Volume (L):** 0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	8	8	8	0	9780	9780	9780	0	9780
Chlorophyta									
Oocystis	2	2	2	0	2445	2445	2445	0	2445
Cryptophyta									
Cryptomonas	4	4	4	0	4890	4890	4890	0	4890
Pyrrhophyta									
Ceratium	1	1	1	0	1222	1222	1222	0	1222
Peridinium	20	20	20	0	24450	24450	24450	0	24450
TOTAL:	35	35	35	0	42,787	42,787	42,787	0	42,787

FOV for max effort=100 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV=0

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Sample\_ID: WYDEQ20LV016

# WYOMING DEQ PHYTOPLANKTON BENCHSHEET

**RAI Sample:** WYDEQ20LV016

WYDEQ #:

TCE-20-261-2PVD

Waterbody and Location: Lake Cameahwait- LPD DUP

**Collector/Agency:** Eric Hargett/WYDEQ

Analyst/Laboratory:

him /Rhithron

**Date Collected:** 9/17/2020

**Analysis Date:** 

1/20/2021

**Dilution/Concentration factor:** 0.015

**Concentration:** 

1.5:100 Concentratio

Subsample Volume (L):

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	9	9	9	0	11002	11002	11002	0	11002
Cryptophyta									
Cryptomonas	2	2	2	0	2445	2445	2445	0	2445
Pyrrhophyta									
Peridinium	5	5	4	1	6112	6112	4890	1222	6112
TOTAL	16	16	15	1	19,559	19,559	18,337	1,222	19,559

FOV for max effort=100 100ml sample concentrated to 1.5ml DCF=0.015 Large and rare at 20x for 20 FOV=0 Very few small centric diatoms present.

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Sample\_ID: WYDEQ20LV017

## **WYOMING DEQ PHYTOPLANKTON BENCHSHEET**

**RAI Sample:** 

WYDEQ20LV017

WYDEQ #:

TCE-20-295-1PVD

Waterbody and Location: Brooks Lake- Inlet Quad

Collector/Agency:

Eric Hargett/WYDEQ

**Analyst/Laboratory:** 

him /Rhithron

**Date Collected:** 

10/21/2020

**Analysis Date:** 

1/20/2021

**Dilution/Concentration factor: 0.02** 

**Concentration:** 

2:100 Concentration

**Subsample Volume (L):** 

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	31	31	31	0	63162	63162	63162	0	63162
Nitzschia	1	1	1	0	2037	2037	2037	0	2037
Stephanodiscus	159	159	152	7	323961	323961	309698	14262	323960
Chlorophyta									
Staurastrum	1	1	1	0	2037	2037	2037	0	2037
Cryptophyta									
Cryptomonas	1	1	1	0	2037	2037	2037	0	2037
Cyanophyta									
Aphanizomenon	106	2968	2968	0	215974	6047270	6047270	0	6047270
Aphanocapsa	1	75	75	0	2037	152812	152812	0	152812
TOTAL:	300	3,236	3,229	7	611,245	6,593,316	6,579,053	14,262	6,593,315

FOV=80 100ml sample concentrated to 2ml DCF=0.02 Large and rare at 20x for 20 FOV Dolichospermum (natural unit=1)(cell count=18)

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Sample\_ID: WYDEQ20LV018

## WYOMING DEQ PHYTOPLANKTON BENCHSHEET

RAI Sample: WYDEQ20LV018

WYDEQ #:

TCE-20-295-2PVD

Waterbody and Location: Brooks Lake- Outlet Quad

**Collector/Agency:** Eric Hargett/WYDEQ

Analyst/Laboratory:

him /Rhithron

**Date Collected:** 10/21/2020

/21/2020

**Analysis Date:** 

1/20/2021

**Dilution/Concentration factor:** 0.02

Concentration:

2:100 Concentration

Subsample Volume (L):

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Fragilaria	26	26	26	0	55763	55763	55763	0	55763
Stephanodiscus	108	108	106	2	231630	231630	227341	4289	231630
Cryptophyta									
Cryptomonas	1	1	1	0	2145	2145	2145	0	2145
Cyanophyta									
Aphanizomenon	164	4592	4592	0	351735	9848582	9848582	0	9848582
Aphanocapsa	1	55	55	0	2145	117960	117960	0	117960
TOTAL:	300	4,782	4,780	2	643,418	10,256,080	10,251,791	4,289	10,256,080

FOV=76 100ml sample concentrated to 2ml DCF=0.02 Large and rare at 20x for 20 FOV Dolichospermum (natural unit=1)(cell count=22)

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Sample\_ID: WYDEQ20LV019

# **WYOMING DEQ PHYTOPLANKTON BENCHSHEET**

**RAI Sample:** 

WYDEQ20LV019

WYDEQ #:

TCE-20-295-3PVD

Waterbody and Location: Brooks Lake- LPD

Collector/Agency:

Eric Hargett/WYDEQ

**Analyst/Laboratory:** 

him /Rhithron

**Date Collected:** 

10/21/2020

**Analysis Date:** 

1/20/2021

**Dilution/Concentration factor: 0.02** 

**Concentration:** 

2:100 Concentration

**Subsample Volume (L):** 

0.1

Original Volume (L):

0.2525

	NCUCounted	CellsCounted	LiveCells	DeadCells	NCUCounted_L	CellsCounted_L	LiveCells_L	DeadCells_L	TotalCells_L
Bacillariophyta									
Stephanodiscus	150	150	147	3	317531	317531	311180	6351	317531
Cryptophyta									
Cryptomonas	2	2	2	0	4234	4234	4234	0	4234
Cyanophyta									
Aphanizomenon	145	4060	4060	0	306947	8594502	8594502	0	8594502
Aphanocapsa	3	350	350	0	6351	740905	740905	0	740905
TOTAL:	300	4,562	4,559	3	635,063	9,657,172	9,650,821	6,351	9,657,172

FOV=77 100ml sample concentrated to 2ml DCF=0.02 Large and rare at 20x for 20 FOV Fragilaria (14) Staurastrum (1)

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