

UMPQUA Research Company

626 NE Division St. - P.O. Box 609
 Myrtle Creek, Oregon 97457
 (541) 863-5201 Fax: (541) 863-6199
 E-mail: Lab@URCmail.net
 Internet: http://ChemLab.cc
 ORELAP ID# OR100031

ANALYSIS REPORT

URC # 5071520

Deschutes River Alliance
 PO Box 440
 Maupin, OR 97037

Project: General
 Project #: 2015 Lake Billy Chinook N
 Client Contact: Greg McMillan

Date Reported: 08/04/15
 Date Sampled: 07/14/15 10:25
 Date Received: 07/15/15 12:34
 Sampled By: McMillan/Hafele

Sample Location: RB Forebay @ East Bank: Surface
 Sample

URC Sample #: 5071520-01

Matrix: Aqueous

Inorganics

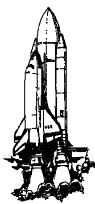
Analyte	Code	Result	Units	MRL	BML	Prepared	Analyzed	Analyst	Qualifier
-									
Chlorophyll-a		0.0302	mg/L	0.0003		07/15/15 17:56	07/22/15	TDL	O-07
EPA 300.0									
Nitrate as N		ND	mg/L	0.10		07/15/15 17:43	07/15/15	TDL	
Nitrite as N		ND	mg/L	0.01		07/15/15 17:43	07/15/15	TDL	
Nitrate/Nitrite as N		ND	mg/L	0.10		07/15/15 17:43	07/15/15	TDL	
Phosphate, ortho as P		0.11	mg/L	0.03		07/15/15 17:43	07/15/15	TDL	
SM 4500Norg B									
Total Kjeldahl Nitrogen		0.688	mg/L	0.200		07/17/15	07/17/15	DJP	
SM 4500P									
Phosphorus-Total		ND	mg/L	0.050		07/23/15	07/27/15	TDL	

UMPQUA Research Company/MC

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ANALYSIS REPORT

URC # 5071520

Deschutes River Alliance	Project: General	Date Reported: 08/04/15
PO Box 440		Date Sampled: 07/14/15 10:45
Maupin, OR 97037	Project #: 2015 Lake Billy Chinook N	Date Received: 07/15/15 12:34
	Client Contact: Greg McMillan	Sampled By: McMillan/Hafele

Sample Location: RB Forebay @ East Bank: Spl. @
 Depth

URC Sample #: 5071520-02

Matrix: Aqueous

Inorganics

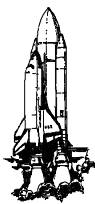
Analyte	Code	Result	Units	MRL	BML	Prepared	Analyzed	Analyst	Qualifier
-									
Chlorophyll-a		0.0020	mg/L	0.0003		07/15/15 17:56	07/22/15	TDL	O-07
EPA 300.0									
Nitrate as N		0.13	mg/L	0.10		07/15/15 17:43	07/15/15	TDL	
Nitrite as N		ND	mg/L	0.01		07/15/15 17:43	07/15/15	TDL	
Nitrate/Nitrite as N		0.13	mg/L	0.10		07/15/15 17:43	07/15/15	TDL	
Phosphate, ortho as P		0.07	mg/L	0.03		07/15/15 17:43	07/15/15	TDL	
SM 4500Norg B									
Total Kjeldahl Nitrogen		0.238	mg/L	0.200		07/17/15	07/17/15	DJP	
SM 4500P									
Phosphorus-Total		0.066	mg/L	0.050		07/23/15	07/27/15	TDL	

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ANALYSIS REPORT

URC # 5071520

Deschutes River Alliance	Project: General	Date Reported: 08/04/15
PO Box 440		Date Sampled: 07/14/15 10:53
Maupin, OR 97037	Project #: 2015 Lake Billy Chinook N	Date Received: 07/15/15 12:34
	Client Contact: Greg McMillan	Sampled By: McMillan/Hafele

Sample Location: RB Forebay @ Middle: Surface Sample

URC Sample #: 5071520-03

Matrix: Aqueous

Inorganics

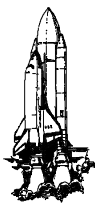
Analyte	Code	Result	Units	MRL	BML	Prepared	Analyzed	Analyst	Qualifier
-									
Chlorophyll-a		0.0294	mg/L	0.0003		07/15/15 17:56	07/22/15	TDL	O-07
EPA 300.0									
Nitrate as N		ND	mg/L	0.10		07/15/15 17:43	07/15/15	TDL	
Nitrite as N		ND	mg/L	0.01		07/15/15 17:43	07/15/15	TDL	
Nitrate/Nitrite as N		ND	mg/L	0.10		07/15/15 17:43	07/15/15	TDL	
Phosphate, ortho as P		ND	mg/L	0.03		07/15/15 17:43	07/15/15	TDL	
SM 4500Norg B									
Total Kjeldahl Nitrogen		0.574	mg/L	0.200		07/17/15	07/17/15	DJP	
SM 4500P									
Phosphorus-Total		ND	mg/L	0.050		07/23/15	07/27/15	TDL	

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ANALYSIS REPORT

URC # 5071520

Deschutes River Alliance	Project: General	Date Reported: 08/04/15
PO Box 440		Date Sampled: 07/14/15 11:05
Maupin, OR 97037	Project #: 2015 Lake Billy Chinook N	Date Received: 07/15/15 12:34
	Client Contact: Greg McMillan	Sampled By: McMillan/Hafele

Sample Location: RB Forebay @ Middle: Spl. @
 Depth

URC Sample #: 5071520-04

Matrix: Aqueous

Inorganics

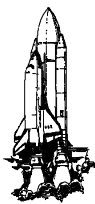
Analyte	Code	Result	Units	MRL	BML	Prepared	Analyzed	Analyst	Qualifier
-									
Chlorophyll-a		0.110	mg/L	0.0003		07/15/15 17:56	07/22/15	TDL	O-07
EPA 300.0									
Nitrate as N		0.25	mg/L	0.10		07/15/15 17:43	07/15/15	TDL	
Nitrite as N		ND	mg/L	0.01		07/15/15 17:43	07/15/15	TDL	
Nitrate/Nitrite as N		0.25	mg/L	0.10		07/15/15 17:43	07/15/15	TDL	
Phosphate, ortho as P		0.08	mg/L	0.03		07/15/15 17:43	07/15/15	TDL	
SM 4500Norg B									
Total Kjeldahl Nitrogen		0.574	mg/L	0.200		07/17/15	07/17/15	DJP	
SM 4500P									
Phosphorus-Total		0.189	mg/L	0.050		07/23/15	07/27/15	TDL	CON-1

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ANALYSIS REPORT

URC # 5071520

Deschutes River Alliance
 PO Box 440
 Maupin, OR 97037

Project: General
 Project #: 2015 Lake Billy Chinook N
 Client Contact: Greg McMillan

Date Reported: 08/04/15
 Date Sampled: 07/14/15 11:14
 Date Received: 07/15/15 12:34
 Sampled By: McMillan/Hafele

Sample Location: RB Forebay @ West Bank:
 Surface Sample

URC Sample #: 5071520-05

Matrix: Aqueous

Inorganics

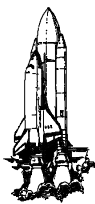
Analyte	Code	Result	Units	MRL	BML	Prepared	Analyzed	Analyst	Qualifier
-									
Chlorophyll-a		0.0269	mg/L	0.0003		07/15/15 17:56	07/22/15	TDL	O-07
EPA 300.0									
Nitrate as N		ND	mg/L	0.10		07/15/15 17:43	07/16/15	TDL	
Nitrite as N		ND	mg/L	0.01		07/15/15 17:43	07/16/15	TDL	
Nitrate/Nitrite as N		ND	mg/L	0.10		07/15/15 17:43	07/16/15	TDL	
Phosphate, ortho as P		ND	mg/L	0.03		07/15/15 17:43	07/16/15	TDL	
SM 4500Norg B									
Total Kjeldahl Nitrogen		0.538	mg/L	0.200		07/17/15	07/17/15	DJP	
SM 4500P									
Phosphorus-Total		ND	mg/L	0.050		07/23/15	07/27/15	TDL	

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ANALYSIS REPORT

URC # 5071520

Deschutes River Alliance	Project: General	Date Reported: 08/04/15
PO Box 440		Date Sampled: 07/14/15 11:29
Maupin, OR 97037	Project #: 2015 Lake Billy Chinook N	Date Received: 07/15/15 12:34
	Client Contact: Greg McMillan	Sampled By: McMillan/Hafele

Sample Location: RB Forebay @ West Bank: Spl. @
 Depth

URC Sample #: 5071520-06

Matrix: Aqueous

Inorganics

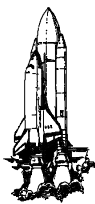
Analyte	Code	Result	Units	MRL	BML	Prepared	Analyzed	Analyst	Qualifier
-									
Chlorophyll-a		ND	mg/L	0.0003		07/15/15 17:56	07/22/15	TDL	O-07
EPA 300.0									
Nitrate as N		0.23	mg/L	0.10		07/15/15 17:43	07/16/15	TDL	
Nitrite as N		ND	mg/L	0.01		07/15/15 17:43	07/16/15	TDL	
Nitrate/Nitrite as N		0.23	mg/L	0.10		07/15/15 17:43	07/16/15	TDL	
Phosphate, ortho as P		0.11	mg/L	0.03		07/15/15 17:43	07/16/15	TDL	
SM 4500Norg B									
Total Kjeldahl Nitrogen		ND	mg/L	0.200		07/17/15	07/17/15	DJP	
SM 4500P									
Phosphorus-Total		0.085	mg/L	0.050		07/23/15	07/27/15	TDL	

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ANALYSIS REPORT

URC # 5071520

Deschutes River Alliance	Project: General	Date Reported: 08/04/15
PO Box 440		Date Sampled: 07/14/15 13:07
Maupin, OR 97037	Project #: 2015 Lake Billy Chinook N	Date Received: 07/15/15 12:34
	Client Contact: Greg McMillan	Sampled By: McMillan/Hafele

Sample Location: Rereg. Dam Tailrace + 200 mtrs.
 Spl. Depth: 1 mtr.

URC Sample #: 5071520-07

Matrix: Aqueous

Inorganics

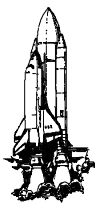
Analyte	Code	Result	Units	MRL	BML	Prepared	Analyzed	Analyst	Qualifier
-									
Chlorophyll-a		0.0031	mg/L	0.0003		07/15/15 17:56	07/22/15	TDL	O-07
EPA 300.0									
Nitrate as N		0.19	mg/L	0.10		07/15/15 17:43	07/16/15	TDL	
Nitrite as N		ND	mg/L	0.01		07/15/15 17:43	07/16/15	TDL	
Nitrate/Nitrite as N		0.19	mg/L	0.10		07/15/15 17:43	07/16/15	TDL	
Phosphate, ortho as P		0.07	mg/L	0.03		07/15/15 17:43	07/16/15	TDL	
SM 4500Norg B									
Total Kjeldahl Nitrogen		0.307	mg/L	0.200		07/17/15	07/17/15	DJP	
SM 4500P									
Phosphorus-Total		0.083	mg/L	0.050		07/23/15	07/27/15	TDL	

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ANALYSIS REPORT

URC # 5071520

Qualifiers and Definitions

O-07	Sample received outside recommended method hold time. Sample analyzed per client request.
CON-1	Results confirmed by duplicate analysis.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the MRL (minimum reporting limit)
NA	Not Applicable
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MRL	Minimum Reporting Limit
MDL	Minimum Detection Limit
BML	Benchmark Level
(‡)	ORELAP Accredited Analyte
(~)	Due to rounding of individual analytes, the "total" may vary slightly from the sum of the individual analyte values.

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