MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE GREATROCK NORTH WATER AND SANITATION DISTRICT HELD AUGUST 5, 2014

A regular meeting of the Board of Directors (referred to hereafter as "Board") of the Greatrock North Water and Sanitation District (referred to hereafter as "District") was convened on Tuesday, August 5, 2014 at 5:30 P.M., at United Power, 500 Cooperative Way, Brighton, Colorado. The meeting was open to the public.

ATTENDANCE

Directors In Attendance Were:
Robert William Fleck
Brian K. Rogers
John D. Wyckoff
Jeffrey Polliard
Dave Lozano

Also In Attendance Were:
Lisa A. Johnson and Divena Mortimeyer; Special District Management Services, Inc.

Brad Simons; TTG Engineers, Inc.

Alan Matlosz, George K. Baum & Company

NEW BOARD MEMBER ORIENTATION

Ms. Johnson continued the presentation of a new board member orientation and reviewed several sections of the presentation with the Board. It was determined to continue the remainder of the orientation to the next Board meeting.

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

Disclosures of Potential Conflicts of Interest: Ms. Johnson advised the Board that, pursuant to Colorado law, certain disclosures may be required prior to taking official action at the meeting. The Board reviewed the Agenda for the meeting, following which Directors Fleck, Rogers, Polliard, and Wyckoff each confirmed that they had no conflicts of interest in connection with any of the matters listed on the Agenda. It was noted that Director Lozano's Disclosure Statements have been filed with the Secretary of State's office in advance of the meeting.

/

ADMINISTRATIVE MATTERS

Agenda: Ms. Johnson distributed for the Board's review and approval a proposed Agenda for the District's regular meeting.

Following discussion, upon motion duly made by Director Rogers, seconded by Director Wyckoff and, upon vote, unanimously carried, the Agenda was approved as amended.

Board of Directors' Report: Director Fleck informed the Board that he and Director Lozano recently conducted a pilot test to determine if increased evaporation could be achieved at the concentrate ponds. He feels the test was successful in that they were able to evaporate one gallon of water in one hour. They plan to continue the pilot test using a technique to provide a fine mist of concentrate water over the test area and then measure the amount of evaporation.

Director Wyckoff commented that the irrigation systems at the Rocking Horse Farms and Great Rock North Facilities have been completed. The total cost to install was $8,400. The budget was $12,000.

Manager's Report: Ms. Johnson presented and the Board reviewed the August Manager's Report. A copy of the report is attached hereto and incorporated herein by this reference.

CONSENT AGENDA

Consent Agenda: The Board considered the following actions:

- Approve Minutes from the July 1, 2014 special meeting.
- Ratify approval of payment of claims through the period ending July 16, 2014, as follows:

General Fund	$ 67,052.78
Debt Service Fund	$ -0-
Capital Projects Fund	$ -0-
Total Claims:	**$ 67,052.78**

Following discussion, upon motion duly made by Director Wyckoff, seconded by Director Rogers and, upon vote, unanimously carried, the Board approved the consent agenda items.

FINANCIAL MATTERS

Possible Restructure of District Debt: Ms. Johnson summarized a recent meeting she attended with Directors Wyckoff and Polliard, Attorney Tanaka, Ms. Mortimeyer and Mr. Matlosz regarding a possible restructure of the District's debt. Mr. Matlosz presented three scenarios to achieve a restructure of the current debt. Each scenario contemplates no growth, no system development fees and no increase in the District's assessed valuation. The goal of a restructure

would be to provide lower annual payments for a period of time to avoid a possible mill levy increase. Each scenario would also provide flexibility with the use of annual tax revenue and the ability to pay additional payments after a short term call period (3-5 years). Mr. Matlosz also commented that the Board does not need to restructure the debt and could continue with the current structure as scenario 4. A copy of the scenarios is attached hereto and incorporated herein by this reference.

Director Polliard expressed his opinion on the potential restructure and would support scenario No.1 or scenario No. 4. His only concern with a restructure is that the Board might choose to spend the money saved each year from the lower payments on Capital Projects.

Director Wyckoff supports a restructure to scenario No. 1. He feels the flexibility in annual revenues would help fund much needed major expenditures in future years.

Directors Fleck and Rogers would like to continue with the existing debt structure at this time.

Director Lozano was undecided.

The Board continued the discussions on each scenario in detail and the pros and cons of restructuring the debt and determined to not move forward with a restructure at this time. They will revisit this opportunity again in the future.

Mr. Matlosz left the meeting at this time.

Financial Statements: Ms. Mortimeyer presented the cash position schedule and unaudited financial statements through the period ending June 30, 2014.

Following review and discussion, upon motion duly made by Director Wyckoff, seconded by Director Polliard and, upon vote, unanimously carried, the Board accepted the cash position schedule and unaudited financial statements through the period ending June 30, 2014.

Ms. Mortimeyer left the meeting at this time.

2015 Budget Committee: Ms. Johnson informed the Board that two budget committee meetings have been scheduled in August to begin the preparation of the 2015 budget. Director Wyckoff, Attorney Tanaka, Ms. Johnson, Ms. Mortimeyer, Mr. Simons and Mr. Rabas comprise the budget committee. Ms. Johnson asked if any other Board member would be interested in serving on the committee. Director Rogers asked that Ms. Johnson send him the dates of the meeting and he will attend if his work schedule allows.

Proposal from Schilling & Company Related to Engineering Design and Operations Plan ("EDOP") Financial Assurance Review: Ms. Johnson presented a proposal from Schilling & Company to review financial assurance documentation as required by the EDOP and prepared by Ms. Mortimeyer.

Following review and discussion, upon motion duly made by Director Polliard, seconded by Director Wyckoff and, upon vote, unanimously carried, the Board approved a proposal from Schilling & Company to review financial assurance documentation as required by the EDOP and prepared by Ms. Mortimeyer.

WATER MATTERS

Status of Options to Purchase Renewable Water Shares: Ms. Johnson updated the Board on efforts to pursue options to purchase renewable water shares. A meeting has been scheduled with the Town of Castle Rock on August 19, 2014.

ENGINEER'S REPORT

Engineer's Report: Mr. Simons presented the Engineer's Report to the Board. A copy of the report is attached hereto and is incorporated herein by this reference.

Evaporation Ponds:

Reclassification of Box Elder Creek/Discharge Permit: Mr. Simons is researching the requirements for the Industrial Wastewater Discharge Permit application and the ability to discharge to Box Elder Creek on a seasonal basis.

Status of Pump Station Control Valve Maintenance: The maintenance service was completed on July 14 and 15, 2014. All valves were able to be serviced, with the exception of the three-inch (3") valve on Pump No. 1 at the Greatrock North Facility. iSiWest has provided a quotation to repair this valve for a not to exceed amount of $1,185. The full report was received by Mr. Simons on August 4, 2014. He will review and present to the Board at the next meeting.

Following review and discussion, upon motion duly made by Director Wyckoff, seconded by Director Fleck and, upon vote, unanimously carried, the Board approved an addendum to the independent contractor agreement with iSiWest to repair a three-inch (3") valve on Pump No. 1 at the Greatrock North Facility for a not to exceed amount of $1,185.

Fire Hydrant Maintenance: Mr. Simons reported that ten fire hydrants were inspected. Seven were extended, one was put out of service while solicitation of a proposal to repair is being prepared, and after further inspection it was determined that the remaining two hydrants did not need extending.

Re-location of Water Meters in Rocking Horse Farms from Inside the Home to a Meter Pit and Repair Curb Stops: Mr. Simons will provide a summary of the scope of work needed to have a minimum of six (6) curb stops investigated using non-destruction potholing techniques to address those that cannot be accessed or operated and to determine dry utility conflicts within the easement and provide that to Mr. Rabas to solicit proposals.

OPERATIONS AND MAINTENANCE MATTERS

Operations and Maintenance Update and Completed Work Order List: The Board reviewed the operations and maintenance update and the completed work order list. A copy of the report is attached hereto and incorporated herein by this reference.

Water Quality Report: The Board reviewed the monthly water quality report.

Fabrication and Installation of a Structure for Alluvial Well No. 1: Mr. Rabas has requested a proposal from Dan's Custom Construction for the fabrication and installation of a structure for Alluvial No. 1.

Curb Stop Inspections in Box Elder Creek Ranch and Greatrock North: Curb stop inspections have been completed in Box Elder Creek Ranch and are underway in Greatrock North. Director Fleck asked that Ms. Johnson confirm with Mr. Rabas that the potable curbs stops were inspected in Box Elder Creek Ranch and not the non-potable curb stops. Directors Fleck and Lozano asked Ms. Johnson to ask Mr. Rabas to contact them to schedule a time to meet them at their residence to show them the location of their potable curb stop.

Rocking Horse Farms Pump Station Project - 11 Month Warranty Inspection: Mr. Rabas conducted an 11 month warranty inspection with Water Technology Group ("WTG"). The Board reviewed the warranty inspection report. Mr. Rabas is working with WTG to address the issues identified during the inspection.

Greatrock North and Box Elder Creek Ranch Facility Observations: The Board reviewed a report prepared by Mr. Rabas regarding issues in need of repair at the Greatrock North and Box Elder Creek Ranch Facilities. Mr. Rabas has referred the issues to his Equipment Services Division for inspection and quotations for repairs if necessary.

Proposal for Landscape Repairs at Box Elder Creek Ranch Facility: The Board reviewed a proposal from Elite Industries to repair landscaping issues at the Box Elder Creek Ranch Facility. Total cost of the repairs is $2,570.

Following review and discussion, upon motion duly made by Director Polliard, seconded by Director Rogers and, upon vote, unanimously carried, the Board

approved an addendum to the independent contractor agreement with Elite Industries for landscape repairs at the Box Elder Creek Ranch Facility for a not to exceed amount of $2,570.

Locating the Service Line at 28567 E. 163rd Place: Ms. Johnson reported that recently she received a call from the property owner at 28567 E. 163rd Place requesting the location of the potable service line stub-out to his property. Mr. Simons and Mr. Rabas reviewed the as-built drawings and determined that the potable service line stub-outs are not shown on the drawings. Mr. Bruno tried to locate the line with a metal detector and was unable to do so. Director Wyckoff visited the lot and found a possible location. Mr. Simons met Director Wyckoff at the lot and inspected the location and agrees with Mr. Wyckoff on the location. Ms. Johnson will ask Mr. Rabas to notify the property owner of the information obtained.

The Board then discussed what to do in the event the property owner is unable to locate the service line stub-out based on the information Mr. Rabas provides him. Director Wyckoff feels it is the District's responsibility to locate the stub-out and suggests the District hire a contractor to locate the line in the event the property owner is unable to do so.

Following discussion, upon motion duly made by Director Polliard, seconded by Director Rogers and, upon vote, with Directors Wyckoff, Polliard, and Rogers voting yes and Directors Fleck and Lozano voting no, the Board approved the hiring of a contractor to locate the potable water service line stub-out in the event the property owner is unable to locate it.

OTHER BUSINESS

Future Expansion of District Facilities: Ms. Johnson presented information provided by Attorney Tanaka regarding the zoning of Parcel B in Rocking Horse Farms. The lot is currently zoned for residential use. The County sees the District's Administration Building as a commercial use and would require a Planned Unit Development Amendment. To begin the process, the District would submit a conceptual review application with a fee of $500 and then would follow the same process as was required to receive approval of the Box Elder Creek Ranch water tank parcel.

The Board received the information and took no action at this time or for the immediate future.

COMMUNITY COMMENTS

Community Comments: There were no community comments.

/

ADJOURNMENT There being no further business to come before the Board at this time, upon motion duly made, seconded and, upon vote, unanimously carried, the meeting was adjourned.

Respectfully submitted,

By _____
Secretary for the Meeting

THESE MINUTES APPROVED AS THE OFFICIAL AUGUST 5, 2014 MINUTES OF THE GREATROCK NORTH WATER AND SANITATION DISTRICT BY THE BOARD OF DIRECTORS SIGNING BELOW:

_____
Robert William Fleck

_____
Jeffrey L. Polliard

_____
Brian K. Rogers

_____
John D. Wyckoff

_____
Dave Lozano

GREATROCK NORTH
WATER & SANITATION DISTRICT

Date: July 29, 2014

To: Greatrock North Water and Sanitation District, Board of Directors

From: Lisa A. Johnson, District Manager

Re: August 5, 2014 Manager's Report

Agenda Action Items

III.A. Consent Agenda

1. July 1, 2014 regular meeting minutes.
2. July 16, 2014 payables.

I recommend approval of the consent agenda items.

IV.A. Possible Debt Restructure

Directors Wyckoff and Polliard and staff met on July 28, 2014 with Alan Matlosz with George K. Baum to discuss options to restructure the current District debt. Mr. Matlosz will attend the August meeting to discuss these options with the entire Board.

IV.B. June 30, 2014 Financial Statements

Ms. Mortimeyer and I will present the second quarter financial statements at the meeting.

I recommend acceptance of the June 30, 2014 financial statements and cash position schedule.

IX.A. Future Expansion of District Facilities

Attorney Tanaka has researched the zoning of the parcel in question and I will provide an update on the information obtained at the meeting.

District Office
for Greatrock North
Water and Sanitation

141 Union Blvd., Suite 150 Lakewood, CO 80228-1898
Phone (303) 987-0835

Review of monthly Water Resumes and Other Water Related Matters

Attorney Poznanovic reviewed the May resume, and did not find any cases that he thinks the District would have an interest in opposing.

Attorney Davenport provided an update to Water Court Case No. 13CW3108. Initial disclosures were circulated in May and last week he received Applicant's preliminary engineering and proposed decree. He will be working with Bishop Brogden Associates to provide a response to the engineering report and revisions to the Applicant's decree by the beginning of October. The next status conference in this case is set for October 29.

Summary of mid-month meeting with Directors Fleck and Wyckoff

Directors Wyckoff and Fleck, Mr. Simons and I met on July 17, 2014 for our mid-month meeting. Items discussed at this meeting are as follows:

- Update on the efforts to re-classify Box Elder Creek.
- Discussion on additional design ideas to allow more surface area at the evaporation ponds to enhance evaporation.
- Application for a new discharge permit and meeting request.
- Replacing the existing R.O. Unit with a more efficient unit and the purchase of an additional R.O. Unit (concentrate the concentrate).
- Discuss constructing an interconnect between Rocking Horse Farms and Greatrock North to allow water to all subdivisions in an emergency.
- Direction to Mr. Simons to prepare a schematic of the water system.

Greatrock North Water and Sanitation District
General Obligation Bond Analysis
Potential Refinancing of Series 2007 Bonds at 4%

Assumptions:

No growth in assessed valuation, no new homes, no system development fees

Cost to Refinance:

Issuance Expenses: $100,000

Interest Expense on old bond payments until 12/1/17: $478,756

Extra interest paid by delaying principal payment : varies by scenario

		Scenario #1		Scenario #2		Scenario #3	
Year	Current Payments	Lower Payments Extend until 2036	Change in Payments	Lower Payments Extend Until 2038	Change in Payments	Lower Payments Extend Until 2040	Change in Payments
2014	$270,595	$247,025	($23,570)	$247,625	($22,970)	$248,291	($22,304)
2015	$424,970	$299,963	($125,007)	$301,763	($123,207)	$303,763	($121,207)
2016	$428,208	$298,451	($129,757)	$300,251	($127,957)	$302,251	($125,957)
2017	$425,338	$296,251	($129,087)	$298,051	($127,287)	$300,051	($125,287)
2018	$437,808	$299,601	($138,207)	$301,401	($136,407)	$303,401	($134,407)
2019	$449,192	$312,650	($136,542)	$314,450	($134,742)	$316,450	($132,742)
2020	$459,312	$449,650	($9,662)	$311,450	($147,862)	$313,450	($145,862)
2021	$448,572	$441,060	($7,512)	$333,450	($115,122)	$305,450	($143,122)
2022	$457,118	$446,751	($10,367)	$353,751	($103,367)	$301,951	($155,167)
2023	$449,802	$436,850	($12,952)	$433,050	($16,752)	$383,450	($66,352)
2024	$476,490	$471,100	($5,390)	$468,100	($8,390)	$400,700	($75,790)
2025	$476,260	$473,300	($2,960)	$466,100	($10,160)	$401,700	($74,560)
2026	$485,308	$474,801	($10,507)	$473,601	($11,707)	$402,201	($83,107)
2027	$488,187	$480,600	($7,587)	$480,200	($7,987)	$412,200	($75,987)
2028	$490,068	$485,401	($4,667)	$480,801	($9,267)	$406,201	($83,867)
2029	$496,030	$489,350	($6,680)	$485,750	($10,280)	$409,950	($86,080)
2030	$505,979	$492,350	($13,629)	$489,750	($16,229)	$412,950	($93,029)
2031	$234,148	$434,401	$200,253	$427,801	$193,653	$600,201	$366,053
2032	$240,025	$445,600	$205,575	$440,200	$200,175	$602,000	$361,975
2033	$240,235	$440,800	$200,565	$441,600	$201,365	$603,000	$362,765
2034		$410,600	$410,600	$407,400	$407,400	$358,200	$358,200
2035		$411,000	$411,000	$409,000	$409,000	$367,400	$367,400
2036		$410,800	$410,800	$405,000	$405,000	$370,800	$370,800
2037				$405,600	$405,600	$368,600	$368,600
2038				$405,600	$405,600	$371,000	$371,000
2039						$367,800	$367,800
2040						$369,200	$369,200

SUMMARY OF RESULTS *

	Current Payments	Lower Payments Extend until 2036	Lower Payments Extend Until 2038	Lower Payments Extend Until 2040
TOTAL PAYMENTS	$8,383,645	$9,448,355	$9,881,745	$10,302,611
Difference from Current		$1,064,710	$1,498,100	$1,918,966
Cost of Issuance		$100,000	$100,000	$100,000
Cost of Interest until 12/1/17		$478,756	$478,756	$478,756
Cost from Delaying Principal		$485,954	$919,344	$1,340,210

**Extending and delaying principal payments will increase total payment over time but will lower payments over the next several years.*

TST
CONSULTING ENGINEERS

GREATROCK NORTH WATER AND SANITATION DISTRICT
ENGINEER'S REPORT
July 28, 2014

Concentrate Disposal and Stream Reclassification

I am researching the requirements for the Industrial Individual Wastewater Discharge Permit application and the ability to discharge to Box Elder Creek on a seasonal basis. The on-line permit template consists of 22 pages and is available at https://www.colorado.gov/pacific/sites/default/files/industrial%20individual%20app.pdf.

Cla-Val Units at Pump Stations

On July 14 and 15, iSiWest performed the scheduled maintenance on five (5) control valves at the following pump stations – Box Elder Creek Ranch, Rocking Horse Farms, and Greatrock North. I am awaiting their completed equipment summary reports and certification data. All valves were able to be serviced, with the exception of the three-inch (3") valve on Pump No. 1 at the Greatrock North Pump Station. I have forwarded iSiWest's quotation to repair this valve to the District Manager for consideration at the August Board meeting.

Fire Hydrant Maintenance and Repairs

Action Fire Hydrant Service extended the six (6) hydrants in the Box Elder Creek Ranch subdivision on July 26. The four remaining hydrants (one in Rocking Horse Farms and three in Greatrock North) will be extended on August 2. I have kept the Greater Brighton Fire Protection District advised of our plan.

Relocation of Water Meters in Rocking Horse Farms

I need to arrange for a contractor to pothole a couple of lots within the subdivision to determine dry utility conflicts within the easement.

EDOP Compliance

Ramey Environmental Compliance has submitted the 2013 Annual Report to the Hazardous Materials and Waste Management Division.

The third round of 2014 quarterly testing has been completed for Alluvial Well No. 1, Alluvial Well No. 2, South Evaporation Pond, and North Evaporation Pond. The results received are presented in the attached EDOP Compliance Monitoring sheets (2 pages).

Other Activities

Blending to Improve Water Quality: On November 11, 2013 TLECC modified the programming code to allow the RO run time to be operator defined. The timer now ranges from 0 to 1,440 minutes (24 hours) and is currently set at 360 minutes (6 hours). Ramey Environmental Compliance periodically samples for total dissolved solids at each tank site. Below are results:

	July 11, 2014	March 5, 2014	January 8, 2014	October 28, 2013
Box Elder Creek Ranch	565 mg/l TDS	586 mg/l TDS	553 mg/l TDS	677 mg/l TDS
Rocking Horse Farms	597 mg/l TDS	543 mg/l TDS	559 mg/l TDS	643 mg/l TDS
Greatrock North	599 mg/l TDS	566 mg/l TDS	575 mg/l TDS	594 mg/l TDS

Ramey Environmental Compliance has also begun monitoring the water hardness, as calcium carbonate, on a more regular basis. Below are results:

	July 11, 2014	May 16, 2014
Box Elder Creek Ranch	221.5 mg/l TDS	165.2 mg/l TDS
Rocking Horse Farms	222.7 mg/l TDS	209.6 mg/l TDS
Greatrock North	220.4 mg/l TDS	198.1 mg/l TDS

Utility Billings and Energy Costs: TST continues to track the United Power utility bills and associated water operations. Year-to-date information for usage and billings for the last three years is presented in the attached summary (3 pages). As reported last month, the May 2014 energy usage for the Rocking Horse Farms Pump Station was unusually high. It was determined that operation of the Laramie-Fox Hills well (LFH-2) for augmentation was the cause.

Monthly Flow Reports: I occasionally monitor the daily SCADA reports for any anomalies, and will enhance the graphs to depict the daily water accounting in a future report. Based upon a year-to-date review, the magnetic flow meter for the Greatrock North Pump Station appears to be out of calibration.

Rocking Horse Farms Pump Station: Ramey Environmental Compliance conducted the 11-month warranty inspection on July 18, 2014.

Box Elder Creek Ranch Pump Station: Ramey Environmental Compliance will schedule the 11-month warranty inspection before March of 2015.

Rocking Horse Farms Tank Repainting: The improvements were inspected and accepted on June 11, 2014. I have asked Jeff Rabas to schedule the 11-month warranty inspection in advance of June 11, 2015.

Greatrock North Pump Station: Options to reconfigure the pump station and type of pumping equipment is a 2015 budget discussion item.

Fire Pumps: This is a 2015 budget discussion item based upon information previously provided.

District Lots and Utilities: I will work on generating maps to be printed and posted at each pump station location for utility markings.

Upgrade to Reverse Osmosis (RO) Treatment Unit(s): Based upon recent research into concentrate management through additional treatment (i.e. concentrate the concentrate), I have been tasked with researching advancements in the RO technology to determine if more efficient units and/or membranes are available in today's market.

Water System Interconnect between Rocking Horse Farms and Greatrock North Subdivisions: Based upon a recent inquiry regarding water system redundancy within these subdivisions, I have been tasked with researching the cost to interconnect the water distribution systems and evaluating each pump station's ability to deliver water to the other subdivision.

			2013		2014				2015				2016	
			QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2
						ALV-1								
Parameter	Unit	120206 Baseline			140311 Results	140402 Results	140702 Results							
Sodium	mg/L	93			113.6	103.2	100.8							
Calcium	mg/L	97			131.5	122.0	98.5							
Magnesium	mg/L	17			23.3	21.5	17.5							
Iron	mg/L	0.007			0.012	<0.005	<0.005							
Chloride	mg/L	120			193.7	170.45	129.19							
Sulfate	mg/L	133			207.54	197.01	150.86							
Alkalinity	mg/L	162			170.1	179.1	168.1							
TDS	mg/L	659			856	761	676							
Total Hardness (as CaCO3)	mg/L	309			424.2	393.1	318.1							
pH	s.u.	6.95			7.58	7.56	7.58							
Fluoride	mg/L	0.68			0.83	0.59	0.72							
						ALV-2								
Parameter	Unit	120206 Baseline			140311 Results	140402 Results								
Sodium	mg/L	99			115.3	117.2								
Calcium	mg/L	126			151.9	152.5								
Magnesium	mg/L	25			30.1	30.4	P							
Iron	mg/L	0.013			0.005	<0.005	E							
Chloride	mg/L	102			118.35	135.70	N							
Sulfate	mg/L	237			310.15	293.88	D							
Alkalinity	mg/L	198			255.7	261.1	I							
TDS	mg/L	816			958	1008	N							
Total Hardness (as CaCO3)	mg/L	412			503.3	505.9	G							
pH	s.u.	7.39			7.78	7.67								
Fluoride	mg/L	0.61			0.77	0.68								

			2013		2014				2015				2016	
			QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2
						South Pond								
		120310			140305	140402	140711							
Parameter	Unit	Baseline			Results	Results	Results							
Sodium	mg/L	1412			1075.0	1404.0	1520.0							
Calcium	mg/L	425			118.1	95.3	82.5							
Magnesium	mg/L	19			125.2	146.7	168.4							
Iron	mg/L	0.1			0.016	0.073	0.340							
Chloride	mg/L	1200			955.92	1166.48	1656.2							
Sulfate	mg/L	1625			1210.67	1416.91	1691.33							
Alkalinity	mg/L	1025			366.0	418.0	315.5							
TDS	mg/L	5707			4021	4746	5022							
Total Hardness (as CaCO3)	mg/L	1142			810.1	841.6	899.0							
pH	s.u.	8.89			9.43	9.28	9.68							
Fluoride	mg/L	-			2.51	2.74	3.06							
						North Pond								
					140305	140402	140711							
Parameter	Unit	Baseline			Results	Results	Results							
Sodium	mg/L				727.5	763.8	1161.0							
Calcium	mg/L				157.2	149.1	151.8							
Magnesium	mg/L				134.3	135.0	179.0							
Iron	mg/L				0.849	0.295	0.252							
Chloride	mg/L				854.97	844.40	1387.93							
Sulfate	mg/L				1135.43	1129.28	1597.15							
Alkalinity	mg/L				187.5	173.1	90.0							
TDS	mg/L				3392	3534	4212							
Total Hardness (as CaCO3)	mg/L				945.2	927.8	1115.6							
pH	s.u.				9.21	9.09	10.04							
Fluoride	mg/L				2.07	1.51	2.52							

Usage (KWH)

	Alluvial Wells			BECR			GN			RHF		
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Jan	2970	2136	2341	13520	13680	15360	4200	5400	5440	3960	17520	2400
Feb	2177	1832	1972	12520	12240	14400	5040	4840	5160	3840	11520	2200
Mar	2724	1854	2329	11960	11400	11600	4200	5080	4720	3400	10720	2080
Apr	3663	2117	2617	15080	12960	9600	11360	5600	4200	16280	9840	1920
May	5092	3517	2750	26800	18960	10320	11880	6400	6000	11680	4920	16840
Jun	7109	8676	4240	52040	52320	11480	15840	15910	9040	11000	8120	3160
Jul												
Aug												
Sep												
Oct												
Nov												
Dec												
YTD	23735	20132	16249	131920	121560	72760	52520	43230	34560	50160	62640	28600

Billing Amount

	Alluvial Wells			BECR			GN			RHF		
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Jan	$ 547.88	$ 358.98	$ 277.72	$ 1,651.60	$ 1,725.12	$ 1,108.54	$ 467.45	$ 670.70	$ 435.45	$ 372.28	$ 1,596.64	$ 226.87
Feb	$ 532.28	$ 341.31	$ 236.47	$ 1,621.27	$ 792.21	$ 1,057.09	$ 705.94	$ 364.19	$ 412.92	$ 512.12	$ 899.32	$ 208.26
Mar	$ 553.69	$ 223.28	$ 276.38	$ 1,645.34	$ 823.97	$ 862.64	$ 643.23	$ 422.21	$ 391.36	$ 520.05	$ 894.39	$ 202.38
Apr	$ 584.98	$ 252.68	$ 308.58	$ 2,396.93	$ 907.26	$ 739.18	$ 1,415.12	$ 447.69	$ 361.64	$ 1,664.58	$ 829.25	$ 188.77
May	$ 659.96	$ 409.20	$ 323.45	$ 2,789.79	$ 1,351.00	$ 777.33	$ 1,484.27	$ 508.91	$ 495.23	$ 1,390.20	$ 425.22	$ 1,505.07
Jun	$ 757.99	$ 985.98	$ 490.03	$ 4,416.78	$ 3,923.69	$ 829.21	$ 1,698.33	$ 1,243.57	$ 713.52	$ 1,620.73	$ 617.25	$ 281.51
Jul												
Aug												
Sep												
Oct												
Nov												
Dec												
YTD	$ 3,636.78	$ 2,571.43	$ 1,912.63	$ 14,521.71	$ 9,523.25	$ 5,373.99	$ 6,414.34	$ 3,657.27	$ 2,810.12	$ 6,079.96	$ 5,262.07	$ 2,612.86

Water Operations (gallons)

	Alluvial Wells			BECR			GN			RHF		
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Jan			1,720,830			2,144,122			542,401			443,608
Feb			1,507,059			1,886,973			424,378			349,397
Mar			1,664,857			1,977,083			383,936			401,330
Apr			1,952,959			2,250,630			562,538			555,259
May			2,550,712			3,383,834			1,011,703			1,189,680
Jun			3,803,749			5,393,746			1,909,813			1,824,868
Jul												
Aug												
Sep												
Oct												
Nov												
Dec												
YTD			13,200,166			17,036,388			4,834,769			4,764,142

Water Operations (KWH/1000 gallons)

	Alluvial Wells			BECR			GN			RHF		
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Jan			1.3604			7.1638			10.0295			5.4102
Feb			1.3085			7.6313			12.1590			6.2966
Mar			1.3989			5.8672			12.2937			5.1828
Apr			1.3400			4.2655			7.4662			3.4578
May			1.0781			3.0498			5.9306			14.1551
Jun			1.1147			2.1284			4.7334			1.7316
Jul												
Aug												
Sep												
Oct												
Nov												
Dec												
YTD			1.2310			4.2709			7.1482			6.0032

Water Operations ($/1000 gallons)														
	Wells			BECR			GN			RHF		
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Jan			$ 0.1614			$ 0.5170			$ 0.8028			$ 0.5114
Feb			$ 0.1569			$ 0.5602			$ 0.9730			$ 0.5961
Mar			$ 0.1660			$ 0.4363			$ 1.0193			$ 0.5043
Apr			$ 0.1580			$ 0.3284			$ 0.6429			$ 0.3400
May			$ 0.1268			$ 0.2297			$ 0.4895			$ 1.2651
Jun			$ 0.1288			$ 0.1537			$ 0.3736			$ 0.1543
Jul												
Aug												
Sep												
Oct												
Nov												
Dec												
YTD	0	0	$ 0.1449	0	0	$ 0.3154	0	0	$ 0.5812	0	0	$ 0.5484

Ramey Environmental Compliance, Inc.
Management and Operation Solutions for
Water and Wastewater Treatment
303-833-5505

PO Box 99, Firestone, Colorado 80520
email: contact.us@RECinc.net
www.RECinc.net

Greatrock North W & S District
Monthly Activities
June 23rd – July 25th

6/23/14: Regular checks and readings.

6/25/14: Regular checks and readings.

6/27/14: Regular checks and readings.

6/30/14: Regular checks and readings. Cleaned the chlorine injector in the RO building.

7/2/14: Regular checks and readings. Sampled EDOP alluvial well #1. Installed the transfer switch sun cover at Rocking Horse Farms.

7/3/14: Regular checks and readings. Fuel alarm light was on for the generator. Fuel level was ok. Picked up trash around the ponds.

7/8/14: Regular checks and readings. Cleaned the aerator at concentrate pond. Noticed tracks from a 4-wheeler spinning doughnuts on the road at Greatrock North. Discussed the repair of the well fence with Scott.

7/9/14: Regular checks and readings.

7/11/14: Regular checks and readings. Completed a water line inspection at 16410 Rayburn St. Sampled the each pump station discharge points and EDOP sampling at the ponds.

7/14/14: Regular checks and readings. Onsite with Brad Siomns and ISI West representative for the clay valve maintenance on Boxelder RO and booster station.

7/15/14: Responded to an alarm for power outage at 1:15am. Completed regular checks and readings. Greased the top end bearings on pump #2 at Greatrock North. Remained onsite for ISI West to complete clay valve maintenance.

7/18/14: Regular checks and readings. Completed inventory on clay valves for each well house, Boxelder, Greatrock North and Rocking Horse Farms. Changed the pre filters on the RO unit at Boxelder and the chlorine tubing on the chlorine pump.

7/21/14: Regular checks and readings. Collected and delivered VOC sampling from Boxelder.

7/23/14: Regular checks and readings.

7/24/14: Additional site visit for a locate at 28567 E 163rd Place. Unable to complete the locate.

7/25/14: Regular checks and readings. Attempted to complete locate for 28567 E 163rd Place with Mike but cannot find on site or on any maps.

Pond levels are below depth markers.

June 23rd – July 25th

RO Run Time Hrs	174.10 hrs
RO Concentrate Flow – 2 ponds	344,718 gallons

Completed Work Order

; Facility Name: Greatrock North WSD

Print Date: 7/25/2014

Date Completed	Department	Equipment	Task	WO Type	Work Ord
7/11/2014	GreatrockNorthWSD	South Concentrate Pond	EDOP Sampling	Scheduled	332.01
7/11/2014	GreatrockNorthWSD	RHF Building	TDS and Hardness	Scheduled	338.02
7/11/2014	GreatrockNorthWSD	GRN Pump Building	TDS and Hardness	Scheduled	338.03
7/9/2014	GreatrockNorthWSD	Boxelder Pump Buildi	TDS and Hardness	Scheduled	338.01
6/4/2014	GreatrockNorthWSD	RHF FH1	FH Flush Fire Hydrant Flush	Scheduled	306.01
6/4/2014	GreatrockNorthWSD	RHF FH1	FH Flush Fire Hydrant Flush	Scheduled	327.01
5/28/2014	GreatrockNorthWSD	BOX BP4 fire pump	grease grease pump motor	Scheduled	301.01
5/28/2014	GreatrockNorthWSD	Pond Aerator	Clean Clean	Scheduled	314.01
5/28/2014	GreatrockNorthWSD	BOX Generator	Ck Fuel Check Fuel Level	Scheduled	315.01
5/28/2014	GreatrockNorthWSD	BOX Generator	Ck Oil Check Oil Level(069)	Scheduled	316.01
5/19/2014	GreatrockNorthWSD	Water Sampling 011	RADS RADS(069)	Scheduled	281.01
5/14/2014	GreatrockNorthWSD	GN Booster pump 1	grease grease pump motor	Scheduled	302.01
5/14/2014	GreatrockNorthWSD	GN Booster pump 2	grease grease pump motor	Scheduled	303.01
5/14/2014	GreatrockNorthWSD	GN Booster Pump 3	grease grease pump motor	Scheduled	304.01
5/14/2014	GreatrockNorthWSD	RHF BP2 motor	grease grease pump motor	Scheduled	305.01
5/14/2014	GreatrockNorthWSD	RHF fire pump	grease grease pump motor	Scheduled	307.01
5/14/2014	GreatrockNorthWSD	Water Sampling 011	SOC's Synthetic Organics(049)	Scheduled	309.01
5/14/2014	GreatrockNorthWSD	GRN Pump Building	Exercise Exercise Valves	Scheduled	312.01
5/14/2014	GreatrockNorthWSD	GRN Tank Valves	Exercise Exercise Valves	Scheduled	313.01
5/14/2014	GreatrockNorthWSD	GN Generator	Ck Fuel Check Fuel Level	Scheduled	317.01
5/14/2014	GreatrockNorthWSD	GN Generator	Ck Oil Check Oil Level(069)	Scheduled	318.01
5/14/2014	GreatrockNorthWSD	RHF Generator	Ck Fuel Check Fuel Level	Scheduled	319.01
5/14/2014	GreatrockNorthWSD	RHF Generator	Ck Oil Check Oil Level(069)	Scheduled	320.01