RECORD OF PROCEEDINGS

MINUTES OF A REGULAR MEETING OF
THE BOARD OF DIRECTORS OF THE
GREATROCK NORTH WATER AND SANITATION DISTRICT
HELD
DECEMBER 4, 2012

A regular meeting of the Board of Directors of the Greatrock North Water and Sanitation District (referred to hereafter as "Board") was convened on Tuesday, December 4, 2012 at 5:30 P.M., at United Power, 500 Cooperative Way, Brighton, Colorado. The meeting was open to the public.

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ATTENDANCE

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

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

Jennifer Tanaka, Esq.; White Bear & Ankele, P.C.

Andrea Bollinger; Olsson Associates, Inc.

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DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

Disclosures of Potential Conflicts of Interest: Attorney Tanaka 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 Krayenhagen, Fleck, Polliard, Rogers and Wyckoff each confirmed that they had no conflicts of interest in connection with any of the matters listed on the Agenda. Director Fleck noted that he has resigned his position on the Box Elder Creek Ranch Homeowners' Association Board of Directors.

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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 Polliard, seconded by Director Wyckoff and, upon vote, unanimously carried, the Agenda was approved, as amended.

Board of Directors' Report: President Krayenhagen reported that he received a call from a resident tonight to report that kids were on top of the Greatrock North water tank riding bikes. Director Wyckoff called the Adams County Sheriff to report the incident.

Director Polliard reported that he noticed BB gun shot marks on the outside of the water tank at Rockinghorse Farms on a recent visit to the tank. He reported his findings to operations staff.

Manager's Report: Ms. Johnson presented and the Board reviewed the December Manager's Report.

Bid Summary Regarding Landscape Maintenance Services: Ms. Johnson presented an updated bid summary to the Board. Three bids were received from CoCal Landscape, Singing Hills and Premier Industries. Director Wyckoff commented that he has been very pleased with the work performed to date by Premier Industries. Their bid is for an amount not to exceed $8,520.

Following discussion, upon motion duly made by Director Fleck, seconded by Director Wyckoff and, upon vote, unanimously carried, the Board approved a contract with Premier Industries for an amount not to exceed $8,520 on an on-call basis. Director Wyckoff will assume the responsibility of contacting Premier Industries when services are needed.

CONSENT AGENDA The Board considered the following actions:

- Approval of the Minutes from the November 6, 2012 special meeting.

- Ratify approval of payment of claims through the period ending November 15, 2012, as follows:

General Fund	$ 62,843.16
Debt Service Fund	$ 192.50
Capital Projects Fund	$ 19,824.20
Total Claims:	**$ 82,859.86**

- Ratify approval of Letter of Completion of Services and Termination of Agreement for the Independent Contractor Agreement for GIS and Surveying Services between the District and Olsson Associates, Inc.

- Approval of Independent Contractor Agreement for Rules & Regulations Specifications and Drawings between the District and Olsson Associates, Inc.

- Approval of Third Addendum to Independent Contractor Agreement for General Electrician Services between the District and Timber Line Electric and Controls Corporation ("TLECC") to incorporate new rate structure.

- Approval of Independent Contractor Agreement for Alluvial Wells RTU Upgrade Services between the District and TLECC.

- Approval of Independent Contractor Agreement for Electrical Preventative Maintenance Services between the District and TLECC.

- Approval of Independent Contractor Agreement for Computer Installation, Programming and Training Services between the District and TLECC.

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

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ENGINEER'S REPORT

Evaporation Ponds:

Concentrate Management Efforts: Ms. Bollinger reported that as of November 23, 2012 the SCADA has a pond depth of 4.17 feet. Ramey Environmental Compliance, Inc. has installed stakes in the north and south ponds and has been monitoring the depth of the water manually in order to compare with the SCADA readings.

Location and Costs to Acquire Land for Third Evaporation Pond: Ms. Bollinger presented four options for locating a new third evaporation pond. The Board directed staff to pursue option A (the location just north of the current ponds) first and if unsuccessful, prepare a feasibility study on option C (acquiring a portion of the Kremer property).

Services Offered by Aries Chemical, Inc.: Ms. Bollinger presented the proposal from Aries Chemical, Inc. for a second reverse osmosis treatment process. The Board directed staff to add this item to the future capital plan and to take no action at this time.

Energy Audit: Ms. Bollinger informed the Board that the tank fill times have been revised per the energy audit. She will continue to monitor the changes through the month of December and if no additional changes are needed, United Power will be contacted in January to change the District's power accounts to coincide with the change in operations, thereby reducing the monthly energy costs.

Engineering, Design and Operations Plan ("EDOP"): Ms. Bollinger noted that she has been in contact with the State and they have completed their review and will provide a written report to the District soon.

GIS Mapping Project: Ms. Bollinger will work to include the comments from Director Fleck and Mr. Rabas into the GIS mapping and finalize the project.

VFD Enclosures: Ms. Bollinger reported to the Board on the status of discussions with Dan LaCoe regarding the VFD enclosures. She noted that she and Mr. Simons are continuing to research the correct enclosure needed for the VFD.

Energy Grant Application: Ms. Bollinger reported that after researching the grant, it was determined that the third evaporation pond design and construction could qualify for funds, but it is advisable to wait on applying for the grant until the District has purchased the land and has funds allocated, because within four months of award of the grant construction must begin.

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OPERATIONS AND MAINTENANCE MATTERS

Operations and Maintenance Update: The Board reviewed the Monthly Activities Report and operations and maintenance update. A copy of the report is attached hereto and incorporated herein by this reference.

Monthly Flow Report: Ms. Johnson will email the monthly report to the Board for their review.

Water Quality Issues in Box Elder Creek Ranch and Rocking Horse Farms: The Board reviewed the monthly water quality report. Director Fleck reported about conversations that were had at the last HOA meeting related to brown water. He also commented that his daughters have noticed that the water smells like dirty dish water.

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DEVELOPMENT PROJECTS

Development Projects:

Hayesmount Estates, Homestead Heights II, and Ridgeview Estates: There was nothing new to report on Hayesmount Estates, Homestead Heights II, and Ridgeview Estates.

Kremer Property: Ms. Johnson reported to the Board that a back charge has been prepared and transmitted to the developer of the Kremer property for additional fees incurred regarding possible inclusion.

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RECORD OF PROCEEDINGS

WATER MATTERS

Recent Well Permit Applications: Ms. Johnson reported to the Board on the status of the recent well permit applications. She noted that all of the 600 foot spacing waivers have been received. The State has issued a draft permit. Mr. Sanchez is reviewing the new permit to ensure no revisions are necessary.

Request from Box Elder Creek Properties, LLC regarding Inclusion of District Water Rights in Their Water Sourcing Operation at Box Elder Farm: The Board reviewed the request and asked that Mr. Ketellapper and Mr. Sanchez attend the January meeting to discuss in detail.

Application of Box Elder Creek Ranch Water Company, Case No. 07CW313: The Board reviewed the comments submitted by Attorney Poznanovic related to the application of Box Elder Creek Ranch Company, Case No. 07CW313. The Board directed staff to ask Attorney Poznanovic to provide the actual decree that comments were provided on. No action was required by the Board.

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COMMUNITY COMMENTS

Community Comments: There were no community comments.

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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

RECORD OF PROCEEDINGS

THESE MINUTES APPROVED AS THE OFFICIAL DECEMBER 4, 2012 MINUTES OF THE GREATROCK NORTH WATER AND SANITATION DISTRICT BY THE BOARD OF DIRECTORS SIGNING BELOW:

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Terry Krayenhagen

_____
Robert William Fleck

_____
Jeffrey L. Polliard

_____
Brian K. Rogers

_____
John D. Wyckoff

MEMO

TO: Lisa Johnson, District Manager

FROM: Andrea Bollinger

RE: November 4, 2012 Meeting Agenda Items

DATE: November 26, 2012

PROJECT: 011-0240

Item IV.A. – Evaporation Ponds

1. Status of concentrate management efforts – As of 11/23/12 the SCADA has a pond depth of 4.17 ft. REC has installed stakes in the north and south ponds and has been monitoring the depth of the water manually in order to compare with the SCADA readings.

2. Third evaporation pond – Olsson Associates met with SDMS, Jennifer Gruber Tanaka, and John Wykoff to discuss location options. See attached email for action items. The locations to examine include:

    - Box Elder Creek/Henrylyn property,
    - Kremmer property,
    - BECR Filing 4 property south of the existing ponds, after the creek but before the canal, and
    - North of the existing ponds.

3. Aries Chemical- Andrea Bollinger met with Aries at BECR to discuss the District's system. During the site visit, Aries explained pretreating the pond water so it could be treated in an RO unit at the pond isn't economical and as a result it was decided to focus on an RO unit at the existing plant only. Aries provided a quote for a 2nd RO unit. See attached quote.

Item IV.B. – Discuss steps to implement changes determined by the energy audit

Andrea Bollinger has contacted Timber Line to discuss operations. Olsson Associates has advised filling set point changes. REC implemented changes on 11/26/12. Below are the existing fill time frame and the proposed.

Subdivision	Existing Tank Fill Time Frame	Proposed Tank Fill Time Frame
GRN	9pm - 9am	10pm - 11am
	21:00 - 9:00	22:00 - 11:00

RHF	9pm - 9am	10pm - 11am
	21:00 - 9:00	22:00 - 11:00

BECR	10pm - 10am	11pm - 12am
	22:00 - 10:00	23:00 - 12:00

Item IV.C – Status of Engineering Design and Operations Plan

- Olsson Associates has contacted the HMWMD requesting a status update for a formal response to the draft submittal.
- Olsson Associates is finalizing the report and is prepared to submit the report to the State by the January 3rd, 2013 deadline.

Item IV.D – Status of GIS Mapping

Olsson Associates has been notified of comments from Rob Fleck and Jeff Rabas.

Item IV.E – Status of VFD enclosures

Olsson Associates has been in discussions with Dan LaCoe and are in the process of arranging a site visit.

Item IV.F – Status of Energy Grant Application

After researching the grant, it was determined the 3rd evaporation pond design and construction could qualify for funds but it is advisable to wait on applying until the District has purchased the land and has funds set aside because within four months of award construction must begin. Please see the attached memo for more detail.

Brad and I will attend the Dec 4, 2012 Board Meeting and will be prepared to address any of these items, as well as any additional items that may arise.

Item IV.A. – Evaporation Ponds

#2- Attachments

Andrea Bollinger

From: Lisa Johnson <ljohnson@sdmsi.com>
Sent: Monday, November 26, 2012 2:22 PM
To: Andrea Bollinger
Cc: Brad Simons
Subject: RE: GNWSD- 3rd pond location Action items 11/26

Looks good with one minor addition. See below ☺.

Thanks Andrea,
Lisa

Lisa A. Johnson
Vice President of Administration
District Manager
Special District Management Service, Inc.
141 Union Blvd., Ste. 150
Lakewood, CO 80228
303-987-0835 (o)
303-987-2032 (f)

From: Andrea Bollinger [mailto:abollinger@olssonassociates.com]
Sent: Monday, November 26, 2012 2:14 PM
To: Lisa Johnson
Cc: Brad Simons
Subject: GNWSD- 3rd pond location Action items 11/26

Lisa,

Based on the meeting today and our phone call below are the items Olsson Associates is to work on:

1. Spend no more than 1 hr. looking at the Box Elder Creek/Henrylyn property and how the land could be utilized.

2. Verify with Adam's County the quantity of land required to be purchased which is exempt from the sub-dividing process with the County. Is it 35 acres?
    a. Section off the quantity of land on the Kremmer's property equal to the amount of land needed to avoid the sub-dividing process. And complete a "back of the napkin" drawing showing how the ponds could fit and what we could utilize the remaining property for, i.e., WWTP or WTP, etc.

3. Examine BECR filing 4 south on the existing ponds, after the creek but before the canal. Is a 3rd and 4th pond viable?

4. Determine if the area north of the existing ponds is feasible from an engineering stand point.
    a. If so, have David Krickbaum open discussions with the County to determine if the County would allow encroachment within the floodway. See attached email for background.

Andrea Bollinger, EIT | Water/Wastewater | Olsson Associates
4690 Table Mountain Drive, Suite 200 | Golden, CO 80403
abollinger@olssonassociates.com | TEL 303.237.2072 | FAX 303.237.2659

Please consider the environment before printing this e-mail.

Andrea Bollinger

From: David Krickbaum
Sent: Thursday, June 02, 2011 7:56 AM
To: Brad Simons
Subject: RE: Greatrock North 3rd evaporation pond

It doesn't.

A complicating factor is that the Adams County floodplain regulations have a requirement for no rise in the base flood elevation (BFE). I think the floodway shown may be based on a 1 foot rise in BFEs. If so, the floodway per Adams County requirements would be wider than shown on the maps.

Would it be okay to talk to Adams County about this to get some additional clarification?

David Krickbaum | Olsson Associates
4690 Table Mountain Drive, Suite 200 | Golden, CO 80403 | dkrickbaum@oaconsulting.com
TEL 303.237.2072 | DIR 303.374.3133 | CELL 303.918.5708 | FAX 303.237.2659

From: Brad Simons
Sent: Wednesday, June 01, 2011 6:10 PM
To: David Krickbaum
Subject: RE: Greatrock North 3rd evaporation pond

The upstream reservoir has been breached. Does this change anything in terms of floodways/floodplains?

Bradley A. Simons, PE | Water/Wastewater | Olsson Associates
4690 Table Mountain Drive, Suite 200 | Golden, CO 80403 | 303.237.2072 | bsimons@oaconsulting.com

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From: David Krickbaum
Sent: Tuesday, May 31, 2011 11:06 AM
To: Brad Simons
Subject: Greatrock North 3rd evaporation pond

Brad-

There is a Zone AE FEMA regulated floodplain and floodway on Box Elder Creek. Portions of the three existing ponds are in the floodplain. The corner of the north pond appears to encroach into the floodway. There are no Letters of Map Change on the FEMA website.

Depending on size and configuration, it may be possible to design the new evaporative pond to be outside the floodway. It would still be in the 100-year floodplain.

Adams County Flood Control Overlay (FCO) Zone District Regulations require that:

- A Conditional Letter of Map Revision (CLOMR) be approved by FEMA before commencing work that would cause any rise in the water surface elevation of the floodplain.
- A flood use permit for any fill, development or change in the channel of watercourse in the FCO Zone District.
- No new construction be permitted which decreases the efficiency or capacity of the channel or floodway.
- Encroachments within the floodway are prohibited unless certified by a professional engineer that the cumulative effect of the proposed development, when combined with other existing and anticipated development, shall not result in any increase in the base flood elevation.

Attached are:

- Effective Flood Insurance Rate Map showing the regulated 100-year floodplain and floodway.
- Aerial map from Adams County showing the future 100-year floodplain, effective 100-year floodplain and floodway

David Krickbaum | Olsson Associates
4690 Table Mountain Drive, Suite 200 | Golden, CO 80403 | dkrickbaum@oaconsulting.com
TEL 303.237.2072 | DIR 303.374.3133 | CELL 303.918.5708 | FAX 303.237.2659

Item IV.A. – Evaporation Ponds

#3- Attachments

Aries Chemical Incorporated

P.O. Box 519, 6604 Depot Street, Beaver Falls, NY 13305 E-mail: aries@arieschem.com
TEL: 315-346-1489 FAX: 315-346-1658

November 20 2012 Quotation #:112012-14

Andrea Bollinger, EIT | Water/Wastewater | Olsson Associates
4690 Table Mountain Drive, Suite 200 | Golden, CO 80403
abollinger@olssonassociates.com | TEL 303.237.2072 | FAX 303.237.2659

25 GPM Reverse Osmosis Filtration System Proposal

Aries Chemical proposes to provide one skid mounted R.O. filtration system designed to recover 75% of flow presently discharged from the potable water RO to evaporation ponds. the 33 gpm feed will result in 25 gpm of relatively high quality permeate that can be send back to the feed of the primary RO system. 8 gpm will be rejected as concentrate containing approximately 14,000 mg/l of total dissolved solids. please refer to our CAD # RO-PFD-12-024. The proposed skid mounted RO system specifications are as follows:

Pretreatment for RO Membrane System

- Water pressure to system shall be a minimum of 5 psi at 33 GPM.
- One chemical feed system for feeding Dispersant into feedwater; consists of a poly day tank & LMI metering pump,
- One Shelco stainless steel filter model 7FOS3 with 5 micron cartridge

RO Membrane System

- Qt. (2) 8 inch composite membrane housings rated at 450 PSI
- RO high pressure feed pump is a multi-staged Goulds with 316SS wetted parts
- 316SS pressure side piping with Victaulic connections
- RO system shall produce a 25 gpm of permeate water with feed temperature of 45 degree F. Approximately 75% recovery and greater than 95% rejection of TDS in permeate.
- Schedule 80 PVC piping on non pressure sides of system
- Concentrate control valve shall be 316SS stainless steel ball valve with worm gear adjustment
- Sample ports on the two housing permeate discharge ports
- Epoxy coated carbon steel skid with all components factory mounted
- 8" x 40" low fouling RO membrane elements; total of 10 membranes in the RO.
- Pressure gauges on feed and concentrate piping
- Control package per below controls section
- CIP system per below description
- Panel mounted flow & conductivity controller with total 7 sensors
- Auto-flush control for optimizing membrane life and reducing cleaning frequency
- pH probe in RO feed

R.O. Membrane Cleaning C.I.P. System

- Auto flush program included with RO
- One CIP chemical make down 150 gallon batch tank
- Auto lockout of R.O. when CIP pump is energized
- Operator shall control the manual valve settings and the cleaning processes

Control Systems:

R.O. Programmable Controller:

- R & D Specialties microprocessor
- Multifunction Keypad with backlit LCD display
- Programmable time delays and set points

- Write protected set points
- Low pressure switch controls feed pump with automatic reset
- Visual and audible alarms at low feed pressure; with silence feature
- RO and auxiliary pump control relays
- Feed water solenoid valve relay
- Flush water solenoid valve relay
- Permeate Conductivity Readout
- Membrane flush solenoid valve
- RO storage tank full relay
- RO storage tank low relay
- Pretreatment and CIP lockouts
- Operating hours
- RO tank full override

Motor Control Starter Panel:

- NEMA 4X enclosures
- 480V, 3 phase, 60A
- One disconnect
- Includes control transformer
- CAD drawings
- VFD for high pressure pump

Installing electrical contractor required to bring a single-point high voltage (480V, 3-Ph, 60A, 60 Hz) to the skid.

Services

- Start and training provided
- O & M manuals provided

ITEMS NOT INCLUDED:

- *Feedwater tank*
- *Permeate Tank*
- *Concentrate Tank*
- *Installation*

RO System with pretreatment & CIP .....$ 54,300FOB Beaver Falls, NY
Delivery……..... 10 weeks ARO

Submitted by:
Brian Graveley
ARIES CHEMICAL INCORPORATED

CC: Bruce Graveley
Greg Angstadt

ATTACHMENTS: TERMS AND CONDITIONS
CAD# RO-PFD-12-024
PRODUCT BULLETIN

GENERAL TERMS AND CONDITIONS

ACCEPTANCE AND AGREEMENTS:

Acceptance of this quotation is not effective unless in strict conformity with the terms set forth herein. Any changes in specifications, equipment, or any of the terms hereof proposed by Buyer are subject to acceptance by Seller. Seller shall have the right to substitute parts, components, and/or equipment in instances of unavailability of same, provided they are of equal grade and quality as those referred to herein, and further provided the overall efficiency of the unit is not decreased. Any material substitution must be cleared by Buyer.

This offer, when accepted, shall constitute the entire agreement between the Buyer and Seller, and Buyer agrees that there have been no verbal understandings or agreements reached between the parties hereto other than the conditions stated in this quotation. However, any and all representations made by Seller to Buyer about the fitness of the subject equipment for the use intended, is merged herein. If there is any inconsistency or conflict between any of the terms, provisions or conditions of this quotation and the Buyers acknowledgement, acceptance of Purchase Order, the provisions of this quotation shall govern and control.

EXPIRATION OF OFFER:

This quotation expires sixty (60) days from the date appearing on the summary page hereof unless earlier withdrawn by Seller by written notice to Buyer.

TERMS OF PAYMENT:

Payments are to be made in U.S. currency as follows:

- 40% of total purchase price is due upon receipt of purchase order.
- 50% of total purchase price due prior to shipment of system components.
- Final 10 % due upon successful start-up of the system. Should the system not be started up due to circumstances not caused by Aries Chemical, then the final 10% is due 60 days from delivery.

TITLE AND RIGHT OF POSSESSION:

The title and right of possession of described articles in this proposal shall remain vested in supplier's company until Buyer shall have made full payment as specified in the above Terms of Payment. This right shall not be waived by attachment of said articles to the real estate of the Buyer. Upon failure to make agreed payments, or any part thereof, supplier is to retain any and all partial payments which may have been made as liquidated damages and shall be entitled to take immediate possession of said materials.

DELIVERY:

Since the equipment purchased under this proposal is specially designed and manufactured for this particular application delivery schedules are approximated to the best of our knowledge at the time of this proposal. The delivery schedule is subject to review by the Seller at the time this offer is accepted by the Buyer. Delivery is subject to extension for delays caused by fire, flood, acts of God, labor disputes, civil or military authority, riot, nondelivery of materials or supplies by subcontractors or suppliers or any other reasons beyond the reasonable control of Seller. Seller will not be liable for any loss of damage, consequential or otherwise resulting from late delivery or nondelivery due to any of said causes.

FREIGHT, TAXES AND DUTIES:
Prices quoted are F.O.B. Beaver Falls, NY. The major portion of the equipment in this proposal is manufactured in Beaver Falls, New York. Subject to availability, shipments will be sent on an exclusive truck. Prices quoted are exclusive of taxes, duties and other ancillary charges. All such charges are the responsibility of Buyer, unless otherwise noted in this quotation.

TECHNICAL INFORMATION:
All drawings, plans, specifications, designs and other engineering and manufacturing information furnished to Buyer by Seller (including that embodied herein) are furnished exclusively for use by Buyer in connection with installing, maintaining or operating the Equipment. Buyer shall not use, sell, or otherwise make available to third parties any such information except to the extent necessary to assist in such installation, maintenance or operation.

CANCELLATION:
Buyer may not cancel this order for any reason except for unreasonable delay or negligence in the completion of the installation, caused by the act of Seller, or his representatives. In the event of such cancellation, Buyer reserves the right to make settlement of all sums due Seller at that time, and complete the installation of the equipment itself.

CHANGES:
Changes in the equipment shall be requested by Buyer in writing. If any charge is made which results in an increase or decrease in the cost to the Seller of fulfilling this agreement, the price specified in the quotation shall be increased or decreased accordingly on an equitable basis determined by Seller, and approved by Buyer.

WARRANTY:
Equipment manufactured by Seller is warranted to be free from defect in materials or workmanship for a period of (I) twelve months, from the date of Buyer's receipt of the equipment, but only if such equipment is installed, operated and maintained in accordance with the instructions furnished by Seller to Buyer, provided, however, that no warranty is given with respect to items which have a normal useful life of less than twelve months. Items furnished by Seller, but manufactured by others are warranted by Seller only in accordance with warranty extended by the manufacturer.

BUYER'S REMEDIES:
Buyer's sole and exclusive remedy in respect of any claim against Seller relating to or arising out of this quotation or the sale or installation of the equipment (including, but not limited to claims for breach of any warranty) shall be limited to Seller's repair or replacement cost, or any part of material proved to be defective during the warranty period provided, however, that Seller shall not be responsible for labor costs incurred for removal and reinstallation of any parts or material in connection with such repair or replacement. In no event, be it due to a breach of any warranty or guarantee here under or any other cause arising out of performance or non-performance of the proposal or contract, shall the Seller be liable for consequential or indirect loss or damage, including but not limited to, loss of profits, plant downtime or suits by third parties against Buyer.

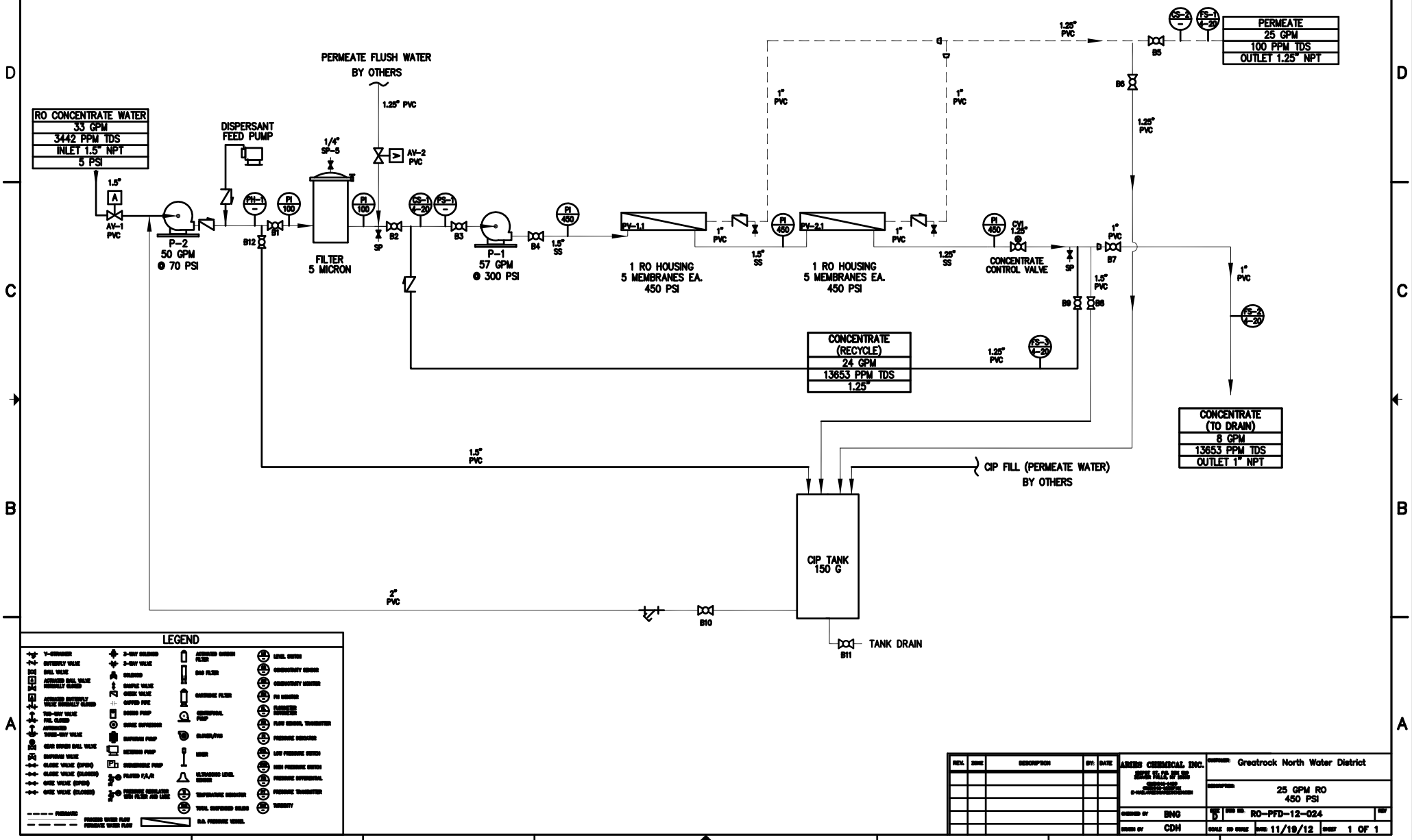
Seller shall protect, defend, indemnify and hold buyer harmless from and against any and all liabilities or expenses arising out of or associated with the negligence or intentional misconduct of seller, its agents, employees and contractors, while on Buyers premises.

Seller shall provide buyer a certificate of insurance evidencing the following coverage:

a. Workmen's compensation - statutory amount.
b. General liability including contractual liability - $2,000,000.00 per occurrence
c. Product liability - $2,000,000.00
d. Umbrella Liability- $ 5,000,000.00

ENTIRE AGREEMENT; APPLICABLE BY LAW:

The terms and conditions set forth in this quotation shall constitute the entire agreement between the parties, and supersede all prior written or oral representations and understandings. This agreement shall be governed by and constructed in accordance with the laws of the State of New York including the Uniform Commercial Code as in effect therein.


RO CONCENTRATE WATER
33 GPM
3442 PPM TDS
INLET 1.5" NPT
5 PSI
1.5"
A
AV-1
PVC
P-2
50 GPM
@ 70 PSI
DISPERSANT
FEED PUMP
PH-1
PI
100
B12
B1
1/4"
SP-5
FILTER
5 MICRON
PERMEATE FLUSH WATER
BY OTHERS
1.25" PVC
AV-2
PVC
SP
B2
CS-1
4-20
PS-1
B3
P-1
57 GPM
@ 300 PSI
B4
1.5"
SS
PI
450
PV-1.1
1 RO HOUSING
5 MEMBRANES EA.
450 PSI
1"
PVC
PV-2.1
1 RO HOUSING
5 MEMBRANES EA.
450 PSI
CV1
1.25"
CONCENTRATE
CONTROL VALVE
B5
B6
B7
B9
B8
CS-2
FS-1
4-20
PERMEATE
25 GPM
100 PPM TDS
OUTLET 1.25" NPT
FS-2
4-20
CONCENTRATE
(RECYCLE)
24 GPM
13653 PPM TDS
1.25"
CONCENTRATE
(TO DRAIN)
8 GPM
13653 PPM TDS
OUTLET 1" NPT
CIP FILL (PERMEATE WATER)
BY OTHERS
CIP TANK
150 G
2"
PVC
B10
B11
TANK DRAIN
LEGEND
REV.
ZONE
DESCRIPTION
BY
DATE
ARKEMA CHEMICAL INC.
Greatrock North Water District
25 GPM RO
450 PSI
DESIGNED BY
BNG
DRAWN BY
CDN
SIZE
D
DWG NO.
RO-PFD-12-024
REV
SCALE
NO SCALE
DATE
11/19/12
SHEET
1 OF 1

ARIES REVERSE OSMOSIS SYSTEMS

Aries designs and manufactures Reverse Osmosis Systems for ultrapure, potable, process and wastewater applications. Aries Reverse Osmosis Systems are typically used whenever total dissolved solids removal is required. In clean water applications Aries Reverse Osmosis Systems can be used individually or in combination with ion exchange polishing to produce water meeting your process needs at the lowest cost. Reverse Osmosis removes 97% - 99% of the total dissolved solids along with some organics and bacteria. Aries is capable of designing, manufacturing and delivering Reverse Osmosis Systems of any scale.

For large applications, we offer a wide range of options from skid mounted systems to custom designed systems with complete pre & post treatment. Our ability to customize the system to meet your specific needs is the advantage of using Aries Reverse Osmosis Systems. Aries has Lab & Pilot Reverse Osmosis Systems available for in house and on site testing.

Typical Reverse Osmosis Applications

- Ultrapure water production
- Desalination of seawater and brackish water
- Recycling wastewater
- Boiler feedwater
- Process rinsewater
- Pharmaceutical manufacturing
- Cosmetics manufacturing
- Pretreatment to Ion Exchange
- Electronics manufacturing
- Metal finishing
- Hospital central supply

■ PO Box 519 ■ Beaver Falls, NY 13305 ■ Tel: 315-346-1489 ■ Fax: 315-346-1658 ■
■ E-mail: aries@arieschem.com ■

Aries Reverse Osmosis Systems are designed to meet the customer's specific needs. Systems are designed with the optimum pretreatment, membrane selection, automation and post-treatment to provide the lowest operating costs. Advanced thin film composite membrane technology is used to provide long membrane life with enhanced chemical and fouling resistance. Pretreatment processes such as ultrafiltration, multimedia filters, activated carbon and softeners are used to maximize membrane life. Clean In Place (CIP) system options are available to keep membranes clean for the greatest efficiency and life-span. Post treatment options include ion exchange, ultraviolet disinfection systems and absolute cartridge filtration.

Aries Reverse Osmosis System Features

- High rejection thin film RO membranes
- Efficient high pressure pumps and motors
- PLC controls
- Skid mounted designs for easy installation
- Continuous TDS monitoring
- Flow meters for product water, concentrate and & recycle lines
- Pressure regulated valves for inlet and concentrate
- Comprehensive limited warranty
- System design to inhibit bacterial contamination
- Integrated micron prefiltration
- Clean In Place (CIP) system available
- Complete system automation available
- Pretreatment options available: UF, activated carbon, softeners
- Post treatment options available: DI, disinfection and absolute filtration

PBRO0210

■ PO Box 519 ■ Beaver Falls, NY 13305 ■ Tel: 315-346-1489 ■ Fax: 315-346-1658 ■
■ E-mail: aries@arieschem.com ■

Item IV.F – Status of Energy Grant Application

Attachments

MEMO

	Overnight
	Regular Mail
	Hand Delivery
X	Other: _email____

TO:	Lisa Johnson, District Manager
PHONE:	303.987.0835
FROM:	Andrea Bollinger
RE:	Greatrock North WSD- Energy Grant Application
DATE:	November 15, 2012
PROJECT #:	011-0240
PHASE:	100

During the November 6, 2012 board meeting, the Greatrock North Water and Sanitation District (District) asked Olsson Associates to research the Department of Local Affairs (DOLA) Energy Mineral Impact Assistance Program (EMIA) and determine if the District could qualify for a grant.

Below is a highlight of the EMIA program guidelines:

- Application deadlines
  - April 1
  - August 1
  - December 1
- EMIA program has three tiers based on level of funding requesting
  - Tier 1: Up to $200,000
  - Tier 2: $200,000 - $1,000,000
  - Tier 3: $1,000,000 - $10,000,000
- Eligible activities include:
  - "Planning, construction, and maintenance of public facilities" and "the provisions of public service."
  - Examples of public facilities include water and sewer infrastructure.
- Minimum local match requirement is 25 percent of the total project cost.
- Funding is volatile and follows the ups and downs of the industry's development and production cycles and as a result the funding amounts for each tier may be adjusted periodically as demand and revenue capabilities change.

Based on the EMIA program guidelines, it appeared the District's third evaporation pond project would qualify for funding. However, Olsson Associates spoke with the DOLA North Central Regional Manager, Don Sandoval, for verification and further clarification on the qualification requirements. Below is what was discussed:

- If the District has oil and gas within its boundaries or within the surrounding area it helps for qualification/priority.
- December 2012 submittals are the most competitive in recent history.
- The District would need a 50:50 matching to be competitive with other submittals.
- This project would probably have a more competitive edge in Tier 1.
    - If the project would cost $500,000 than the District could request $200,000 from EMIA in Tier 1 while the District supplies the $300,000.
- If awarded during the December process, the monies can be used for design, but the project would have to be under construction within four months of a signed contract.
    - Typically a signed contract is executed in the April/May following the December submittals. This would result in the District beginning construction in August/September of 2013.

Based on Olsson Associates research and discussions with DOLA, the design and construction of a third evaporation pond could qualify for the program. However, it is advisable to wait and apply for the monies after land for the third pond has been purchased. The land location could potentially delay construction, if not acquired in time, and thus result in a retraction of an award. Waiting to submit would allow the District to better position themselves for the application and help ensure they could be under construction within the four months of the award.

Please notify me if the Board would like to proceed with submitting the application for the December 2012 deadline. Should you have any questions on this matter feel free to call or email me and we can discuss further.

CC: Brad Simons, Olsson Associates
Olsson Associates project file

F:\Projects\011-0240\Data\Energy Grant Application- DOLA\MEMO_2012-11-15.doc

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
October - November 2012

10/29/12: Regular checks and readings. Check oil & fuel on all generators.

10/31/12: Regular checks and readings. Placed 1" pvc pipe at the water edge in the southwest corner of the south concentration pond.

11/2/12: Regular checks and readings.

11/5/12: Regular checks and readings.

11/7/12: Regular checks and readings. Rocky Mountain Cummins onsite. Greatrock North generator needed a new solenoid and Rocking Horse needed a new temperature switch.

11/8/12: Regular checks and readings. Collected and delivered monthly samples. Opened the water valve at 16130 Timber Cove. Installed a stick in the north evaporation pond. Water level is at 13 marks. Water level in the south pond had not changed since the stick was installed.

11/12/12: Regular checks and readings.

11/13/12: Additional visit to complete a line locate at 32260 E 167th Dr.

11/14/12: Regular checks and readings. Pond levels increased by a half an inch. UKA 1 & 2 were in auto. LFH all were off. ALV2 was off.

11/16/12: Regular checks and readings. Pulled the aerator from RO concentrate pond. The impeller was crested with salts. Removed as much as possible with mechanical means. Need to get some HCL to dissolve the solids. RO recovery is slightly high. Flushed and readjusted the concentrate valve.

We have completed the valve exercising on the Great Rock North distribution lines. 56 valves were found and 11 of the 56 we could not operate due to too much debris on the valve stems (we will need to discuss how to clean these out). Our guy made a few notes on the drawings and we will provide those to Andrea.

11/19/12: Regular checks and readings. Completed a line locate at 28495 E 163rd Pl.

11/21/12: Regular checks and readings.

11/23/12: Regular checks and readings.

11/26/12: Regular checks and readings. Boxelder Generator is the only one exercising at this point. Working with Cummins Rocky Mountain to get the problems resolved.

October 31 to November 26, 2012

RO Run Time Hrs	107 hrs.
RO Concentrate Flow – 2 ponds	211,860 gallons

Completed Work Order List Report
Greatrock North WSD

11/26/2012

(Filtered)

Completed	Equipment Number	Task	Description	Priority	WO #	Type
10/29/2012	BOX BP1 VFD	Clean Eqp	Clean Equipment	5	117	Sched
10/29/2012	BOX Generator	Ck Oil	Check Oil Level	5	129	Sched
10/29/2012	BOX Generator	Ck Fuel	Check Fuel Level	5	126	Sched
10/29/2012	RHF Generator	Ck Oil	Check Oil Level	5	131	Sched
10/29/2012	RHF Generator	Ck Fuel	Check Fuel Level	5	128	Sched
10/29/2012	GN Generator	Ck Fuel	Check Fuel Level	5	127	Sched
10/29/2012	BOX BP2 VFD	Clean Eqp	Clean Equipment	5	118	Sched
10/29/2012	BOX BP3 VFD	Clean Eqp	Clean Equipment	5	119	Sched
10/29/2012	GN Generator	Ck Oil	Check Oil Level	5	130	Sched
10/31/2012	BOX RO system	CIP	Clean in place	1	110	Sched
11/8/2012	Water Sampling	Bacti	Bacti Sampling	1	122	Sched

Greatrock North WSD
Water Quality Calls 2010 - 2012

	Date	Complaint	Name	Address	Phone	Subd	Action Taken
1	02/08/10	Fluoride	Greer, Sherry	16385 Jalna Ct	303-637-9200	RHF	Discussion and forward lab results
2	03/22/10	Brown water	Lloyd	16588 Joppa Ct.		RHF	Flush on 3/22
3	04/02/10	Bad Hot Water Tank		16460 Tree Haven		BOX	Discussed with Rob Fleck
4	04/26/10	Gray water turning whites gray, smelly	Roppo, Mary	16715 Shadowwood Ct	303-659-4688	BOX	Discussed with homeowner; flush on 4/28
5	05/07/10	Brown water	Randall	16481 Tree Haven St.	303-667-7222	BOX	Asked him to run water for a few minutes to see if it would clear
6	05/12/10	Brown water	Arnold, Brian	16530 Treehaven	303-655-8121	BOX	Flush on 5/12
7	05/18/10	Brown water	Lovato	31305 E. 166th Ave.	303-659-2616	BOX	Flush on 5/18
8	05/29/10	Murky water; musky smell	Paustian, Corinne	16555 Umpire Ct	303-655-1954	BOX	Asked her to run water for a few minutes to see if it would clear
9	06/04/10	Brown water	Dahlin	16181 Rayburn St.	303-655-1289	BOX	Flush on 6/4
10	06/04/10	Brown water	Obrechet, Ted	16651 Treehaven	303-659-1914	BOX	Flush on 6/4
11	07/10/10	Brown water	Montoya, Jeff	31450 E 167th Ave	303-655-0606	BOX	Flush on 7/12
12	07/15/10	Brown water	Cheserinick	32285 E. 166th Ct.	303-637-0079	BOX	Flush on 7/16
13	07/23/10	Brown water	Frank	16261 Timber Cove St.		BOX	Flush on 7/26
14	08/03/10	Brown water	Leonard, Travis	16720 Kenuil Ct.	303-655-3744	RHF	Flush on 8/3
15	08/03/10	Brown water	Zaiss, Brian	31351 E 167th	303-710-0193	BOX	Flush on 8/3
16	08/10/10	Brown water	Fleck, Rob	16460 Tree Haven St	via email	BOX	Flush on 8/10
17	08/12/10	Milky then brown water	Watt	29365 E. 160th Ct.	303-6551757	GN	Flush on 8/12
18	08/13/10	Brown water	Campbell, Robert	28355 E. 160th Ave.	303-655-0148	GN	Flush on 8/13
19	8/17/10	Brown water	Fleck, Rob	16460 Tree Haven St	via email	BOX	Waiting for controlled flush with Olsson
20	9/14/10						FLUSH ALL OF BOX ELDER CREEK SUBD.
21	9/15/10	Brown water	Gerry	16290 Greatrock Way	303-325-6894	GN	Called customer
22	9/20/10	Brown water	Moore, Ken	16480 Timber Cove	720-685-7167	BOX	flush lines and met with customer
23	10/4/10	Tea colored	Moore, Ken	16480 Timber Cove	303-906-1355	BOX	Flush on 10/4
24	10/12/10	Reddish Brown	Moore, Denise	16480 Timber Cove		BOX	Inspection by Brad Simons - see Olsson memo 16480 timbercove 10-12-10.xls
25	10/21/10	particles in water	Dahlberg, Julie	16600 Umpire Ct.	303-498-0419	BOX	flush on 10/21/10
26	11/5/10	bad taste	Jimison, Robert	16580 Umpire St.	Stopped Katie reading meters	BOX	explained RO just went back online
27	11/5/10	bad taste	Howes, Angie	16141 Rayburn St.	Stopped Katie reading meters	BOX	explained RO just went back online
28	12/8/10	Water filter turns brown very quickly	Curl, Jo Ann	29430 E 160th Ct	303-654-0132	GN	Discussed status of water looping project and present blending of RO and well water
29	1/5/11	Update	Leonard, Travis	16720 Kenuil Ct.	303-655-3744	RHF	
30	2/17/11	Update	Leonard, Travis	16720 Kenuil Ct.	303-655-3744	RHF	Flushed this date; water was clear
31	2/19/11	Update	Williams, Ken	32505 E 167 Dr	303-637-0708	BOX	
32	2/21/11	Brown water	Moore, Ken	16480 Timber Cove	303-906-1355	BOX	Flush fire hydrants one South of address and one North of address on 2/22/11
33	2/21/11	Lt Brown Water	Allain, Kimberly	16321 Timber Cove	303-637-9886	BOX	Flush Timber Cove & Umpire St. fire hydrant and the Timber Cove cul-de-sac blowoff on 2/22/11
34	2/21/11	Brown water	Ross, Don	29957 E 166th Place	720-685-0905	RHF	Flush on 2/22/11
35	2/22/11	Light brown water	Dahlin, Mathew	16181 Rayburn St.	303-655-1289	BOX	Flush on 2/22/11
36	2/23/11	Blue staining in cup	Fleck, Rob	16460 Tree Haven St	via email	BOX	Langelier Index sample to lab on 2/23/11
37	2/23/11	Much better, running clear	Ross, Don	29957 E 166th Place	720-685-0905	RHF	Flush on 2/22/11
38	3/12/11	Lt Brown Water	Tario, Alma	16655 Stroilway St	303-637-0121	BOX	Flushed on 3/14/11
39	3/14/11	Brown water	Eberle, Doug	16640 Stroilway St	303-659-3733	BOX	Flushed on 3/14/11
40	3/15/11	Brown water	Best, Dan	16785 Red Lane	303-748-1800	BOX	Flushed on 3/15/11
41	5/9/11	Horrible Taste	Fleck, Rob	16460 Tree Haven St	via Brad	BOX	No Action
42	8/5/11	Ruining his evaporative coolers	Whitley, William	31451 E 167th Ave	303-961-8859	BOX	Discussed changes in blending and % of RO water
43	8/5/11	Pleased with water quality	Leonard, Travis	16720 Kenuil Ct.	303-655-3744	RHF	
44	11/7/11	Water smells musty when first turned on	Snider, Bev	16675 Stroilway	303-467-5882	Box	Checking with Engineer

45	11/25/11	Brown water	Moore, Ken	16480 Timber Cove	720-685-7167	BOX	Sent email to Terry K.
46	2/21/12	high water usage	Neff, Linda	28580 E. 160th Pl	303-654-9860	GN	asked Mike to verify meter pit isn't full of water
47	3/26/12	Flushed All Hydrants	REC,Inc.	All three subdivisions		BOX,GN.RHF	Will provide Separate Memo
48	06/20/12	Low PSI and yucky water in filters	Greer, Sherry	16385 Jalna Ct	303-637-9200	RHF	Increased pressure at Rocking Horse Farms Pump station from 60 to 65 psi.
49	07/20/12	Brown Water	Keith	16685 Keniul Ct	303-915-0918	RHF	Flushed Hydrant next to house
50	09/15/12	Brown Water	Ted Obrecht	16460 Tree Haven St	303-659-1914	BOX	Flushed Hydrant next to house