



TRANSMITTAL RECEIVED

13

MAR 07 2011

WA State Department of Ecology (SWRO)

RE Water Monitoring Report for G2-28621

Date March 4, 2011

To Department of Ecology Southwest Regional Office Water Resources PO Box 47775 Olympia, WA 98504-7775

From Glenn Hirai 1416 - 112TH Avenue NE Bellevue, WA 98004

Phone # Fax #

Phone # 425.646.6919 Fax # 425.455.3828

WE ARE SENDING YOU:

Fax PAGE(S) including cover sheet

X Attached

Under separate cover via the following items:

- Shop drawings, Prints, Plans, Samples, Specifications, Copy of letter, Change order, Contract

Table with 4 columns: COPIES, DATE, # Pgs, DESCRIPTION. Row 1: 1, 2/14/2011, Hawks Prairie Golf Course Monitoring Results - Links Course

THESE ARE TRANSMITTED as checked below:

- For approval, For your use, As requested, For review and comment, Approved as submitted, Approved as noted, Returned for corrections, Resubmit copies for approval, Submit copies for distribution, Return corrected prints

Remarks

Please find attached, the water monitoring report for G2-28621. Wells are located at the Golf Club at Hawks Prairie, 9051 46th Avenue NE, Lacey, WA 98516. Should you have any questions, please let me know. Thank you

Copy to:

Signed

Handwritten signature of Glenn Hirai



5309 Shilshole Avenue NW
Suite 200
Seattle, WA 98107
206.789.9658 phone
206.789.9684 fax

www.adolfson.com

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MAR 07 2011
WA State Department
of Ecology (SWRO)

February 14, 2011

Mr. Glenn Hirai
Oki Golf
1416 – 112th Avenue NE
Bellevue, WA 98004

RE: Golf Club at Hawks Prairie Well Monitoring Results – The Links

Dear Glenn:

As requested, ESA Adolfson (Adolfson) has continued to conduct monthly ground water level monitoring and quarterly chloride monitoring throughout 2010 from the well located at The Links course of the Golf Club at Hawks Prairie in Lacey, Washington.

Per our agreement, we began collecting monthly water levels in August 2007. Data for The Links monitoring well was last reported in a letter dated February 25, 2010.

Water levels were collected using an electronic water level indicator, measured to the nearest 0.1 foot. Water levels are presented both as the raw number measured in the field, and the calculation of the depth below ground surface. For the well at The Links course, the top of the well casing (located within a utility vault) is located 3.2 feet below grade.

Also per our agreement, we collected chloride samples from the monitoring well quarterly – in February, April, August, and December of 2010. The chloride samples were collected in the field and analyzed by Aquatic Research in Seattle. Copies of the laboratory results are attached for your reference.

The attached table provides a summary of the water levels and chloride monitoring results collected from the well for 2010. The chloride results are well below the action level of 100 mg/L, and the measurements of water levels have remained consistent throughout. Per your permit requirements, a copy of these results should be submitted to the Washington State Department of Ecology by the end of February.

Please don't hesitate to call if you have any questions or require additional information. I will be contacting you regarding an amendment to our contract to continue monitoring water levels on a monthly basis, and collect chloride samples quarterly throughout 2011.



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Very truly yours,

A handwritten signature in blue ink, appearing to read "Lisa B. Adolfsen".

Lisa Adolfsen
Senior Project Manager
ESA Adolfsen

Attachments: Summary table
Laboratory data

**Golf Club at Hawks Prairie
The Links Course Well***

Date	Water Level Measurement (feet)**	Calculated depth below ground surface (+3.2 ft)	Pump Status	Chloride concentration (mg/L)
1/20/2010	206.5	209.7	not running	
2/25/2010	214.3	217.5	not running	
3/18/2010	212.1	215.3	not running	2.05
4/23/2010	211.9	215.1	not running	
5/13/2010	216.4	219.6	not running	
6/23/2010	227.7	230.9	not running	1.76
7/20/2010	222	225.2	not running	
8/17/2010	260	263.2	running	1.66
9/29/2010	207	210.2	not running	
10/28/2010	206.8	210	not running	
11/30/2010	210	213.2	not running	
12/29/2010	205.2	208.4	not running	1.66
1/26/2011	205.2	208.4	not running	

*The well at the Links course is not specified by a unique identification number on the Ecology Permit (# G2-28621) and no unique identification number is posted on the well. The well is located within the NW 1/4 of Section 23, Township 29 N., Range 1 W.

**Water levels are measured from the top of the well casing within the utility vault. This location is 3.2 feet below ground surface.



AQUATIC RESEARCH INCORPORATED

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

PHONE: (206) 632-2715 FAX: (206) 632-2417

CASE FILE NUMBER:	ADL001-69	PAGE 1
REPORT DATE:	04/02/10	
DATE SAMPLED:	03/18/10	DATE RECEIVED: 03/18/10
FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER SAMPLES FROM ADOLFSON ASSOCIATES		

CASE NARRATIVE

Three water samples were delivered to the laboratory in good condition. The samples were analyzed according to the chain of custody. No difficulties were encountered in the preparation or analysis of these samples. Sample data follows while QA/QC data is contained on subsequent pages.

SAMPLE DATA

SAMPLE ID	CHLORIDE (mg/L)
LINKS COURSE	2.05
WOODLAND 2	3.52
WOODLAND 3	15.6



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REPORT DATE:	04/02/10	
DATE SAMPLED:	03/18/10	DATE RECEIVED: 03/18/10
FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER		
SAMPLES FROM ADOLFSON ASSOCIATES		

QA/QC DATA

QC PARAMETER	CHLORIDE (mg/L)
METHOD	SM18 4500CLC
DATE ANALYZED	04/01/10
DETECTION LIMIT	0.50
DUPLICATE	
SAMPLE ID	BATCH
ORIGINAL	2.44
DUPLICATE	2.35
RPD	4.08%
SPIKE SAMPLE	
SAMPLE ID	BATCH
ORIGINAL	2.44
SPIKED SAMPLE	12.1
SPIKE ADDED	10.0
% RECOVERY	96.78%
QC CHECK	
FOUND	28.6
TRUE	30.0
% RECOVERY	95.47%
BLANK	<0.50

RPD = RELATIVE PERCENT DIFFERENCE.

NA = NOT APPLICABLE OR NOT AVAILABLE.

NC = NOT CALCULABLE DUE TO ONE OR MORE VALUES BEING BELOW THE DETECTION LIMIT.

OR = RECOVERY NOT CALCULABLE DUE TO SPIKE SAMPLE OUT OF RANGE OR SPIKE TOO LOW RELATIVE TO SAMPLE CONCENTRATION.

SUBMITTED BY:


Steven Lazoff

Laboratory Director



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CASE FILE NUMBER:	ADL001-71	PAGE 1
REPORT DATE:	07/12/10	
DATE SAMPLED:	06/23/10	DATE RECEIVED: 06/23/10
FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER SAMPLES FROM ADOLFSON ASSOCIATES		

CASE NARRATIVE

One water sample was delivered to the laboratory in good condition. The sample was analyzed according to the chain of custody. No difficulties were encountered in the preparation or analysis of this sample. Sample data follows while QA/QC data is contained on subsequent pages.

SAMPLE DATA

SAMPLE ID	CHLORIDE (mg/L)
LINKS WELL SAMPLE	1.76





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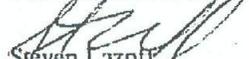
CASE FILE NUMBER:	ADL001-71	PAGE 2
REPORT DATE:	07/12/10	
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FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER		
SAMPLES FROM ADOLFSON ASSOCIATES		

QA/QC DATA

QC PARAMETER	CHLORIDE (mg/L)
METHOD	SM18 4500CLC
DATE ANALYZED	07/12/10
DETECTION LIMIT	0.50
DUPLICATE	
SAMPLE ID	LINKS WELL SAMPLE
ORIGINAL	1.76
DUPLICATE	1.86
RPD	5.41%
SPIKE SAMPLE	
SAMPLE ID	LINKS WELL SAMPLE
ORIGINAL	1.76
SPIKED SAMPLE	11.6
SPIKE ADDED	10.0
% RECOVERY	98.73%
QC CHECK	
FOUND	28.9
TRUE	30.0
% RECOVERY	96.45%
BLANK	<0.50

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CASE FILE NUMBER:	ADL001-72	PAGE 1
REPORT DATE:	09/07/10	
DATE SAMPLED:	08/17/10	DATE RECEIVED: 08/17/10
FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER		
SAMPLES FROM ADOLFSON ASSOCIATES		

CASE NARRATIVE

Three water samples were delivered to the laboratory in good condition. The samples were analyzed according to the chain of custody. No difficulties were encountered in the preparation or analysis of these samples. Sample data follows while QA/QC data is contained on subsequent pages.

SAMPLE DATA

SAMPLE ID	CHLORIDE (mg/L)
LINKS	1.66
WELL 211	21.3
WELL 327	18.3



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DATE SAMPLED:	08/17/10	DATE RECEIVED: 08/17/10
FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER		
SAMPLES FROM ADOLFSON ASSOCIATES		

QA/QC DATA

QC PARAMETER	CHLORIDE (mg/L)
METHOD	SM18 4500CLC
DATE ANALYZED	09/03/10
DETECTION LIMIT	0.50
DUPLICATE	
SAMPLE ID	WELL 327
ORIGINAL	18.3
DUPLICATE	18.2
RPD	0.54%
SPIKE SAMPLE	
SAMPLE ID	WELL 327
ORIGINAL	18.3
SPIKED SAMPLE	28.0
SPIKE ADDED	10.0
% RECOVERY	96.78%
QC CHECK	
FOUND	28.9
TRUE	30.0
% RECOVERY	96.45%
BLANK	<0.50

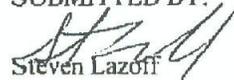
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SUBMITTED BY:


Steven Lazoff

Laboratory Director



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CASE FILE NUMBER:	MIS021-83	PAGE 1
REPORT DATE:	01/05/11	
DATE SAMPLED:	12/29/10	DATE RECEIVED: 12/29/10
FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER SAMPLES FROM ADOLFSON ASSOCIATES		

CASE NARRATIVE

One water sample was delivered to the laboratory in good condition. The sample was analyzed according to the chain of custody. No difficulties were encountered in the preparation or analysis of this sample. Sample data follows while QA/QC data is contained on subsequent pages.

SAMPLE DATA

SAMPLE ID	CHLORIDE (mg/L)
LINKS WELL	1.66



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CASE FILE NUMBER:	MIS021-83	PAGE 2
REPORT DATE:	01/05/11	
DATE SAMPLED:	12/29/10	DATE RECEIVED: 12/29/10
FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER		
SAMPLES FROM ADOLFSON ASSOCIATES		

QA/QC DATA

QC PARAMETER	CHLORIDE
	(mg/L)
METHOD	SM18 4500CLC
DATE ANALYZED	01/04/11
DETECTION LIMIT	0.50
DUPLICATE	
SAMPLE ID	BATCH
ORIGINAL	1.37
DUPLICATE	1.37
RPD	0.00%
SPIKE SAMPLE	
SAMPLE ID	BATCH
ORIGINAL	1.37
SPIKED SAMPLE	11.0
SPIKE ADDED	10.0
% RECOVERY	96.78%
QC CHECK	
FOUND	28.4
TRUE	30.0
% RECOVERY	94.82%
BLANK	<0.50

RPD = RELATIVE PERCENT DIFFERENCE.
NA = NOT APPLICABLE OR NOT AVAILABLE.
NC = NOT CALCULABLE DUE TO ONE OR MORE VALUES BEING BELOW THE DETECTION LIMIT.
QR = RECOVERY NOT CALCULABLE DUE TO SPIKE SAMPLE OUT OF RANGE OR SPIKE TOO LOW RELATIVE TO SAMPLE CONCENTRATION.

SUBMITTED BY:


Steven Lazoff
Laboratory Director

