CURRICULUM VITAE

University of Idaho

NAME: Osiensky, James L.

DATE: April 8, 2008

RANK OR TITLE: Professor of Hydrogeology

DEPARTMENT: Geological Sciences

OFFICE LOCATION AND CAMPUS ZIP: McClure Hall 301B, 3022 **OFFICE PHONE:** 208-885-4681
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DATE OF FIRST EMPLOYMENT AT UI: January 1988

DATE OF TENURE: 1996

DATE OF PRESENT RANK OR TITLE: 2002

EDUCATION BEYOND HIGH SCHOOL:

Degrees:

Ph.D., Geology, 1983, University of Idaho, Moscow, Idaho
M.S., Hydrology, 1979, University of Idaho, Moscow, Idaho
B.A., Geology/Chemistry, 1975, Bridgewater State College, Bridgewater, Massachusetts

EXPERIENCE:

Teaching and Research Appointments:

July 2002-present, Professor of Hydrogeology, University of Idaho, Moscow
July 1997-June 2002, Associate Professor of Hydrogeology, University of Idaho, Moscow
January 1988-June 1997, Associate Professor of Hydrogeology, University of Idaho – stationed at Boise State University
June-December 1987, Research Scientist, University of Idaho, Moscow
August 1986-May 1987, Assistant Professor of Hydrogeology, University of Idaho, Moscow
August 1985-May 1986, Assistant Professor of Geology, Washington State University, Pullman, Washington
September 1982-October 1985, Research Scientist, University of Idaho, Moscow
September 1981-September 1982, Research Associate, University of Idaho, Moscow

Non-Academic Employment:

April 1978-August 1979, Hydrogeologist-Reclamation Division of the Montana Department of State Lands
1982-present, Consulting Hydrogeologist

TEACHING ACCOMPLISHMENTS:

Areas of Specialization:

Contaminant Hydrogeology, Hydrogeologic Site Characterization, Hydrogeologic Property Testing, Hydrogeophysical Applications in Hydrogeology, Ground Water Hydraulics

Courses Taught:

Courses offered at the University of Idaho, Moscow from 1997-present:

Applied Hydrogeologic Concepts (HYDR 413/513)
Environmental Hydrogeology (HYDR 412/512)
Ground Water (GEOL 309)
Ground Water (GEOL 409)
Techniques of Ground Water Study (GEOL 410)
Well Hydraulics (HYDR 502)
Ground Water Modeling (HYDR 502)
Contaminant Hydrogeology (HYDR 569)
Computer Applications in Geohydrology (HYDR 577)

Courses offered at Boise State University from 1988-96 [GO xxx = Boise State University; HYDR xxx = University of Idaho]:
Hydrogeology (GO 412), 1988-96
Applied Hydrogeologic Concepts (GO 497), 1990-96
Techniques of Ground Water Study (GO 497) Spring 1988
Ground Water Monitoring (HYDR 502), 1992-94, 1996
Hydrogeology (HYDR 563) Boise to Moscow and Idaho Falls compressed video & tape, 1996
Contaminant Hydrogeology (HYDR 569), Fall 1988, 1989-92, 1994-95
Computer Applications in Geohydrology (HYDR 577), 1989-90, 1993, 1995
Well Hydraulics and Aquifer Testing - Short Courses in Boise and Idaho Falls, Spring 1990
Ground Water Evaluation at a Solid Waste Site - Short courses in Boise, Idaho Falls and Moscow, Spring 1989
Concepts of Contaminant Migration in Saturated Porous Media - Short Courses in Boise and Idaho Falls, Spring 1988

Students Advised:

Undergraduate Students:
Geology/Hydrogeology Option (Senior Theses):
Brad Bennett, 2008 senior thesis
Chad Opatz, 2004 senior thesis
Derek Holom, 2004 senior thesis
Leanne Tumlinson, 2003 senior thesis

Environmental Science (Senior Theses):
Chelsea Sherman, 2007
Jonathon Jacobson, 2007
Jason Sweeney, 2005
John Sugden, 2004
Loy Pehrson, 2004
Nichole Wilson, 2003
Alyssa Douglas, 2002
Justin Nawrocki, 2002
Sarah Scott, 2001
Robin Dunn, 2001
Zachary Garcia, 2001
John Rainey, 2001
Willard Belknap, 2000
Andrea Townley, 1999
Robert Henderson, 1999
Jeremy Cope, 1999
Andrea Dahmen, 1999
Robert Neff, 1999
Lindsay Wichers, 1998

Students Advised (cont.):

Graduate Students, Major Professor, Degree Completed:

Nicole Badon – (UI) MS Hydrology (2007)
Michael McVay – (UI) MS Hydrology (2007)
Hannah Hernandez – (UI) MS Hydrology (2007)
Chad Opatz – (UI) MS Hydrology (2007)
Derek Holom – (UI) MS Hydrology (2006)
Katie Rhode – (UI) MS Hydrology (2006)
Toby Wilson – (UI) MS Hydrology (2006)
Layna Goodman – (UI) MS Hydrology (2006)
Lisa Scott, (UI) MS Hydrology (2005)
Kathryn Dallas – (UI) MS Hydrology (2005)
Terah Douglas – (UI) MS Environmental Science (2005)
Robin Nimmer, (UI) Ph.D. Geology, 2005
Alyssa Douglas, (UI) MS Hydrology, 2004
Dennis Owsley, (UI) MS Hydrology, 2003
Diane Hopster, (UI) MS Hydrology, 2003
Mark Gagnon, (UI) MS Hydrology, 2002
Greg Johnson, (UI) MS Hydrology, 2002
Craig Tesch, (UI) MS Hydrology, 2002
Ryan Molsee, (UI) MS Environmental Science, 2002
Sara West, (UI) MS Hydrology, 2001
James Johnson (UI) MS Hydrology, 2000
Robert Middour (UI) MS Hydrology, 2000
David Baumgarten (BSU) MS Geology 1999
Rick Carlson (BSU) MS Geology, 1999
Scott Urban (UI) MS Hydrology, 1998
Eugene Freeman (UI) MS Hydrology, 1995
Jonathon Hutchings (UI) MS Hydrology, 1995
John Kaminsky (ISU) MS Geology, 1989

Graduate Students, Served on Graduate Committee, Degree Completed:

Lindy Murray, MS Hydrology, 2007
Robert Podgorney, Ph.D. Geology, 2007
Shannon Miller, MS Environmental Science, 2007
Alex Colter, MS Environmental Science, 2007
Scott Struh, MS Hydrology, 2006
Kirandeep Dhami, MS Environmental Science, 2006
Scott Struh, MS Hydrology, 2006
James Heffner, MS Hydrology, 2004
Bethany Nelson, MS Environmental Science, 2003
Edward Teasdale, MS Geology, 2002
Brian Twining, MS Hydrology, 2001
Jungseok Ho, MS Civil Engineering, 2001
Bruce Wakefield, (UI) MS Hydrology 2001
Heidi Bullock, (UI) MS Hydrology, 2000
Scott Miller, (UI) MS Hydrology, 2000
Richard Van Blaricom, (UI) PhD Geology, 1999
Robin Nimmer, (UI) MS Hydrology, 1998
Douglas Bennett, (BSU) MS Geology, 1996
John Smoot, Ph.D (UI) Geology, 1995
Tim Mosko, (UI) MS Hydrology, 1993
Edward Squires (BSU) MS Interdisciplinary Studies, 1992
Fredrick Kirschner, (UI) PhD Geology, 1991
Carlton Parker (BSU) MS Geophysics, 1991

Gary Stevens, (UI) MS Geophysics, 1991
Merion Kendall, (UI) MS Hydrology, 1989

Graduate Students, Major Professor, Current:

Aaren Fiedler, (UI) MS Hydrology in progress

Graduate Students, Serve on Graduate Committee, Current:
Neil Maimer, MS Hydrology in progress
Carolyn T. Moores – MS Hydrology in progress
Joel Hubbell, Ph.D. Geology in progress

Courses Developed:

Hydrogeology (video), Ground Water (video), Contaminant Hydrogeology, Applied Hydrogeologic Concepts, Techniques of Ground Water Study, Computer Applications in Geohydrology, Well Hydraulics, Environmental Hydrogeology, Ground Water Monitoring, plus three, formal short courses.

Continuing Education Credit Classes:

Well Hydraulics and Aquifer Testing. Two-day short courses taught in Boise and Idaho Falls, Idaho, spring semester, 1990.
Ground Water Evaluation at a Solid Waste Site. Two-day short courses taught in Boise, Idaho Falls and Moscow, Idaho, spring semester, 1989.
Concepts of Contaminant Migration in Saturated Porous Media. Two-day short courses taught in Boise and Idaho Falls, Idaho, spring semester, 1988.

SCHOLARSHIP ACCOMPLISHMENTS:

Publications:

Refereed:

Rhode, K. L., J.L. Osiensky and S.M. Miller. 2007. Numerical evaluation of volumetric weighted mean transmissivity estimates in laterally heterogeneous aquifers. Journal of Hydrology, 347, 381-390.

Douglas, A.A., J.L. Osiensky and C.K. Keller. 2007. Carbon-14 dating of ground water in the Palouse Basin of the Columbia river basalts. Journal of Hydrology, 334, 502-512.

Nimmer, R.E., J.L. Osiensky, A.M. Binley, K.F. Sprenke, B.C. Williams. 2007. Electrical resistivity imaging of conductive plume dilution in fractured rock. Hydrogeology Journal, 15, 877-890.

Tumlinson, L.G., J.L. Osiensky, and J.P. Fairley. 2006. Numerical evaluation of pumping well transmissivity estimates in laterally heterogeneous formations. Hydrogeology Journal, 14, 21-30.

Hubble, J.M., J.L. Osiensky, M.J. Nicholl, and J.B. Sisson. 2006. A suction bailer for sampling very thin saturated zones, Ground Water Monitoring and Remediation, 26, 52-57.

Osiensky, J.L., W.J. Belknap, and P.R. Donaldson. 2006. Superposition of borehole-to-surface voltage residuals for Vadose Zone plume delineation. Journal of Contaminant Hydrology, 82, 241-254.

Osiensky, J.L. Nimmer, R.E., and A.M. Binley. 2004. Borehole cylindrical noise during hole-surface and hole-hole resistivity measurements. Journal of Hydrology, 289, pp. 78-94.

Nelson, B.J., S.A. Wood, and J.L. Osiensky. 2004. Rare Earth Element Geochemistry of Ground Water in the Palouse Basin, Northern Idaho- Eastern Washington. Geochemistry: Exploration, Environment, & Analysis, Vol. 4, pp. 227-241.

Nelson, B.J., S.A. Wood, and J.L. Osiensky. 2003. Partitioning of REE between solution and particulate matter in natural waters: A Filtration Study. Journal of Solid State Chemistry, Vol 171, pp. 51-56.

Johnson, D.M., J.L. Osiensky, and S.M. Miller. 2003. Geostatistical ground water monitoring of a point source NO_3^--*N* plume entering a restored riparian zone. *Journal of Environmental Science and Health-Part A Toxic/Hazardous Substances & Environmental Eng.* Vol. A38, No. 5.

Nimmer, R.E., and J.L. Osiensky. 2003. Charged body potential monitoring of an electrolyte plume emanating from a dripping source. *Journal of Environmental Science and Health-Part A Toxic/Hazardous Substances & Environmental Eng,* Vol. A38, No. 5.

Nimmer, R.E., and J.L. Osiensky. 2002. Direct current and self potential monitoring of an evolving plume in partially saturated fractured rock, *Journal of Hydrology*, Vol. 267, nos. 3-4, pp. 258-272.

Gagnon, M., and J.L. Osiensky. 2002. Numerical simulations of groundwater recovery systems to optimize contaminant plume capture. *Contaminated Soil Sediment & Water*, Association of Environmental Health and Sciences, Sept/Oct, pp. 27-37.

Carlson, R.A., and J.L. Osiensky. 2002. A geostatistically based ground water monitoring study of nonpoint source NO_3^--N concentrations. *Ground Water Monitoring and Remediation*, Vol 22, no 4, pp. 109-116.

Nimmer, R.E., and J.L. Osiensky. 2002. Using Mise-a-la-masse to Delineate the Migration of a Conductive Tracer in Partially Saturated Basalt. *Environmental Geosciences*, Vol. 9, no. 2, pp. 81-87.

Carlson, R.A., and J.L. Osiensky. 2001. Geostatistical Based Monitoring of Soil Water NO_3^--N: A Potential Nonpoint Source of Ground Water Contamination. *Journal of Environmental Science and Health-Part A Toxic/Hazardous Substances & Environmental Eng.*, Vol. A36, No. 10, pp. 1935-1956.

Osiensky, J.L., R.E Williams, B. Williams, and G. Johnson. 2000. Evaluation of drawdown curves derived from multiple well aquifer tests in heterogeneous environments. *Mine Water and The Environment,* International Mine Water Association, Vol. 19, No. 1, pp. 30-55.

Osiensky, J.L., R.E. Williams, D.R. Ralston, G.S. Johnson, and L.L. Mink. 1999. Simulation of Electrical Potential Differences Near a Contaminant Plume Excited by a Point Source of Current. *Mine Water and The Environment*, International Mine Water Association, Vol. 18, No. 1, pp. 29-44.

Osiensky, J.L. 1998. Reply to the Discussion by Yongqiang Lan of "Potential Inaccuracies in MODFLOW Simulations Involving the SIP and SSOR Methods for Matrix Solution" by Osiensky and Williams(1997), *Ground Water*, Vol.36, No. 1, p. 2.

Hutchings, J.J., J.E. Hammel, and J.L. Osiensky. 1998. Nitrogen Leaching from Unlined Cull-Onion Landfills. *Journal of Environmental Quality*, Vol. 27, no.5, pp. 1254-1260.

Carlson, R., and J.L. Osiensky. 1998. Geostatistical Analysis and Simulation of Nonpoint Source Ground Water Nitrate Contamination: A Case Study. *Environmental Geosciences*, Vol 5, no. 4. Division of Environmental Geosciences, AAPG.

Osiensky, J.L. 1997. Ground Water Modeling of Mise-a-la-masse Delineation of Contaminated Ground Water Plumes. *Journal of Hydrology*, 197, pp.146-165.

Osiensky, J.L., and R.E. Williams.1997. Potential Inaccuracies in MODFLOW Simulations Involving the SIP and SSOR Methods for Matrix Solution. *Ground Water*, vol. 35, no. 2. pp. 229-232.

Osiensky, J.L., and R.E. Williams. 1996. A Two-dimensional MODFLOW Numerical Approximation of Mise-A-La-Masse Electrical Flow Through Porous Media, *Ground Water*, Vol. 34, No. 4, pp. 727-733.

Osiensky, J.L., and R.E. Williams. 1995. Finite-Difference Simulation of the Application of Electrical Flow Through Conductive Contaminant Plumes. *Mine Water and The Environment*, International Mine Water Association, Vol.14, pp. 39-56.

Osiensky, J.L. 1995. Time Series Electrical Potential Field Measurements for Early Detection of Ground Water Contamination. *Journal of Environmental Science & Health*, Vol. A30, No. 7, pp 1601-1626.

Osiensky, J.L., and P.R. Donaldson. 1995. Electrical Flow Through an Aquifer for Contaminant Source Leak Detection and Delineation of Plume Evolution. *Journal of Hydrology*, Vol. 168, issues 1-4, pp. 353-373.

Osiensky, J.L., and P.R. Donaldson. 1994. A Modified MISE-A'-LA-MASSE Method For Contaminant Plume Delineation. *Ground Water*, Vol. 32, no. 3, pp.448-457.

Osiensky, J.L., and R.E. Williams. 1990. Factors Affecting Efficient Aquifer Restoration at In Situ Uranium Mine sites. *Ground Water Monitoring Review*, Vol. X, No. 2, pp. 107-112.

Bloomsburg, G., R.E. Williams, and J.L. Osiensky. 1989 Distribution of Downward Flux in Unsaturated Heterogeneous Hydrogeology Environments. *Geological Society of America Bulletin*, Vol. 101, pp. 1623-1630.

Osiensky, J.L., K.A. Peterson, and R.E. Williams. 1988. Solute Transport Simulation of Aquifer Restoration After In-Situ Uranium Mining. *Ground Water Monitoring Review*, Vol. 8, No. 2, pp. 137-144.

Staub, W.P., N.E. Hinkle, R.E. Williams, F.S. Anastasi, J.L. Osiensky, and Douglas Rogness. 1986. An Analysis of Excursions at Selected In Situ Uranium Mines in Wyoming and Texas. *NUREG/CR-3967*, U.S. Nuclear Regulatory Commission, Washington, D.C.

Osiensky, J.L. 1985. Reply to the Discussion by William R. Highland on "Monitoring and Mathematical Modeling of Contaminated Ground-Water Plumes in Fluvial Environments", by Osiensky and others (1984). *Ground Water*, Vol. 23, No. 1, pp. 102-104.

Osiensky, J.L., G.V. Winter, and R.E. Williams. 1984. Monitoring and Mathematical Modeling of Contaminated Ground-Water Plumes in Fluvial Environments. *Ground Water*, Vol. 22, No. 3, pp. 298-306.

Osiensky, J.L. 1983. Ground-Water Withdrawal Schemes for Uranium Mill Waste Disposal Sites. *Ground Water Monitoring Review*, Vol. 3, No. 1, pp. 22-27.

Peer Reviewed/Evaluated:

Nimmer, R.E., J.L. Osiensky, and A.M. Binley, 2003. Effects of borehole fill on resistivity investigations. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems, The Environmental and Engineering Geophysical Society, April 6-10, 2003, paper-BOR02 on CD-ROM, pp. 116-130.

Nimmer, R.E., J.L. Osiensky, and K. Sprenke. 2001. Borehole-Surface and Cross-Borehole Mise-Á-La-Masse Delineation of a Radial Injection Tracer Experiment in Partially Saturated Fractured Basalt. Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems, The Environmental and Engineering Geophysical Society, March 4-7, 2001, paper-BLH-2 on CD-ROM.

Baumgarten, D.J., and J.L. Osiensky. 1997. Ground Water Evaluation of Agricultural Best Management Practices: Eastern Snake River Plain National Monitoring Project. National Water Quality Watershed Project Symposium.

Osiensky, J.L., G.V. Winter, and R.E. Williams. 1983. Monitoring and Mathematical Modeling of Contaminated Ground-Water Plumes in Paleo-fluvial Environments for Regulatory Purposes. Proceedings, Third National Symposium on Aquifer Restoration and Ground Water Monitoring, NWWA, Columbus, Ohio, May.

Osiensky, J.L., R.E. Williams, and John Linehan. 1983. Pump Testing In-Situ Hydrostratigraphic Units. 7th Annual Symposium on Uranium and Precious Metals, Colorado Section, AIME, Denver, August.

Osiensky, J.L., and R.E. Williams. 1982. Ground Water Pump-Back System for a Uranium Tailings Disposal Site. Proceedings, Second National Symposium on Aquifer Restoration and Ground Water Monitoring, NWWA, Columbus, Ohio, May.

Other:

Williams, B., R.E. Nimmer, A. Owen, J.L. Osiensky, and J McKenna, 2002. Clearwater Uplands Basin Source Water Assessment Capture Zone Delineation Report to Idaho Department of Environmental Quality, June, 2002.

Osiensky, J.L., R.E. Nimmer, and J. McKenna. 2000. Moscow Basin Source Water Assessment, Report to Idaho Department of Environmental Quality, December 18, 2000.

Osiensky, J.L., and R.E. Nimmer. Quarterly Report for INEEL URC Research Consortium FY 2000, Task 3 – Vadose Zone Tracers, March, 15, 2000.

Osiensky, J.L., and R.E. Nimmer. Quarterly Report for INEEL URC Research Consortium FY 2000, Task 3 – Vadose Zone Tracers, June 16, 2000.

Osiensky, J.L., and R.E. Nimmer. Final Report for INEEL URC Research Consortium FY 2000, Task 3 – Vadose Zone Tracers, September 30, 2000.

Osiensky, J.L., R. Carlson, D. Baumgarten, M. Baker, and B. Gilliland. 1999. Ground Water Monitoring Technical Completion Report: Evaluation of Agricultural Best Management Practices to Reduce Nonpoint Source Ground Water Nitrate in Southern Minidoka County, Idaho. Idaho Water Resources Research Institute, 225p.

Osiensky, J.L., R. Carlson, and B. Gilliland. 1998. Minidoka/Cassia Ground Water Monitoring Project, Semiannual Report to the Idaho Division of Environmental Quality, March-September, 83p.

Osiensky, J.L., R. Carlson, and B. Gilliland. 1998. Minidoka/Cassia Ground Water Monitoring Project, Semiannual Report to the Idaho Division of Environmental Quality, September 1997-March 1998, 83p.

Osiensky, J.L., R. Carlson, and B. Gilliland. 1997. Minidoka/Cassia Ground Water Monitoring Project, Semiannual Report to the Idaho Division of Environmental Quality ,March-August, 79p.

Osiensky, J.L., D.J. Baumgarten, R. Carlson, and B. Gilliland. 1997. Minidoka/Cassia Ground Water Monitoring Project, Semiannual Report to the Idaho Division of Environmental Quality, September 1996- February, 101p.

West, S., J.L. Osiensky, and E. Squires. 1997. Water Levels and Drawdown Data from Pumping and Observation Wells in the East Boise Area, Report to United Water of Idaho, June 30, 1997, 44p.

West, S., J.L. Osiensky, and E. Squires. 1997, Interpretation and Analysis from Collected Water Levels and Drawdown Data in the East Boise Area, Report to United Water of Idaho, June 30, 132p.

West, S., and J.L. Osiensky. 1997. Interpretation and Analysis of Existing Pumping Test Data in the East Boise Area. Report to the Idaho Water Resources Research Institute, December 31, 130p.

Osiensky, J.L., and D.J. Baumgarten. 1996. Minidoka/Cassia Ground Water Monitoring Project, Semi-annual report February 1 - September 1), Report to Idaho DEQ and USEPA, 94 p.

Osiensky, J.L., D.L. Baumgarten, and M.F. Baker. 1996. Ground Water Monitoring for the Snake River Plain Water Quality Demonstration Project, Quarterly report (January 1 - February 28), Report to Idaho DEQ and USEPA, 108 p.

Osiensky, J.L., D.J. Baumgarten, and M.F. Baker. 1995. Snake River Plain Water Quality Demonstration Project – Annual Report to Idaho Division of Environmental Quality.

Osiensky, J.L., and M.F. Baker. 1994. Snake River Plain Water Quality Demonstration Project - Annual Report to Idaho Division of Environmental Quality.

Hammel, J.E., J.L. Osiensky, and J.J. Hutchings. 1993. Field Investigation of Landfill Disposal of Cull Onions. Final Report to the Center for Applied Agricultural Research, Oregon Department of Agriculture.

Osiensky, J.L., and M.F. Baker. 1993. Snake River Plain Water Quality Demonstration Project - Annual Report to Idaho Division of Environmental Quality.

Squires, E., S.P. Wood, J.L. Osiensky, and R. Dittus. 1993. Ground Water Conditions and Hydraulic Testing of the Boise-Fan Aquifer of Southeast Boise River Valley, Ada County, Idaho, A report submitted to Boise Water Corporation and the Idaho Department of Water Resources.

Squires, E., S.H. Wood, and J.L. Osiensky. 1992. Hydrogeologic Framework of the Boise Aquifer System: Ada County, Idaho. A report prepared for Boise Water Corporation and the Idaho Water Resources Research Institute, University of Idaho, Moscow, 75p.

Osiensky, J.L., and M.F. Baker. 1992. Snake River Plain Water Quality Demonstration Project - Annual Report to Idaho Division of Environmental Quality.

Williams, R.E., J.L. Osiensky, F.S. Anastasi, and Douglas Rogness. 1984. An Analysis of Excursions and Hydrogeologic Testing Methods at Selected Uranium Leach Sites in Wyoming and Texas. Report to the Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee, from the Mineral Resources Waste Management Team, College of Mines and Earth Resources, University of Idaho, Moscow, 425p.

Williams, R.E., and J.L. Osiensky. 1983. Hydrogeologic Analysis of Uranium Mill Tailings Sites. Report to the Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee, from the Mineral Resources Waste Management Team, College of Mines and Earth Resources, University of Idaho, Moscow, 425p.

Williams, R.E., J.L. Osiensky, and R. Kaufman. 1980. Overview of Groundwater Contamination

Associated With Six Operating Uranium Mills in the United States, A Report to the U.S. Nuclear Regulatory Commission, Washington, D.C., and to Oak Ridge National Laboratory, Oak Ridge, Tennessee. University of Idaho, Moscow, 89p.

Refereed Publications (currently submitted):

Other:

Short Course Texts:

Osiensky, J.L., and T. Brooks. 1990. Well Hydraulics and Aquifer Testing. A course text prepared for students for short courses taught in Boise and Idaho Falls, Idaho, spring semester, 95p.

Osiensky, J.L. 1989. Ground Water Evaluation at a Solid Waste Site. A course text prepared for students for short courses taught in Boise, Idaho Falls and Moscow, Idaho, spring semester, 100p.

Osiensky, J.L. 1988. Concepts of Contaminant Migration in Saturated Porous Media. Course notes prepared for students in short courses taught in Boise and Idaho Falls, Idaho, spring semester, 27p.

Professional meeting papers and workshops: (currently submitted):

Professional meeting papers and workshops (presented):

Nimmer, R.E., Osiensky, J.L., Binley, A.M., Sprenke, K.F., and Williams, B, 2006, Monitoring Dilution of a KCl Plume in Fractured Basalt with Electrical Resistance Tomography, oral presentation at the Environmental & Subsurface Science Symposium, September 2006.

Nimmer, R.E., Osiensky, J.L., Binley, A.M., Sprenke, K.F., and Williams, B, 2006, Use of 2D and 3D Resistivity Methods to Monitor Dilution of a Conductive Plume in Fractured Basalt, oral presentation at the AGU Fall Meeting, December 2006.

Osiensky, J.L., 2006, The Do's and Don'ts in Current Understanding of the Palouse Basin Grande Ronde Aquifer System, oral presentation at the Palouse Basin Water Summit, October 2006.

Hernandez, H., and Osiensky, J.L., 2006, Characterzation of Hydrogeological Relationship Between Paradise Creek and Wanapum Aquifer. Poster presented at the Palouse Basin Water Summit, October 2006.

Opatz, C., and Osiensky, J.L., 2006, Investigation of Crossformational Flow from the Wanapum Aquifer to the Vantage Member of the Latah Formation. Poster presented at the Palouse Basin Water Summit, October 2006.

Douglas, S., and Osiensky, J.L., 2006, Monitoring Groundwater in the Palouse Basin. Poster presented at the Palouse Basin Water Summit, October 2006.

Holom, D., Osiensky, J.L., and Oldow, J.S., 2005. Gravity Determination of the Pre-basalt, Crystalline Rock Topography Along the Eastern Extent of the Columbia River Basalts, Poster presented at the conference Groundwater Under The Pacific Northwest: Integrating Research, Policy and Education, November 2-3, 2005, Stevenson, WA.

Rhode, K., and Osiensky, J.L., 2005. Numerical Analysis of Spatially Dependent Transmissivity and Storativitiy in a Heterogeneous Aquifer, Poster presented at AGU Fall meeting, December 5-9, San Francisco, CA.

Douglas, A., Osiensky, J.L., and Keller, C.K., 2005. Carbon-14 Dating of "Ice Age" Recharge in a Columbia River Basalt Interstate Ground Water Resource System. Poster presented at the Palouse Basin Water Summit, Oct.

6-7, Moscow, ID.

Badon, Nicole., and Osiensky J.L., 2005. Wanapum Groundwater Monitoring Project. Poster presented at the Palouse Basin Water Summit, Oct. 6-7, Moscow, ID.

Holom, D., Osiensky, J.L., and Oldow, J.S., 2005. Are Moscow and Palouse in the Same Groundwater Basin? Poster presented at the Palouse Basin Water Summit, Oct. 6-7, Moscow, ID.

McVay, M.,and Osiensky, J.L., 2005. Deep Aquifer Research Project. Poster presented at the Palouse Basin Water Summit, Oct. 6-7, Moscow, ID.

Opatz, C., and Osiensky, J.L., 2005. Investigation of Crossformational Flow From the Wanapum Aquifer to the Vantage Member of the Latah Formation. Poster presented at the Palouse Basin Water Summit, Oct. 6-7, Moscow, ID.

Owsley, D., and Osiensky, J.L., 2005. Characterization of Grande Ronde Aquifers in the Palouse Basin Using Large Scale Aquifer Tests. Poster presented at the Palouse Basin Water Summit, Oct. 6-7, Moscow, ID.

Pehrson, L., and Osiensky, J.L., 2005. The Evaluation of Potential Water Harvesting: A Source of Water for Artificial Aquifer Recharge in the Palouse Basin. Poster presented at the Palouse Basin Water Summit, Oct. 6-7, Moscow, ID.

Nimmer, R.E., J.L. Osiensky, and A.M. Binley, 2003. Effects of borehole fill on resistivity investigations. Paper presented at the Symposium on the Application of Geophysics to Engineering and Environmental Problems, The Environmental and Engineering Geophysical Society, April 6-10, 2003, San Antonio, TX.

Owsley, D., and J.L. Osiensky. Characterization of Grande Ronde aquifers in the Palouse basin using large scale aquifer tests. Poster presented at the 4th Symposium on the Hydrogeology of Washington State, Tacoma, WA, April 8-10, 2003.

Armstrong, B.J., S.A. Wood, and J.L. Osiensky. 2002. Rare Earth Elements as Tracers of Groundwater Flow. Poster presented at the 23rd Rare Earth Research Conference, July 13-18, University of California, Davis.

Nimmer, R.E., and J.L. Osiensky. 2001. Electrical Delineation of an Electrolyte Tracer in Partially Saturated Fractured Basalt. Paper presented at the Unsaturated Zone Interest Group Meeting, USGS, USDOE and University of Idaho. July 30-August 2, 2001, Idaho Falls.

Nimmer, R.E., J.L. Osiensky, and K. Sprenke. 2001. Borehole-Surface and Cross-Borehole Mise-Á-La-Masse Delineation of a Radial Injection Tracer Experiment in Partially Saturated Fractured Basalt. Paper presented at the Symposium on the Application of Geophysics to Engineering and Environmental Problems, The Environmental and Engineering Geophysical Society, March 4-7, 2001, Denver.

Carlson, R.A., and J.L. Osiensky. 2000. A stochastic evaluation of the effects of an alfalfa-grain rotation on nitrate concentrations in shallow ground water. Paper presented at the Eighth National Nonpoint-Source Monitoring Workshop, Sept. 11-14, Hartford, Connecticut.

Nimmer, R.E. and J.L. Osiensky. 2000. Time series geophysical 3-D characterization of moisture flux redistribution during a radial injection tracer experiment in unsaturated fractured basalt. Paper presented at the University Research Consortium Annual Meeting, July 31- August 1, Idaho Falls, Idaho.

Carlson, R.A., and J.L. Osiensky. 1999. Geostatistical Simulation of Agricultural Nonpoint Source Contamination Southern Idaho. Paper presented at the 9th Annual Nonpoint Water Quality Monitoring Results Workshop, Boise, Idaho, January 12-14.

Gilliland, B., and J.L. Osiensky. 1999. Evaluation of Ground Water Nitrate Concentration Related to Agricultural Best Management Practices: Eastern Snake River Plain, Idaho. Paper presented at the 9th Annual Nonpoint Water

Quality Monitoring Results Workshop, Boise, Idaho, January 12-14.

Rowley, T., and J.L. Osiensky. 1998. Electrical and Seismic Surface Geophysics to Characterize a Landfill Leachate Plume. Poster presented at the National Ground Water Association 50th Anniversary National Convention and Exposition, December 13-16, Las Vegas.

Carlson, R.A., and J.L. Osiensky. 1998. Geostatistical Analysis and Simulation of the Effects of Agricultural Best Management Practices on Ground Water Nitrate Concentrations in the Eastern Snake River Plain, Idaho. Paper presented at the Sixth National Nonpoint-Source Monitoring Workshop, September 21-24, Cedar Rapids, Iowa.

Gilliland, B.K., and J.L. Osiensky. 1998. Evaluation of Ground Water Nitrate Concentrations Related to Agricultural Best Management Practices: Eastern Snake River Plain, Idaho. Paper presented at the Sixth National Nonpoint-Source Monitoring Workshop, September 21-24, Cedar Rapids, Iowa.

Baumgarten, D.J., and J.L. Osiensky. 1997. Agricultural Non-point Source Ground Water Monitoring in Two Paired Fields, Southern Idaho, Seventh Annual Nonpoint Source Water Quality Monitoring Results Workshop, January 7-9, Boise, Idaho.

Baumgarten, D.J., and J.L. Osiensky. 1997. Snake River Plain Water Quality Demonstration Project, Preliminary Analysis of Baseline Ground Water Nitrate in Two Paired Agricultural Fields Burley, Idaho, Seventh Annual Nonpoint Source Water Quality Monitoring Results Workshop, January 7-9, Boise, Idaho.

Baumgarten, D.J., and J.L. Osiensky. 1997. Ground water Evaluation of Agricultural Best Management Practices: Eastern Snake River Plain National Monitoring Project. Paper presented at the National Watershed Water Quality Project Symposium, September 22-26, Washington, D.C.

Baumgarten, D.J., and J.L. Osiensky. 1997. Nitrate Contamination of a Shallow Ground Water Resource, Pacific Northwest Section of the American Water Works Association, May 7-9, Boise, Idaho.

Osiensky, J.L. 1997. Aquifer Testing in Heterogeneous Environments: What do the Numbers Mean? Paper presented at the Pacific Northwest Section of the American Water Works Association, May 7-9, Boise, Idaho.

West, S., J.L. Osiensky, and E. Squires. 1997. Analysis of Trends Related to Aquifer Tests in the Southeast Boise Area, Pacific Northwest Section of the American Water Works Association, May 7-9, Boise, Idaho.

West, S., J.L. Osiensky, and E. Squires. 1997. Analysis of Aquifer Test Data for the Southeast Boise Area. Connections'97: Ground Water in the Rocky Mountain Region, September 24-26, Boise, Idaho.

Carlson, R., and J.L. Osiensky. 1997. Ground Water Quality Evaluation of Agricultural Best Management Practices in Southern Idaho. Connections'97: Ground Water in the Rocky Mountain Region, September 24-26, Boise, Idaho.

Gilliland, B., and J.L. Osiensky. 1997. Ground Water Quality Effects from Potato Crops Grown in Sandy Soils Compared to Silty Soils: Eastern Snake River Plain National Monitoring Project Idaho. Connections'97: Ground Water in the Rocky Mountain Region, September 24-26, Boise, Idaho.

Baumgarten, D.J., and J.L. Osiensky. 1996. Hydrogeologic Investigation and Baseline Nitrate Monitoring in a Shallow Aquifer South Central Idaho. Fourth National Nonpoint Source Watershed Projects Workshop, September 16-20, Harrisburg, Pennsylvania.

Baumgarten, D.J., and J.L. Osiensky. 1996. Measures of Success in a Ground Water Quality Monitoring Program for BMP Evaluation. Fourth National Nonpoint Source Watershed Projects Workshop, September 16-20, Harrisburg, Pennsylvania.

Rowley, T.H., P.R. Donaldson, J.L. Osiensky, and J.C. Parker. 1995. Dual Geophysical Data Set Interpretation for Landfill Plume Delineation. Symposium of Applied Geophysics to Environmental and Engineering Problems, Environmental and Engineering Geophysical Society, April 23-26, Orlando, Florida.

Baker, M.F., and J.L. Osiensky. 1995. A Geostatistical Evaluation of the Nitrate Contamination in an Agricultural Field. Connections: Ground Water in Idaho, Ground Water Technical Workshop, March 9-10, Boise.

Baker, M.F., and J.L. Osiensky. 1995. Field Specific Ground Water Monitoring for the Snake River Plain Water Quality Demonstration Project. Paper presented at the Fifth Annual Nonpoint Source Water Quality Monitoring Results Workshop. Boise, Idaho, Jan 3-5.

Rowley, T.H., S. Howe, P.R. Donaldson, and J.L. Osiensky. 1994. A Ground Water Investigation Using the Mise-a-la-masse Method. Paper presented at the 1994 Idaho Regional Conference on Hazardous Wastes & Materials, Boise, Idaho, May 3-4.

Rowley, T.H., P.R. Donaldson, J.L. Osiensky, and J.A. Welhan. 1994. A Mise-a-la-masse Method for Landfill Contaminant Plume Evaluation. Paper presented at the 1994 Symposium on Engineering Geology and Geotechnical Engineering, Boise, Idaho, March 23-25.

Hutchings, J.J., J.E. Hammel, and J.L. Osiensky. 1993. Field Investigation of Landfill Disposal of Cull Onions. Paper Presented at the National Soil Science Society of America Meeting, Cincinnati, Ohio, November.

Squires, E., S.P. Wood, and J.L. Osiensky. 1993. Hydrogeologic Framework of the Boise Aquifer System, Southeastern Idaho. Geological Society of America Abstracts with Programs, vol. 25, no. 5, p. 150, May.

Hutchings, J.J., J.L. Osiensky, and J.E. Hammel. 1993. Field Investigation of Landfill Disposal of Cull Onions. Paper presented at the 1993 Ground Water Quality Technical Workshop, Boise, Idaho, Feb 11-12.

Moderator, Hazardous Waste: Issues, Problems, and Solutions, Idaho Water Resources Research Institute, Boise, Idaho, May 21-22, 1990.

Osiensky, J.L., G.V. Winter, and R.E. Williams. 1983. Monitoring and Mathematical Modeling of Contaminated Ground-Water Plumes in Paleo-fluvial Environments for Regulatory Purposes. Third National Symposium on Aquifer Restoration and Ground Water Monitoring, NWWA, Columbus, Ohio, May.

Osiensky, J.L., and R.E. Williams. 1982. Ground Water Pump-Back System for a Uranium Tailings Disposal Site. Second National Symposium on Aquifer Restoration and Ground water Monitoring, NWWA, Columbus, Ohio, May.

Grants and Contracts Awarded:

Monitoring Wanapum Basalt/Latah Formation....(PI), PBAC, 2007-2009, $31,324.

Grande Ronde Monitoring/Testing.... (PI), PBAC, 2007-2008, $26,694.

Passive Recharge Investigation (PI), PBAC, 2006-2007, $45,000.

Big Gulch Ground Water Model (PI), M3 Companies, 2006-2007, $37,871.

IDWR Ground Water Monitoring Wells (PI), IDWR, 2006-2007, $240,000.

Grande Ronde Aquifer Investigation (PI) PBAC, 2004-2006, $31,571.

Wanapum Aquifer Investigation (PI) PBAC, 2004-2006, $30,871.

Gravity/ Magnetics Basin Investigation (Co-PI with John Oldow), PBAC , 2004-2006, $36, 558.

Ground Water Age Dating in the Palouse Basin (Co-PI with Kent Keller) PBAC, 2003-2004, $24,000.

Hydrostratigraphic Conditions in the Palouse Basin (Co-PI with Kent Keller) PBAC, 2003-2004, $80,000.

Evaluation of Falling Ground Water Levels in the Moscow-Pullman Area (Principal Investigator) PBAC, 2003-2004, $16,000.

Large-Scale Groundwater Tracer Tests at Hagerman Fossil Beds National Monument (Principal Investigator) National Park Service, 2002-2004, $51,500.

Ground Water Quality Analysis of the Wanapum and Grande Ronde Aquifers in Moscow, Idaho (Principal Investigator) PBAC, 2002, $16,000.

Clearwater Plateau Source Water Assessment Delineations (Co-PI with Barbara Williams), 2001, $85,990.

Graduate Student Support (PI) Idaho State Board of Education through the University of Idaho Environmental Science Program, 2001, $12,000.

Evaluation of Transient Ground Water Level Fluctuations in the Palouse Basin (Principal Investigator) PBAC, 2001, $25,000.

Rare Earth Element Analysis for Differentiation of Ground Water Recharge (Co-PI with Scott Wood) PBAC, 2001, $2,000.

Subsurface Science and Education Outreach (Co-PI with Roy Mink and others) Bechtel, 2001, $420,257.

Technology Incentive Grant (Co-PI with Margrit Von Braun and others) Idaho State Board of Education, 2001, $311,407 (continued from 1999).

Technology Incentive Grant (Co-PI with Margrit Von Braun and others) Idaho State Board of Education, 2001, $97,000 (continued from 2000).

Evaluation of Hydrostratigraphic Conditions in the Palouse Basin (Principal Investigator 50% with Kent Keller) PBAC, 2001, $187,075 (continued from 1999).

Graduate Student Support (Co-PI with Scott Wood) Idaho State Board of Education through the University of Idaho Environmental Science Program, 2001, $12,000.

Vadose Zone Science and Technology Alliance (Co-PI with Roy Mink and others) Bechtel, 2000, $396,259.

Moscow, Idaho Area Source Water Assessment Delineations (Principal Investigator) Idaho Department of Environmental Quality, 2000, $23,041.

Graduate Student Support (PI) Idaho State Board of Education through the University of Idaho Environmental Science Program, 2000, $12,000.

Graduate Student Support (Co-PI with Scott Wood) Idaho State Board of Education through the University of Idaho Environmental Science Program, 2000, $12,000.

Technology Incentive Grant (Co-PI with Margrit Von Braun and others) Idaho State Board of Education, 2000, $311,407 (continued from 1999)

Technology Incentive Grant (Co-PI with Margrit Von Braun and others) Idaho State Board of Education, 2000, $97,000 (2-years).

Evaluation of Hydrostratigraphic Conditions in the Palouse Basin (Principal Investigator 50% with Kent Keller) PBAC, 2000, $187,075 (continued from 1999).

Remediation of the Sweet Ave. Ground Water Plume (Principal Investigator) EnviroSafe Services of Idaho, Inc., 1999, $20,000.

Nonpoint Source Control (Co-PI with Roy Mink) USEPA 319 Grant, 1999, $167,699.

Vadose Zone Science and Technology Alliance (Co-PI with Roy Mink and others) Lockheed, 1999, $312,459.

Technology Incentive Grant (Co-PI with Margrit Von Braun and others) Idaho State Board of Education, 1999, $311,407 (3-years)

Evaluation of Hydrostratigraphic Conditions in the Palouse Basin (Principal Investigator 50% with Kent Keller) PBAC, 1999, $187,075 (3-years).

Snake River Plain Water Quality Demonstration Project - Ground Water Monitoring (Principal Investigator) USEPA 319 National Monitoring Program, 1998, $78,640.

Snake River Plain Water Quality Demonstration Project - Ground Water Monitoring (Principal Investigator) USEPA 319 National Monitoring Program, 1997, $77,750.

Treasure Valley Hydrologic Project (Principal Investigator) – Idaho Department of Water Resources, 1996, $138,746.

Snake River Plain Water Quality Demonstration Project—Ground Water Monitoring (Principal Investigator) USEPA 319 National Monitoring Program, 1996, $79,933.

Snake River Plain Water Quality Demonstration Project—Ground Water Monitoring (Principal Investigator) USEPA 319 National Monitoring Program, 1995, $68,607.

Field Investigation of Landfill Disposal of Cull Onions (Principal Investigator- 50% with John Hammel) Idaho Eastern Oregon Onion Committee, 1995, $4,500.

Snake River Plain Water Quality Demonstration Project--Ground Water Monitoring (Principal Investigator) USEPA 319 National Monitoring Program, 1994, $73,684.

EnviroSafe Services of Idaho, Inc., 1994, $6,000.

Field Investigation of Landfill Disposal of Cull Onions (Principal Investigator- 50% with John Hammel) Idaho Eastern Oregon Onion Committee, 1994, $4,500.

Snake River Plain Water Quality Demonstration Project--Ground Water Monitoring (Principal Investigator) USEPA 319 National Monitoring Program, 1993, $55,006.

Field Investigation of Landfill Disposal of Cull Onions (Co-principal Investigator- 50% with John Hammel) Idaho Eastern Oregon Onion Committee, 1993, $4,500.

Ground Water Vulnerability Mapping Project Idaho Division of Environmental Quality through the Idaho Water Resources Research Institute, 1993, $9,600.

Snake River Plain Water Quality Demonstration Project -- Ground Water Monitoring (Principal Investigator) USEPA 319 National Monitoring Program, 1992, $102,568.

Field Investigation of Landfill Disposal of Cull Onions (Principal Investigator) Idaho Eastern Oregon Onion Committee, 1992, $14,300.

Field Investigation of Landfill Disposal of Cull Onions (Principal Investigator- 50% with John Hammel) Center for Applied Agricultural Research - Oregon Department of Agriculture, 1992, $8,960.

Field Investigation of Landfill Disposal of Cull Onions (Principal Investigator- 50% with John Hammel) Idaho Water Resources Research Institute, 1992, $10,257.

Comprehensive Groundwater Study of the Boise Municipal Supply -Phase III, Computer Simulation Co-PI with Spencer Wood) Boise Water Corporation, 1992, $19,926.

Field Investigation of Landfill Disposal of Cull Onions (Principal Investigator) Idaho Eastern Oregon Onion Committee, 1991, $18,230.

Field Investigation of Landfill Disposal of Cull Onions (Principal Investigator- 50% with John Hammel) Center for Applied Agricultural Research - Oregon Department of Agriculture, 1991, $15,970.

Municipal Groundwater Supply for the Boise, Idaho Area: Phase II, Testing to Determine Aquifer Parameters, Vertical Hydraulic Conductivity, Aquifer Conductivity and Leakage (Investigator with Spencer Wood) Idaho Water Resources Research Institute, 1991, $11,605.

Municipal Groundwater Supply for the Boise, Idaho Area: Phase II, Testing to Determine Aquifer Parameters, Vertical Hydraulic Conductivity, Aquifer Conductivity and Leakage (Investigator with Spencer Wood) Boise Water Corporation, 1991, $38,806.

Municipal Groundwater Supply of the Boise, Idaho Area: Phase I, Geologic Framework, Delineation of Aquifers and Production, Preliminary Testing for Aquifer Parameters (Investigator with Spencer Wood) Idaho Water Resources Research Institute, 1990, $11,102.

Municipal Groundwater Supply of the Boise, Idaho Area: Phase I, Geologic Framework, Delineation of Aquifers and Production, Preliminary Testing for Aquifer Parameters (Investigator with Spencer Wood) Boise Water Corporation, 1990, $30,588.

Development of an Improved Method to Evaluate Contaminant Migration in a Fluvial Aquifer (Principal Investigator) Idaho State Board of Education, 1990, $30,800.

Analysis of Contaminant Migration in an Aquifer of Fluvial Origin (Principal Investigator) Idaho State Board of Education Matching Grant, 1989, $39,100.

SERVICE:

Major Committee Assignments:

Geological Sciences Graduate Admissions Committee (Chair), and Graduate Student Coordinator
Geological Sciences Faculty Annual Review Committee
Geological Engineering Program Review Committee
Geological Engineering Curriculum Committee
Geological Sciences Curriculum Committee
COMER computer committee
Geological Sciences Graduate Admissions Committee
Tenure and Promotions Guideline Committee
COMER Hydrology/Hydrogeology Program Development Committee
Environmental Sciences Program Review Committee
Hydrogeology Search Committee
Geological Sciences Tenure and Promotion Committee
Geological Sciences Graduate Admissions Coordinator

Professional and Scholarly Organizations:

American Geophysical Union
National Ground Water Association
International Association of Hydrogeologists

Community Service:

State of Idaho Solid Waste Advisory Committee
State of Idaho Solid Waste Technical Advisory Committee
Treasure Valley Hydrologic Project Technical Advisory Committee
State of Idaho Ground Water Quality Monitoring Technical Committee
Agricultural Ground Water Coordination Committee

PROFESSIONAL DEVELOPMENT:

Scholarship:

Environmental & Subsurface Science Symposium, September 2006, Idaho Falls, ID.
AGU Fall Meeting, December 2006.
Palouse Basin Water Summit, October 2006.
Groundwater Under The Pacific Northwest: Integrating Research, Policy and Education, November 2-3, 2005, Stevenson, WA.
AGU Fall meeting, December 5-9, San Francisco, CA.
Palouse Basin Water Summit, Oct. 6-7, Moscow, ID.
4th Symposium on the Hydrogeology of Washington State, Tacoma, WA, April 8-10, 2003.
Symposium of Applied Geophysics to Environmental and Engineering Problems, Environmental and Engineering Geophysical Society, April 6-9, 2003, San Antonio.
Unsaturated Zone Interest Group Meeting, USGS, USDOE and University of Idaho. July 30-August 2, 2001, Idaho Falls.
Symposium of Applied Geophysics to Environmental and Engineering Problems, Environmental and Engineering Geophysical Society, March 4-7, 2001, Denver.
Eighth National Nonpoint-Source Monitoring Workshop, Sept. 11-14, 2000, Hartford, Connecticut.
Ninth Annual Nonpoint Water Quality Monitoring Results Workshop, January 12-14, 1999, Boise, Idaho,.
National Ground Water Association 50th Anniversary National Convention and Exposition, December 13-16, 1998, Las Vegas, Nevada.
Sixth National Nonpoint-Source Monitoring Workshop, September 21-24, 1998, Cedar Rapids, Iowa.
Seventh Annual Nonpoint Source Water Quality Monitoring Results Workshop, January 7-9, 1997, Boise, Idaho.
National Watershed Water Quality Project Symposium, September 22-26, 1997, Washington, D.C.
Pacific Northwest Section of the American Water Works Association, May 7, 1997, Boise, Idaho.
Connections'97: Ground Water in the Rocky Mountain Region, September, 1997, Boise, Idaho
Fourth National Nonpoint Source Watershed Projects Workshop, September 16-20, Harrisburg, PA.
Symposium of Applied Geophysics to Environmental and Engineering Problems, Environmental and Engineering Geophysical Society, April 23-26, 1995, Orlando, Florida.
Connections: Ground Water in Idaho, Ground Water Technical Workshop, March 9-10, 1995, Boise, Idaho.
Fifth Annual Nonpoint Source Water Quality Monitoring Results Workshop. Jan 3-5, 1995, Boise, Idaho.
Idaho Regional Conference on Hazardous Wastes & Materials, May 3-4, 1994, Boise, Idaho.
Symposium on Engineering Geology and Geotechnical Engineering, March 23-25, 1994, Boise, Idaho,
National Soil Science Society of America Meeting, November, 1993, Cincinnati, Ohio,.
Ground Water Quality Technical Workshop, Feb 11-12, 1993, Boise, Idaho,.
Hazardous Waste: Issues, Problems, and Solutions, Idaho Water Resources Research Institute, May 21-22, 1990, Boise, Idaho.
Third National Symposium on Aquifer Restoration and Ground Water Monitoring, NWWA, May, 1983, Columbus, Ohio.
Second National Symposium on Aquifer Restoration and Ground water Monitoring, NWWA, May, 1982, Columbus, Ohio.

Outreach:

1988-97 University of Idaho Hydrogeologist – on location in the Department of Geosciences at Boise State

University. Two University of Idaho graduate hydrogeology courses (including video) offered per year and two undergraduate Boise State University courses offered per year. Other duties included short courses, visiting lectures, advising graduate students at all three universities, and collaborative research with faculty at Boise State University and Idaho State University in Pocatello, Idaho.

Summary of Comments on Technical Analyses

Dr. James L. Osiensky

University of Idaho Department of Geological Sciences
November 25, 2008

1) This outline summarizes my comments, as of November 25, 2008, regarding certain hydrogeological studies relevant to Water Right Application 63-32573 filed by M3 Eagle LLC.

2) I am familiar with the December 2007 M.S. Hydrology thesis of my former graduate student advisee, Stacey Douglas, entitled "Development of a Numerical Ground Water Flow Model for the M3 Eagle Development Area Near Eagle, Idaho." I was among those advising Ms. Douglas throughout her investigation on this project, and I was her Major Professor. The model development was carried out independently (to the degree possible) from efforts being undertaken in this same area by Hydro Logic, Inc. (HLI) and the Idaho Department of Water Resources (IDWR). However, the modeling product is based primarily on information provided by HLI during the course of the modeling investigation. Ms. Douglas competently evaluated geologic and hydraulic evidence concerning the Pierce Gulch Sand Aquifer beneath the Eagle-Star area in north Ada County, Idaho. Conclusions presented by Ms. Douglas support the conceptual model of the aquifer that HLI described in the May 4, 2007 report entitled "M3 Eagle Regional Hydrogeologic Characterization, North Ada, Canyon, and Gem Counties, Idaho Year-One Progress Report" (HLI, 2007 Report). To my knowledge, IDWR has not developed any data or report conflicting with or questioning either the thesis or the HLI, 2007 Report.

2) I have thoroughly reviewed the first and second drafts of HLI's July 4, 2008 "Re-Analysis of 16 Aquifer Tests in the Greater Eagle-Star Area of North Ada County, Idaho". I provided comments and suggestions to HLI, Inc. on both drafts as a peer reviewer.

3) I am familiar with the academic background and professional work of Ed Squires and believe him to be a competent, experienced, and ethical hydrogeologist.

4) I have read and reviewed the HLI, 2007 Report and I have no reason to disagree with its scientific approach, or its conclusions related to the characterization of the Pierce Gulch Sand Aquifer.

5) I believe the Treasure Valley Hydrologic Project's numerical ground water model and water budget are not adequate with respect to the selection of model layers and boundary conditions to accurately simulate ground water flow conditions in the M3 Eagle development area.

6) Based on my review of the information developed by M3 Eagle's hydrogeologists, sufficient evidence was compiled during the HLI, Inc. investigations to support ground water production estimates for the proposed development.

7) Based on my knowledge of the hydrogeological data developed by HLI, I believe the predicted effects and projected drawdowns presented in their work represent reasonable estimates of the effects that the M3 Development will have on the ground water resource systems in the development area.

8) I have reviewed the November 6, 2008 memorandum from Dr. Dale Ralston to Josephine Beeman in which Dr. Ralston states that the HLI, 2007 Report "does not provide specifics relative to locations and characteristics of recharge [to the aquifer] in the Boise River basin or any information relative to locations and characteristics of ground-water discharge [from the aquifer] within the Payette River basin." I concur with these observations. However, I believe that sufficient evidence exists for substantial underflow to the M3 Eagle Development area primarily from the south and east in the Boise River drainage, and that this ground water flows generally to the northwest toward the Payette River drainage.

9) I have reviewed Dr. Ralston's conclusion that "the characterization of the target aquifer system . . . has not been complete enough to support an analysis of impacts from full project development." In my opinion, HLI has collected sufficient information to support conservative estimates of impacts (i.e., projected drawdowns in the Pierce Gulch Sand Aquifer at various distances from identified production well sites.