FEB 0 8 2013

DEPARTMENT OF WATER RESOURCES

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ATTORNEYS FOR THE IDAHO GROUND WATER APPROPRIATORS

BEFORE DEPARTMENT OF WATER RESOURCES STATE OF IDAHO

IN THE MATTER OF DIST	RIBUTION OF
WATER TO WATER RIGH	IT NOS. 36-02551 &
36-07694	
(RANGEN INC.)	

Docket No.: CM-DC-2011-004

AFFIDAVIT OF BERN S. HINCKLEY

STATE OF WYOMING) : ss County of Albany)

Bern S. Hinckley, being first duly sworn under oath deposes and states as follows:

1. I am self-employed. I operate Hinckley Consulting, specializing in groundwater resource evaluation and management and technical studies of water rights and resources. I am a Registered Professional Geologist in Wyoming, Idaho and Nebraska. I have a Bachelor of Arts degree in Geology and Geophysics from Princeton University, and Master of Applied Earth Science degree from Stanford University. Attached hereto is my current resume.

AFFIDAVIT OF BERN S. HINCKLEY - p. 1

- 2. As evidenced in prior pleadings, I have been retained by IGWA to provide expert reports, testimony and technical assistance in this delivery call regarding the hydrogeology of the ESPA, the ESPAM, among other technical and scientific matters, mainly involving the hydrogeology affecting the groundwater supply of Rangen, Inc.'s fish facilities.
 - 3. I am competent to testify in this matter.
- 4. My Expert Report submitted on December 21, 2012 and submitted to IDWR on December 21, 2012, my corrected report dated January 29, 2013 and submitted to IDWR on January 29, 2013 and my Rebuttal Report dated February 8, 2013 and submitted to IDWR on February 8, 2013 (collectively my "Expert Reports") are based upon:
 - a. my personal knowledge and professional expertise; and
 - b. information known to me at this time.

Subject to these bases, my Expert Reports reflect my true and correct opinions in this case.

FURTHER YOUR AFFIANT SAYETH NAUGHT.

DATED this 8 day of February, 2013.

BERN S. HINCKLEY

SUBSCRIBED AND SWORN TO before me this 8th day of February, 2013.

GWEN ANN ALLNUTT - NOTARY PUBLIC COUNTY OF STATE OF WYOMING MY COMMISSION EXPIRES DECEMBER 17, 2016

NOTARY PUBLIC FOR WYOMING

Residing at: 407 5. 8 4 51.

My Commission Expires 12/17/16

CERTIFICATE OF SERVICE

I hereby certify that on this \(\frac{1}{2} \) day of February, 2013, I caused to be served a true and correct copy of the foregoing \(Affidavit \) of \(Bern S. \) Hinckley upon the following by the method indicated:

Signature of person mailing form

Original: U.S. Mail/Postage Prepaid Director, Gary Spackman Idaho Department of Water Resources Facsimile PO Box 83720 Overnight Mail Boise, ID 83720-0098 Hand Delivery Attn: Deborah Gibson E-mail Deborah.Gibson@idwr.idaho.gov Kimi.white@idwr.idaho.gov Garrick Baxter, Deputy Attorney General U.S. Mail/Postage Prepaid Chris Bromley, Deputy Attorney General Facsimile Idaho Department of Water Resources Overnight Mail P.O. Box 83720 Hand Delivery Boise, Idaho 83720-0098 🛛 E-mail garrick.baxter@idwr.idaho.gov chris.bromley@idwr.idaho.gov U.S. Mail/Postage Prepaid Robyn M. Brody Facsimile Brody Law Office, PLLC Overnight Mail PO Box 554 Hand Delivery Rupert, ID 83350 E-mail rbrody@cableone.net robynbrody@hotmail.com U.S. Mail/Postage Prepaid Fritz X. Haemmerle Haemmerle & Haemmerle, PLLC Facsimile PO Box 1800 Overnight Mail Hailey, ID 83333 Hand Delivery fxh@haemlaw.com E-mail U.S. Mail/Postage Prepaid J. Justin May Facsimile May, Browning & May, PLLC Overnight Mail 1419 West Washington Hand Delivery Boise, ID 83702 E-mail imay@maybrowning.com Sarah Klahn U.S. Mail/Postage Prepaid Facsimile Mitra Pemberton WHITE JANKOWSKI, LLP Overnight Mail

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EDUCATION: A.B. Geology and Geophysics, Princeton University

M.S. Applied Earth Sciences, Stanford University

Post-Graduate Coursework: Advanced Groundwater, Water Law – U. Wyo. Groundwater Modeling, Environmental Statistics – professional short

courses

AWARDS: A.B. Princeton University summa cum laude

AAAS Best Graduate-Student Paper – 1980 Conference

REGISTRATION: Registered Professional Geologist – Wyoming, Idaho, Nebraska

SUMMARY:

Mr. Hinckley began work in geology and water resources consulting in 1975, providing field investigations for the Trans-Alaska Pipeline. Since then, his work has included extensive involvement with groundwater reconnaissance and development, water rights litigation, water resources management, and a variety of air and water-related environmental investigations. His experience includes design and implementation of groundwater evaluation, exploration and analysis programs, municipal and agricultural water use evaluations, aquifer testing, expert witness work, streamflow analysis, groundwater modeling, geothermal resource assessment, well logging, geochemical and water quality studies, investigation of soil erosion rates and processes, and evaluation and interpretation of various types of environmental data. The majority of his work has been in his home state of Wyoming, but includes project experience in Nebraska, Idaho, Montana, Colorado, Utah, South Dakota, Minnesota and elsewhere in the United States.

EMPLOYMENT:

HINCKLEY CONSULTING (1993 - present)

Mr. Hinckley currently operates a small consulting firm providing specialized expertise in groundwater resource evaluation and management, and technical studies in support of water rights litigation. Typically, Hinckley works as part of a larger technical team. Project involvement covers the spectrum from focused analysis of a specific issue like aquifer performance testing, to coordination among complex legal, hydrologic, agricultural, economic, and environmental investigations. While maintaining a core expertise in groundwater resources, Hinckley has substantial project experience in the analysis of water resources in general and in the application of scientific principles to water-resource analyses.

JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC. (currently MONTGOMERY/WATSON – HARZA) (1986 - 1992)

As a Supervising Hydrogeologist in the Laramie, Wyoming office of this international water resources engineering firm, Mr. Hinckley's responsibilities included development and

management of groundwater exploration, production, and analysis programs; municipal and agricultural water resources investigations; water rights studies; supervision of drilling, well logging, and aquifer testing; subsurface contamination investigations; groundwater modeling; geologic mapping and interpretation; and water quality studies.

ANDERSON & KELLY (1981 - 1985)

As a Senior Geologist with this regional groundwater resources firm based in Boise, Idaho, Mr. Hinckley was heavily involved in groundwater exploration and development work. He provided preliminary hydrogeologic investigations, well site selection, construction inspection, aquifer testing design and supervision, water quality sampling, and data analysis on over 30 municipal and industrial water-supply projects.

U.S. GEOLOGICAL SURVEY; UNIVERSITY OF WYOMING; R & M CONSULTING, FAIRBANKS, ALASKA; STANFORD UNIVERSITY; WYOMING GEOLOGICAL SURVEY; ROCKY MOUNTAIN FIELD STUDIES; NATIONAL SCIENCE FOUNDATION; PRINCETON UNIVERSITY

As Research Associate, Field Geologist, Associate Geologist, Instructor, Research Assistant, and Teaching Assistant, Mr. Hinckley conducted environmental geology investigations, taught classes, analyzed environmental impact statements, catalogued fossil specimens, and prepared the first field inventory of thermal waters in Wyoming.

PROFESSIONAL ORGANIZATIONS:

American Water Resources Association (past President – Wyoming Chapter)
Association of Groundwater Scientists and Engineers
Engineers Without Borders
Wyoming Geological Association
Wyoming Water Association
Wyoming Water Well Association
Geological Society of America

EXPERT WITNESS WORK:

Wyoming State Engineer S Office
Wyoming Board of Control
Wyoming District Court – Fifth Judicial District
Nebraska Department of Water Resources
U.S. Dept. of Interior Board of Land Appeals
U.S. District Court – Wyoming
U.S. District Court – Nevada

U.S. Supreme Court

PUBLICATIONS:

- Breckenridge, R.M. and B.S. Hinckley, 1978, Thermal Springs of Wyoming; Wyoming Geological Survey Bulletin 60.
- Iverson, R.M., B.S. Hinckley, and B. Hallet, 1981, Physical Effects of Vehicular Disturbances on Arid Landscapes; <u>Science</u> 212: 915-917.
- Hinckley, B.S., H.P. Heasler, and J.M. King, 1982, The Thermopolis Hydrothermal System: With an Analysis of Hot Springs State Park; Wyoming Geological Survey Preliminary Report No. 20.
- Hinckley, B.S., R.M. Iverson, and B. Hallet, 1983, Accelerated Water Erosion in ORV-Use Areas, Chapter 6 of Environmental Effects of Off-road Vehicles Impacts and Management in Arid Areas; Springer-Verlag.
- Hinckley, B.S., 1984, Oil-field Geothermal Waters in Wyoming; D.O.E. Geothermal Investigations Technical Report No. DE-F107-79ID12026.
- Hinckley, B.S. and H.P. Heasler, 1984, Geothermal Resources of the Laramie, Hanna, and Shirley Basins, Wyoming; Wyoming Geological Survey Report of Investigations No. 26.
- Hinckley, B.S. and H.P. Heasler, 1985, Geothermal Resources of the Bighorn Basin, Wyoming; Wyoming Geological Survey Report of Investigations No. 29.
- Hinckley, B.S. and H.P. Heasler, 1987, Geothermal Resources of the Wind River Basin; Wyoming Geological Survey Report of Investigations No. 38.

CONSULTANT REPORTS WITH MAJOR AUTHORSHIP (PUBLIC CLIENTS ONLY):

Anderson & Kelly, Inc.; 1983; Hydrogeologic Evaluation of Potential Aquifers near South Superior, Wyoming; Town of South Superior, Wyoming.

Anderson & Kelly, Inc.; 1984; Report of Drilling and Testing Town of South Superior Wells Nos. 16 and 17, Sweetwater County, Wyoming; Town of South Superior, Wyoming.

Anderson & Kelly, Inc.; 1984; Hydrogeologic Evaluation of the Nugget Aquifer near Rawlins, Wyoming; Wyoming Water Development Commission.

Anderson & Kelly, Inc.; 1985; Report of Drilling and Testing Well No. 18; Town of Superior, Wyoming.

Anderson & Kelly, a Division of James M. Montgomery, Consulting Engineers, Inc.; 1986; Hogadon Ski Area Water Supply Investigations, Preliminary Design Report; City of Casper.

James M. Montgomery, Consulting Engineers, Inc.; 1986; Rawlins Groundwater Project Level III Summary of Interim Report and Nugget Aquifer Report; Wyoming Water Development Commission.

James M. Montgomery, Consulting Engineers, Inc.; 1986; Culinary Water Supply Alternatives Investigation for Tremonton and Garland Cities; Utah Department of Natural Resources.

Anderson & Kelly, Inc.; 1987; Hydrogeologic Evaluation of The Natural Bridge Well, Converse County, Wyoming; Wyoming Water Development Commission.

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James M. Montgomery, Consulting Engineers, Inc.; 1989; Centennial Water Supply Project Report; Wyoming Water Development Commission.

James M. Montgomery, Consulting Engineers, Inc.; 1989; Report of Hydrogeologic Investigations, Abandonment of Old Government Camp Well, and Drilling of Boysen State Park Headquarters No. 1 Well; Wyoming Recreation Commission.

James M. Montgomery, Consulting Engineers, Inc.; 1990; Final Report for the Evansville Groundwater Supply Project; Wyoming Water Development Commission.

James M. Montgomery, Consulting Engineers, Inc.; 1990; Report of Drilling and Testing Rolling Hills Well No. 5; Town of Rolling Hills and Wyoming Water Development Commission.

Civil Engineering Professionals, Inc.; 1990; Red Lane Rehabilitation Project, Level II Feasibility Study; Wyoming Water Development Commission.

James M. Montgomery, Consulting Engineers, Inc.; 1991; Casper-Alcova Irrigation District Report of Investigations; Wyoming Attorney General's Office.

Hinckley Consulting; 1993; Level II Study Report, Upper Little Warm Springs Water Supply Project, Fremont County, Wyoming; Wyoming Water Development Commission.

Hinckley Consulting; 1994; Big Piney / Marbleton Level II Water Supply Project Report;

Wyoming Water Development Commission.

Graham, Dietz & Associates, Consulting Engineers; 1994; Manderson Water Supply Project; Wyoming Water Development Commission.

BRS, Inc.; 1994; Shallow Water Table Control / Abatement Project, Town of Hanna; Wyoming Department of Environmental Quality, Abandoned Mine Land Program.

Kjellgren Engineering; 1995; Rock Springs East Water Supply Master Plan – Level I Study; Wyoming Water Development Commission.

Hinckley Consulting; 1995; Level II (Phase III) Study Report, Upper Little Warm Springs Water Supply Project, Fremont County, Wyoming; Wyoming Water Development Commission.

Hinckley Consulting; 1996; Goshen Irrigation District – Report of Investigations; Wyoming Attorney General's Office.

Hinckley Consulting; 1997; Buffalo Valley Water Supply Project Level II, Teton County, Wyoming, Final Report; Wyoming Water Development Commission.

Hinckley Consulting; 1997; U.S. Bureau of Reclamation Procedures For Allocation of Water to North Platte Project and Warren Act Contractors; Wyoming Attorney General's Office.

Hinckley Consulting; 1997; Farmers Irrigation District – Report of Investigations; Wyoming Attorney General's Office.

Hinckley Consulting; 1997; Pathfinder Irrigation District – Report of Investigations; Wyoming Attorney General's Office.

Hinckley Consulting; 1997; Mitchell Irrigation District – Report of Investigations; Wyoming Attorney General's Office.

Hinckley Consulting; 1997; Northport Irrigation District – Report of Investigations; Wyoming Attorney General's Office.

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Hinckley Consulting; 1997; Canal Loss and River Gain – Summary of Investigations [North Platte River, Goshen Co., Wyo.]; Wyoming Attorney General's Office.

Bredehoeft, John and Bern Hinckley; 1998; The Impact of NPPD and CNPPID on the North Platte River; Nebraska's Groundwater Mound; Wyoming Attorney General's Office.

Hinckley, Bern (ed.); 1998; Water Rights, Streamflow, and Hydrogeology of the Horse Creek Basin, Wyoming; Wyoming Attorney General's Office.

Hinckley, Bern and Todd Schmidt; 1998; Post-Decree Changes in Irrigation, Platte River Basin, Colorado, Wyoming, and Nebraska; Wyoming Attorney General's Office.

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Hinckley, Bern, John Shields, Charles Brendecke, and Rebecca Mathisen; 1998; Implementation and Administration of the 1945 North Platte Decree; Wyoming Attorney General's Office.

Jensen, Marvin, Robert Burman, Bern Hinckley, Dennis Clark, and Todd Schmidt; 1998; The Wyoming Irrigation Model; Wyoming Attorney General's Office.

Jorgensen Engineering and Land Surveying; 1998; Final, Rafter J Water Supply Level II Study; Wyoming Water Development Commission.

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Sunrise Engineering; 2003; Snake/Salt River Basin Plan Final Report and Technical Memoranda; Wyoming Water Development Commission.

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Hinckley Consulting; 2011; Town of Elk Mountain, Groundwater Exploration Program, Elk Mountain No. 4 Well