## RECEIVED

JUL 03 2008

High Plains Hydrology LLC 7956 S. Shawnee St. Aurora, CO 80016-7206 (303) 693-0299

#### DEPARTMENT OF NATURAL RESOURCES

July 1, 2008

Steve Gaul Supervisor, Planning and Assistance Division Nebraska Department of Natural Resources P.O. Box 94676 Lincoln, NE 68509-4676



### Dear Steve:

Enclosed please find my monthly report for June, an invoice for the time and expenses for work with the Department of Natural Resource, a worksheet supporting insurance expensed for January through June, and a spreadsheet supporting the time. If you have any questions, please give me a call. Thank you.

Sincerely,

Duck

Richard R. Luckey Senior Hydrologist

# Groundwater Modeling Support for the Nebraska Department of Natural Resources Status Report, June 30, 2008

Objectives: 1. Provide modeling support as requested; and

2. Compare COHYST and RRCA models in area of overlap, with emphasis on the groundwater mound area.

#### Status:

Dick spent considerable time in June working on the comparison of the COHYST and Republican models. The Department of Natural Resources provided comments late May and on June 3 on a draft report on the comparison. There were over 100 comments plus a number of editorial suggestions. Dick started work on the comments in May and finished them in June.

Dick reorganized the Introduction to the report to include a discussion of the groundwater mound early on. He also reorganized the Results section. These reorganizations were done as a result of comments received from the Department. Dick redid the analysis of the evapotranspiration (ET) surface to include only those cells where both the RRCA and COHYST ET rates were non-zero, also as a result of comments. He redid all the charts in the report to make them look better. The x-axis labels were close to the percentile lines, and this caused potential confusion. He also found a way of moving the charts into the Word document that made them look much better.

Dick changed the color scheme on a number of maps to make them more intuitive based on suggestions from Doug Hallum. This really did help. He also redid a number of other maps so the maps in the report looked more consistent.

Dick spent parts of two days doing a complete read through of the documentation and making minor adjustments to it. Once the Word version of the documentation was finalized, he worked on an Adobe PDF versions of the documentation. The PDF contains bookmarks for all sections, figures, and tables. The final report was sent to the Department on June 25.

### Plans for next month:

Dick will organize all the shapefiles, spreadsheets, and other files used in the comparison of the COHYST and RRCA models. He will prepare metadata for the shapefiles to make them more useful. He will create an archival DVD of this data and send it to the Department. This task will be started in July, but may not be finished. If data are needed before the final DVD is prepared, he may provide partial data sets to the Department.

Dick may start work on a PowerPoint presentation of the comparison of the COHYST and RRCA models. He will give the presentation to the Department sometime in the fall.

Dick will work with Doug Hallum and Jim Schneider on what kind of water budgets are needed for the area of overlap between the COHYST and RRCA models. The need for these budgets came up during the review of the comparison documentation. The budgets will be for at least several dates, and may include annual budgets. There also may be budgets for subareas of the study area. How this will be done will be determined over the next few months.

Dick will do other tasks as requested by DNR.

## **High Plains Hydrology LLC**

7956 S. Shawnee St. Aurora, CO 80016-7206 Phone (303) 693-0299 Cell (303) 916-5973



INVOICE

INVOICE #150 **DATE: JULY 1, 2008** 

Nebraska Department of Natural Resources RECEIVED 301 Centennial Mall South

P.O. Box 94676 Lincoln, NE 68509-4676

FOR: Services of Senior Groundwater Modeler

LABOR DESCRIPTION	HOURS	RATE	AMOUNT
June, 2008, Task 1-1 (see attached spreadsheet)	0.25	\$ 75.00	\$ 18.75
June, 2008, Task 1-2 (see attached spreadsheet)	53.25	75.00	3,993.75
EXPENSES DESCRIPTION	QUANTITY	UNIT PRICE	LINE TOTAL
Insurance for January-June, 2008 (see attached worksheet)			657.38
		:	
TOTAL this Period			\$ 4,669.88
Previous balance			\$ 7,518.75
Payments received			\$ 1,950.00
		TOTA :	+ 40 770 60
		TOTAL	\$ 10,238.63

Make all checks payable to High Plains Hydrology LLC

Total due in 30 days. Overdue accounts subject to a service charge of 1% per month.

Thank you for your business!

High Plains Hydrology LLC 7956 S. Shawnee St. Aurora, CO 80016-7206 (303) 693-0299

July 1, 2008



### 2008 Insurance Cost Worksheet

Annual cost of professional insurance obtained February 2007 = \$3,193.00. (See attached sheet)

Annual cost of professional insurance obtained February 2008 = \$3,193.00. (See attached sheet).

Cost allocated to January-June, 2008: \$3,193.00 \* (1/12) = \$266.08\$3,193.00 \* (5/12) = 1,330.42

\$3,193.00 \* (5/12) = 1,330.42 \$ 1,596.50

Hours worked for COHYST January-June, 2008 = 403.00 Hours worked for DNR January-June, 2008 = 288.75 Hours worked for others January-June, 2008 = 9.50 Total hours worked January-June, 2008 = 701.25

For the period January-June, 2008:

Insurance charged to COHYST = \$1,596.50 \* (403.00/701.25) = \$917.49

Insurance charged to DNR = 1,596.50 \* (288.75/701.25) = \$657.38

Richard R. Luckey Senior Hydrologist

DNR 013477



# in Salar High Plains Hydrology LLC Common Policy Declarations

This contract is delivered as a surplus line coverage under the "Nonadmitted Insurance Act". The insurer issuing this contract is not licensed in Colorado but is an approved nonadmitted insurer. There is no protection under the provisions of the "Colorado Insurance Guaranty Association Act".

This policy is a claims-made policy which provides liability coverage only if a claim is made during the policy period or any applicable extended reporting period

Hudson Insurance Company Hudson Specialty Insurance Company (A New York Domiciled Company)

Policy Number: FEC7001634 Renewal Of: FEC6111124

"THIS POLICY IS A CLAIMS-MADE POLICY WHICH PROVIDES LIABILITY COVERAGE ONLY IF A CLAIM IS MADE DURING THE POLICY PERIOD OR ANY APPLICABLE EXTENDED REPORTING PERION "

Named Insured High Plains Hydrology, LLC 7956 S. Shawnee Street Aurora, CO 80016

**Program Administrator** Freberg Environmental, Inc. 1451 Larimer Street, Suite 200 Denver, Colorado 80202

**Policy Period** 

From: 2/3/2008

To: 2/3/2009

At 12:01 am Standard Time at your mailing address shown above

In return for the payment of premium, and subject to all the terms of this policy, we agree with you to provide

the insurance as stated in this policy.

	This policy consists of the following Coverage Parts as indicated:	Premium				
	CONTRACT IS DELIVERED AS A Commercial General Liability Coverage	Included				
JRP ONA	US LINE COVERAGE UNDER THE DMITTED INSURANCE ACT'. THE DMITTED INSURANCE ACT'. THE DMITTED INSURANCE ACT'.	Included				
SUF	ER ISSUING THIS CONTRACT IS NOT Professional Liability Coverage	Included				
CEN PR	SED IN COLORADO BUT IS AN OVER NONADMITTED INSURE PROPERTIES IMPAIRMENT LIABILITY COVERAGE	Not Covered				
NO	PROTECTIONStorage Tank Enghößraental Impairment Liability Coverage	Not Covered				
	E 'COLORADO INSURANCE GUARANTY  CIATION ACT:"  Total Coverage Part Premium	\$2,500				
	Terrorism Coverage	Not Covered				
	Total Premium	\$2,500 +++				

FORMS APPLICABLE TO ALL COVERAGE PARTS: See FEI-0104-451-E Schedule of Forms and Endorsements and attached State specific Surplus Lines Warning.

These declarations together with the common policy conditions, coverage part declarations, coverage part coverage forms(s) and forms and endorsements, if any, issued to form a part thereof, complete the above numbered policy.

Issue Date: 2/25/2008 +++ Plus: \$200.00 Company Loss Controll Fee; \$250.00 Company Fee;

\$150.00 Policy Fee and \$93.00 3% SL Tax

Authorized Representative Freberg Environmental, Inc.

NO FLAT CANCELLATIONS

FEI-0104-309-E

THE SOUTH STATES

7936 E. Arapahue Ct. Suits 3000, Englewood, CO (00112)

A KAUFMAN GROUP COMPANY

UATE: 2/8/2007

Phone (303) 804-0200 OR (800) 888-9701 Fax: (303) 804-0207

Page 1 of 2

THIS BINDER IS A TEMPORARY INSURANCE CONTRACT, SUBJECT TO THE CONDITIONS SHOWN BELOW. BAW PRODUCER: Edmund J Holub

INSURANCE BINDER

High Plains Hydrology, 1.1.C. 7956 S. Shawnee St. INSURED:

Aurora, CO 80016

AGENT: Brian R. Luckey 1300 Broad St

Milliken, CO 80543

LOCATION(S) OF RISK:

# 1: 7956 S. Shawnes St., Aurura, CO 60016

POLICY EFFECTIVE FROM: 02/03/07 AT 12:01 AM TO 02/03/08 AT 12:01 AM \$TD TIME AT RISK LOCATION.

CLAIMS MADE Retro Date: 02/03/2006

PROFESSIONAL LIABILITY FORM OF COVERAGE:

Environmental Consultants

FEC6111124

POLICY NO:

INSURER(S):

Supplier(s) Ling Of Business

Mudson Speciety Insurance Company

Participation

100.00 %

LIMITS / DEDUCTIBLES

PROFESSIONAL LIABILITY

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NPINED-1 Notes	Monthly renorts on ancient and Direct relations of Such Mill Triangues and anticons of Such Mill 1888 of Such Mill Such Such Mill 1888 of Such Mill Such Such Mill 1888 of Suc	Tyling to understand differences in CycleWell, intect 8000 and 16,000. Working on PowerPoint of results.	PowerPoint on CycleWell. Sent to Duane at 12:00. Worked on New Depletions by NRD (NDbyNRD) in the afternoon. Sent to Technical Committee for review. MINAVBD table of contents name numbers	Moved Preface of NDIVNRD report to before table of contents. Checked TOC nase numbers. BBCA teach Add mound area to fining 3	RRCA report comments.	Helping Tri-Basin NRD find correct galned/lost Irrigated land files. Call from Ron Cacek. Preface of NDbyNRD report revision. NDbyNRD Preface and Limitations sections. Created NDbyNRD PDF and added bookmarks. Sent NDbyNRD report to Sponsors and Technical Committee at 3:30.	Induler parameter charts for RRCA documentation. Final from Rich Hollmower NDNMRD error in Kearnes Counts in Table 3 Tracked down and frost Cell from Steas Did not use consilisations.	within a year. RRCA chart template for pumpage. Pumpage charts. Recharge charts. Net stress charts. Water level charts.	Prepared handout for North Platte NRD meeting. Call from Clint about COHYST issues. Travel to Scottsbulf. Copied files on Julie's laptop and network area to my external hand drive. Attended NPNRD breath meeting and nave renort on COHYST models. I imited day to 8 hours.	1.75 Meet with Ron Cacek about Editorsoot Ethanol plant and Garint well field. Tawai to Aurora Co.	RRCA water-level change charts. Wound attended the chart. Redid water level charts (bad Y axis title). Redid base of aquifer chart. Toying to figure out how in check FT surface whose ET rate is non-zero.	RRCACOHYST ET surfaces differences. New map and statistics to text. Comments through and of Aguiter Parameters sendion.	Working on RRCA comments. Reorganizing Sthrulation Results section. Working on "No Value" for some maps, Inverted colors on RRCA new stress maps, much before.	Inverting colors on COHYST net stress maps. Call about Gering well field work from Eric Saener at HRS Water Consultants. Located Gering well	field stuff in Julie's directory. Put on DVD. Called Ron C. about giving it to consultant. Delivered to HRS after doctor appointment. Call to Doug 0.75 labout RRCA review comments.	Upgraded various RRCA maps to make them all look consistent. Checked report to make sure all comments were considered. Started read	Charlenge results BRCA report	Common read in region of this property of the principal property of the property of the principal of the property of the prope	Burned CD's for RRCA report. Fluished printing seport. Turning landscape pages on printed versions. Took report to Office Max to get bound. Malled report to DNR. Cheoking gained/lost infigated land for Rich Holloway.	Clean up directory to make NDbyNRD archival disks. Making archival disk for EMU, CMU, WMU, Documentation, and GIS. Clean up NDbyNRD files. Mailed DVD's to Doug Hallum and Duane Woodward,		7.00 documentation.	Reviewed CMU documentation pages 1-57. Call from Doug Hallum about how to handle times series data to get cell-by-cell statistics.	9.50 June total and total by task number				
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# Nebraska Department of Natural Resources

# O.K. To Pay

Date 7/7/08

Contract Manager Steve Coul

DNR Contract No. 1794-2258

NIS No.

O.K. to Pay OK to Pay \$4669.88 56

Amount Remaining in Account \$ 40761.98

# Return to Contract Manager

Comments:
Total Bill 15 \$10.238.63 but remide show
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Move here prid under previous Authorization
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