EXHIBIT
"A"

e-PUR, llc

Safe Water For All

JOHN M. LAMBIE

Principal Groundwater Hydrologist

EDUCATION

MS Sediment Mechanics, 1984, Massachusetts Institute of Technology, Cambridge, Massachusetts

BS Earth & Planetary Sciences, 1983, Massachusetts Institute of Technology, Cambridge, Massachusetts

Specialized Training

Groundwater Modeling, 1985, 1987, 1989, 2003, 2005
U.S. EPA Risk Assessment- 1988
Decision Benefit Analysis - 1998
Data Statistics and Interpretation - 2006

REGISTRATIONS

Professional Civil Engineer	California No. C58059
	Oregon No. 72442PE
	Washington No. 40125
Certified Water Rights Examiner	Oregon No. 72442WRE
Certified Engineering Geologist	California No. EG 1662
Professional Geologist	California (No. 4607)

OSHA Hazardous Waste Operations and Supervisor Training 1986 to present

PROFESSIONAL HISTORY

e-pur, LLC, Portland, Oregon
President and Principal Engineer, 2003-present
S.S. Papadopulos & Associates, Inc., Portland, Oregon
Vice President and Principal Groundwater Hydrologist, 2002-2006
H_2O Technologies Limited, Portland, Oregon
Vice President and Environmental Division Manager, 2001-2002
SECOR International Inc., San Francisco, California
Vice-President and Principal Hydrologist, 1991-2001
Levine-Fricke, Oakland, California
Project to Senior Associate Hydrogeologist, 1986-1991
Environmental Research & Technology (ERT), Concord, Massachusetts
Staff Hydrogeologist, 1984-1986

SUMMARY OF QUALIFICATIONS

Mr. Lambie's 24 years of experience ncludes evaluation and modeling of water resources, engineering evaluation and design of water resource projects for treatment and supply, and engineering cost-benefit decision analysis.

Mr. Lambie has evaluated and modeled groundwater at the basin scale and site scale for a wide variety of water resource projects. The projects have ranged from municipal and industrial supply planning and evaluation, to water supply for habitat areas. He has applied a variety of innovative approaches for water treatment, numerical modeling, and hydraulic testing.

SUMMARY OF QUALIFICATIONS

Mr. Lambie has worked on characterization and remediation of a wide range of chemicals in soil and water under the federal Clean Water Act, and correlative state law. He has worked on microbial contamination, PCBs, creosote and coal tar, chlorinated solvents, dioxin, pentachlorophenol, heavy metals (especially As, Cr,

— continued

Cu, Pb, Ur, and Hg), perchlorate, MTBE and other gasoline constituents, pesticides (especially EDB and DBCP), and wastewater loadings of chloride, nitrate, phosphate, and bacteria.

REPRESENTATIVE PROJECT EXPERIENCE

Examples of Mr. Lambie's project experience are presented below in the areas of Water Resources Studies, Groundwater and Soil Remediation Projects, Decision Analysis, and Legal Support.

WATER RESOURCE STUDIES

- Water Supply Study, USF&W Lower Klamath National Wildlife Refuge, Klamath Basin of Oregon and California — Developed an overall water budget for the Tule Lake sub-basin of the Upper Klamath Basin on behalf of the U.S. Fish & Wildlife Service (USF&W) in light of the Klamath Basin adjudication. Built and calibrated a 3,600 square mile groundwater model of the surface and groundwater system of the entire Tule Lake sub-basin. Evaluated the feasibility of long-term groundwater supply to augment seasonal wetlands in the USF&W Refuges. Gathered data from U.S. Geological Survey and water resource agencies from Oregon and California on water demands in the area, irrigated acreage, hydrogeology, and groundwater elevations. Developed novel method for calculating net recharge from rainfall in a closed basin using published watershed techniques. Adjudication is pending along with further analysis of alternate supply option(s).
- Spring Source Evaluation, Mount Shasta City, California – Investigated multiple locations for borehole interception of spring water. Study involved installation of a number of shallow and deep wells to map fracture and structure patterns to geology that produced springs and then to determine areas that were supplying flow to springs. Drilled spring borehole on property over 500 feet from spring emergence and established adjacency under California Department of Health Services spring water criteria. Performed dye tracer studies, stable isotope evaluations of water provenance, and withdrawal tests on sustainable borehole/spring yield.
- Water Supply Master Plan for the Town of Windsor, California — In partnership with RMC Water and Environment developed a staged approach to supplemental groundwater supply wells for Town of Windsor's Water Master Plan. The hydrogeology of the area surrounding the town was evaluated along with the engineering analysis of locations of greatest need in the water distribution system to develop recommended locations for well siting and an approach to staged evaluation of aquifer storage & recovery (ASR) of water.
- Water Supply Aquifer Test Analyses – Faribault, Northfield, and Janesville, Minnesota — In partnership with Summit Envirosolutions evaluated large long term aquifer tests to support water rights applications to Minnesota Dept. of Natural Resources for industrial uses. Tests involved monitoring of numerous nearby domestic and municipal water supply wells using real-time processing of groundwater elevation data from pressure transducers in the operating well fields to evaluate local and background water level influences. Extraction rates

REPRESENTATIVE PROJECT EXPERIENCE — *continued*

ranged from 1,000 to 2,000 gpm over periods of 2 weeks or more. Hydraulic parameters for the bedrock aquifers were estimated along with estimates of projected drawdown and capture area for planned long term operation.

- Evaluation of Background Arsenic Concentrations in Groundwater and Threat to Groundwater Supply Wells, Snohomish, Washington — Analyzed background arsenic concentrations in groundwater aquifer (Vashon Outwash) and then analyzed the complex groundwater flow system in area of Cross Valley Water District with water supply wells operating and not operating. Developed Washington State Model Toxics Control Act (MTCA) evaluation of arsenic bearing soils at former industrial property to assess potential for past and future leaching of arsenic. Complex evaluation of arsenic speciation and chemistry for client was developed for approval by the Dept. of Ecology.

- Water Quantity and Quality Study, Russian River, Healdsburg, California – Evaluated quantity of flow reaching Russian River from ponds in the river floodplain. Changes in the groundwater and surface-water interaction were evaluated and placed into a numerical model of the sub-portion of the basin. One pond is being utilized for tertiary wastewater treatment creating an artificial discharge condition to the Russian River year round. Reviewed existing models for the area and developed and refined a groundwater model in MODFLOW and MT3D to evaluate quantity of flow to river and the effect on river and groundwater quality under different portions of the climatic cycle.

- Evaluation of City Water Supply Well Field and Recharge Program, Modesto, California — Modeled groundwater flow in the sub-basin that surrounds and underlies Modesto, California to evaluate the regional and local flow patterns in response to extraction over the 20th century in Modesto. Localized enhanced recharge from the City's use of dry wells for storm-water runoff was evaluated for both the quantity of recharge made available and the risks to City water-supply wells from urban runoff. In addition the prospective impact of potential industrial/commercial chemical releases to groundwater were evaluated for perchloroethylene. The study involved identification of uranium releases from NORM material that was liberated by changing reduction-oxidation potential, bacterial contamination of well fields from sewage backups and dry well overflows, pesticide induction from neighboring farm communities, and a variety of other water quality issues. Numerical simulations were performed for both groundwater flow and contaminant transport using MODFLOW and MT3D to identify City wells at risk of impact from chemical release points such as the dry wells and sewers, and industrial sources such as auto shops and dry cleaners. In addition the effects of two rivers within the City were evaluated for the quantity of flow into or out of the river and the effect upon the river and groundwater quality for induced issues such as uranium. Project report identified key risks to city water-supply wells from dry-well water-quality and from sewer releases.

- Coal Mine Water Supply, Utah – Applied a basin-scale groundwater model to evaluate effects of proposed water withdrawals for coal slurry pipeline.

REPRESENTATIVE PROJECT EXPERIENCE — *continued*

Evaluated springs and surface-water flows on adjacent valley. Conducted modeling based on rainfall probability to evaluate reliability of outcomes for 99-year projected mine life. Used predictive tools to evaluate actual water table declines and to provide benchmark criteria to guide water resource withdrawal.

RESEARCH PROJECTS

- NIH Phase I STTR Grant for Control and Removal of Biofilm in Dental Unit Water Lines – Developed and received grant funding with Center for Biofilm Engineering at Montana State University, performed all aspects of engineering management to develop prototype involving mechanical design engineer, electrical engineer, and electrochemical engineer, and performed hydraulic engineering. Project was successful in demonstrating complete removal and control of biofilm using a patent pending process.
- US Patent Pending on "Method for Electrolytic Disinfection of Water" US 2007,/0131556.
- NASA EOCAP Grant for Use of Spatial Imaging for Water Resource Analysis. Currently developing second generation products on real-time imaging of groundwater aquifers for water quantity and quality. Focus is to provide systems for resource conservation and management of water for drinking-water-supply systems using groundwater. US Patent No. 5553492.
- U.S. Dept. of Defense ESTCP Grant Applicant on Evaluation of Groundwater Recirculation using PlumeEater™ technology. Work is pending on this grant for 2008 to sister to work performed in 2007. US Patent Nos. 7007759 and 7077208

GROUNDWATER AND SOIL REMEDIATION PROJECTS

- Site Characterization and Remediation of former Industrial Manufacturing Site, San Diego, California — Participated in full site characterization and remediation efforts at this 44 acre aircraft and defense equipment manufacturing site in response to a Cleanup and Abatement Order from California EPA. The characterization work involved identification and characterization of off-site impacts to sediments in nearby Convair Lagoon from PCBs and heavy metals from upland contributors. Site Conceptual Models were developed to explain the data findings for recontamination of sediments in the lagoon, to identify data gaps, and to develop characterization approaches to identify tributary sources of affected sediments to the lagoon.
- Dry Cleaner, Lodi, California — Evaluated the distribution of chemicals in soil and groundwater around a dry cleaning facility near affected City water-supply wells. Identified the origin of contamination as the City sanitary sewer system based upon the chemistry detected and the locations in groundwater. The lateral and vertical extent of PCE and other constituents such as nitrates was characterized and prospective remediation devised. The chemical fate and transport of the PCE and other wastewater constituents was found to be limited and did not reach the City of Lodi water supply wells nearby.

REPRESENTATIVE PROJECT EXPERIENCE — *continued*

- Middlefield Ellis Whisman (MEW) Superfund Site, Mountain View, California – Designed and implemented soil and groundwater remediation system for chlorinated solvent release at a former semiconductor manufacturing facility within this multi-party regional Superfund site. Conducted analytical groundwater capture analysis to develop control strategy for the specific client's site and evaluated influence of nearby site and regional remedies. Participated in EPA responsible party meetings to coordinate progress and provide input on remedy selection process.

- Plessey Microsciences Site, Mountain View, California – Managed all aspects of remediation review for large chlorinated release site. Existing remedial systems using UV/oxidation technologies were expensive and unreliable. Step-wise evaluation and re-design of the remediation process yielded immediate and long-term benefits. Logic circuit diagrams were analyzed for flaws, and decision ladders were rebuilt to improve system uptime. After additional characterization of source areas for metals and solvents, a change in remedial technologies was implemented to better remediate known areas and to lower system costs. Over $1 million in savings were recorded in 4 years of project operation by switching to low profile tray air strippers and reducing system shutdowns.

- Hillview-Porter Site Soil and Groundwater Remediation, Palo Alto, California – Evaluated two of nine sites involved in this large regional groundwater contamination investigation that involved RI/FS reports and a Remedial Action Plan on behalf of Hewlett-Packard. Each site was characterized using innovative techniques such as the BAT discrete-sampling technique and installation of multi-port monitoring wells. Developed a complex series of groundwater and surface-water flow numerical models to evaluate sustainable flows and complex discharge patterns to surface water induced by structural deformation of the subsurface. Developed a site-specific groundwater remediation plan for each of the two sites based primarily on the numerical modeling evaluations in MODFLOW and PATH3D. Participated in lengthy public review process with highly active citizens group.

- Teledyne/Spectra-Physics Superfund Site, Mountain View, California – Managed and oversaw performance of all aspects of the CERCLA compliance program for Spectra-Physics. Conducted extensive investigations of soil and groundwater affected by chlorinated solvents. Fate and transport analysis of chlorinated solvents and their degradation products revealed a variety of sources in the area including sewer lines. Applied groundwater numerical and soil chemical transport models to establish remediation alternatives for on-site and off-site areas. Project involved complex interactions and negotiations with municipal, state, and private parties to obtain access for off-site remediation in newly redeveloped residential area.

- Iron and Steel Foundry, Berkeley, California – Evaluated chromate contamination and other metals releases from small iron foundry. Obtained historical information on uses of adjacent property to demonstrate off-site

REPRESENTATIVE PROJECT EXPERIENCE
— continued

sources for hexavalent chrome. Developed control and abatement plan for in-situ chromate reduction.

- Phone Wire and Phone Manufacturing Plant, Kearny, New Jersey – Performed extensive testing for facility closure under ISRA rules. Developed a statistically based approach for sampling soil and groundwater for this large (~100-acre) facility to improve data reliability. Directed the analysis of anomalous patterns of background detections for lead, copper, chromium, and other constituents using statistical filtering techniques. Off-site atmospheric sources from surficial contamination by metals were found for some of the metals, and the negotiated cleanup levels were adjusted accordingly. Characterized and remediated PCB-affected areas associated with rail yard operations. Conducted aquifer tests to define extent of small plume of cleaning solvents discovered within the rail yard area. A shallow interception drain was used to capture and remove the affected groundwater.

- Soil Bioremediation at Nuclear Facility, Vallecitos, California – Performed bioremediation of diesel- and motor-oil-range hydrocarbon-contaminated soil located within a radiation exclusion zone. The soil was irrigated and fertilized over a 6-month period to reduce the hydrocarbon concentrations to acceptable levels. The soil was then reworked within the radiation exclusion zone.

DECISION ANALYSIS SUPPORT

- Puente Valley Superfund Site, California – Evaluated impacts of chlorinated solvent releases on groundwater. Assisted in numerical model analysis using MODFLOW and MT3D of potential impacts to water supply wells. The basin-wide model included evaluation of some 50 separate source sites using inverse source-fitting solutions. Alternative remediation approaches were evaluated, and recommendations regarding compliance and cost-allocation were provided to the client and legal counsel.

- Merced, California – Provided litigation support to group of dry cleaners sued by the City of Merced, California for potential impacts to water supply wells. Evaluated groundwater impacts and modeled potential outcomes technically and financially. Assisted client in successful resolution of lawsuit using remediation cost-cap insurance criteria.

- Hillview Porter Decision Analysis, Palo Alto, California – Developed decision-tree matrix for future remedial options, contingencies, and expected cost outcomes. Worked with a team of lawyers, scientists, and client environmental managers to determine the high risk cost areas for the project and to develop strategies for cost control on those aspects. Further guided settlement strategies in cost allocation among parties and in maintaining certain portions of remedy to ensure positive public relations. Modeling was performed using decision-programming language and @RISK™.

- Acme Solvent Superfund Site, Rockford, Illinois – Performed detailed groundwater fate and transport modeling for a wide range of chemicals at this waste disposal site in support of a human health risk assessment (nearby

REPRESENTATIVE PROJECT EXPERIENCE — *continued*

resident water supplies were affected and the decision to replace currently unaffected supply wells was pressing). Completed the Conceptual Site Model for exposure pathways supported by numerical modeling. Used detailed numerical forecasting and probabilistic techniques to estimate likelihood of impact to other residential wells and the nearby Rock River.

- Chlorinated Solvent Contamination, Spartanburg, South Carolina – Developed decision analysis structure for project midway through problem characterization. The decision model guided investigations to complete Conceptual Site Model and to fill in missing information necessary to develop appropriate conceptual remedies for a site that had limited access.
- Phone Manufacturing Facility, Shreveport, Louisiana – Developed decision-tree structure to evaluate pilot testing of competing technologies for remediating a chlorinated solvents plume. Potential cost outcomes for overall remediation were evaluated using @RISK™ to identify the most promising technologies for long-term cost reduction. A staged approach for testing of technologies was used to prioritize the lowest expected cost outcomes from the decision analysis framework.
- Napa River Flood Control Improvement Project, Napa, California – Using RemedyDefender™, modeled the costs for a large-scale excavation and treatment of oil-contaminated soil. Cost increases for scope enlargement were correlated with lower unit cost of performance to demonstrate that project had reasonable cost stability enabling the client to move forward.
- Natural-Gas-Processing Sites, Central United States – Evaluated remedial costs for purchaser of 18 large natural-gas processing plants from Texas through Wyoming and Utah. PortfolioDefender™ was used to model the cost growth expected with scope uncertainties, the probable timing of facility closure, and required conformance to environmental standards. Project was successful in controlling risk using remediation cost-cap insurance on this $1.4 billion acquisition.

LEGAL SUPPORT

- Expert Witness Testimony – Mr. Lambie has been retained as an expert on a variety of legal cases. He has testified on cases before both state and federal courts which resulted in some landmark decisions. In addition to courtroom testimony, he has provided written opinions and had his deposition taken on a number of matters that settled before trial.
- Mediated Settlements – Mr. Lambie has been retained by individual PRPs and large PRP groups in large basin-scale releases to evaluate the technical, factual, and economic legal liability to help effect settlement. These have been conducted in the following Superfund Site Operable Units: Burbank, California; North Glendale, California; South Glendale, California; Baldwin Park, California; Puente Valley, California; Wichita, Kansas; and the Hillview-Porter State of California Superfund Site.

REPRESENTATIVE PROJECT EXPERIENCE — *continued*

- Neutral Technical Expert – Mr. Lambie has been retained as a neutral technical expert to assist mediation by listening to the factual technical arguments and rendering non-binding opinions to facilitate the mediation process. This has included review of water-rights adjudications to evaluated water supply planning efforts.

PROFESSIONAL SOCIETIES

Association of Groundwater Scientists and Engineers (AGWSE)
American Society of Civil Engineers (ASCE)
American Water Works Association (AWWA)
California Groundwater Resources Association (GRA)

PUBLICATIONS AND PRESENTATIONS

Lambie, J. and M. Harrington, 2007. **A Re-examination of Groundwater Flow in Stratified Aquifers Induced by Vertical Recirculation Wells** (Abstract and Presentation). Washington Hydrogeology Symposium, May 1-3, 2007, Tacoma, Washington.

Agostinho, A. M, Sturman, P.; **Lambie, J.**; Camper, A.; Pulcini, E.; James, G., 2007, **Removal and control of biofilms in dental unit waterlines using electrolyzed water,** (Poster) American Society on Microbiology (ASM), Biofilms 2007 Conference March 25-29, Quebec City, Quebec, Canada, Poster A289, Topic: Prevention and Treatment of Biofilms.

Lambie, J.M., J. Orolin, T. Buschek, R. Benkosky, and R. Cochran, 2001. **Remediation of MTBE and Petroleum Hydrocarbons in Groundwater at a Fuel Storage Terminal.** *Contaminated Soil Sediment and Water,* December 2001, pp. 6-10.

Lambie, J.M., J. Orolin, T. Buscheck, R. Benkosky, and R. Cochran, 2001, **Remediation of MTBE and Petroleum Hydrocarbons in Groundwater at a Chevron Fuel Terminal Using Iso-Gen In-Situ Dissolved Oxygen Technology.** *Proceedings of the Petroleum Hydrocarbons and Organic Chemicals in Ground Water: Prevention, Detection, and Remediation,* 2001 Conference and Exposition, November 14-16, 2001, Houston, Texas, pp. 133-137.

Orolin, J., and **J.M. Lambie**, 2001, **In-Situ Remediation of MTBE and Other Petroleum Hydrocarbons by Introduction of Dissolved Oxygen** (Abstract). Focus Conference: *MTBE in Ground Water: Assessment, Remediation Technologies, and Public Policy,* June 4-5, 2001, Baltimore, Maryland, p. 88.

Southard, J.B., **J M. Lambie**, D.C. Federico, H.T. Pile, and C. R. Weidman, 1990, Experiments on Bed Configurations in Fine Sands Under Bidirectional Purely Oscillatory Flow, and the Origin of Hummocky Cross-Stratification. *Journal of Sedimentary Petrology*, v. 60, no. 1, pp. 1-17.

DEPOSITIONS AND TRIAL TESTIMONY

2007 : Deposition. **Unified Port District of San Diego vs. TDY Industries Inc. et al.**, United States District Court, Southern District of California, Case No. 03 CV 1146-B (POR), January.

2006 : Deposition. **Carla Clarke et al. vs. City of Santa Rosa, et al.**, Sonoma County Superior Court, Case No. SCV 227896, March 21, 2006

2004: Deposition. **SS&G, LLC vs. Riebes Automotive Supply et al**. United States District Court, Eastern District of California, Sacramento. March 30.

2003-2004: Deposition. **City of Modesto vs. Dow Chemical et al.**, San Francisco County Court, November 13 and 14, and December 9 and 10, 2003, and January 23, 2004.

2003: Deposition. **TDY Industries vs. Unified Port District of San Diego**, San Diego County Court, September 23.

2003: Deposition. **City of Lodi vs. M&P Investments**, United States District Court, Eastern District of California, Sacramento, May.

2003: Deposition and Testimony. **Northern California River Watch vs. City of Healdsburg, California**, United States District Court, Northern District of California, Deposition in August and Trial Testimony in December.

1999: Deposition. **Placer Ranch Partners *vs.* Placer County**, Sacramento County Court.

1999: Deposition. **Advanced Micro Devices *vs.* National Semiconductor and United Technologies Corporation,** U.S. District Court, Northern District of California, Case No. 97-20797 MRW, September 7.

1998: Deposition. **City of Burbank *vs.* Lockheed.**

1996: Deposition. **Property Owner *vs.* Syntex**, Mountain View, California.

1996: Deposition. **Property Owner *vs.* Nixon-Egli**, Santa Fe Springs, California.

1996: Deposition and Testimony. **Property Owner *vs.* Kaiser Aerospace,** Alameda County Court.

1994: Deposition and Testimony. **Favero *vs.* Gotthold et al.**, Sacramento County Court.

1992: Deposition June 3, 10, and 11, and Testimony. **Mangini *vs.* Aerojet General Corporation and Cordova Chemical Company**, Sacramento County Superior Court, Case No. 500170.

1989: Deposition and Testimony. **Park McKee Homeowners Association *vs.* Bingo Oil**, Alameda County Superior Court.

1989: Deposition and Testimony. **Dunnigan Truck Stop *vs.* Insurance Carrier**, Sacramento County Superior Court.