UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

OAKLAND DIVISION

VIETNAM VETERANS OF AMERICA, a Non-Profit Corporation; SWORDS TO PLOWSHARES: VETERANS RIGHTS ORGANIZATION, a California Non-Profit Corporation; BRUCE PRICE; FRANKLIN D. ROCHELLE; LARRY MEIROW; ERIC P. MUTH; DAVID C. DUFRANE; WRAY C. FORREST; TIM MICHAEL JOSEPHS; and WILLIAM BLAZINSKI, individually, on behalf of themselves and all others similarly situated,

Plaintiffs,

vs.

CENTRAL INTELLIGENCE AGENCY; DAVID H. PETRAEUS, Director of the Central Intelligence Agency; UNITED STATES DEPARTMENT OF DEFENSE; LEON PANETTA, Secretary of Defense; UNITED STATES DEPARTMENT OF THE ARMY; JOHN MCHUGH, United States Secretary of the Army; UNITED STATES DEPARTMENT OF VETERANS AFFAIRS; and ERIC K. SHINSEKI, UNITED STATES SECRETARY OF VETERANS AFFAIRS,

Defendants.

Case No. CV 09-0037-CW

EXPERT REPORT OF SONYA S. KWON, M.B.A.

I. INTRODUCTION

A. Retention

1. I have been retained by Morrison & Foerster LLP on behalf of its clients, plaintiffs in this matter, Vietnam Veterans of America, Swords to Plowshares: Veterans Rights Organization, Bruce Price, Franklin D. Rochelle, Larry Meirow, Eric P. Muth, David C. Dufrane, Wray C. Forrest, Tim Michael Josephs, and William Blazinski (collectively, "Plaintiffs") to serve as a consultant and expert witness in the above captioned action.

2. I expect to testify at trial regarding the matters discussed in this expert report, and in any supplemental reports or declarations that I may prepare for this matter. I may also testify at trial regarding matters related to my opinions addressed by any expert or fact witness testifying on behalf of Plaintiffs or Defendants Central Intelligence Agency; David H. Petraeus, Director of the Central Intelligence Agency; United States Department of Defense; Leon Panetta, Secretary of Defense; United States Department of the Army; John McHugh, United States Secretary of the Army; United States Department of Veterans Affairs; and Eric K. Shinseki, United States Secretary of Veterans Affairs (collectively, "Defendants"), including but not limited to any reports, testimony, exhibits, references, or demonstratives presented by Defendants.

3. I reserve the right to supplement or amend this report if additional facts and information that affect my opinions become available. It is my understanding that Plaintiffs have retained other experts and that Defendants may serve expert reports concerning one or more of the issues I address in this report. I reserve the right to testify concerning such other reports or testimony, to respond to any such report from Defendants' expert(s), and to rebut at trial any opinions expressed in such a report or in such testimony. I also understand that depositions of additional fact witnesses may take place and that Defendants have just recently produced or will be producing additional documents that are still undergoing review. Furthermore, it is my understanding that Defendants have produced, and continue to produce, a substantial quantity of documents and other information in formats that are inaccessible or exceedingly difficult to access or evaluate properly, and that Plaintiffs' counsel is continuing to attempt to convert such information into a usable format. Should Plaintiffs' counsel's efforts be successful, and

information from these sources becomes available to me, I reserve the right to supplement this report to incorporate that information.

4. The headings in this report have been added to create sections for ease of organization. I do not intend these headings to be in any way restrictive of the information contained in the respective sections.

B. Compensation

5. I am being compensated for my work on this matter at a rate of $475 per hour, plus expenses. My compensation is not conditioned on my opinions, testimony at deposition or trial, or the outcome of this matter.

II. MY BACKGROUND AND QUALIFICATIONS

6. I have worked in Navigant Consulting, Inc.'s ("Navigant") Disputes and Investigations practice since 2004 and have been a Managing Director since 2010. In that capacity, I co-lead a group called "Complex Data Management and Analysis," which specializes in the application of financial, statistical, economic, and complex data intensive analyses to legal and regulatory issues. I have extensive experience in complex data management as well as relational database construction, design and development, as detailed in my *curriculum vitae*, attached hereto as Exhibit 1.

7. I received my Bachelor of Arts degree in Economics from University of California, Berkeley in 1998 and my Masters of Business Administration from the University of California, Los Angeles Anderson School of Management in 2009.

8. From 1998 to 2002, I worked as a Strategy, Finance, and Economics Senior Consultant at Arthur Andersen LLP. From 2002 to 2003, I was a Manager of Financial Advisory Services at PricewaterhouseCoopers. And from 2003 to 2004, I worked as a Manager of Financial Advisory Services at Deloitte & Touche (now just Deloitte). At all of these firms, I developed and implemented national complex data analysis programs and courses. I have worked on a number of litigation matters on a variety of issues, including matters involving mining and analyzing large volumes of data and performing relational data comparisons of information provided from multiple stakeholders. I have over fourteen years of experience in preparing expert

analyses for financial, economic, and statistical matters and have been designated the expert on numerous matters involving assessing the accuracy and quality of database construction and complex data management.

9. In total, I have served as an expert on ten matters—some of which are ongoing—including matters involving database design and management as well as complex data modeling. A description of these matters can be found in the "List of Testimonial Experience and Expert Reports," attached hereto as Exhibit 2.

III. BASIS AND SCOPE OF MY OPINIONS

10. Plaintiffs engaged Navigant to construct a relational database that incorporates and combines the information contained in the following four principal sources: (1) the Chem-Bio Database (VET083_000001); (2) the Mustard Gas Database (VET120_000001-36); (3) the Department of Veterans Affairs ("DVA") outreach letter spreadsheet (DVA006 104420-639); and (4) the magnetic tapes printout (VET102-000129-355) (collectively the "data sets"). Throughout this report, I will refer to this database as the Aggregate Database.

11. I have been asked to describe the process by which Navigant (myself included) processed and analyzed the underlying data from these four main sources, including any assumptions made and the algorithms used to create relationships among the four data sets. These methods, expressed in detail in this report, were derived from Navigant's collective experience with relational database construction, design, and development, and are generally used by and accepted as authoritative by experts in my field.

12. I reserve the right to provide further exhibits to be used as a summary of, or as support for, my opinions or testimony, including any testimony by experts or other witnesses at trial.

IV. THE AGGREGATE DATABASE

A. Sources of Data

13. The Aggregate Database comprises the data from the following four sources produced by Defendants: (1) the Chem-Bio Database (VET083_000001); (2) the Mustard Gas Database (VET120_000001-36); (3) the DVA outreach letter spreadsheet (excluding SHAD

letters) (DVA006 104420-639); and (4) the magnetic tapes printout (VET102-000129-355). No data entry was required to incorporate the information from the former three sources because Defendants produced these sources as native Microsoft Excel files. Manual data entry was required, however, to incorporate the information from the magnetic tapes printout because Defendants only produced the printout in hard copy or PDF form.

14. With the exception of the "Converted Dosage" field generated from the dosage information in the magnetic tapes printout (discussed below), the underlying data from these sources was not interpreted or transformed in any way. As to the "Converted Dosage" field, using a chart provided to us by Plaintiffs' counsel, we converted the dosage to the same form used in the other sources for purposes of consistency and to permit direct comparisons.

B. Database Construction Methods and Algorithms

15. As I mentioned above, the Aggregate Database is what is known as a relational database. In simple terms, a relational database is "an electronic database comprising multiple files of related information, usually stored in tables of rows (records) and columns (fields), and allowing a link to be established between separate files that have a matching field, as a column of invoice numbers, so that the two files can be queried simultaneously by the user." http://dictionary.reference.com/ browse/relational+database/. Even simpler, perhaps, one can think of a relational database as a collection of data sets related to each other by common fields. There are many common databases that are relational in nature, including sales and distribution data warehouses, hospital claims and insurance databases, and employee human resources and payroll databases.

16. An essential element to creating a relational database among various data sets is the ability to relate the data together through common fields. One way to achieve this, particularly when the fields do not match exactly across data sets, is to identify a unique identifier common to each data set that can link them all together. For example, if Jack Jones has a Personnel ID of 12345 (which is a unique identifier) in the Chem-Bio Database, that Personnel ID could be linked to another data set (such as the DVA outreach letter spreadsheet or the Mustard Gas Database) wherein an individual also has a Personnel ID of 12345.

17. The four data sets identified above, however, do not include a consistent unique identifier across all the data sets. As a result, we had to make certain assumptions to assign a unique identifier to each individual within the data sets. After an examination of the potential fields from the data sets to use as a basis for generating such a unique identifier, we chose the Personnel ID from the Chem-Bio Database as a starting point because it is the single largest repository of information in the Aggregate Database. Further, the Personnel ID field was already being used to link the various worksheets within the Chem-Bio Database (i.e., Personnel, Exposures, and Treatments), and was therefore suited as the best starting point for creating a unique identifier that encompasses all data sets.

18. In order to link the Personnel IDs from the Chem-Bio Database to the remaining data sets, we performed the following tasks:

- Added a Personnel ID column to each data set where it did not previously exist;
- Added a MatchType column (discussed below) to each data set that contained personnel information; and
- Applied algorithms to match and update the Personnel ID and MatchType columns for all data sets that contained these columns

19. Though each of the data sets contain some combination of unique identifying information, e.g., name and address, but not date of birth, that information is not consistently available across data sets. As a result of these variations in data availability and completeness, we created eight matching algorithms to link the various data sets together. Each algorithm utilizes the Personnel IDs that already existed in the Chem-Bio Database and applies that Personnel ID to all other personnel data set rows that do not have a Personnel ID already assigned to them.

20. The input data to which we apply each algorithm consists of all records that match a certain criteria. For instance, the input data to the Social Security Number Match algorithm (discussed below) is the set of all rows where the Social Security Number in that row matches the Social Security Number for a row in the Chem-Bio Database. The output of each algorithm is to

assign a Personnel ID and MatchType to each input row. "MatchType" indicates the algorithm performed that resulted in a match.

21. The algorithms were performed in the following order:

Order Applied	MatchType
1	Original
2	SSN
3	Name + Address
4	Name + DOB
5	Name + Service Number
6	Service Number
7	First, Middle, Last Name Only
8	ID Assigned

22. **Algorithm 1: Original Personnel ID Match** — For the records that were already labeled with a Personnel ID (e.g., records in the Chem-Bio Database), no matching was required, as this is the original Personnel ID that is used to match to other data sets. For these records, the MatchType column reads "Original."

23. **Algorithm 2: Social Security Number Match** — Matches the Social Security Numbers among the four data sets (one data set at a time). When Social Security Numbers for individuals match, it is assumed that these individuals are the same person. For each match, the algorithm updates the Personnel ID in the other data sets to the Personnel ID in the Chem-Bio Database data set and updates the MatchType column to read "SSN."

24. **Algorithm 3: Name and Address Match** — Matches the Full Name[1] and Address from the personnel information in the Chem-Bio Database to the remaining data sets (the only other data set with address information is the DVA outreach letter spreadsheet). Because the same address can be written in multiple ways (for example, Rural Road 2 could synonymously be written as RR 2 or R.R. 2), the algorithm supplements the initial match results with matches of

Full Name and City (of Address). After performing these two steps, we manually examined the generated names and addresses for matches. For those rows where a match existed, this information was added to a supplemental table which was used as the basis for the matching algorithm. When both the Full Name and the Address for individuals match, it is assumed that these individuals are the same person. For each match, the algorithm updates the Personnel ID in the other data sets to the Personnel ID in the Chem-Bio Database data set and updates the MatchType column to read "Name + Address."

25. **Algorithm 4: Name and DOB Match** — Matches the Full Name and date of birth among the four data sets (one data set at a time). When both the Full Name and the date of birth for individuals match, it is assumed that these individuals are the same person. For each match, the algorithm updates the Personnel ID in the other data sets to the Personnel ID in the Chem-Bio Database data set and updates the MatchType column to read "Name + DOB." The priority for this match type is lower due to the relatively higher probability that two individuals can have the same name and birthday as compared to the same name and address or identical social security numbers.

26. **Algorithm 5: Name and Service Number Match** — Matches the Full Name and Service Number among the four data sets (one data set at a time). When both the Full Name and the Service Number for individuals match, it is assumed that these individuals are the same person. For each match, the algorithm updates the Personnel ID in the other data sets to the Personnel ID in the Chem-Bio Database data set and updates the MatchType column to read "Name + Service Number." The priority for this match type is lower due to the fact that if multiple service numbers are used (e.g., Army, Navy, Marines), the service number would not be as unique as a Social Security Number. The potential mismatches that might result from this method were mitigated by adding the additional criteria of an exact Full Name match.

27. **Algorithm 6: Service Number Match** — This algorithm is the same as the previous algorithm, but it does not contain the additional criterion that the Full Name needs to be an exact match. When the Service Number for individuals match, it is assumed that these individuals are the same person. For each match, the algorithm updates the Personnel ID in the

other data sets to the Personnel ID in the Chem-Bio Database data set and updates the MatchType column to read "Service Number."

28. **Algorithm 7: First, Middle, Last Name Match** — Matches first, middle, and last names among the four data sets (one data set at a time). Only exact matches of all three names are captured by this algorithm. When all three names for individuals are an exact match, it is assumed that these individuals are the same person. For each match, the algorithm updates the Personnel ID in the other data sets to the Personnel ID in the Chem-Bio Database data set and updates the MatchType column to read "First, Middle, Last Name Only." This match type was assigned to the lowest priority to account for the possibility that people could potentially have the same name and middle initial, particularly for more common names such as "John Smith."

29. **Algorithm 8: ID Assigned** — For the vast majority (approximately 98%) of the personnel rows, we were able to find a match using the seven algorithms described above.[2] However, for those personnel rows that we could not match, we assigned a Personnel ID. The assignment process consisted of starting with the first number following the last Personnel ID listed in the Chem-Bio Database and enumerating each unassigned row of personnel data with a new, unique identifier and a MatchType of "ID Assigned."

30. The algorithms are performed in the above order because they are arranged in order of decreasing confidence, that is, the likelihood of an inaccurate match. In other words, the "Personnel ID" algorithm was assumed to have the least likelihood of an inaccurate match while the "First, Middle, Last Name" algorithm was assumed to have the greatest likelihood of an inaccurate match. In order to maintain a unique matching assignment, if a personnel row has already been assigned a Personnel ID, it is excluded from the population of possible inputs from all subsequent algorithms. Because the algorithms have been performed in order of decreasing confidence, this ensures that the MatchType assigned to each person reflects the highest available

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[2] It is likely that we would have obtained more matches from these algorithms if we had not required strict, exact matching parameters. For example, an individual could have a "-" for a middle name in one database and a "NONE" in another database, which would result in no match and therefore make the individual fall within the "ID Assigned" population.

confidence matching method. For example, a person in the Mustard Gas Database could have a Social Security Number and a date of birth that are both contained in the Chem-Bio Database. In this instance, the individual could be matched using either Social Security Number or Date of Birth. Because a Social Security Number match carries a higher confidence level than a date of birth match, the "Social Security Number" MatchType is assigned.

31. Finally, we utilized methods standard in the industry for testing the accuracy of the results. We performed a series of high level tests such as reviewing resulting counts of matches for the data set by MatchType for reasonableness, assessing common databases (i.e., "Venn Diagram" type of review) for each Personnel ID, and reviewing Personnel IDs that did not appear in one or more of the data sets for reasonableness. Reasonableness tests include reviewing information contained in non-matching fields (i.e., fields that are not used for the match in each algorithm) and ensuring that the results are logical for a given individual. We supplemented these tests with a detailed review of the information across databases for a given Personnel ID and reviewed any anomalies and outliers in detail.

C. Dosage Information from the Magnetic Tapes Printout

33. In addition, we added a "Converted Dosage" field to allow for comparisons to other dosage information in the remaining data sets.

34. In order to generate this "Converted Dosage" field, we used a chart that Plaintiffs' counsel provided to us:

Dose-X Example	Exponent Value	Unit	Translation of Dose-X
5-0	1×10^{0}	gram	5 grams
6-1	1×10^{-1}	decigram	6 decigrams
11-2	1×10^{-2}	centigram (but sometimes expressed in milligrams)	11 centigrams (110 milligrams)
7-3	1×10^{-3}	milligram	7 milligrams
8-4	1×10^{-4}	Usually expressed	.8 milligrams or 800

		in milligrams in micrograms	micrograms (or 800 mcg/kg of body weight)
20-5	1×10^{-5}	Usually expressed in milligrams or micrograms	.2 milligrams or 200 micrograms (or 200 mcg/kg of body weight)
9-6	1×10^{-6}	microgram	Either 9 total micrograms or 9 mcg/kg of body weight

35. We assumed the accuracy of the chart when converting the dosages.

V. CONCLUSION

36. Using these methods, we believe the Aggregate Database accurately and reliably combines the data elements stored in the four data sets identified above. The Aggregate Database can be used to generate any one of a number of reports summarizing the data stored in fields of the database, the results of which will faithfully summarize the information contained in the Aggregate Database.

Respectfully submitted,

Dated: August 7, 2012

Sonya S. Kwon, M.B.A.

Exhibit 1

NAVIGANT

Sonya S. Kwon, M.B.A

Sonya S. Kwon
Managing Director

As a Managing Director in Navigant Consulting, Inc's Disputes and Investigations practice, Sonya leads a group that specializes in the application of financial, statistical, economic, and complex data intensive analyses to legal and regulatory issues. She is an expert in the area of data collection, database design and development, and analysis of financial, transactional, and operational data. She has successfully led numerous data-intensive matters including regulatory and governmental investigations, employment wage and hour disputes, consumer class action suits, financial and accounting investigations, healthcare claims, entertainment royalty audits, and other cases requiring the analysis of structured data or complex data modeling. Technically, Sonya has extensive experience in the cost-effective and total quality management of large dataset capture and analysis and has worked with Fortune 100 companies to analyze data and from the largest warehouses. Sonya has pioneered the development of data quality assessment techniques and has developed numerous relational database design, data quality management, economic modeling and computer programming courses to fellow employees and clients. She has served as a named expert on matters involving financial database design and management, complex data modeling, and employment wage and hour issues.

Practice Areas

» Complex Data Management and Analysis/ Data Mining

» Employment Wage and Hour Litigation

» Financial, Economic and Statistical Modeling

» Regulatory and Governmental Investigations

» Entertainment Royalty Audit

Client and Industry Experience

» Banking

» Healthcare

» Retail

» Media and Entertainment

» Telecommunications

NAVIGANT

Sonya S. Kwon

Complex Data Analysis

» ***Financial Institution – Breach of Contract Dispute:*** Retained as the Third-party Neutral Expert in a matter pertaining to allegations of a breach of Insurance Recovery Agreement for real-estate owned ("REO") properties entered into by the parties. Led a team in analyzing data from disparate sources including electronic records pertaining to bank loans in default, as well as foreclosure and REO property records, asset manager records, hazard insurance recovery provider data, and insurance claims records to provide expert opinions regarding: 1) the potentially relevant loan and/or REO population; 2) the potential REO assignment shortfall; 3) the financial payments for recoveries made on this REO population; and 4) the assumptions and characteristics applicable to determining the calculations. Issued expert report and provided key expert testimony in arbitration.

» ***US Governmental Agency - Data Quality Assurance Review:*** In support of the US EPA Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) enforcement efforts, served as a national expert on the application of SAP business management software in the business practices of major U.S. companies. Performed the following: 1) review a large data dump from an SAP-over-Oracle database for tracking distribution and sales information including an Access reporting database; and 2) data that another Contractor reconstructed in spreadsheet format from that data dump. The data dump was submitted by the subject of an enforcement investigation, a Fortune 500 company. Conducted a quality assurance review of the reconstructed data and provided report.

» ***Information Provider – Theft of Trade Secrets Matter:*** Retained as the data management and analysis expert by Counsel for plaintiffs in a theft of trade secret matter. This lawsuit was filed pursuant to discovering evidence that their competitor had been using their unauthorized access to confidential and trade information to allegedly compete unfairly with the client. We have been reviewing the data exchanged by both parties, converting the data into an analytical repository, standardizing the data to facilitate a comparison of the data contents for the two competing products, and reviewing and comparing the content of the databases. The matter is ongoing.

» ***Government – Alleged Trust Accounts Mismanagement Investigation:*** Developed an analytical data repository of 60 million transactional records for a period of 15 years for a large-scale class action suit for the Government in a dispute with individual Native Americans involving the mismanagement of individual trust accounts. Reconciled over 500,000 accounts to determine account status, misclassified accounts, and beginning balances at the time of electronic system inception.

» ***Large Commercial Bank – Corporate Trust Accounting Investigation:*** Provided litigation support services to a large financial institution in a class action lawsuit pertaining to corporate trust accounting practices. Designed and developed a SQL Server data repository containing over 200 million of historical client transactions. Performed bond recalculations from transactional data and developing a reporting system. Created complex financial models to estimate escheat liabilities.

» ***Large Commercial Bank – Loan Process Review:*** Provided privileged consulting services to a large financial institution in response to allegations that loans were not properly monitored through the loan default process. Reviewed over 200 million electronic loan records to assess the effectiveness of various loan default system triggers (i.e., notices sent to borrower, reminders sent, etc.) for various types of loans (i.e., first/second, HELOCS, subprime, etc.) Conducted a series of interviews with the mortgage loan IT group to learn the various life cycles and system triggers as well as the business practices around managing loans in default.

» ***Large Non-Profit Financial Institution – Data Validation:*** Designed and developed a database to support defense efforts in a high profile litigation involving over $1 billion in alleged damages against a financial institution. Studied investment relationships to understand transferring of funds across accounts. Programmed sophisticated processes of recreating, analyzing and summarizing investment account histories and applied advanced statistical theories to understand patterns and anomalies.

» ***Large Entertainment Company - Royalty Reporting Review:*** Led the data quality assessment and analysis in response to multiple royalty audits of a major entertainment company regarding allocation of distribution costs for cable and pay television, home video, theatrical, and non-theatrical income. Scope of work included: 1) Understanding the procedures used by internal accounting and financial groups to record and report financial information; 2) tracing revenues and expenses through various levels of internal reporting systems to confirm data integrity, accuracy and consistency before data was released to the requesting party; and 3) making recommendations for improved efficiency and accuracy of reporting systems. Applied sophisticated database techniques and statistical theories to develop cutting-edge data analyses/models to perform in-depth review of all underlying mainframe, SAP, JDE, ORACLE, and contract rights systems that feed into participations reporting system.

» ***Large Entertainment Company – Financial Systems Review:*** Led multi-faceted consulting engagement to assist a major entertainment company with general streamlining, automating, and tightening of internal controls for financial reporting and tracking purposes. Led interviews of numerous business leaders and systems/IT personnel to understand: 1) relevant business processes including manufacturing, warehousing, distribution, and revenue/expense sharing with participants; 2) internal controls; and 3) reporting for all relevant business functions. Led the review of financial reporting accuracy and robustness of the IT systems including a detailed review of historical and current system 'mappings' and 'queries'. Reviewed financial statements and reports to ensure accuracy in reporting and calculations. Reviewed invoices, adjustments, charge-backs, and set-offs to assess the reasonableness and accuracy of transactions and estimated outstanding A/R and account balances.

» ***Major National Insurance Provider:*** Led a team in a consumer class action matter involving allegations that the due dates on insurance renewal bills were misleading and were earlier than the effective dates of automobile insurance policies. Analyzed millions of records to assess statistical trends between types of consumers and payment behavior for any given customer. Assessed reasonableness of whether consumers were misled into submitting payments early and estimated potential liability and exposure.

» ***Major National Insurance Provider:*** Led a team in providing defense support in a matter involving allegations against numerous insurance providers regarding a software program that allegedly underestimated insurance claim amounts. Performed complex data analysis and statistical tests on uninsured and under-insured claims to assess whether the program was systematically awarding amounts in favor of the insurance companies. Assess whether the amounts for various bodily injury claims were statistically reasonable and fair over time and across individuals.

» ***Major Call Center Discovery Services:*** For a major national call center, led a project team in the monitoring and database collections in response to court-ordered discovery requests. Migrate millions of transactional records from one set of systems to another. Assisted counsel in the monitoring of data retention, collections, and productions.

» ***Major Big Box Retailer Discovery Compliance Review:*** Managed a project team to monitor a larger mass merchandiser's compliance with certain discovery requests. Developed a stratified random sample plan and conducted regional, store and district level manager interviews for the compliance review. Assisted in preparation of expert report for counsel.

» ***Satellite Distributor – Systems Review:*** For a major satellite distributor, performed an in-depth financial review of multiple facets of their business including purchases, charge-backs, and rebates. Recommended areas for improvement and worked with client IT personnel to develop a more robust and streamlined financial reporting process. Developed and integrated computer algorithms to assess the validity of customer charge-backs and dealer rebate submissions. Developed statistical testing modules to identify patterns, hidden relationships, anomalies, outliers, and gaps; performed segmentation analyses; and created an analytical data repository to analyze sales reporting processes and to test for potentially fraudulent commission claims.

» ***Telecommunications – Charge-back Analysis:*** For a major telecommunications company, evaluated reasonableness and accuracy of charge-backs associated with customer service requests related to complaints for '900' number calls. Reviewed multiple data sources containing information pertaining to the time requests were made and responses were recorded as well as any ultimate actions taken to correct the issues. Developed a statistical sampling methodology to evaluate the process and created an analytical data repository of multiple data sources containing millions of transactions.

» ***Nationwide Wireless Provider - Late Fee Class Action:*** Retained by one of the largest US wireless providers to quantify amounts due to customers residing within three east-coast states related to improper late fee charges. Our data extraction and financial modeling team extracted billing information for over 400,000 customers and quantified damages on a customer-by-customer basis.

» ***Data Quality Expert for Government Investigation:*** Reviewed millions of SAP transactions related to goods manufacturing and delivery to assess the accuracy and defend the integrity of the data preparation and review techniques as well as opine on the accuracy of the final data prepared for a government investigation.

» ***Major Retailer – Charge-back Analysis:*** For a major big box retailer, hired on a privileged consulting basis to evaluate whether charge-backs and returns associated with electronic products were reasonable and accurate. Reviewed multiple sources of supporting information including invoices and documentation to determine if charge-backs were appropriately validated. Estimated the balance on the A/R after adjustments were made.

» ***Reinsurance – Claims Review:*** Led a team to load, compile, and format millions of records of data into a SQL Server database received from a client who provides reinsurance to a health insurance company. Analyzed trends in the data and reviewed member and provider eligibility files, member benefit files, professional and institutional claims data, and authorization data. Aggregated relevant healthcare statistics, such as the frequency and cost of encounters and admissions and claims payment lag reports. Determined whether claims were paid and reported to the company in a timely manner and whether premiums charged by the insurer reflected actual claims experience. Assisted in the preparation of an expert report.

» ***Waste Management Company – Systems Efficiency Assessment:*** Conducted an in-depth privileged systems review and efficiency assessment of all relevant IT systems for a large waste management company which included SAP, JDE, and Oracle systems. Developed an automated proprietary computerized module for a large waste management company to streamline the financial reporting system. Programmed the tool to also review the accuracy and validity of the data migration process to and from various databases.

Regulatory Consulting Experience

» ***Response to DOJ Investigation:*** Led a team to help a large pharmaceutical company respond to an investigation regarding allegations of oversized tablets. Reviewing millions of records related to call records, emails, quality assurance follow up records, adverse events and unusual incident reports for the relevant tablets in question.

» ***Review of Accounting Procedures for Ambulatory Service Provider:*** Led a team in reviewing year-end accounting and quality control procedures. Reviewed general ledger accounting transactions from sub-business units and reviewed the SAP system and relevant hard copy document support to determine if there was adequate documentation and accurate posting of transactions by the finance department. Quantified the economic impact of noncompliance with contractual obligations and federal, state and local regulations

» ***Review of Medicare Fraud Allegations:*** Led a team to quantify potential Medicare fraud and payback to U.S. government related to cost report cost-shifting issues. Cost reports from throughout the U.S. were sampled and reviewed for alleged improper Medicare billing, including shifting of costs between cost-based units. Implemented extrapolation strategies and statistical and financial modeling of large data sets to estimate damages for use in settlement negotiations with the U.S. government. Estimated potential adjustment to Medicare submissions by a third-party reviewer using a statistical cluster model. Developed fraud risk management programs and strategies and performed fraud risk assessments.

» ***Review of Medicare Fraud Allegations:*** Led an internal investigation of Medicare and Medicaid billing practices for a large pharmaceutical company. Led the team in performing detailed reviews of a sample of Medicare and Medicaid patient files to identify potential overpayment and duplicate payment situations. Verified information such as the patient's coverage information, determining whether coordination of benefits between payors existed, identifying claims that were either billed to the wrong payor or billed to multiple payors, quantifying the potential overpayments resulting from the erroneous billings, and determining whether refunds were properly issued upon request.

» ***Medicare Fraud Investigation:*** Assisted on multiple investigations into allegations of fraudulent reporting to the CMS. Selected and audited statistically valid random sample of claims that had been adjudicated by the payors. Quantified errors identified in claims tested and developed extrapolation methodologies to estimate total under/overpayment in population of overall claims.

» ***Review of Improper Billing Allegations:*** Led a team to develop a sampling plan in which cost reports from selected hospitals nationwide would be reviewed for improper Medicare billing of non-allowable costs, including use of management companies in cost-based units and treatment of reserves. Applied complex statistical methods to extrapolated results of 37 facilities to the population of hospitals nationwide.

» ***Review of Upcoding Allegations:*** Estimated potential exposure of upcoding disease codes (DRGs) designed to increase reimbursement from the federal government for a national healthcare corporation. Performed sampling analysis of problematic DRGs from affected hospitals and quantified overpayments through statistical extrapolation methodologies to support settlement negotiations.

» ***Medicare Dispute:*** Developed automated programs using Visual Basic for Applications (VBA) to identify the financial impact of fraudulent cost reports related to a multi-billion dollar Medicare reimbursement dispute for a nationwide hospital system. Developed automated processes to import provider claim data from text files into organized databases and to test for fraudulent cost reports. Results of tests were relied upon for exposure calculations.

» ***Payer/Provider Dispute:*** Led a variety of engagement teams for hospitals or health insurers involved in disputes over reimbursement rates for both contracted and non-contracted services. Reviewed application of contractual clauses for stop-loss claims and high cost items and the appropriateness of the denial of services as non-covered, medically unnecessary or provided without proper pre-authorization or referral. Evaluated whether appropriate reimbursement (usual and customary) rates were applied for non-contracted providers and reviewed claims for commercial, Medicare, and Medicaid members.

» ***Securities Investigation:*** Led a complex data team in the investigation and analysis of a massive real estate based Ponzi scheme for a failed non-profit financial institution. The work included understanding the relationships between accounts, mapping the flow of funds, asset tracing, and estimating potential recovery amounts.

Employment Litigation Experience

» ***Bank Employee Misclassification:*** For one of the largest international banks, led a team of privileged consultants to assist in the class certification defense of a wage and hour case involving alleged overtime and missed breaks. Prepared statistical analyses to assess the heterogeneity and trends across the branches, employees, and locations. Analyzed and evaluated the statistical validity of Plaintiffs' expert's analyses.

» ***Bank Employee Overtime:*** For one of the largest international banks, led a team of privileged consultants to assist in the class certification defense of a wage and hour case involving alleged overtime and missed breaks. Prepared statistical analyses to assess the heterogeneity and trends across the branches, employees, and locations. Analyzed and evaluated the statistical validity of Plaintiffs' expert's analyses.

» ***Electronics National Retailer Employee Misclassification:*** Led seven class action matters for national electronic retailer chain. Developed an analytical data repository of payroll, time and attendance and hard copy exception data, and applied economic and statistical modeling to calculate exposure related to the alleged misclassification of store managers for a national electronics retailer. Prepared expert economic report related to that included an opinion on potential award amounts to the plaintiffs, the time and dollar impact of overtime, the effect of increased payroll expenses on profit-based bonuses, and calculated offsets to potential exposure due to decreased profits.

» ***Major Big Box Retailer Off-the-Clock and Break Time Violations***: Developed an analytical data repository of punch clock, hard copy exception, payroll, and point-of-sale data to evaluate claims of inappropriate time shaving and break inserts and to detect instances of time deletions and inserted breaks for a national merchandiser. Assisted in the preparation of expert report to respond to allegations of time deletions and inserted breaks.

» ***National Electronics Retailer Meal and Rest Break Violations***: Analyzed over 83 million point-of-sale transactions to develop a proxy for employee behavior in the class certification stage for a national electronics retailer. Applied advanced clustering algorithms to identify unique attributes of employees, categorize combinations of employee attributes into distinct cluster groups and to quantify the magnitude of differences in groups. Developed a sampling methodology to compare hard copy scheduling documents with the point-of-sale data to test accuracy of time card recording. Prepared expert report to oppose plaintiff's motion for class certification.

» ***Global Professional Services Firm - Misclassification:*** Led consulting services to a large accounting firm in a matter involving alleged misclassification issues. We evaluated the merits of the allegations and prepared statistical analyses to evaluate potential exposure. We also assisted in the defense against class certification. The matter is ongoing.

» ***National Transportation Company - Wage and Hour Violations:*** Led defense analyses involving potential meal and rest break, daily overtime, and regular rate of pay exposure. Analyzed electronic timekeeping systems and current payroll systems to estimate exposure for statute of limitations period. Reprogrammed calculations to incorporate all components of regular rate of pay (i.e., bonus and incentive pay) in the payroll system.

» ***Luxury Department Store Chain - CA Wage and Hour Issues:*** For a large department retail store chain, provided privileged consulting services to assess the potential exposure and merits related to allegations of unpaid overtime and meal break violations.

» ***Call Center Off-the-Clock and Break Time Violations***: Developed an analytical data repository of phone timekeeping, badge swipe, computer log in, and productivity information to evaluate claims of off-the-clock work and missed breaks against a national call center. Prepared expert report in opposition to class certification of over 2,000 employees. Our analyses included qualitative and quantitative studies of patterns and practices, commonality and typicality to defend class certification and rebuttal of Plaintiffs statistical methodology.

» ***Telecommunications Commission Underpayments:*** Created databases of sales and commissions data for a major telecommunications company used for damage analysis and expert witness preparation in a commission underpayment dispute. Analyzed payroll and commissions processing data to calculate exposure related to alleged errors in the commissions payroll processing system and to assess potential liability for putative class. Participated in mediation proceedings.

NAVIGANT

Sonya S. Kwon

Expert Reports and Testimonial Experience

McSwain, et al. v. Thrifty Payless, Inc. dba Rite Aid
Superior Court of the State of California, City and County of Alameda (Case No. BC429793)
Declaration of Sonya S. Kwon, November 15, 2011

Noel Smith, et al. v. MV Transportation
Superior Court of the State of California, City and County of Alameda (Case No. RG08389864)
Declaration of Sonya S. Kwon, November 4, 2010

Eder Rojas, et al. v. Gail Stoffer, Gail Stoffer dba Somerset Studios, Marco Antonio Espinoza
Superior Court of the State of California, County of Alameda (Case No. CGC-07-470047)
Expert Report and Deposition of Sonya S. Kwon, August 19, 2009

Worldwide Processors, LLC dba PRP claims v. Washington Mutual Bank, Inc.
American Arbitration Association (AAA Case No. 72 148 Y 00779 07 MARS)
Court Appointed Neutral Expert
Expert Testimony and Expert Report of James Gordon and Sonya S. Kwon, January 26, 2009

Cindy Fulawka, et al. vs. Bank of Nova Scotia
Ontario Superior Court of Justice (Court File No.07-CV-345166CP)
Expert Report of Sonya S. Kwon, November 4, 2008

Stacey Smith, et al vs. Teletech Holdings, Inc.
American Arbitration Association (AAA Case No. 111 600 272 604)
Expert Report of David A. Gulley and Sonya S. Kwon, November 17, 2005

Memberships

Jan 2009 to Current: Co-Founder, West Coast Chapter of Women's Leadership and Mentoring Alliance (WLMA)

Jan 2009 to Current: Appointed Navigant Consulting National Diversity Chair of Women's Initiative

Jan 2007 to Current: Director of Navigant Consulting Women's Initiative, Los Angeles

June 2006 to Current: Firm Liaison for ABA Section of Litigation and Member, Employment and Labor Relations Committee

June 2006 to Current: Member, Women's Lawyers Los Angeles (WLALA)

June 2010 to Current: Member, National Asian Pacific Bar Association (NAPABA)

June 2010 to Current: Member, Beverly Hills Bar Association (BHBA)

Exhibit 2

Exhibit 3

The Chem-Bio Database	
The Mustard Gas Database	
The Magnetic Tapes Printout, "Agent List, 1955-1975, Edgewood"	
Department of Veterans Affairs Outreach Letter Spreadsheet	DVA006 104420-639