



Mat-Su Test Lab of Alaska



Mile 3.2 Palmer-Wasilla Hwy.
Midtown Community Business Park
P.O. Box 2749
Palmer, Alaska 99645
Phone: 745-3005 Fax: 745-3010

Drinking Water Analysis Report

Glacier Ridge Properties LLC
Kevin Sorenson

River Bend Subdivision

PWSID

N/A

Lab. #

51253

FULL SERIES IOC

VOC

Date:

4/14/05

SECONDARY CONTAMINANTS

RAW WATER ARSENIC

PER CHUCK LEET @ ALASKA RIM ENGINEERING

mg/L - Milligrams per Liter

ND - None Detected

MCL - Maximum Contaminant Level allowed by EPA.

Analysis Performed by: MAT-SU TEST LAB & CTE If have any questions concerning the above/attached results, please call 745-3005.

Marlene Tyson



Mat-Su Test Lab of Alaska



Mile 3.2 Palmer-Wasilla Hwy.
Midtown Community Business Park
P.O. Box 2749
Palmer, Alaska 99645
Phone: 745-3005 Fax: 746-3010

Drinking Water Analysis Report Total Coliform Bacteria

Client: <u>Glacier Ridge Properties</u>		
Address:		PWSID#(if applicable):
Phone #:	Fax #:	Paid:

This Section to be completed by Sampler

Legal Description of Property: River Bend Subdivision

Sample Site Location: well head Delivered to Lab By: JPC
(I.E.: kitchen sink, bathroom sink, outside hose bib)

Time Sampled: 1345 Date Sampled: 4/14/05 Sampled by: JPC

Sample Type: Routine: Treated: Untreated: Repeat Sample #: _____

This Section to Be Completed by Lab

Analysis Results:

- Satisfactory
- Unsatisfactory
- Sample too long in transit (greater than 30 hrs.)
*Request resample.

Copy Sent to State: Yes No

Chromogenic/Fluorogenic Method Results:

A Total Coliform Present (P)/Absent (A) Lab I.D. #: 50932

A E. Coli Present (P)/Absent (A)

Date Received: 4/14/05 Time Received: 1515 Received by: JH

Date Test Begun: 4/14 Time Test Begun: 1630 Analyst: JH

Date Completed: 4/15 Time Completed: 1630 Analyst: JH



SGS Ref.# 1051942001
 Client Name Mar Su Test Labs
 Project Name/# 51253
 Client Sample ID 51253 RiverBend Sub (New Well)
 Matrix Drinking Water

All Dates/Times are Alaska Standard Time

Printed Date/Time 05/06/2005 14:12
 Collected Date/Time 04/14/2005 14:30
 Received Date/Time 04/15/2005 15:15
 Technical Director Stephen C. Ede

Sample Remarks:

MBAS (Surfactants) by SM5440C was analyzed by Analytica International of Anchorage, AK.

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prerp Date	Analysis Date	Init
<u>Volatile Gas Chromatography/Mass Spectroscopy</u>									
1,1,1,2-Tetrachloroethane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,1,1-Trichloroethane	0.50 U	0.50	ug/L	EPA 524.2	K	(<=200)	04/19/05	04/19/05	VS
1,1,2,2-Tetrachloroethane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,1,2-Trichloroethane	0.50 U	0.50	ug/L	EPA 524.2	K	(<=5)	04/19/05	04/19/05	VS
1,1-Dichloroethane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,1-Dichloroethene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=7)	04/19/05	04/19/05	VS
1,1-Dichloropropene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,2,3-Trichlorobenzene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,2,3-Trichloropropane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,2,4-Trichlorobenzene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=70)	04/19/05	04/19/05	VS
1,2,4-Trimethylbenzene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,2-Dibromo-3-chloropropane	2.0 U	2.0	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,2-Dibromoethane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,2-Dichlorobenzene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=600)	04/19/05	04/19/05	VS
1,2-Dichloroethane	0.50 U	0.50	ug/L	EPA 524.2	K	(<=5)	04/19/05	04/19/05	VS
1,2-Dichloropropane	0.50 U	0.50	ug/L	EPA 524.2	K	(<=5)	04/19/05	04/19/05	VS
1,3,5-Trimethylbenzene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,3-Dichlorobenzene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,3-Dichloropropane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
1,4-Dichlorobenzene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=75)	04/19/05	04/19/05	VS
2,2-Dichloropropane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
2-Chlorotoluene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
4-Chlorotoluene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
4-Isopropyltoluene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Benzene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=5)	04/19/05	04/19/05	VS
Bromobenzene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Bromochloromethane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Bromodichloromethane	1.2	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS

SGS

SGS Ref.# 1051942001
 Client Name Mat Su Test Labs
 Project Name/# 51253
 Client Sample ID 51253 RiverBend Sub (New Well)
 Matrix Drinking Water

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Printed Date/Time 05/06/2005 14:12
 Collected Date/Time 04/14/2005 14:30
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 Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Bromoform	1.1	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Bromomethane	1.0 U	1.0	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Carbon tetrachloride	0.50 U	0.50	ug/L	EPA 524.2	K	(<=5)	04/19/05	04/19/05	VS
Chlorobenzene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=100)	04/19/05	04/19/05	VS
Chloroethane	1.0 U	1.0	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Chloroform	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Chloromethane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
cis-1,2-Dichloroethene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=70)	04/19/05	04/19/05	VS
cis-1,3-Dichloropropene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Dibromochloromethane	2.3	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Dibromomethane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Dichlorodifluoromethane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Ethylbenzene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=700)	04/19/05	04/19/05	VS
Hexachlorobutadiene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Isopropylbenzene (Cumene)	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Methyl-t-butyl ether	1.0 U	1.0	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Methylene chloride	0.50 U	0.50	ug/L	EPA 524.2	K	(<=5)	04/19/05	04/19/05	VS
n-Butylbenzene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
n-Propylbenzene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Naphthalene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
o-Xylene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
P & M -Xylene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
sec-Butylbenzene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Styrene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=100)	04/19/05	04/19/05	VS
tert-Butylbenzene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Tetrachloroethene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=5)	04/19/05	04/19/05	VS
Toluene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=1000)	04/19/05	04/19/05	VS
Total Trihalomethanes	5.1	2.0	ug/L	EPA 524.2	K	(<=80)	04/19/05	04/19/05	VS
trans-1,2-Dichloroethene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=100)	04/19/05	04/19/05	VS
trans-1,3-Dichloropropene	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Trichloroethene	0.50 U	0.50	ug/L	EPA 524.2	K	(<=5)	04/19/05	04/19/05	VS

SGS

SGS Ref.# 1051942001
 Client Name Mat Su Test Labs
 Project Name/# 51253
 Client Sample ID 51253 RiverBend Sub (New Well)
 Matrix Drinking Water

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Printed Date/Time 05/06/2005 14:12
 Collected Date/Time 04/14/2005 14:30
 Received Date/Time 04/15/2005 15:15
 Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
<u>Volatile Gas Chromatography/Mass Spectroscopy</u>									
Trichlorofluoromethane	0.50 U	0.50	ug/L	EPA 524.2	K		04/19/05	04/19/05	VS
Vinyl chloride	0.40 U	0.40	ug/L	EPA 524.2	K	(<=2)	04/19/05	04/19/05	VS
Xylenes (total)	1.0 U	1.0	ug/L	EPA 524.2	K	(<=10000)	04/19/05	04/19/05	VS
<u>Surrogates</u>									
1,2-Dichloroethane-D4 <surrogate>	102		%	EPA 524.2	K	70-130	04/19/05	04/19/05	VS
4-Bromofluorobenzene <surrogate>	105		%	EPA 524.2	K	70-130	04/19/05	04/19/05	VS
Toluene-d8 <surrogate>	101		%	EPA 524.2	K	70-130	04/19/05	04/19/05	VS
<u>Inorganic Contaminants</u>									
Antimony	1.00 U	1.00	ug/L	EP200.8	J	(<=6)	04/19/05	04/21/05	SCL
Arsenic	5.00 U	5.00	ug/L	EP200.8	J	(<=50)	04/19/05	04/21/05	SCL
Barium	12.6	3.00	ug/L	EP200.8	J	(<=2000)	04/19/05	04/21/05	SCL
Beryllium	0.400 U	0.400	ug/L	EP200.8	J	(<=4)	04/19/05	04/21/05	SCL
Cadmium	0.500 U	0.500	ug/L	EP200.8	J	(<=5)	04/19/05	04/21/05	SCL
Chromium	1.00 U	1.00	ug/L	EP200.8	J	(<=100)	04/19/05	04/21/05	SCL
Cyanide	0.0050 U	0.0050	mg/L	SM20 4500-CN C,E	A	(<=0.2)	04/25/05	04/28/05	PLW
Fluoride	0.100 U	0.100	mg/L	EPA 300.0	A	(<=2)		04/15/05	XM
Mercury by Cold Vapor	0.200 U	0.200	ug/L	EP245.1	J	(<=0.2)	04/19/05	04/19/05	TK
Nickel	2.00 U	2.00	ug/L	EP200.8	J	(<=100)	04/19/05	04/21/05	SCL
Nitrate-N	0.100 U	0.100	mg/L	EPA 300.0	A	(<=10)		04/15/05	XM
Nitrite-N	1.00 U	1.00	mg/L	EPA 300.0	D	(<=1)		04/15/05	XM
Selenium	5.00 U	5.00	ug/L	EP200.8	J	(<=50)	04/19/05	04/21/05	SCL
Thallium	1.00 U	1.00	ug/L	EP200.8	J	(<=2)	04/19/05	04/21/05	SCL
<u>Secondary Contaminants</u>									
Calcium	45.9	0.200	mg/L	EP200.7	J		04/19/05	04/21/05	BAG
Chloride	3.01	0.100	mg/L	EPA 300.0	A	(<=250)		04/15/05	XM
Color	5.00 U	5.00	PCU	SM20 2120B	C	(<=15)		04/15/05	PLW



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 Client Name Mat Su Test Labs
 Project Name/# 51253
 Client Sample ID 51253 RiverBend Sub (New Well)
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Printed Date/Time 05/06/2005 14:11
 Collected Date/Time 04/14/2005 14:30
 Received Date/Time 04/15/2005 15:15
 Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Secondary Contaminants									
Copper	1.00 U	1.00	ug/L	EP200.8	J	(<=1000)	04/19/05	04/21/05	SCL
Fluoride	0.100 U	0.100	mg/L	EPA 300.0	A	(<=2)		04/15/05	XM
Iron	0.0400 U	0.0400	mg/L	EP200.7	J	(<=0.3)	04/19/05	04/21/05	BAG
Langlier Index @ 40 degree F	-0.365			SM14 203	C			04/27/05	KAW
Manganese	1.00 U	1.00	ug/L	EP200.8	J	(<=50)	04/19/05	04/21/05	SCL
Langlier Index @ 140 degree F	0.715			SM14 203	C			04/27/05	KAW
Odor (TON)	1.00 U	1.00	T.O.N.	SM20 2150B	B	(<=3)		04/15/05	PLW
pH	7.90	0.100	pH units	EPA 150.1	C	(6.5-8.5)		04/14/05	PLW
Magnesium	4.93	0.200	mg/L	EP200.7	J		04/19/05	04/21/05	BAG
Sodium	6.95	2.00	mg/L	EP200.7	J	(<=250)	04/19/05	04/21/05	BAG
Sulfate	4.22	0.100	mg/L	EPA 300.0	A	(<=250)		04/15/05	XM
Total Dissolved Solids	178	10.0	mg/L	SM20 2540C	C	(<=500)		04/15/05	PLW
Zinc	5.05	5.00	ug/L	EP200.8	J	(<=5000)	04/19/05	04/21/05	SCL



SGS Environmental Services
Attn: Mr. Forest Taylor

200 W POTTER DR
ANCHORAGE, AK 99518
907 562-2343
Fax: 907-561-5301

Client Sample ID: **51253**
Client Project: 51253
Location: 1051942001
Sample Matrix: Aqueous
COC #:
PWS#:
Comments:

Analytica International, Inc.
5761 Silverado Way, Unit N
Anchorage, AK 99518
Phone: 907-258-2155
Fax: 907-258-6634

Report Date: 4/29/2005
Receipt Date: 4/15/2005
Sample Date: 4/14/2005
Sample Time: 2:30:00PM
Collected By:

Flag Definitions:

MRL = Method Reporting Limit
MCL = Maximum Contaminant Limit
B = Present also in Method Blank
H = Exceeds Regulatory Limit
M = Matrix Interference
J = Estimated Value
D = Lost to Dilution
** = RL higher than MCL; target not detected

Sample Comment:

Lab#: A0504136-01A

Analysis Method	Result	Units	Flags	MRL	Prep MCL	Prep Method	Prep Date	Analysis Date	Analyst
5540C (Aqueous) - Surfactants as MBAS									
MBAS Foaming Agents	<MRL	mg/L		0.10			4/16/2005	4/16/2005	AJ

Test was conducted by: Analytica - Anchorage

Amber Hammontree

Reported by: Amber Hammontree,
Laboratory Project Manager

Page 1 of 1

SGS

SGS Ref.# 1051942002
Client Name Mat Su Test Labs
Project Name/# 51253
Client Sample ID 51253 RBd Sub (New Well)
Matrix Drinking Water

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Printed Date/Time 05/06/2005 14:12
Collected Date/Time 04/14/2005 14:30
Received Date/Time 04/15/2005 15:15
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Metals by ICP/MS									
Arsenic	5.00 U	5.00	ug/L	EP200.8	A		04/19/05	04/21/05	SCL