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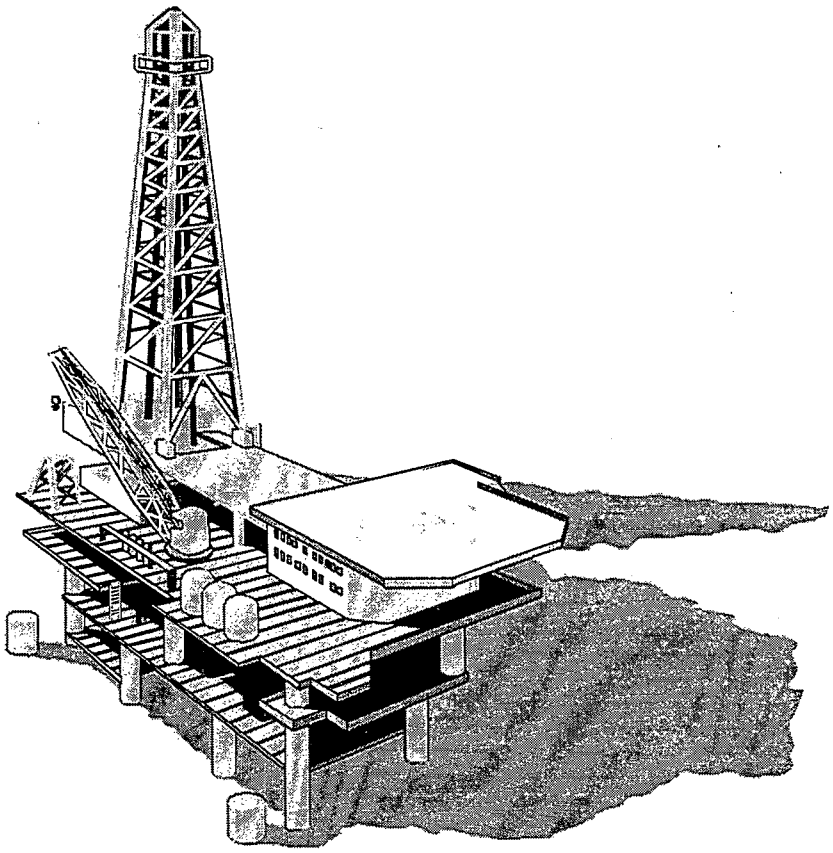
Statistical Analyses Supporting Final Effluent Limitations Guidelines and Standards for Synthetic-Based Drilling Fluids and other Non-Aqueous Drilling Fluids in the Oil and Gas Extraction Point Source Category



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1. Introduction

The summary statistics presented in this document support EPA's development of effluent limitations guidelines, standards, and best management practices (BMPs) for the control of pollutant discharges associated with the retention on cuttings (ROC) of synthetic-based drilling fluids (SBFs) and other drilling fluids that are non-dispersible in water. EPA's primary uses for these summary statistics include: (a) estimating current (baseline) pollutant discharges, (b) evaluating regulatory options, (c) calculating potential effluent limits, and (d) evaluating a criteria for accepting applications to institute BMPs.

More specifically, this document provides summary statistics for the percent retention of SBF on cuttings after treatment from each of three technology types. The technology types include shakers (with subtypes primary shakers, secondary shakers, and other shakers), cuttings dryers (with subtypes horizontal centrifuge [Mud 10], vertical centrifuge, squeeze press, and high-G dryer), and fines removal units (with subtypes decanting centrifuge and mud cleaner). These summary statistics include volume-weighted and uniformly-weighted mean retention of SBF on cuttings and their associated variances for individual wells. In addition, the arithmetic mean, variance, 95th percentile, and 99th percentile of the well means are computed, summarizing both volume-weighted well means and uniformly-weighted well means.

These analyses reflect some revisions and updates in data submitted in response to the March 2000 Notice of Data Availability. The most significant revision reflects new data submitted by industry. Another revision is that EPA accepted industry comments to use certain data quality criteria for selecting data used to develop ROC limits. EPA also added an analysis that addresses the ability of drilling fluids treatment technologies to meet ROC limits when using technologies different than those forming the technology basis of the limits. The statistical methodology for calculating potential ROC limits has not changed since the Notice of Data Availability.

2. Data Description

Industry and equipment vendor representatives provided EPA with percent retention measurements on drill cuttings discharged from solids control systems. These data were recorded as percent SBF on cuttings in a sample ([Weight of SBF]/[Weight of Wet Cuttings], expressed as a percentage). Since quantitation limits were under development for these measurement methods as the data presented here were being collected, none of the percent retention data are identified in EPA's database as being "non-detect." Associated data generally included either the drilling depth or the length of a segment drilled, pipe diameter, drilling fluid treatment technology, backup data for the calculation of percent retention, and location of the drilling site. EPA's engineering review of the raw data is documented in the memo from Lynn Petrazzuolo and Gary Petrazzuolo of Avanti Corporation to Birute Vanatta of ERG titled *Engineering Review of SBF Retention-on-Cuttings Data*, dated December 12, 2000.

EPA analyses presented in this report used both: (a) the total depth of the well at the time the associated ROC measurement was taken and (b) the length of the interval drilled since the previous ROC

measurement was taken. However, data submitted to EPA either provided one or the other. To convert from total depth to drilling interval, the data were first sorted by date within each well and the length of the segment drilled was computed by taking the differences between depths for each pair of successive records. To convert from drilling interval to total depth, the data were first sorted by date within each well and all drilling intervals prior to that associated with the current ROC measurement were summed.

For purposes of analysis and the development of potential limits, treatment technology categories or subcategories are: primary shakers, secondary shakers, shakers, horizontal centrifuge (Mud 10), vertical centrifuge, squeeze press, high-G dryer, cuttings dryer 1 (a combination of the horizontal centrifuge, vertical centrifuge, squeeze press, and high-G dryer subcategories), cuttings dryer 2 (a combination of the horizontal centrifuge, vertical centrifuge, and squeeze press subcategories), cuttings dryer 3 (a combination of the horizontal and vertical centrifuge subcategories), decanting centrifuge, mud cleaner, and fines removal (a combination of the decanting centrifuge and mud cleaner subcategories).

3. Statistical Methods

EPA generated summary statistics for individual measurements of retention on cuttings (ROC), uniformly weighted means for ROC, and volume weighted means for ROC. The volume used for weighting the mean is that associated with the cuttings contained within the interval drilled. We computed means and variances for percent retention of drilling fluids from individual wells in the various technology categories and subcategories described above. In addition, EPA presents means, variances, 95th percentiles, and 99th percentiles of the well means for these same technology categories or subcategories.

Note that the retention on cuttings estimates presented here have been calculated without the use of detection or quantitation limits. Data were originally reported without detection or quantitation limits because the measurement method for retention on cuttings was under development at the time. However, with the publication of this regulation, EPA is promulgating a quantitation limit (minimum level or ML) of 2%. EPA used measurements below quantitation in the development of numerical limits because the lab equipment was calibrated to the reported levels or lower and unbiased measurement results below quantitation are appropriate for use in large datasets that describe the general performance of a technology over time. EPA recognizes that such measurement results are variable but measurement results above the quantitation limit are also variable and censoring the ROC dataset with quantitation limits would deny the Agency the ability to characterize the drilling fluid treatment technologies with the most precise and unbiased measurement results available.

3.1 Data Evaluation

EPA evaluated: (1) the relationship between depth drilled and percent retention and (2) the probability distributions of individual percent retention measurements within wells, volume weighted well means, and uniformly weighted well means.

EPA's evaluation of the relationship between depth drilled and percent retention was graphical. Figures 1 - 6 graphically display the relationship between depth drilled and percent retention on cuttings by well and by technology. The six individual technologies displayed here are those considered as the bases for the development of numeric limits. These technologies are horizontal centrifuge (Mud 10), vertical centrifuge, squeeze press, high-G dryer, decanting centrifuge and mud cleaner. Figure 7 displays the relationship between depth drilled and percent retention on cuttings by technology, without regard to the individual well.

EPA's distributional evaluation was both inferential and graphical. Where the inferential Shapiro-Wilk statistic is calculated from the observed values ("X_{ij}" or "X_i" in Table 1), the probability that the data come from a normal distribution is estimated. Where the Shapiro-Wilk statistic is calculated from the log of the observed values ("$log(X_{ij})$" or "$\log(X_i)$" in Table 1), the probability that the data come from a lognormal distribution is estimated. Selected graphical analyses (Figure 8) indicate how closely the uniformly weighted well means follow either the normal or lognormal distribution by plotting the observed probability of obtaining a particular well mean versus the probability that such a mean would have been obtained under either the normal or the lognormal distribution.

3.2 Estimation of Volume-Weighted and Uniformly-Weighted Means with Variances for Individual Wells

Table 2 presents estimates for uniformly-weighted well means and volume-weighted well means. The uniformly-weighted well means are the arithmetic mean of percent retention, whereas the volume-weighted well means are calculated under the assumption that the percent retention associated with the volume of drill cuttings (a function of pipe size and length of segment drilled) provided a more appropriate source for estimating the mean. Theoretically, smaller pipe sizes generate smaller cutting that expose more surface area to the drilling fluid. The greater surface area would lead to greater retention of SBF on cuttings.

EPA estimated volume-weighted means and variances (Sokal and Rohlf, 1969[1]) for individual wells as follows:

$$\bar{x}_i = \sum_{j=1}^{n_i} w_{ij} x_{ij} \Big/ \sum_{j=1}^{n_i} w_{ij}$$

$$s_i^2 = \left[\sum_{j=1}^{n_i} w_{ij} x_{ij}^2 - \left(\sum_{j=1}^{n_i} w_{ij} x_{ij} \right)^2 \right] \Big/ \left(1 - \sum w_{ij}^2 \right)$$

Estimators of uniformly-weighted means and variances for individual wells are:

[1] Sokal, R. R. and F. J. Rohlf. (1969) Biometry, 3rd edition. Page 42. New York: W. H. Freeman and Company. ISBN:0-7167-2411-1.

$$\bar{x}_i = \sum_{j=1}^{n_i} x_{ij} \Big/ n_i$$

$$s_i^2 = \sum_{j=1}^{n_i} \left(x_{ij} - \bar{x}_i\right)^2 \Big/ \left(n_i - 1\right)$$

where

w_{ij} = volume associated with the jth record from the ith well
= π * (½ * pipe diameter)^2 * (interval drilled)

x_{ij} = percent retention for the jth record from the ith well

n_i = total number of records from the ith well,

j = $1,\ldots, n_i$

i = the ith well, $i = 1, \ldots, n$

For EPA to calculate the volume of cuttings in an interval drilled, it was sometimes necessary to use records indicating that the interval drilled was either zero or negative. If the interval drilled associated with a non-missing retention measurement was zero then the retention value associated with the zero drilling interval and the retention value associated with the positively valued drilling interval from the immediately preceding record were averaged and applied to the volume weight associated with the positively valued drilling interval. If the drilling interval in the immediately preceding record also was zero, then the record for percent retention did not enter the volume-weighted retention analysis. This procedure is based on EPA's assumption that measurements associated with no new drilling will reflect characteristics of the cuttings generated during the previous drilling interval. EPA handled negative intervals drilled, indicating that the pipe was pulled up and drilling proceeded in a different direction, as zero and processed such retention values as described above.

3.3 Estimation of the Mean, Variance, and Upper Percentiles of Well Means (assuming well means are normally distributed)

Table 3 presents arithmetic means and variances of the volume-weighted or uniformly-weighted well means and upper percentiles (95th and 99th). These estimates were calculated by the following formula, assuming that both the volume-weighted and uniformly-weighted well means follow a normal distribution:

$$\bar{x} = \left[\sum_{i=1}^{n} \bar{x}_i\right] / n$$

$$s^2 = \left[\sum_{i=1}^{n} (\bar{x}_i - \bar{x})^2\right] / (n-1)$$

$$p_{95} = \bar{x} + z_{0.95} s$$

$$p_{99} = \bar{x} + z_{0.99} s$$

where

$\bar{x}_i$ = volume-weighted or uniformly-weighted mean of percent retention for the *i*th well

n = total number of wells

$z_{0.95}$ = 95th percentile from the standard normal distribution (= 1.645)

$z_{0.99}$ = 99th percentile from the standard normal distribution (= 2.326)

Such percentiles were calculated based on data selected using the factors considered in establishing final effluent limitations guidelines, standards, and best management practices. These factors included the type of drilling fluid treatment technology in use, the existence of backup data for the retention on cuttings measurements, the foreign or domestic location of the well being drilled, and the duration of the period considered for demonstrating that a well is capable of being drilled using best management practices.

3.4 Compliance Analyses

Compliance analyses that EPA presents in Tables 4 and 5 provide information on two issues. The first issue is the likelihood that any given technology will be able to comply with a potential limit without modifying the technology, operations, or maintenance of the drilling fluid treatment system. The second issue is the predictive ability of the demonstration required prior to beginning operations under best management practices (BMPs). Table 4 displays these estimates for technologies considered under numeric limit Option 1. In numeric limit Option 1, the limit is based on a weighted average of retention on cuttings measurements from both cuttings dryer and fines removal technologies. Numeric limits are calculated under the assumption that 97% of the cuttings volume discharged comes from the cuttings dryer technology and 3% of the cuttings volume discharged comes from the fines removal technology. In numeric limit Option 2, the limit is based on a discharge from a single cuttings dryer technology.

In order to estimate the likelihood that any given technology will be able to comply with a potential limit without modifying the technology, operations, or maintenance, all useable data were compared to potential limits associated with a particular combination of factors (see Tables 4 and 5). These factors included the type of drilling fluid treatment technology in use, the existence of backup data for the retention on cuttings measurements, and the foreign or domestic location of the well being drilled.

In order to estimate the predictive ability of the demonstration required prior to beginning operations under best management practices (BMPs), data from the first one third of the depth drilled using SBF were compared to potential limits associated with a particular combination of factors (see Tables 4 and 5). These results are then arrayed next to those associated with drilling the entire depth drilled using SBF.

4. Analysis

In this section, EPA discusses the results of the relationship between well depth and percent retention on cuttings, distributional, and compliance analyses.

For proposal[2], EPA accepted the industry contention and assumed that the percent retention of SBF on cuttings increased as the depth of the well being drilled increased. However, for the notice of data availability[3], EPA found that the available data did not support this assumption. With the submission of data subsequent to the notice of data availability, EPA has again examined this assumption in Figures 1 - 7. With regard to the graphics showing the relationship within individual wells (Figures 1 - 6), EPA again finds that the available data do not support the assumption that the percent retention of SBF on cuttings will systematically increase as the depth of the well being drilled increases. While the available data do suggest such a correlated relationship in some cases, there are about as many cases in the available data that suggest a relationship in the opposite direction. With regard to the graphics showing the relationship after combining all measurements on the same technology subcategory (Figure 7) , it is difficult to see any kind of a general trend that would not be overwhelmed by the variability between wells.

For proposal and again for the notice of data availability, EPA found that the data associated with individual technologies as implemented in specific countries (considered as the bases of numeric limits for retention on cuttings) were approximately normal in distribution. Again, using inferential (Table 1) and graphical (Figure 8) analytical products to support the final rule, EPA finds that the data associated with individual technologies from specific countries are approximately normal in distribution. However, in response to comments, EPA considered basing final limits on combinations of drilling fluid treatment technologies as implemented in different countries.

There are physical, engineering, and statistical reasons why EPA believes that these different datasets do not come from the same probability distribution. The physical principles and design elements of these

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[2]White, C., U.S. EPA. Memorandum to Joseph Daly, Energy Branch through Henry Kahn, Statistics Analysis Section regarding Current Performance, when using Synthetic-Based Drilling Fluids, for Primary Shakers, Secondary Shakers, and Vibrating Centrifuge and Model Limits for Percent Retention of Base Fluids on Cuttings for Secondary Shakers and Vibrating Centrifuge. January 29, 1999.

[3]EPA, *Statistical Analysis of the Percent Retention of Drilling Fluids on Cuttings after Treatment*. March 2000.

technologies are different (see the development document) and the formation drilled in Canada is claimed to be significantly harder than that found in the Gulf of Mexico. Additionally, EPA has some question as to how well the technology was implemented on the Canadian wells since this use of the technology was conducted without experienced equipment operators. Statistically, Figure 8 shows the Canadian (foreign) wells using the horizontal centrifuge to have average retention on cuttings measurements that are noticeably higher than those found in the Gulf of Mexico (USA) when the same technology is in use and that these Canadian well averages cast doubt on the assumption of a single normal probability distribution. If the data displayed in a quantile - quantile plot, such as those displayed in Figure 8, really came from the assumed distribution then the data points would be arrayed in an approximately linear fashion. Under the assumption of a normal probability distribution, where the Canadian data are plotted with the horizontal centrifuge data from the Gulf of Mexico, the Canadian data clearly do not follow the linear relationship shown with the data from the Gulf of Mexico. Where the lognormal distribution is assumed, the Canadian data arguably do follow the same linear relationship shown with the data from the Gulf of Mexico. However, the well average retention on cuttings measurements from Canada are all higher than those found in the Gulf of Mexico and that argues that the Canadian data do not belong to the same probability distribution as that associated with the data from the Gulf of Mexico. Since these technologies appear to be physically and statistically different, a single distribution for retention on cuttings from any combination of cuttings dryer technologies does not appear to exist.

The compliance analysis presented in Tables 4 and 5 are intended to display: (1) estimates of the likelihood that any given technology will be able to comply with a potential limit without modifying the technology, operations, or maintenance and (2) estimates of the predictive ability of the demonstration required prior to beginning operations under best management practices (BMPs). In general, these estimates demonstrate that there are some cases where technologies different than those that form the basis for a potential limit would be able to meet that limit. For example, the first line of Table 5 indicates that 53 wells in EPA's database would be able to meet a limit that Table 3 tells us was based on 41 wells. This means that at least 8 of the wells in EPA's database were using some technology different than the technology basis of that potential limit. These estimates also demonstrate that, although there is some increased variability due to the use of a smaller sample size, the BMP demonstration period seems to provide reasonable predictions for the well average retention on cuttings achieved when operations and maintenance are maintained throughout the drilling of the entire well.

5. Final Effluent Limits

EPA selected two final numeric limits for the retention of SBF on cuttings. For drilling fluids with the environmental properties of esters (toxicity and bio-degradation), the well-average ROC not to be exceeded is 9.4%. This is based on the uniformly weighted within well averages of measurement results from Cuttings Dryer Technology 1 that include foreign data but exclude measurement results without backup data. Again, Cuttings Dryer Technology 1 included horizontal centrifuges, vertical centrifuges, squeeze presses, and high-G dryers. For all other synthetic based drilling fluids, the well-average ROC not to be exceeded is 6.9%. This is based on the uniformly weighted within well averages of measurement

results from Cuttings Dryer Technology 3 that include foreign data but exclude measurement results without backup data. Again, Cuttings Dryer Technology 3 included horizontal and vertical centrifuges. In both cases, as was proposed and presented in the notice of data availability, the numeric limit is estimated as the 95th percentile of a normal distribution for the well-averages.

Comments in response to the proposal and the notice of data availability suggested considering the following factors in the development of final numeric limits: (a) the hypothesis that retention on cuttings is related to the depth drilled, (b) documentation of data, (c)geology of areas in the US that do not currently have drilling operations, and (d) flexibility in the choice of technology used to meet final numeric limits.

With regard to factor (a) the hypothesis that retention on cuttings is related to the depth drilled, EPA rejects this hypothesis based on the analysis presented in section 4. As a consequence, final numeric limits are based on uniformly weighted well averages as opposed to volume weighted well averages.

With regard to considering factor (b) documentation of data, EPA has agreed with industry comments that numeric limits should be based on ROC data where backup data are available to describe how those measurement results were obtained. As a consequence, measurement results without backup data were excluded from the datasets used to develop final numeric limits.

With regard to considering factor (c) the geology of areas in the US that do not currently have drilling operations, EPA has provided a reasonable allowance for the increased variability expected in such locations. EPA provided this allowance by including data for wells that were not drilled in the US, as opposed to basing numeric limits on a 99th percentile. Use of the 99th percentile was discussed in the notice of data availability but including data from foreign wells directly includes variability associated with formations different than those that currently have drilling operations within the United States. Use of the 99th percentile would have been an alternative method to allow for more variability but the allowance could not be tied to the motivating source of variability, which is that due to drilling in areas in the US that do not currently have drilling operations. EPA further notes that the well average used for compliance with the ROC limit is roughly analogous to the monthly average limits EPA generally sets equal to a 95th percentile estimate. EPA generally uses 99th percentile estimates as the basis for limits set on single measurement results[4].

With regard to factor (d) providing flexibility in the choice of technology used to meet final numeric limits, EPA included several different technologies in the datasets used to develop two final numeric limits. In particular, the high-G dryer was included in the technology basis used to develop final numeric limits for drilling fluids with the environmental properties of ester based drilling fluids. This technology is particularly important because it appears to take less space than other technologies and it may fit on drilling rigs that

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[4]Kahn, H.D. and Rubin, M.B., Use of Statistical Methods in Industrial Water Pollution Control Regulations in the United States, *Environmental Monitoring and Assessment*, Volume 12, pages 129-148, 1989.

may not otherwise be able to install a cuttings dryer technology. For wells used in the development of final numeric limits, three out of six high-G dryers, all five squeeze press units, all eight vertical centrifuges, and twenty-five out of twenty-six horizontal centrifuges demonstrated their ability to comply with the numeric limit of 9.4 without further attention to operations, maintenance, or design. For all other SBF drilling fluids, the numeric limit is based on combining data from the horizontal and vertical centrifuges. Both technologies are included to provide industry the ability to choose between equipment vendors. For wells used in the development of the final numeric limits, all eight vertical centrifuges and twenty-four out of twenty-six horizontal centrifuges demonstrated their ability to comply with the numeric limit of 6.9 without further attention to operations, maintenance, or design.

As discussed in section 4, a consequence of both factors (c) and (d) is that using a normal probability distribution between wells means is a only a rough approximation to the true distribution between well means. However, in order to provide this industry with the flexibility in selection of drilling fluid treatment systems necessary to encourage the use of more environmentally benign drilling fluids, to allow for variability in drilling through formations that do not currently have drilling operations, and to follow EPA's proposed methodology for estimating percentiles, EPA based final numeric limits on combinations of drilling fluid treatment technologies from both foreign and domestic wells . Combining data from various technologies and locations does allow for the calculation of 95th percentiles based on EPA's proposed methodology. EPA's proposed methodology assumes that the well means are approximately normal in probability distribution. As proposed, EPA is establishing limits equal to 95th percentiles estimated from the performance of wells using the technology bases for ROC limits.

Table 1. Attained Significance (p-value) for Shapiro-Wilk Test (H_0:Data are Normally Distributed)

Technology Category/Subcategory	Results w/o Backup Data	Foreign Data	Individual Measurements		Uniformly-Weighted Well Means		Volume-Weighted Well Means	
			X_{ij}	$log(X_{ij})$	X_i	$log(X_i)$	X_i	$log(X_i)$
Mud 10	Include	Include	<0.0001	<0.0001	0.0317	0.604	0.0958	0.910
		Exclude	<0.0001	<0.0001	0.221	0.392	0.403	0.482
	Exclude	Include	<0.0001	<0.0001	0.00202	0.494	0.0305	0.750
		Exclude	<0.0001	<0.0001	0.317	0.111	0.275	0.152
Vertical Centrifuge	Include	Include	<0.0001	0.699	0.361	0.289	0.276	0.279
		Exclude	<0.0001	0.699	0.361	0.289	0.276	0.279
	Exclude	Include	<0.0001	0.699	0.361	0.289	0.276	0.279
		Exclude	<0.0001	0.699	0.361	0.289	0.276	0.279
Squeeze Press	Include	Include	<0.0001	0.475	0.180	0.238	0.634	0.581
		Exclude	<0.0001	0.475	0.180	0.238	0.634	0.581
	Exclude	Include	0.000524	0.238	0.402	0.462	0.634	0.581
		Exclude	0.000524	0.238	0.402	0.462	0.634	0.581
High-G Dryer	Include	Include	0.0559	0.000994	0.211	0.229	0.134	0.134
		Exclude	0.0559	0.000994	0.211	0.229	0.134	0.134

Table 1. Attained Significance (p-value) for Shapiro-Wilk Test (cont.)

Technology Category/Subcategory	Results w/o Backup Data	Foreign Data	Individual Measurements		Uniformly-Weighted Well Means		Volume-Weighted Well Means	
			X_{ij}	$log(X_{ij})$	X_i	$log(X_i)$	X_i	$log(X_i)$
	Exclude	Include	0.0559	0.000994	0.211	0.229	0.134	0.134
		Exclude	0.0559	0.000994	0.211	0.229	0.134	0.134
*Cuttings Dryer 1	Include	Include	<0.0001	<0.0001	0.00498	0.372	0.000519	0.823
		Exclude	<0.0001	<0.0001	0.000306	0.605	0.000122	0.674
	Exclude	Include	<0.0001	<0.0001	0.00249	0.530	0.00217	0.553
		Exclude	<0.0001	<0.0001	0.00125	0.655	0.000719	0.612
*Cuttings Dryer 2	Include	Include	<0.0001	<0.0001	0.0241	0.181	0.129	0.396
		Exclude	<0.0001	<0.0001	0.0107	0.641	0.116	0.576
	Exclude	Include	<0.0001	<0.0001	0.0120	0.510	0.0984	0.356
		Exclude	<0.0001	<0.0001	0.156	0.383	0.210	0.202
*Cuttings Dryer 3	Include	Include	<0.0001	<0.0001	0.0176	0.471	0.0847	0.748
		Exclude	<0.0001	<0.0001	0.123	0.266	0.151	0.315
	Exclude	Include	<0.0001	<0.0001	0.00191	0.532	0.0325	0.625
		Exclude	<0.0001	<0.0001	0.183	0.0796	0.128	0.0993
Decanting Centrifuge	Include	Include	<0.0001	<0.0001	0.133	0.00811	0.347	0.0277

Table 1. Attained Significance (p-value) for Shapiro-Wilk Test (cont.)

Technology Category/Subcategory	Results w/o Backup Data	Foreign Data	Individual Measurements		Uniformly-Weighted Well Means		Volume-Weighted Well Means	
			X_{ij}	$log(X_{ij})$	X_i	$log(X_i)$	X_i	$log(X_i)$
		Exclude	<0.0001	<0.0001	0.119	0.00582	0.366	0.0218
	Exclude	Include	<0.0001	<0.0001	0.105	0.0123	0.336	0.0339
		Exclude	<0.0001	<0.0001	0.106	0.0102	0.390	0.0297
Mud Cleaner	Include	Include	<0.0001	0.00317	0.405	0.408	0.272	0.422
		Exclude	<0.0001	0.00317	0.405	0.408	0.272	0.422
	Exclude	Include	<0.0001	0.00968	0.356	0.441	0.240	0.397
		Exclude	<0.0001	0.00968	0.356	0.441	0.240	0.397
*Fines Removal	Include	Include	<0.0001	<0.0001	0.439	0.470	0.704	0.928
		Exclude	<0.0001	<0.0001	0.313	0.312	0.671	0.948
	Exclude	Include	<0.0001	<0.0001	0.660	0.542	0.679	0.905
		Exclude	<0.0001	<0.0001	0.561	0.408	0.679	0.948
Primary SS	Include	Include	<0.0001	<0.0001	0.485	<0.0001	0.295	0.00688
		Exclude	<0.0001	<0.0001	0.332	<0.0001	0.323	0.0123
	Exclude	Include	<0.0001	0.0179	0.154	0.301	0.705	0.225
		Exclude	<0.0001	0.00148	0.314	0.216	0.702	0.299

Table 1. Attained Significance (p-value) for Shapiro-Wilk Test (cont.)

Technology Category/Subcategory	Results w/o Backup Data	Foreign Data	Individual Measurements		Uniformly-Weighted Well Means		Volume-Weighted Well Means	
			X_{ij}	$log(X_{ij})$	X_i	$log(X_i)$	X_i	$log(X_i)$
Secondary SS	Include	Include	<0.0001	<0.0001	0.00951	0.00635	0.000494	0.000314
		Exclude	<0.0001	<0.0001	0.00951	0.00635	0.000494	0.000314
	Exclude	Include	<0.0001	<0.0001	0.225	0.00190	0.0390	0.00500
		Exclude	<0.0001	<0.0001	0.225	0.00190	0.0390	0.00500
Prim/Sec SS	Include	Include	<0.0001	<0.0001	0.332	0.218	0.237	0.389
		Exclude	<0.0001	<0.0001	0.183	0.228	0.285	0.310
	Exclude	Include	0.000270	<0.0001	0.110	0.0661	0.131	0.0788
		Exclude	0.000270	<0.0001	0.110	0.0661	0.131	0.0788

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
Mud 10	Include	Include	AMOCO G.L.1 53/3C-5	5	5.84	12.3	5	5.69	5.39
			AMOCO SEDCO 711 APPLETON 30/11B-4	34	5.68	5.33	34	4.09	2.83
			AMOCO SEDCO 711 OATES	28	6.23	3.36	28	5.41	4.78
			BRITE	33	8.61	9.63	33	6.89	7.04
			CUBP2	30	5.76	4.32	30	3.90	3.92
			CUDP1	10	7.11	8.16	10	6.59	7.81
			CUDP2	9	3.92	4.23	9	3.25	2.50
			GA3	30	5.08	1.90	30	5.34	3.01
			GLOMAR LABRADOR 1 43/6-1	17	6.02	5.42	17	4.76	1.57
			LASMO G.L.1 49/3-C3	9	4.96	1.08	9	4.59	0.774
			PARRY	33	6.36	4.77	33	4.04	5.71
			SPEKE	30	6.73	3.45	30	7.17	2.11
			BP_15555	4	3.05	1.96	2	3.82	0.00951

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CH28	28	4.94	3.36	27	4.71	2.74
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CAN_V_3	43	9.43	4.34	42	8.72	1.91
			CAN_V_4	54	9.17	5.32	53	7.58	4.58

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			WELL_A_U	12	2.58	1.07	12	2.87	1.33
			WELL_B_U	17	2.63	0.591	11	2.74	0.458
			WELL_C_U	16	2.19	1.12	10	2.39	0.951
			WELL_D_U	4	1.76	0.886	4	1.97	0.576
			WELL_E_U	19	2.54	0.350	8	2.78	0.366
			WELL_F_U	29	2.27	1.22	23	1.99	1.20
			WELL_G_U	14	2.35	1.81	14	2.39	1.43
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_I_U	13	2.80	1.04	12	3.09	1.19
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	19	2.93	0.0887	15	2.99	0.0943
Mud 10	Include	Exclude	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			WELL_A_U	12	2.58	1.07	12	2.87	1.33

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_B_U	17	2.63	0.591	11	2.74	0.458
			WELL_C_U	16	2.19	1.12	10	2.39	0.951
			WELL_D_U	4	1.76	0.886	4	1.97	0.576
			WELL_E_U	19	2.54	0.350	8	2.78	0.366
			WELL_F_U	29	2.27	1.22	23	1.99	1.20
			WELL_G_U	14	2.35	1.81	14	2.39	1.43
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_I_U	13	2.80	1.04	12	3.09	1.19
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	19	2.93	0.0887	15	2.99	0.0943
Mud 10	Exclude	Include	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CAN_V_3	43	9.43	4.34	42	8.72	1.91
			CAN_V_4	54	9.17	5.32	53	7.58	4.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			WELL_A_U	4	2.18	0.989	4	2.06	0.661
			WELL_C_U	2	1.55	0.0450	2	1.65	0.0121

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/oBackup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_D_U	3	1.52	0.966	3	1.62	0.652
			WELL_F_U	10	2.12	1.73	10	1.99	2.18
			WELL_G_U	7	2.56	3.57	7	2.63	2.99
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	9	2.88	0.152	9	2.91	0.160
Mud 10	Exclude	Exclude	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			WELL_A_U	4	2.18	0.989	4	2.06	0.661
			WELL_C_U	2	1.55	0.0450	2	1.65	0.0121
			WELL_D_U	3	1.52	0.966	3	1.62	0.652
			WELL_F_U	10	2.12	1.73	10	1.99	2.18
			WELL_G_U	7	2.56	3.57	7	2.63	2.99
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	9	2.88	0.152	9	2.91	0.160

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
Vertical Centrifuge	Include	Include	CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			SH_A10	5	3.71	6.09	4	3.19	2.56
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			CHST52	12	5.78	5.34	12	5.25	6.58
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
Vertical Centrifuge	Include	Exclude	CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			SH_A10	5	3.71	6.09	4	3.19	2.56
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			CHST52	12	5.78	5.34	12	5.25	6.58
			SENESEJ	9	1.79	0.451	9	1.88	0.306

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
Vertical Centrifuge	Exclude	Include	CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			SH_A10	5	3.71	6.09	4	3.19	2.56
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			CHST52	12	5.78	5.34	12	5.25	6.58
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
Vertical Centrifuge	Exclude	Exclude	CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			SH_A10	5	3.71	6.09	4	3.19	2.56
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			CHST52	12	5.78	5.34	12	5.25	6.58

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
Squeeze Press	Include	Include	CON_A9ST	5	6.95	1.43	4	6.76	0.962
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SEPARKER	4	8.78	6.29	.	.	.
			SH_A18	11	8.78	7.16	11	7.62	2.52
			UNOCALHI	11	5.03	0.437	.	.	.
			SHELLA18	20	5.35	3.00	20	4.96	2.88
Squeeze Press	Include	Exclude	CON_A9ST	5	6.95	1.43	4	6.76	0.962
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SEPARKER	4	8.78	6.29	.	.	.
			SH_A18	11	8.78	7.16	11	7.62	2.52
			UNOCALHI	11	5.03	0.437	.	.	.

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SHELLA18	20	5.35	3.00	20	4.96	2.88
Squeeze Press	Exclude	Include	CON_A9ST	5	6.95	1.43	4	6.76	0.962
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SH_A18	11	8.78	7.16	11	7.62	2.52
			SHELLA18	20	5.35	3.00	20	4.96	2.88
Squeeze Press	Exclude	Exclude	CON_A9ST	5	6.95	1.43	4	6.76	0.962
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SH_A18	11	8.78	7.16	11	7.62	2.52
			SHELLA18	20	5.35	3.00	20	4.96	2.88
High-G Dryer	Include	Include	SEPR1501	8	8.35	5.77	5	8.08	5.82
			TEX_63_1	24	6.81	6.58	23	7.14	6.44
			SE76_H10	4	11.7	2.34	4	12.0	2.10
			SEPRIDE	10	11.6	9.40	10	11.1	2.69

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			UNCLH11	8	10.7	2.57	7	11.3	0.993
			UNCLH9	3	7.36	31.7	3	7.44	28.2
High-G Dryer	Include	Exclude	SEPR1501	8	8.35	5.77	5	8.08	5.82
			TEX_63_1	24	6.81	6.58	23	7.14	6.44
			SE76_H10	4	11.7	2.34	4	12.0	2.10
			SEPRIDE	10	11.6	9.40	10	11.1	2.69
			UNCLH11	8	10.7	2.57	7	11.3	0.993
			UNCLH9	3	7.36	31.7	3	7.44	28.2
High-G Dryer	Exclude	Include	SEPR1501	8	8.35	5.77	5	8.08	5.82
			TEX_63_1	24	6.81	6.58	23	7.14	6.44
			SE76_H10	4	11.7	2.34	4	12.0	2.10
			SEPRIDE	10	11.6	9.40	10	11.1	2.69
			UNCLH11	8	10.7	2.57	7	11.3	0.993
			UNCLH9	3	7.36	31.7	3	7.44	28.2
High-G Dryer	Exclude	Exclude	SEPR1501	8	8.35	5.77	5	8.08	5.82

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			TEX_63_1	24	6.81	6.58	23	7.14	6.44
			SE76_H10	4	11.7	2.34	4	12.0	2.10
			SEPRIDE	10	11.6	9.40	10	11.1	2.69
			UNCLH11	8	10.7	2.57	7	11.3	0.993
			UNCLH9	3	7.36	31.7	3	7.44	28.2
*Cuttings Dryer 1	Include	Include	AMOCO G.L.1 53/3C-5	5	5.84	12.3	5	5.69	5.39
			AMOCO SEDCO 711 APPLETON 30/11B-4	34	5.68	5.33	34	4.09	2.83
			AMOCO SEDCO 711 OATES	28	6.23	3.36	28	5.41	4.78
			BRITE	33	8.61	9.63	33	6.89	7.04
			CUBP2	30	5.76	4.32	30	3.90	3.92
			CUDP1	10	7.11	8.16	10	6.59	7.81
			CUDP2	9	3.92	4.23	9	3.25	2.50
			GA3	30	5.08	1.90	30	5.34	3.01
			GLOMAR LABRADOR 1 43/6-1	17	6.02	5.42	17	4.76	1.57

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			LASMO G.L.1 49/3-C3	9	4.96	1.08	9	4.59	0.774
			PARRY	33	6.36	4.77	33	4.04	5.71
			SPEKE	30	6.73	3.45	30	7.17	2.11
			BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			CON_A9ST	5	6.95	1.43	4	6.76	0.962
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SEPARKER	4	8.78	6.29	.	.	.
			SEPR1501	8	8.35	5.77	5	8.08	5.82
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A18	11	8.78	7.16	11	7.62	2.52
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			TEX_63_1	24	6.81	6.58	23	7.14	6.44
			UNOCALHI	11	5.03	0.437	.	.	.
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CAN_V_3	43	9.43	4.34	42	8.72	1.91
			CAN_V_4	54	9.17	5.32	53	7.58	4.58
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SE76_H10	4	11.7	2.34	4	12.0	2.10
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SEPRIDE	10	11.6	9.40	10	11.1	2.69
			SHELLA18	20	5.35	3.00	20	4.96	2.88
			UNCLH11	8	10.7	2.57	7	11.3	0.993
			UNCLH9	3	7.36	31.7	3	7.44	28.2
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	12	2.58	1.07	12	2.87	1.33
			WELL_B_U	17	2.63	0.591	11	2.74	0.458
			WELL_C_U	16	2.19	1.12	10	2.39	0.951

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_D_U	4	1.76	0.886	4	1.97	0.576
			WELL_E_U	19	2.54	0.350	8	2.78	0.366
			WELL_F_U	29	2.27	1.22	23	1.99	1.20
			WELL_G_U	14	2.35	1.81	14	2.39	1.43
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_I_U	13	2.80	1.04	12	3.09	1.19
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	19	2.93	0.0887	15	2.99	0.0943
*Cuttings Dryer 1	Include	Exclude	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			CON_A9ST	5	6.95	1.43	4	6.76	0.962
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SEPARKER	4	8.78	6.29	.	.	.

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SEPR1501	8	8.35	5.77	5	8.08	5.82
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A18	11	8.78	7.16	11	7.62	2.52
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			TEX_63_1	24	6.81	6.58	23	7.14	6.44

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			UNOCALHI	11	5.03	0.437	.	.	.
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SE76_H10	4	11.7	2.34	4	12.0	2.10
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SEPRIDE	10	11.6	9.40	10	11.1	2.69
			SHELLA18	20	5.35	3.00	20	4.96	2.88
			UNCLH11	8	10.7	2.57	7	11.3	0.993
			UNCLH9	3	7.36	31.7	3	7.44	28.2
			SPIRIT76	6	2.00	0.537	6	1.92	0.310

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_A_U	12	2.58	1.07	12	2.87	1.33
			WELL_B_U	17	2.63	0.591	11	2.74	0.458
			WELL_C_U	16	2.19	1.12	10	2.39	0.951
			WELL_D_U	4	1.76	0.886	4	1.97	0.576
			WELL_E_U	19	2.54	0.350	8	2.78	0.366
			WELL_F_U	29	2.27	1.22	23	1.99	1.20
			WELL_G_U	14	2.35	1.81	14	2.39	1.43
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_I_U	13	2.80	1.04	12	3.09	1.19
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	19	2.93	0.0887	15	2.99	0.0943
*Cuttings Dryer 1	Exclude	Include	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			CON_A9ST	5	6.95	1.43	4	6.76	0.962

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SEPR1501	8	8.35	5.77	5	8.08	5.82
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A18	11	8.78	7.16	11	7.62	2.52
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			TEX_63_1	24	6.81	6.58	23	7.14	6.44
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CAN_V_3	43	9.43	4.34	42	8.72	1.91
			CAN_V_4	54	9.17	5.32	53	7.58	4.58
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SE76_H10	4	11.7	2.34	4	12.0	2.10
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SEPRIDE	10	11.6	9.40	10	11.1	2.69
			SHELLA18	20	5.35	3.00	20	4.96	2.88

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			UNCLH11	8	10.7	2.57	7	11.3	0.993
			UNCLH9	3	7.36	31.7	3	7.44	28.2
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	4	2.18	0.989	4	2.06	0.661
			WELL_C_U	2	1.55	0.0450	2	1.65	0.0121
			WELL_D_U	3	1.52	0.966	3	1.62	0.652
			WELL_F_U	10	2.12	1.73	10	1.99	2.18
			WELL_G_U	7	2.56	3.57	7	2.63	2.99
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	9	2.88	0.152	9	2.91	0.160
*Cuttings Dryer 1	Exclude	Exclude	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			CON_A9ST	5	6.95	1.43	4	6.76	0.962

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SEPR1501	8	8.35	5.77	5	8.08	5.82
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A18	11	8.78	7.16	11	7.62	2.52
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			TEX_63_1	24	6.81	6.58	23	7.14	6.44
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SE76_H10	4	11.7	2.34	4	12.0	2.10
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SEPRIDE	10	11.6	9.40	10	11.1	2.69
			SHELLA18	20	5.35	3.00	20	4.96	2.88
			UNCLH11	8	10.7	2.57	7	11.3	0.993
			UNCLH9	3	7.36	31.7	3	7.44	28.2

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	4	2.18	0.989	4	2.06	0.661
			WELL_C_U	2	1.55	0.0450	2	1.65	0.0121
			WELL_D_U	3	1.52	0.966	3	1.62	0.652
			WELL_F_U	10	2.12	1.73	10	1.99	2.18
			WELL_G_U	7	2.56	3.57	7	2.63	2.99
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	9	2.88	0.152	9	2.91	0.160
*Cuttings Dryer 2	Include	Include	AMOCO G.L.1 53/3C-5	5	5.84	12.3	5	5.69	5.39
			AMOCO SEDCO 711 APPLETON 30/11B-4	34	5.68	5.33	34	4.09	2.83
			AMOCO SEDCO 711 OATES	28	6.23	3.36	28	5.41	4.78
			BRITE	33	8.61	9.63	33	6.89	7.04
			CUBP2	30	5.76	4.32	30	3.90	3.92

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CUDP1	10	7.11	8.16	10	6.59	7.81
			CUDP2	9	3.92	4.23	9	3.25	2.50
			GA3	30	5.08	1.90	30	5.34	3.01
			GLOMAR LABRADOR 1 43/6-1	17	6.02	5.42	17	4.76	1.57
			LASMO G.L.1 49/3-C3	9	4.96	1.08	9	4.59	0.774
			PARRY	33	6.36	4.77	33	4.04	5.71
			SPEKE	30	6.73	3.45	30	7.17	2.11
			BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			CON_A9ST	5	6.95	1.43	4	6.76	0.962
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SEPARKER	4	8.78	6.29	.	.	.
			SH981ST2	5	4.18	4.10	5	4.30	4.38

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A18	11	8.78	7.16	11	7.62	2.52
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			UNOCALHI	11	5.03	0.437	.	.	.
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results woBackup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CAN_V_3	43	9.43	4.34	42	8.72	1.91
			CAN_V_4	54	9.17	5.32	53	7.58	4.58
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SHELLA18	20	5.35	3.00	20	4.96	2.88
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	12	2.58	1.07	12	2.87	1.33
			WELL_B_U	17	2.63	0.591	11	2.74	0.458
			WELL_C_U	16	2.19	1.12	10	2.39	0.951
			WELL_D_U	4	1.76	0.886	4	1.97	0.576
			WELL_E_U	19	2.54	0.350	8	2.78	0.366

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_F_U	29	2.27	1.22	23	1.99	1.20
			WELL_G_U	14	2.35	1.81	14	2.39	1.43
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_I_U	13	2.80	1.04	12	3.09	1.19
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	19	2.93	0.0887	15	2.99	0.0943
*Cuttings Dryer 2	Include	Exclude	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			CON_A9ST	5	6.95	1.43	4	6.76	0.962
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SEPARKER	4	8.78	6.29	.	.	.
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A18	11	8.78	7.16	11	7.62	2.52
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			UNOCALHI	11	5.03	0.437	.	.	.
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SHELLA18	20	5.35	3.00	20	4.96	2.88
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	12	2.58	1.07	12	2.87	1.33
			WELL_B_U	17	2.63	0.591	11	2.74	0.458
			WELL_C_U	16	2.19	1.12	10	2.39	0.951
			WELL_D_U	4	1.76	0.886	4	1.97	0.576
			WELL_E_U	19	2.54	0.350	8	2.78	0.366
			WELL_F_U	29	2.27	1.22	23	1.99	1.20
			WELL_G_U	14	2.35	1.81	14	2.39	1.43
			WELL_H_U	6	2.98	0.132	6	2.98	0.125

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_I_U	13	2.80	1.04	12	3.09	1.19
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	19	2.93	0.0887	15	2.99	0.0943
*Cuttings Dryer 2	Exclude	Include	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			CON_A9ST	5	6.95	1.43	4	6.76	0.962
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A18	11	8.78	7.16	11	7.62	2.52

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CAN_V_3	43	9.43	4.34	42	8.72	1.91
			CAN_V_4	54	9.17	5.32	53	7.58	4.58
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results woBackup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SHELLA18	20	5.35	3.00	20	4.96	2.88
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	4	2.18	0.989	4	2.06	0.661
			WELL_C_U	2	1.55	0.0450	2	1.65	0.0121
			WELL_D_U	3	1.52	0.966	3	1.62	0.652
			WELL_F_U	10	2.12	1.73	10	1.99	2.18
			WELL_G_U	7	2.56	3.57	7	2.63	2.99
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	9	2.88	0.152	9	2.91	0.160
*Cuttings Dryer 2	Exclude	Exclude	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CON_A9ST	5	6.95	1.43	4	6.76	0.962
			CON_A_15	12	5.52	0.366	12	5.48	0.370
			CON_A_9	5	6.95	1.43	5	6.74	1.13
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A18	11	8.78	7.16	11	7.62	2.52
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SHELLA18	20	5.35	3.00	20	4.96	2.88
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	4	2.18	0.989	4	2.06	0.661
			WELL_C_U	2	1.55	0.0450	2	1.65	0.0121
			WELL_D_U	3	1.52	0.966	3	1.62	0.652
			WELL_F_U	10	2.12	1.73	10	1.99	2.18

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_G_U	7	2.56	3.57	7	2.63	2.99
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	9	2.88	0.152	9	2.91	0.160
*Cuttings Dryer 3	Include	Include	AMOCO G.L.1 53/3C-5	5	5.84	12.3	5	5.69	5.39
			AMOCO SEDCO 711 APPLETON 30/11B-4	34	5.68	5.33	34	4.09	2.83
			AMOCO SEDCO 711 OATES	28	6.23	3.36	28	5.41	4.78
			BRITE	33	8.61	9.63	33	6.89	7.04
			CUBP2	30	5.76	4.32	30	3.90	3.92
			CUDP1	10	7.11	8.16	10	6.59	7.81
			CUDP2	9	3.92	4.23	9	3.25	2.50
			GA3	30	5.08	1.90	30	5.34	3.01
			GLOMAR LABRADOR 1 43/6-1	17	6.02	5.42	17	4.76	1.57
			LASMO G.L.1 49/3-C3	9	4.96	1.08	9	4.59	0.774

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			PARRY	33	6.36	4.77	33	4.04	5.71
			SPEKE	30	6.73	3.45	30	7.17	2.11
			BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CAN_V_3	43	9.43	4.34	42	8.72	1.91
			CAN_V_4	54	9.17	5.32	53	7.58	4.58
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	12	2.58	1.07	12	2.87	1.33
			WELL_B_U	17	2.63	0.591	11	2.74	0.458

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_C_U	16	2.19	1.12	10	2.39	0.951
			WELL_D_U	4	1.76	0.886	4	1.97	0.576
			WELL_E_U	19	2.54	0.350	8	2.78	0.366
			WELL_F_U	29	2.27	1.22	23	1.99	1.20
			WELL_G_U	14	2.35	1.81	14	2.39	1.43
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_I_U	13	2.80	1.04	12	3.09	1.19
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	19	2.93	0.0887	15	2.99	0.0943
*Cuttings Dryer 3	Include	Exclude	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	12	2.58	1.07	12	2.87	1.33
			WELL_B_U	17	2.63	0.591	11	2.74	0.458
			WELL_C_U	16	2.19	1.12	10	2.39	0.951
			WELL_D_U	4	1.76	0.886	4	1.97	0.576
			WELL_E_U	19	2.54	0.350	8	2.78	0.366
			WELL_F_U	29	2.27	1.22	23	1.99	1.20
			WELL_G_U	14	2.35	1.81	14	2.39	1.43
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_I_U	13	2.80	1.04	12	3.09	1.19
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	19	2.93	0.0887	15	2.99	0.0943
*Cuttings Dryer 3	Exclude	Include	BP_15555	4	3.05	1.96	2	3.82	0.00951

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			UN_C_23	7	3.77	0.746	6	3.84	0.639

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CAN_V_3	43	9.43	4.34	42	8.72	1.91
			CAN_V_4	54	9.17	5.32	53	7.58	4.58
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	4	2.18	0.989	4	2.06	0.661
			WELL_C_U	2	1.55	0.0450	2	1.65	0.0121
			WELL_D_U	3	1.52	0.966	3	1.62	0.652
			WELL_F_U	10	2.12	1.73	10	1.99	2.18
			WELL_G_U	7	2.56	3.57	7	2.63	2.99

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	9	2.88	0.152	9	2.91	0.160
*Cuttings Dryer 3	Exclude	Exclude	BP_15555	4	3.05	1.96	2	3.82	0.00951
			CH28	28	4.94	3.36	27	4.71	2.74
			CHEV_M_8	8	5.10	11.3	8	5.83	11.6
			SH981ST2	5	4.18	4.10	5	4.30	4.38
			SH_528_1	14	5.86	9.50	14	5.47	5.70
			SH_68A_1	3	1.39	1.04	3	1.36	0.587
			SH_A1	7	3.39	2.72	7	3.18	1.83
			SH_A10	5	3.71	6.09	4	3.19	2.56
			SH_A5	22	4.51	1.31	22	4.43	1.05
			SH_A6	10	4.21	3.72	10	3.34	1.77
			SH_A7	7	4.97	12.7	7	5.66	6.24
			SH_CRA6	15	4.15	3.84	15	4.19	3.18

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_MA24	12	4.24	1.10	12	4.19	0.748
			SH_MARS	22	4.46	12.9	22	4.58	10.4
			SH_MMS2	13	2.60	12.2	12	2.36	11.3
			UN_C_23	7	3.77	0.746	6	3.84	0.639
			UN_HI179	9	2.44	0.105	8	2.55	0.0629
			UN_V9ST1	3	5.19	1.56	3	5.24	0.414
			BRUTUS	19	2.82	5.31	19	2.60	3.67
			CHST52	12	5.78	5.34	12	5.25	6.58
			CHW_4	5	4.08	0.563	5	4.20	0.304
			CHW_5	17	4.87	4.20	17	4.36	2.61
			SENESEJ	9	1.79	0.451	9	1.88	0.306
			SPIRIT76	6	2.00	0.537	6	1.92	0.310
			WELL_A_U	4	2.18	0.989	4	2.06	0.661
			WELL_C_U	2	1.55	0.0450	2	1.65	0.0121
			WELL_D_U	3	1.52	0.966	3	1.62	0.652

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_F_U	10	2.12	1.73	10	1.99	2.18
			WELL_G_U	7	2.56	3.57	7	2.63	2.99
			WELL_H_U	6	2.98	0.132	6	2.98	0.125
			WELL_J_U	9	2.08	0.504	9	1.90	0.305
			WELL_K_U	9	2.88	0.152	9	2.91	0.160
Decanting Centrifuge	Include	Include	C36	1	9.60	.	.	.	.
			C75	5	8.66	2.31	.	.	.
			S11	8	11.6	2.57	.	.	.
			S14	3	9.40	5.92	2	10.1	3.19
			S6	2	9.35	4.21	.	.	.
			S7	1	11.0	.	.	.	.
			BP_15555	2	9.16	3.81	1	10.5	
			CH28	31	11.7	19.1	30	11.4	18.9
			CHEV_M_8	9	11.9	2.71	9	12.0	1.52
			CON_A_9	2	9.81	1.45	2	9.84	0.723

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results woBackup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_68A_1	3	7.98	0.642	3	8.01	0.365
			SH_A1	7	12.3	4.45	7	11.9	5.24
			SH_A10	2	12.4	2.74	1	12.4	
			SH_A18	6	5.81	5.65	6	6.91	4.30
			SH_CRA6	15	10.8	2.04	15	11.3	1.95
			SH_MMS2	14	12.8	1.59	13	13.0	1.75
			UN_C_23	7	10.4	0.482	6	10.5	0.498
			UN_V9ST1	3	13.1	1.92	3	13.8	0.875
			CAN_V_3	4	11.6	29.5	4	12.5	27.1
			CAN_V_4	2	7.14	0.541	2	6.99	0.249
			CH236_2	4	5.89	0.125	4	5.90	0.0950
			CHW_4	5	9.14	7.98	5	9.60	3.90
			CHW_5	13	11.5	37.5	13	11.5	31.6
			SHELLA18	8	8.95	0.800	8	8.86	0.908
			WELL_A_U	4	9.63	1.10	4	9.63	0.695

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_F_U	12	5.98	3.63	11	5.37	2.78
			WELL_G_U	10	11.2	22.5	10	10.7	13.7
			WELL_J_U	9	10.2	1.47	9	9.96	0.677
Decanting Centrifuge	Include	Exclude	C36	1	9.60	.	.	.	.
			C75	5	8.66	2.31	.	.	.
			S11	8	11.6	2.57	.	.	.
			S14	3	9.40	5.92	2	10.1	3.19
			S6	2	9.35	4.21	.	.	.
			S7	1	11.0	.	.	.	.
			BP_15555	2	9.16	3.81	1	10.5	
			CH28	31	11.7	19.1	30	11.4	18.9
			CHEV_M_8	9	11.9	2.71	9	12.0	1.52
			CON_A_9	2	9.81	1.45	2	9.84	0.723
			SH_68A_1	3	7.98	0.642	3	8.01	0.365
			SH_A1	7	12.3	4.45	7	11.9	5.24

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A10	2	12.4	2.74	1	12.4	
			SH_A18	6	5.81	5.65	6	6.91	4.30
			SH_CRA6	15	10.8	2.04	15	11.3	1.95
			SH_MMS2	14	12.8	1.59	13	13.0	1.75
			UN_C_23	7	10.4	0.482	6	10.5	0.498
			UN_V9ST1	3	13.1	1.92	3	13.8	0.875
			CH236_2	4	5.89	0.125	4	5.90	0.0950
			CHW_4	5	9.14	7.98	5	9.60	3.90
			CHW_5	13	11.5	37.5	13	11.5	31.6
			SHELLA18	8	8.95	0.800	8	8.86	0.908
			WELL_A_U	4	9.63	1.10	4	9.63	0.695
			WELL_F_U	12	5.98	3.63	11	5.37	2.78
			WELL_G_U	10	11.2	22.5	10	10.7	13.7
			WELL_J_U	9	10.2	1.47	9	9.96	0.677
Decanting Centrifuge	Exclude	Include	BP_15555	2	9.16	3.81	1	10.5	

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CH28	31	11.7	19.1	30	11.4	18.9
			CHEV_M_8	9	11.9	2.71	9	12.0	1.52
			CON_A_9	2	9.81	1.45	2	9.84	0.723
			SH_68A_1	3	7.98	0.642	3	8.01	0.365
			SH_A1	7	12.3	4.45	7	11.9	5.24
			SH_A10	2	12.4	2.74	1	12.4	
			SH_A18	6	5.81	5.65	6	6.91	4.30
			SH_CRA6	15	10.8	2.04	15	11.3	1.95
			SH_MMS2	14	12.8	1.59	13	13.0	1.75
			UN_C_23	7	10.4	0.482	6	10.5	0.498
			UN_V9ST1	3	13.1	1.92	3	13.8	0.875
			CAN_V_3	4	11.6	29.5	4	12.5	27.1
			CAN_V_4	2	7.14	0.541	2	6.99	0.249
			CH236_2	4	5.89	0.125	4	5.90	0.0950
			CHW_4	5	9.14	7.98	5	9.60	3.90

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CHW_5	13	11.5	37.5	13	11.5	31.6
			SHELLA18	8	8.95	0.800	8	8.86	0.908
			WELL_A_U	4	9.63	1.10	4	9.63	0.695
			WELL_F_U	12	5.98	3.63	11	5.44	3.07
			WELL_G_U	10	11.2	22.5	10	10.7	13.7
			WELL_J_U	9	10.2	1.47	9	9.96	0.677
Decanting Centrifuge	Exclude	Exclude	BP_15555	2	9.16	3.81	1	10.5	
			CH28	31	11.7	19.1	30	11.4	18.9
			CHEV_M_8	9	11.9	2.71	9	12.0	1.52
			CON_A_9	2	9.81	1.45	2	9.84	0.723
			SH_68A_1	3	7.98	0.642	3	8.01	0.365
			SH_A1	7	12.3	4.45	7	11.9	5.24
			SH_A10	2	12.4	2.74	1	12.4	
			SH_A18	6	5.81	5.65	6	6.91	4.30
			SH_CRA6	15	10.8	2.04	15	11.3	1.95

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_MMS2	14	12.8	1.59	13	13.0	1.75
			UN_C_23	7	10.4	0.482	6	10.5	0.498
			UN_V9ST1	3	13.1	1.92	3	13.8	0.875
			CH236_2	4	5.89	0.125	4	5.90	0.0950
			CHW_4	5	9.14	7.98	5	9.60	3.90
			CHW_5	13	11.5	37.5	13	11.5	31.6
			SHELLA18	8	8.95	0.800	8	8.86	0.908
			WELL_A_U	4	9.63	1.10	4	9.63	0.695
			WELL_F_U	12	5.98	3.63	11	5.44	3.07
			WELL_G_U	10	11.2	22.5	10	10.7	13.7
			WELL_J_U	9	10.2	1.47	9	9.96	0.677
Mud Cleaner	Include	Include	PH_A_3	8	12.5	2.08	7	12.7	1.54
			SH981ST2	5	9.64	0.699	5	9.71	0.614
			SH_528_1	14	13.1	1.30	14	13.3	1.36
			SH_A5	22	8.80	1.39	22	8.75	1.18

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A6	10	8.21	5.41	10	8.68	2.08
			SH_A7	4	8.78	8.84	4	7.80	5.13
			SH_CRA6	14	13.1	5.02	14	13.7	4.89
			SH_MA24	12	11.9	4.88	12	12.1	4.08
			SH_MARS	18	15.4	28.1	18	16.1	29.8
			SH_MMS2	14	15.7	6.14	13	16.1	5.99
			UNOCALHI	9	13.4	0.667	.	.	.
			UN_HI179	2	17.9	20.4	2	18.7	9.66
			A_8ST1	13	11.7	0.305	12	11.7	0.290
			BRUTUS	19	10.0	3.17	19	10.3	3.38
			CH236_2	6	11.9	12.3	6	8.17	7.25
			CH248ST1	7	8.54	0.874	7	8.54	0.749
			CH248ST2	11	8.68	1.31	11	8.52	0.817
			CHMC248	9	13.9	4.11	9	13.8	3.53
			CHW_5	6	12.6	2.60	6	12.7	1.11

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			FOIL_HI	11	11.7	0.432	11	11.7	0.367
			WELL_C_U	4	14.2	0.232	4	14.1	0.169
			WELL_K_U	9	10.9	0.660	9	11.0	0.509
Mud Cleaner	Include	Exclude	PH_A_3	8	12.5	2.08	7	12.7	1.54
			SH981ST2	5	9.64	0.699	5	9.71	0.614
			SH_528_1	14	13.1	1.30	14	13.3	1.36
			SH_A5	22	8.80	1.39	22	8.75	1.18
			SH_A6	10	8.21	5.41	10	8.68	2.08
			SH_A7	4	8.78	8.84	4	7.80	5.13
			SH_CRA6	14	13.1	5.02	14	13.7	4.89
			SH_MA24	12	11.9	4.88	12	12.1	4.08
			SH_MARS	18	15.4	28.1	18	16.1	29.8
			SH_MMS2	14	15.7	6.14	13	16.1	5.99
			UNOCALHI	9	13.4	0.667	.	.	.
			UN_HI179	2	17.9	20.4	2	18.7	9.66

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			A_8ST1	13	11.7	0.305	12	11.7	0.290
			BRUTUS	19	10.0	3.17	19	10.3	3.38
			CH236_2	6	11.9	12.3	6	8.17	7.25
			CH248ST1	7	8.54	0.874	7	8.54	0.749
			CH248ST2	11	8.68	1.31	11	8.52	0.817
			CHMC248	9	13.9	4.11	9	13.8	3.53
			CHW_5	6	12.6	2.60	6	12.7	1.11
			FOIL_HI	11	11.7	0.432	11	11.7	0.367
			WELL_C_U	4	14.2	0.232	4	14.1	0.169
			WELL_K_U	9	10.9	0.660	9	11.0	0.509
Mud Cleaner	Exclude	Include	PH_A_3	8	12.5	2.08	7	12.7	1.54
			SH981ST2	5	9.64	0.699	5	9.71	0.614
			SH_528_1	14	13.1	1.30	14	13.3	1.36
			SH_A5	22	8.80	1.39	22	8.75	1.18
			SH_A6	10	8.21	5.41	10	8.68	2.08

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A7	4	8.78	8.84	4	7.80	5.13
			SH_CRA6	14	13.1	5.02	14	13.7	4.89
			SH_MA24	12	11.9	4.88	12	12.1	4.08
			SH_MARS	18	15.4	28.1	18	16.1	29.8
			SH_MMS2	14	15.7	6.14	13	16.1	5.99
			UN_HI179	2	17.9	20.4	2	18.7	9.66
			A_8ST1	13	11.7	0.305	12	11.7	0.290
			BRUTUS	19	10.0	3.17	19	10.3	3.38
			CH236_2	6	11.9	12.3	6	8.17	7.25
			CH248ST1	7	8.54	0.874	7	8.54	0.749
			CH248ST2	11	8.68	1.31	11	8.52	0.817
			CHMC248	9	13.9	4.11	9	13.8	3.53
			CHW_5	6	12.6	2.60	6	12.7	1.11
			FOIL_HI	11	11.7	0.432	11	11.7	0.367
			WELL_C_U	2	14.0	0.551	2	13.6	0.148

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_K_U	9	10.9	0.660	9	11.0	0.509
Mud Cleaner	Exclude	Exclude	PH_A_3	8	12.5	2.08	7	12.7	1.54
			SH981ST2	5	9.64	0.699	5	9.71	0.614
			SH_528_1	14	13.1	1.30	14	13.3	1.36
			SH_A5	22	8.80	1.39	22	8.75	1.18
			SH_A6	10	8.21	5.41	10	8.68	2.08
			SH_A7	4	8.78	8.84	4	7.80	5.13
			SH_CRA6	14	13.1	5.02	14	13.7	4.89
			SH_MA24	12	11.9	4.88	12	12.1	4.08
			SH_MARS	18	15.4	28.1	18	16.1	29.8
			SH_MMS2	14	15.7	6.14	13	16.1	5.99
			UN_HI179	2	17.9	20.4	2	18.7	9.66
			A_8ST1	13	11.7	0.305	12	11.7	0.290
			BRUTUS	19	10.0	3.17	19	10.3	3.38
			CH236_2	6	11.9	12.3	6	8.17	7.25

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CH248ST1	7	8.54	0.874	7	8.54	0.749
			CH248ST2	11	8.68	1.31	11	8.52	0.817
			CHMC248	9	13.9	4.11	9	13.8	3.53
			CHW_5	6	12.6	2.60	6	12.7	1.11
			FOIL_HI	11	11.7	0.432	11	11.7	0.367
			WELL_C_U	2	14.0	0.551	2	13.6	0.148
			WELL_K_U	9	10.9	0.660	9	11.0	0.509
*Fines Removal	Include	Include	C36	1	9.60	.	.	.	.
			C75	5	8.66	2.31	.	.	.
			S11	8	11.6	2.57	.	.	.
			S14	3	9.40	5.92	2	10.1	3.19
			S6	2	9.35	4.21	.	.	.
			S7	1	11.0	.	.	.	.
			BP_15555	2	9.16	3.81	1	10.5	
			CH28	31	11.7	19.1	30	11.4	18.9

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results wo Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CHEV_M_8	9	11.9	2.71	9	12.0	1.52
			CON_A_9	2	9.81	1.45	2	9.84	0.723
			PH_A_3	8	12.5	2.08	7	12.7	1.54
			SH981ST2	5	9.64	0.699	5	9.71	0.614
			SH_528_1	14	13.1	1.30	14	13.3	1.36
			SH_68A_1	3	7.98	0.642	3	8.01	0.365
			SH_A1	7	12.3	4.45	7	11.9	5.24
			SH_A10	2	12.4	2.74	1	12.4	
			SH_A18	6	5.81	5.65	6	6.91	4.30
			SH_A5	22	8.80	1.39	22	8.75	1.18
			SH_A6	10	8.21	5.41	10	8.68	2.08
			SH_A7	4	8.78	8.84	4	7.80	5.13
			SH_CRA6	29	11.9	4.81	29	12.5	4.86
			SH_MA24	12	11.9	4.88	12	12.1	4.08
			SH_MARS	18	15.4	28.1	18	16.1	29.8

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_MMS2	28	14.2	5.89	26	14.5	6.28
			UNOCALHI	9	13.4	0.667	.	.	.
			UN_C_23	7	10.4	0.482	6	10.5	0.498
			UN_HI179	2	17.9	20.4	2	18.7	9.66
			UN_V9ST1	3	13.1	1.92	3	13.8	0.875
			A_8ST1	13	11.7	0.305	12	11.7	0.290
			BRUTUS	19	10.0	3.17	19	10.3	3.38
			CAN_V_3	4	11.6	29.5	4	12.5	27.1
			CAN_V_4	2	7.14	0.541	2	6.99	0.249
			CH236_2	10	9.47	16.4	10	7.37	5.89
			CH248ST1	7	8.54	0.874	7	8.54	0.749
			CH248ST2	11	8.68	1.31	11	8.52	0.817
			CHMC248	9	13.9	4.11	9	13.8	3.53
			CHW_4	5	9.14	7.98	5	9.60	3.90
			CHW_5	19	11.9	26.0	19	11.9	22.7

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results woBackup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			FOIL_HI	11	11.7	0.432	11	11.7	0.367
			SHELLA18	8	8.95	0.800	8	8.86	0.908
			WELL_A_U	4	9.63	1.10	4	9.63	0.695
			WELL_C_U	4	14.2	0.232	4	14.1	0.169
			WELL_F_U	12	5.98	3.63	11	5.37	2.78
			WELL_G_U	10	11.2	22.5	10	10.7	13.7
			WELL_J_U	9	10.2	1.47	9	9.96	0.677
			WELL_K_U	9	10.9	0.660	9	11.0	0.509
*Fines Removal	Include	Exclude	C36	1	9.60	.	.	.	.
			C75	5	8.66	2.31	.	.	.
			S11	8	11.6	2.57	.	.	.
			S14	3	9.40	5.92	2	10.1	3.19
			S6	2	9.35	4.21	.	.	.
			S7	1	11.0	.	.	.	.
			BP_15555	2	9.16	3.81	1	10.5	.

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CH28	31	11.7	19.1	30	11.4	18.9
			CHEV_M_8	9	11.9	2.71	9	12.0	1.52
			CON_A_9	2	9.81	1.45	2	9.84	0.723
			PH_A_3	8	12.5	2.08	7	12.7	1.54
			SH981ST2	5	9.64	0.699	5	9.71	0.614
			SH_528_1	14	13.1	1.30	14	13.3	1.36
			SH_68A_1	3	7.98	0.642	3	8.01	0.365
			SH_A1	7	12.3	4.45	7	11.9	5.24
			SH_A10	2	12.4	2.74	1	12.4	
			SH_A18	6	5.81	5.65	6	6.91	4.30
			SH_A5	22	8.80	1.39	22	8.75	1.18
			SH_A6	10	8.21	5.41	10	8.68	2.08
			SH_A7	4	8.78	8.84	4	7.80	5.13
			SH_CRA6	29	11.9	4.81	29	12.5	4.86
			SH_MA24	12	11.9	4.88	12	12.1	4.08

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results wo Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_MARS	18	15.4	28.1	18	16.1	29.8
			SH_MMS2	28	14.2	5.89	26	14.5	6.28
			UNOCALHI	9	13.4	0.667	.	.	.
			UN_C_23	7	10.4	0.482	6	10.5	0.498
			UN_HI179	2	17.9	20.4	2	18.7	9.66
			UN_V9ST1	3	13.1	1.92	3	13.8	0.875
			A_8ST1	13	11.7	0.305	12	11.7	0.290
			BRUTUS	19	10.0	3.17	19	10.3	3.38
			CH236_2	10	9.47	16.4	10	7.37	5.89
			CH248ST1	7	8.54	0.874	7	8.54	0.749
			CH248ST2	11	8.68	1.31	11	8.52	0.817
			CHMC248	9	13.9	4.11	9	13.8	3.53
			CHW_4	5	9.14	7.98	5	9.60	3.90
			CHW_5	19	11.9	26.0	19	11.9	22.7
			FOIL_HI	11	11.7	0.432	11	11.7	0.367

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SHELLA18	8	8.95	0.800	8	8.86	0.908
			WELL_A_U	4	9.63	1.10	4	9.63	0.695
			WELL_C_U	4	14.2	0.232	4	14.1	0.169
			WELL_F_U	12	5.98	3.63	11	5.37	2.78
			WELL_G_U	10	11.2	22.5	10	10.7	13.7
			WELL_J_U	9	10.2	1.47	9	9.96	0.677
			WELL_K_U	9	10.9	0.660	9	11.0	0.509
*Fines Removal	Exclude	Include	BP_15555	2	9.16	3.81	1	10.5	
			CH28	31	11.7	19.1	30	11.4	18.9
			CHEV_M_8	9	11.9	2.71	9	12.0	1.52
			CON_A_9	2	9.81	1.45	2	9.84	0.723
			PH_A_3	8	12.5	2.08	7	12.7	1.54
			SH981ST2	5	9.64	0.699	5	9.71	0.614
			SH_528_1	14	13.1	1.30	14	13.3	1.36
			SH_68A_1	3	7.98	0.642	3	8.01	0.365

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results woBackup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A1	7	12.3	4.45	7	11.9	5.24
			SH_A10	2	12.4	2.74	1	12.4	
			SH_A18	6	5.81	5.65	6	6.91	4.30
			SH_A5	22	8.80	1.39	22	8.75	1.18
			SH_A6	10	8.21	5.41	10	8.68	2.08
			SH_A7	4	8.78	8.84	4	7.80	5.13
			SH_CRA6	29	11.9	4.81	29	12.5	4.86
			SH_MA24	12	11.9	4.88	12	12.1	4.08
			SH_MARS	18	15.4	28.1	18	16.1	29.8
			SH_MMS2	28	14.2	5.89	26	14.5	6.28
			UN_C_23	7	10.4	0.482	6	10.5	0.498
			UN_HI179	2	17.9	20.4	2	18.7	9.66
			UN_V9ST1	3	13.1	1.92	3	13.8	0.875
			A_8ST1	13	11.7	0.305	12	11.7	0.290
			BRUTUS	19	10.0	3.17	19	10.3	3.38

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CAN_V_3	4	11.6	29.5	4	12.5	27.1
			CAN_V_4	2	7.14	0.541	2	6.99	0.249
			CH236_2	10	9.47	16.4	10	7.37	5.89
			CH248ST1	7	8.54	0.874	7	8.54	0.749
			CH248ST2	11	8.68	1.31	11	8.52	0.817
			CHMC248	9	13.9	4.11	9	13.8	3.53
			CHW_4	5	9.14	7.98	5	9.60	3.90
			CHW_5	19	11.9	26.0	19	11.9	22.7
			FOIL_HI	11	11.7	0.432	11	11.7	0.367
			SHELLA18	8	8.95	0.800	8	8.86	0.908
			WELL_A_U	4	9.63	1.10	4	9.63	0.695
			WELL_C_U	2	14.0	0.551	2	13.6	0.148
			WELL_F_U	12	5.98	3.63	11	5.44	3.07
			WELL_G_U	10	11.2	22.5	10	10.7	13.7
			WELL_J_U	9	10.2	1.47	9	9.96	0.677

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_K_U	9	10.9	0.660	9	11.0	0.509
*Fines Removal	Exclude	Exclude	BP_15555	2	9.16	3.81	1	10.5	
			CH28	31	11.7	19.1	30	11.4	18.9
			CHEV_M_8	9	11.9	2.71	9	12.0	1.52
			CON_A_9	2	9.81	1.45	2	9.84	0.723
			PH_A_3	8	12.5	2.08	7	12.7	1.54
			SH981ST2	5	9.64	0.699	5	9.71	0.614
			SH_528_1	14	13.1	1.30	14	13.3	1.36
			SH_68A_1	3	7.98	0.642	3	8.01	0.365
			SH_A1	7	12.3	4.45	7	11.9	5.24
			SH_A10	2	12.4	2.74	1	12.4	
			SH_A18	6	5.81	5.65	6	6.91	4.30
			SH_A5	22	8.80	1.39	22	8.75	1.18
			SH_A6	10	8.21	5.41	10	8.68	2.08
			SH_A7	4	8.78	8.84	4	7.80	5.13

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_CRA6	29	11.9	4.81	29	12.5	4.86
			SH_MA24	12	11.9	4.88	12	12.1	4.08
			SH_MARS	18	15.4	28.1	18	16.1	29.8
			SH_MMS2	28	14.2	5.89	26	14.5	6.28
			UN_C_23	7	10.4	0.482	6	10.5	0.498
			UN_HI179	2	17.9	20.4	2	18.7	9.66
			UN_V9ST1	3	13.1	1.92	3	13.8	0.875
			A_8ST1	13	11.7	0.305	12	11.7	0.290
			BRUTUS	19	10.0	3.17	19	10.3	3.38
			CH236_2	10	9.47	16.4	10	7.37	5.89
			CH248ST1	7	8.54	0.874	7	8.54	0.749
			CH248ST2	11	8.68	1.31	11	8.52	0.817
			CHMC248	9	13.9	4.11	9	13.8	3.53
			CHW_4	5	9.14	7.98	5	9.60	3.90
			CHW_5	19	11.9	26.0	19	11.9	22.7

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			FOIL_HI	11	11.7	0.432	11	11.7	0.367
			SHELLA18	8	8.95	0.800	8	8.86	0.908
			WELL_A_U	4	9.63	1.10	4	9.63	0.695
			WELL_C_U	2	14.0	0.551	2	13.6	0.148
			WELL_F_U	12	5.98	3.63	11	5.44	3.07
			WELL_G_U	10	11.2	22.5	10	10.7	13.7
			WELL_J_U	9	10.2	1.47	9	9.96	0.677
			WELL_K_U	9	10.9	0.660	9	11.0	0.509
Primary SS	Include	Include	A10	3	9.50	0.750	1	9.00	
			A22	2	11.9		.	.	.
			A23	3	14.6	5.23	.	.	.
			A24	4	13.6	6.87	.	.	.
			A9	20	7.55	15.9	19	9.58	29.7
			AO	3	12.1	0.205	3	12.1	0.148
			C14	3	4.37	0.563	3	4.16	0.423

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			C16	1	6.30	.	1	6.30	
			C18	5	7.52	0.577	.	.	.
			C30	3	11.9	59.8	.	.	.
			C31	12	11.0	3.31	.	.	.
			C36	8	12.3	10.3	.	.	.
			C37	9	11.8	3.40	.	.	.
			C56	9	14.0	6.15	.	.	.
			C69	6	9.32	5.57	.	.	.
			C75	5	9.28	1.38	.	.	.
			C76	9	13.6	2.73	.	.	.
			C77	20	6.15	4.63	.	.	.
			C78	7	9.94	12.6	.	.	.
			C79	12	10.9	7.55	.	.	.
			C80	7	14.4	6.52	.	.	.
			C81	24	13.7	13.8	19	11.5	4.74

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			M10	4	14.8	10.9	3	15.6	3.81
			M11	3	10.2	23.2	2	13.3	0.147
			M13	5	12.9	28.9	4	10.4	0.417
			M14	16	12.2	49.0	13	10.5	15.6
			M15	7	8.02	5.00	4	8.37	0.320
			M16	1	18.3	.	.	.	.
			M17	7	5.76	18.4	6	5.04	15.2
			M18	3	12.6	3.86	3	12.5	2.95
			M19	7	14.1	2.48	.	.	.
			M21	9	4.51	8.71	8	3.80	4.96
			M5	19	8.20	14.4	.	.	.
			M6	3	10.2	23.2	2	13.3	0.147
			M8	26	10.8	18.1	23	10.4	10.2
			M9	17	13.3	22.2	14	11.4	28.0
			S11	12	11.7	14.4	.	.	.

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			S14	14	11.1	3.77	7	11.5	1.68
			S18	7	13.3	2.08	.	.	.
			S27	4	7.78	7.92	.	.	.
			S30	2	12.8	0.0450	.	.	.
			S32	2	11.9	223.0	.	.	.
			S34	1	10.8	.	.	.	.
			S35	7	14.8	5.00	5	15.2	6.52
			S44	11	2.04	0.157	.	.	.
			S6	3	14.3	0.743	.	.	.
			S7	13	7.49	10.7	.	.	.
			S9	10	10.8	19.5	.	.	.
			BHPVIPER	17	6.86	3.81	17	7.14	3.56
			CHEV1002	12	10.3	2.29	12	10.1	1.60
			CON_A9ST	1	12.4	.	1	12.4	
			CON_A_9	5	8.40	5.15	5	8.74	5.03

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			PH_A_3	8	5.61	1.39	7	5.96	0.0763
			SEPARKER	4	13.2	2.06	.	.	.
			SH_A10	3	13.0	4.12	3	12.9	3.20
			SH_A18	11	10.4	17.3	11	9.86	17.1
			TEX_63_1	24	6.66	22.4	23	7.52	26.3
			UNOCALHI	11	14.2	9.62	.	.	.
			UN_HI179	12	12.6	0.329	11	12.7	0.209
			UN_V9ST1	3	10.1	5.61	3	10.8	1.99
			A_8ST1	13	9.60	6.64	12	9.48	6.93
			BRUTUS	18	6.64	1.61	18	6.47	1.67
			CAN_V_3	35	15.8	13.1	33	13.9	8.93
			CAN_V_4	53	15.4	19.3	52	12.2	13.3
			CH236_2	13	5.41	2.57	13	4.31	3.60
			CH248ST1	8	9.52	6.19	8	9.52	5.42
			CH248ST2	14	7.20	3.65	14	7.15	3.42

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CHC_16ST	13	11.5	1.74	13	11.4	1.49
			CHMC248	14	10.1	7.84	14	10.1	7.56
			CHST52	12	10.0	9.04	12	9.19	11.6
			FOIL_HI	12	6.69	0.149	12	6.69	0.155
			SE76_H10	4	7.00	8.17	4	6.16	6.45
			SENESEJ	9	10.2	0.842	9	10.0	1.16
			SHELLA18	20	4.95	2.51	20	4.77	2.16
			UNCLH11	8	6.91	3.81	7	5.99	1.24
			UNCLH9	4	4.52	3.85	4	4.01	2.80
			WTF_9	13	5.63	0.218	13	5.63	0.198
			CH10ST	6	11.1	6.21	6	11.1	4.92
			CH15ST1	5	15.0	1.89	5	15.1	1.46
			CH15ST3	6	9.41	12.6	6	9.22	10.1
			CH15WB2	3	9.19	0.471	3	8.79	0.261
			SPIRIT76	6	10.3	1.30	6	9.99	1.24

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results wo Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
Primary SS	Include	Exclude	A10	3	9.50	0.750	1	9.00	
			A22	2	11.9		.	.	.
			A23	3	14.6	5.23	.	.	.
			A24	4	13.6	6.87	.	.	.
			A9	20	7.55	15.9	19	9.58	29.7
			AO	3	12.1	0.205	3	12.1	0.148
			C14	3	4.37	0.563	3	4.16	0.423
			C16	1	6.30	.	1	6.30	
			C18	5	7.52	0.577	.	.	.
			C30	3	11.9	59.8	.	.	.
			C31	12	11.0	3.31	.	.	.
			C36	8	12.3	10.3	.	.	.
			C37	9	11.8	3.40	.	.	.
			C56	9	14.0	6.15	.	.	.
			C69	6	9.32	5.57	.	.	.

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			C75	5	9.28	1.38	.	.	.
			C76	9	13.6	2.73	.	.	.
			C77	20	6.15	4.63	.	.	.
			C78	7	9.94	12.6	.	.	.
			C79	12	10.9	7.55	.	.	.
			C80	7	14.4	6.52	.	.	.
			C81	24	13.7	13.8	19	11.5	4.74
			M10	4	14.8	10.9	3	15.6	3.81
			M11	3	10.2	23.2	2	13.3	0.147
			M13	5	12.9	28.9	4	10.4	0.417
			M14	16	12.2	49.0	13	10.5	15.6
			M15	7	8.02	5.00	4	8.37	0.320
			M16	1	18.3	.	.	.	.
			M17	7	5.76	18.4	6	5.04	15.2
			M18	3	12.6	3.86	3	12.5	2.95

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			M19	7	14.1	2.48	.	.	.
			M21	9	4.51	8.71	8	3.80	4.96
			M5	19	8.20	14.4	.	.	.
			M6	3	10.2	23.2	2	13.3	0.147
			M8	26	10.8	18.1	23	10.4	10.2
			M9	17	13.3	22.2	14	11.4	28.0
			S11	12	11.7	14.4	.	.	.
			S14	14	11.1	3.77	7	11.5	1.68
			S18	7	13.3	2.08	.	.	.
			S27	4	7.78	7.92	.	.	.
			S30	2	12.8	0.0450	.	.	.
			S32	2	11.9	223.0	.	.	.
			S34	1	10.8	.	.	.	.
			S35	7	14.8	5.00	5	15.2	6.52
			S44	11	2.04	0.157	.	.	.

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			S6	3	14.3	0.743	.	.	.
			S7	13	7.49	10.7	.	.	.
			S9	10	10.8	19.5	.	.	.
			BHPVIPER	17	6.86	3.81	17	7.14	3.56
			CHEV1002	12	10.3	2.29	12	10.1	1.60
			CON_A9ST	1	12.4	.	1	12.4	
			CON_A_9	5	8.40	5.15	5	8.74	5.03
			PH_A_3	8	5.61	1.39	7	5.96	0.0763
			SEPARKER	4	13.2	2.06	.	.	.
			SH_A10	3	13.0	4.12	3	12.9	3.20
			SH_A18	11	10.4	17.3	11	9.86	17.1
			TEX_63_1	24	6.66	22.4	23	7.52	26.3
			UNOCALHI	11	14.2	9.62	.	.	.
			UN_HI179	12	12.6	0.329	11	12.7	0.209
			UN_V9ST1	3	10.1	5.61	3	10.8	1.99

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results wo Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			A_8ST1	13	9.60	6.64	12	9.48	6.93
			BRUTUS	18	6.64	1.61	18	6.47	1.67
			CH236_2	13	5.41	2.57	13	4.31	3.60
			CH248ST1	8	9.52	6.19	8	9.52	5.42
			CH248ST2	14	7.20	3.65	14	7.15	3.42
			CHC_16ST	13	11.5	1.74	13	11.4	1.49
			CHMC248	14	10.1	7.84	14	10.1	7.56
			CHST52	12	10.0	9.04	12	9.19	11.6
			FOIL_HI	12	6.69	0.149	12	6.69	0.155
			SE76_H10	4	7.00	8.17	4	6.16	6.45
			SENESEJ	9	10.2	0.842	9	10.0	1.16
			SHELLA18	20	4.95	2.51	20	4.77	2.16
			UNCLH11	8	6.91	3.81	7	5.99	1.24
			UNCLH9	4	4.52	3.85	4	4.01	2.80
			WTF_9	13	5.63	0.218	13	5.63	0.198

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CH10ST	6	11.1	6.21	6	11.1	4.92
			CH15ST1	5	15.0	1.89	5	15.1	1.46
			CH15ST3	6	9.41	12.6	6	9.22	10.1
			CH15WB2	3	9.19	0.471	3	8.79	0.261
			SPIRIT76	6	10.3	1.30	6	9.99	1.24
Primary SS	Exclude	Include	BHPVIPER	17	6.86	3.81	17	7.14	3.56
			CHEV1002	12	10.3	2.29	12	10.1	1.60
			CON_A9ST	1	12.4	.	1	12.4	
			CON_A_9	5	8.40	5.15	5	8.74	5.03
			PH_A_3	8	5.61	1.39	7	5.96	0.0763
			SH_A10	3	13.0	4.12	3	12.9	3.20
			SH_A18	11	10.4	17.3	11	9.86	17.1
			TEX_63_1	24	6.66	22.4	23	7.52	26.3
			UN_HI179	12	12.6	0.329	11	12.7	0.209
			UN_V9ST1	3	10.1	5.61	3	10.8	1.99

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			A_8ST1	13	9.60	6.64	12	9.48	6.93
			BRUTUS	18	6.64	1.61	18	6.47	1.67
			CAN_V_3	35	15.8	13.1	33	13.9	8.93
			CAN_V_4	53	15.4	19.3	52	12.2	13.3
			CH236_2	13	5.41	2.57	13	4.31	3.60
			CH248ST1	8	9.52	6.19	8	9.52	5.42
			CH248ST2	14	7.20	3.65	14	7.15	3.42
			CHC_16ST	13	11.5	1.74	13	11.4	1.49
			CHMC248	14	10.1	7.84	14	10.1	7.56
			CHST52	12	10.0	9.04	12	9.19	11.6
			FOIL_HI	12	6.69	0.149	12	6.69	0.155
			SE76_H10	4	7.00	8.17	4	6.16	6.45
			SENESEJ	9	10.2	0.842	9	10.0	1.16
			SHELLA18	20	4.95	2.51	20	4.77	2.16
			UNCLH11	8	6.91	3.81	7	5.99	1.24

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			UNCLH9	4	4.52	3.85	4	4.01	2.80
			WTF_9	13	5.63	0.218	13	5.63	0.198
			CH10ST	6	11.1	6.21	6	11.1	4.92
			CH15ST1	5	15.0	1.89	5	15.1	1.46
			CH15ST3	6	9.41	12.6	6	9.22	10.1
			CH15WB2	3	9.19	0.471	3	8.79	0.261
			SPIRIT76	6	10.3	1.30	6	9.99	1.24
Primary SS	Exclude	Exclude	BHPVIPER	17	6.86	3.81	17	7.14	3.56
			CHEV1002	12	10.3	2.29	12	10.1	1.60
			CON_A9ST	1	12.4	.	1	12.4	
			CON_A_9	5	8.40	5.15	5	8.74	5.03
			PH_A_3	8	5.61	1.39	7	5.96	0.0763
			SH_A10	3	13.0	4.12	3	12.9	3.20
			SH_A18	11	10.4	17.3	11	9.86	17.1
			TEX_63_1	24	6.66	22.4	23	7.52	26.3

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			UN_HI179	12	12.6	0.329	11	12.7	0.209
			UN_V9ST1	3	10.1	5.61	3	10.8	1.99
			A_8ST1	13	9.60	6.64	12	9.48	6.93
			BRUTUS	18	6.64	1.61	18	6.47	1.67
			CH236_2	13	5.41	2.57	13	4.31	3.60
			CH248ST1	8	9.52	6.19	8	9.52	5.42
			CH248ST2	14	7.20	3.65	14	7.15	3.42
			CHC_16ST	13	11.5	1.74	13	11.4	1.49
			CHMC248	14	10.1	7.84	14	10.1	7.56
			CHST52	12	10.0	9.04	12	9.19	11.6
			FOIL_HI	12	6.69	0.149	12	6.69	0.155
			SE76_H10	4	7.00	8.17	4	6.16	6.45
			SENESEJ	9	10.2	0.842	9	10.0	1.16
			SHELLA18	20	4.95	2.51	20	4.77	2.16
			UNCLH11	8	6.91	3.81	7	5.99	1.24

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			UNCLH9	4	4.52	3.85	4	4.01	2.80
			WTF_9	13	5.63	0.218	13	5.63	0.198
			CH10ST	6	11.1	6.21	6	11.1	4.92
			CH15ST1	5	15.0	1.89	5	15.1	1.46
			CH15ST3	6	9.41	12.6	6	9.22	10.1
			CH15WB2	3	9.19	0.471	3	8.79	0.261
			SPIRIT76	6	10.3	1.30	6	9.99	1.24
Secondary SS	Include	Include	A14	6	11.5	1.93	.	.	.
			A4	12	11.1	8.61	.	.	.
			A9	21	9.70	25.2	20	11.7	43.1
			AO	1	6.60	.	.	.	.
			C14	4	15.2	2.76	3	14.4	2.48
			C15	5	14.0	6.38	4	14.1	3.85
			C16	2	13.0	0.845	1	13.6	
			C18	7	14.9	1.36	.	.	.

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			C69	1	13.6	.	.	.	.
			C75	5	7.48	0.217	.	.	.
			C77	20	12.2	3.22	.	.	.
			C78	5	15.7	5.17	.	.	.
			C81	27	16.8	10.3	19	14.2	7.94
			M11	18	14.7	5.66	13	17.5	3.78
			M13	10	17.8	3.18	9	17.8	2.99
			M14	19	17.4	28.2	17	16.5	2.87
			M15	13	13.9	11.2	9	14.4	4.74
			M16	1	28.2	.	1	28.2	
			M17	7	15.4	8.93	6	14.7	6.31
			M18	1	15.8	.	.	.	.
			M19	8	21.1	7.57	.	.	.
			M21	9	13.9	4.02	8	14.1	3.84
			M5	9	9.58	18.1	.	.	.

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			M6	18	14.7	5.66	16	17.4	4.27
			M8	23	14.0	10.7	20	14.8	15.0
			M9	17	18.8	13.8	16	19.5	13.0
			S11	1	11.4	.	.	.	.
			S14	13	12.0	1.83	7	12.0	0.579
			S18	2	12.3		.	.	.
			S22	7	11.2	13.2	4	13.0	1.08
			S45	4	11.7	0.103	.	.	.
			S6	3	13.2	4.44	.	.	.
			S7	5	8.87	2.24	.	.	.
			PH_A_3	8	14.0	1.10	7	13.7	0.248
			SH_A18	2	14.1	0.000200	2	14.1	0.000100
			TEX_63_1	24	15.9	12.3	23	15.6	10.1
			UNOCALHI	11	16.9	10.1	.	.	.
			UN_HI179	12	12.8	4.34	11	12.6	2.51

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			A_8ST1	13	14.5	2.51	12	14.5	2.20
			CH236_2	13	10.8	3.95	13	10.7	2.24
			CH248ST1	8	13.4	1.72	8	13.4	1.50
			CH248ST2	16	14.2	2.92	16	14.2	2.62
			CHC_16ST	13	13.6	2.39	13	13.7	2.02
			CHMC248	14	16.4	9.84	14	16.6	8.05
			FOIL_HI	12	10.5	0.165	12	10.5	0.139
			SE76_H10	4	18.3	1.63	4	18.5	0.878
			SENESEJ	10	11.1	2.67	10	10.4	1.05
			SHELLA18	20	15.4	28.2	20	16.2	25.7
			UNCLH11	8	17.0	2.71	7	16.3	0.768
			UNCLH9	4	22.7	186.0	4	25.7	153.0
			WTF_9	13	4.70	0.437	13	4.70	0.400
			CH10ST	6	13.9	9.36	6	14.1	7.90
			CH15ST1	5	15.1	0.700	5	15.1	0.559

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CH15ST3	6	12.0	11.2	6	12.6	9.28
			CH15WB2	3	11.3	0.0225	3	11.3	0.00659
			SPIRIT76	7	11.1	3.96	7	10.3	1.06
Secondary SS	Include	Exclude	A14	6	11.5	1.93	.	.	.
			A4	12	11.1	8.61	.	.	.
			A9	21	9.70	25.2	20	11.7	43.1
			AO	1	6.60	.	.	.	.
			C14	4	15.2	2.76	3	14.4	2.48
			C15	5	14.0	6.38	4	14.1	3.85
			C16	2	13.0	0.845	1	13.6	
			C18	7	14.9	1.36	.	.	.
			C69	1	13.6	.	.	.	.
			C75	5	7.48	0.217	.	.	.
			C77	20	12.2	3.22	.	.	.
			C78	5	15.7	5.17	.	.	.

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results wo Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			C81	27	16.8	10.3	19	14.2	7.94
			M11	18	14.7	5.66	13	17.5	3.78
			M13	10	17.8	3.18	9	17.8	2.99
			M14	19	17.4	28.2	17	16.5	2.87
			M15	13	13.9	11.2	9	14.4	4.74
			M16	1	28.2	.	1	28.2	
			M17	7	15.4	8.93	6	14.7	6.31
			M18	1	15.8	.	.	.	.
			M19	8	21.1	7.57	.	.	.
			M21	9	13.9	4.02	8	14.1	3.84
			M5	9	9.58	18.1	.	.	.
			M6	18	14.7	5.66	16	17.4	4.27
			M8	23	14.0	10.7	20	14.8	15.0
			M9	17	18.8	13.8	16	19.5	13.0
			S11	1	11.4	.	.	.	.

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			S14	13	12.0	1.83	7	12.0	0.579
			S18	2	12.3		.	.	.
			S22	7	11.2	13.2	4	13.0	1.08
			S45	4	11.7	0.103	.	.	.
			S6	3	13.2	4.44	.	.	.
			S7	5	8.87	2.24	.	.	.
			PH_A_3	8	14.0	1.10	7	13.7	0.248
			SH_A18	2	14.1	0.000200	2	14.1	0.000100
			TEX_63_1	24	15.9	12.3	23	15.6	10.1
			UNOCALHI	11	16.9	10.1	.	.	.
			UN_HI179	12	12.8	4.34	11	12.6	2.51
			A_8ST1	13	14.5	2.51	12	14.5	2.20
			CH236_2	13	10.8	3.95	13	10.7	2.24
			CH248ST1	8	13.4	1.72	8	13.4	1.50
			CH248ST2	16	14.2	2.92	16	14.2	2.62

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CHC_16ST	13	13.6	2.39	13	13.7	2.02
			CHMC248	14	16.4	9.84	14	16.6	8.05
			FOIL_HI	12	10.5	0.165	12	10.5	0.139
			SE76_H10	4	18.3	1.63	4	18.5	0.878
			SENESEJ	10	11.1	2.67	10	10.4	1.05
			SHELLA18	20	15.4	28.2	20	16.2	25.7
			UNCLH11	8	17.0	2.71	7	16.3	0.768
			UNCLH9	4	22.7	186.0	4	25.7	153.0
			WTF_9	13	4.70	0.437	13	4.70	0.400
			CH10ST	6	13.9	9.36	6	14.1	7.90
			CH15ST1	5	15.1	0.700	5	15.1	0.559
			CH15ST3	6	12.0	11.2	6	12.6	9.28
			CH15WB2	3	11.3	0.0225	3	11.3	0.00659
			SPIRIT76	7	11.1	3.96	7	10.3	1.06
Secondary SS	Exclude	Include	PH_A_3	8	14.0	1.10	7	13.7	0.248

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results woBackup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A18	2	14.1	0.000200	2	14.1	0.000100
			TEX_63_1	24	15.9	12.3	23	15.6	10.1
			UN_HI179	12	12.8	4.34	11	12.6	2.51
			A_8ST1	13	14.5	2.51	12	14.5	2.20
			CH236_2	13	10.8	3.95	13	10.7	2.24
			CH248ST1	8	13.4	1.72	8	13.4	1.50
			CH248ST2	16	14.2	2.92	16	14.2	2.62
			CHC_16ST	13	13.6	2.39	13	13.7	2.02
			CHMC248	14	16.4	9.84	14	16.6	8.05
			FOIL_HI	12	10.5	0.165	12	10.5	0.139
			SE76_H10	4	18.3	1.63	4	18.5	0.878
			SENESEJ	10	11.1	2.67	10	10.4	1.05
			SHELLA18	20	15.4	28.2	20	16.2	25.7
			UNCLH11	8	17.0	2.71	7	16.3	0.768
			UNCLH9	4	22.7	186.0	4	25.7	153.0

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WTF_9	13	4.70	0.437	13	4.70	0.400
			CH10ST	6	13.9	9.36	6	14.1	7.90
			CH15ST1	5	15.1	0.700	5	15.1	0.559
			CH15ST3	6	12.0	11.2	6	12.6	9.28
			CH15WB2	3	11.3	0.0225	3	11.3	0.00659
			SPIRIT76	7	11.1	3.96	7	10.3	1.06
Secondary SS	Exclude	Exclude	PH_A_3	8	14.0	1.10	7	13.7	0.248
			SH_A18	2	14.1	0.000200	2	14.1	0.000100
			TEX_63_1	24	15.9	12.3	23	15.6	10.1
			UN_HI179	12	12.8	4.34	11	12.6	2.51
			A_8ST1	13	14.5	2.51	12	14.5	2.20
			CH236_2	13	10.8	3.95	13	10.7	2.24
			CH248ST1	8	13.4	1.72	8	13.4	1.50
			CH248ST2	16	14.2	2.92	16	14.2	2.62
			CHC_16ST	13	13.6	2.39	13	13.7	2.02

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CHMC248	14	16.4	9.84	14	16.6	8.05
			FOIL_HI	12	10.5	0.165	12	10.5	0.139
			SE76_H10	4	18.3	1.63	4	18.5	0.878
			SENESEJ	10	11.1	2.67	10	10.4	1.05
			SHELLA18	20	15.4	28.2	20	16.2	25.7
			UNCLH11	8	17.0	2.71	7	16.3	0.768
			UNCLH9	4	22.7	186.0	4	25.7	153.0
			WTF_9	13	4.70	0.437	13	4.70	0.400
			CH10ST	6	13.9	9.36	6	14.1	7.90
			CH15ST1	5	15.1	0.700	5	15.1	0.559
			CH15ST3	6	12.0	11.2	6	12.6	9.28
			CH15WB2	3	11.3	0.0225	3	11.3	0.00659
			SPIRIT76	7	11.1	3.96	7	10.3	1.06
Prim/Sec SS	Include	Include	AMOCO G.L.1 53/3C-5	5	13.4	46.1	5	15.1	21.9

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results wo Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			AMOCO SEDCO 711 APPLETON 30/11B-4	34	11.5	14.4	34	9.43	6.90
			AMOCO SEDCO 711 OATES	28	12.1	21.2	28	11.5	12.0
			BRITE	33	16.7	17.0	33	14.6	6.42
			CUBP2	30	12.9	12.6	30	8.82	14.4
			CUDP1	10	13.8	20.4	10	13.1	18.4
			CUDP2	9	10.3	11.0	9	8.88	6.57
			GA3	30	11.5	13.2	30	14.5	15.6
			GLOMAR LABRADOR 1 43/6-1	17	13.0	17.0	17	10.8	12.8
			LASMO G.L.1 49/3-C3	9	10.5	4.70	9	10.3	3.18
			PARRY	33	16.4	14.1	33	16.0	6.20
			SPEKE	30	14.3	25.7	30	16.2	9.38
			BP_15555	4	9.14	14.3	2	10.6	0.262
			CH28	35	8.98	1.47	34	8.96	1.35
			CHEV_M_8	11	11.1	16.0	11	10.3	11.9

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CON_A_15	12	11.7	2.98	12	12.2	4.12
			SH981ST2	5	6.61	2.78	5	6.27	1.52
			SH_68A_1	3	6.82	0.419	3	6.78	0.246
			SH_A1	7	6.94	3.94	7	7.33	1.29
			SH_A5	21	6.70	2.27	21	6.93	1.81
			SH_A6	10	7.66	12.9	10	7.27	4.57
			SH_A7	8	6.86	5.26	8	6.71	2.71
			SH_MA24	12	9.02	3.04	12	9.11	2.76
			UN_C_23	7	10.7	0.250	6	10.9	0.125
			CHW_4	5	7.43	3.97	5	8.02	2.97
			CHW_5	19	9.50	6.54	19	9.80	5.27
			WELL_A_U	12	11.0	23.3	12	12.8	30.6
			WELL_B_U	17	14.1	8.46	11	14.1	12.9
			WELL_C_U	16	11.5	5.42	10	12.5	6.04
			WELL_D_U	4	11.7	12.6	4	12.8	11.8

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_E_U	19	14.6	5.16	8	14.2	1.76
			WELL_F_U	31	8.05	4.94	24	7.91	5.08
			WELL_G_U	17	10.3	4.54	17	10.5	5.86
			WELL_H_U	9	9.15	0.889	8	9.35	0.915
			WELL_I_U	13	9.38	2.86	12	9.18	1.97
			WELL_J_U	10	10.9	3.55	10	10.4	1.61
			WELL_K_U	19	12.1	2.48	15	11.9	2.54
Prim/Sec SS	Include	Exclude	BP_15555	4	9.14	14.3	2	10.6	0.262
			CH28	35	8.98	1.47	34	8.96	1.35
			CHEV_M_8	11	11.1	16.0	11	10.3	11.9
			CON_A_15	12	11.7	2.98	12	12.2	4.12
			SH981ST2	5	6.61	2.78	5	6.27	1.52
			SH_68A_1	3	6.82	0.419	3	6.78	0.246
			SH_A1	7	6.94	3.94	7	7.33	1.29
			SH_A5	21	6.70	2.27	21	6.93	1.81

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A6	10	7.66	12.9	10	7.27	4.57
			SH_A7	8	6.86	5.26	8	6.71	2.71
			SH_MA24	12	9.02	3.04	12	9.11	2.76
			UN_C_23	7	10.7	0.250	6	10.9	0.125
			CHW_4	5	7.43	3.97	5	8.02	2.97
			CHW_5	19	9.50	6.54	19	9.80	5.27
			WELL_A_U	12	11.0	23.3	12	12.8	30.6
			WELL_B_U	17	14.1	8.46	11	14.1	12.9
			WELL_C_U	16	11.5	5.42	10	12.5	6.04
			WELL_D_U	4	11.7	12.6	4	12.8	11.8
			WELL_E_U	19	14.6	5.16	8	14.2	1.76
			WELL_F_U	31	8.05	4.94	24	7.91	5.08
			WELL_G_U	17	10.3	4.54	17	10.5	5.86
			WELL_H_U	9	9.15	0.889	8	9.35	0.915
			WELL_I_U	13	9.38	2.86	12	9.18	1.97

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_J_U	10	10.9	3.55	10	10.4	1.61
			WELL_K_U	19	12.1	2.48	15	11.9	2.54
Prim/Sec SS	Exclude	Include	BP_15555	4	9.14	14.3	2	10.6	0.262
			CH28	35	8.98	1.47	34	8.96	1.35
			CHEV_M_8	11	11.1	16.0	11	10.3	11.9
			CON_A_15	12	11.7	2.98	12	12.2	4.12
			SH981ST2	5	6.61	2.78	5	6.27	1.52
			SH_68A_1	3	6.82	0.419	3	6.78	0.246
			SH_A1	7	6.94	3.94	7	7.33	1.29
			SH_A5	21	6.70	2.27	21	6.93	1.81
			SH_A6	10	7.66	12.9	10	7.27	4.57
			SH_A7	8	6.86	5.26	8	6.71	2.71
			SH_MA24	12	9.02	3.04	12	9.11	2.76
			UN_C_23	7	10.7	0.250	6	10.9	0.125
			CHW_4	5	7.43	3.97	5	8.02	2.97

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			CHW_5	19	9.50	6.54	19	9.80	5.27
			WELL_A_U	4	8.90	0.587	4	9.09	0.507
			WELL_C_U	2	10.4	0.0450	2	10.2	0.0121
			WELL_D_U	3	9.90	0.0700	3	10.0	0.0438
			WELL_F_U	12	6.66	3.03	11	6.71	2.47
			WELL_G_U	10	9.83	6.16	10	10.3	9.32
			WELL_H_U	9	9.15	0.889	8	9.35	0.915
			WELL_J_U	10	10.9	3.55	10	10.4	1.61
			WELL_K_U	9	12.2	2.38	9	12.2	1.92
Prim/Sec SS	Exclude	Exclude	BP_15555	4	9.14	14.3	2	10.6	0.262
			CH28	35	8.98	1.47	34	8.96	1.35
			CHEV_M_8	11	11.1	16.0	11	10.3	11.9
			CON_A_15	12	11.7	2.98	12	12.2	4.12
			SH981ST2	5	6.61	2.78	5	6.27	1.52
			SH_68A_1	3	6.82	0.419	3	6.78	0.246

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			SH_A1	7	6.94	3.94	7	7.33	1.29
			SH_A5	21	6.70	2.27	21	6.93	1.81
			SH_A6	10	7.66	12.9	10	7.27	4.57
			SH_A7	8	6.86	5.26	8	6.71	2.71
			SH_MA24	12	9.02	3.04	12	9.11	2.76
			UN_C_23	7	10.7	0.250	6	10.9	0.125
			CHW_4	5	7.43	3.97	5	8.02	2.97
			CHW_5	19	9.50	6.54	19	9.80	5.27
			WELL_A_U	4	8.90	0.587	4	9.09	0.507
			WELL_C_U	2	10.4	0.0450	2	10.2	0.0121
			WELL_D_U	3	9.90	0.0700	3	10.0	0.0438
			WELL_F_U	12	6.66	3.03	11	6.71	2.47
			WELL_G_U	10	9.83	6.16	10	10.3	9.32
			WELL_H_U	9	9.15	0.889	8	9.35	0.915
			WELL_J_U	10	10.9	3.55	10	10.4	1.61

Table 2. Summary Statistics for Percent Retention by Well (Uniformly-Weighted and Volume-Weighted) (cont.)

Technology Category/ Subcategory	Results w/o Backup Data	Foreign Data	Well Name	Uniformly-Weighted			Volume-Weighted		
				Number of Records	Mean	Variance	Number of Records	Mean	Variance
			WELL_K_U	9	12.2	2.38	9	12.2	1.92

Table 3. Summary Statistics for Uniformly-Weighted and Volume-Weighted Well Means

Technology Category/Subcategory	Results w/o Backup Data	Foreign Data	Weighting	Number of Wells	Mean of Wells	Variance of Wells	95th Percentile	99th Percentile
Mud 10	Include	Include	Uniform	41	4.43	3.96	7.71	9.06
			Volume	41	4.12	2.80	6.87	8.01
		Exclude	Uniform	27	3.36	1.33	5.26	6.05
			Volume	27	3.36	1.27	5.22	5.99
	Exclude	Include	Uniform	26	3.85	4.04	7.16	8.53
			Volume	26	3.72	3.19	6.66	7.88
		Exclude	Uniform	24	3.40	1.59	5.47	6.33
			Volume	24	3.35	1.59	5.43	6.29
Vertical Centrifuge	Include	Include	Uniform	8	3.72	2.38	6.26	7.31
			Volume	8	3.71	2.49	6.31	7.39
		Exclude	Uniform	8	3.72	2.38	6.26	7.31
			Volume	8	3.71	2.49	6.31	7.39
	Exclude	Include	Uniform	8	3.72	2.38	6.26	7.31
			Volume	8	3.71	2.49	6.31	7.39
		Exclude	Uniform	8	3.72	2.38	6.26	7.31
			Volume	8	3.71	2.49	6.31	7.39

Table 3. Summary Statistics for Uniformly-Weighted and Volume-Weighted Well Means (cont.)

Technology Category/Subcategory	Results w/o Backup Data	Foreign Data	Weighting	Number of Wells	Mean of Wells	Variance of Wells	95th Percentile	99th Percentile
Squeeze Press	Include	Include	Uniform	7	6.77	2.46	9.34	10.4
			Volume	5	6.31	1.16	8.08	8.81
		Exclude	Uniform	7	6.77	2.46	9.34	10.4
			Volume	5	6.31	1.16	8.08	8.81
	Exclude	Include	Uniform	5	6.71	1.92	8.99	9.93
			Volume	5	6.31	1.16	8.08	8.81
		Exclude	Uniform	5	6.71	1.92	8.99	9.93
			Volume	5	6.31	1.16	8.08	8.81
High-G Dryer	Include	Include	Uniform	6	9.40	4.69	13.0	14.4
			Volume	6	9.52	4.83	13.1	14.6
		Exclude	Uniform	6	9.40	4.69	13.0	14.4
			Volume	6	9.52	4.83	13.1	14.6
	Exclude	Include	Uniform	6	9.40	4.69	13.0	14.4
			Volume	6	9.52	4.83	13.1	14.6
		Exclude	Uniform	6	9.40	4.69	13.0	14.4
			Volume	6	9.52	4.83	13.1	14.6

Table 3. Summary Statistics for Uniformly-Weighted and Volume-Weighted Well Means (cont.)

Technology Category/Subcategory	Results w/o Backup Data	Foreign Data	Weighting	Number of Wells	Mean of Wells	Variance of Wells	95th Percentile	99th Percentile
*Cuttings Dryer 1	Include	Include	Uniform	62	5.08	6.18	9.18	10.9
			Volume	60	4.79	5.62	8.69	10.3
		Exclude	Uniform	48	4.67	6.55	8.88	10.6
			Volume	46	4.55	6.37	8.70	10.4
	Exclude	Include	Uniform	45	4.89	7.42	9.37	11.2
			Volume	45	4.78	7.06	9.15	11.0
		Exclude	Uniform	43	4.68	6.80	8.97	10.7
			Volume	43	4.62	6.81	8.92	10.7
*Cuttings Dryer 2	Include	Include	Uniform	56	4.62	4.18	7.99	9.38
			Volume	54	4.26	2.99	7.10	8.28
		Exclude	Uniform	42	4.00	3.20	6.94	8.16
			Volume	40	3.80	2.36	6.33	7.37
	Exclude	Include	Uniform	39	4.19	4.25	7.59	8.99
			Volume	39	4.05	3.45	7.11	8.37
		Exclude	Uniform	37	3.92	2.96	6.75	7.92
			Volume	37	3.83	2.64	6.50	7.61

Table 3. Summary Statistics for Uniformly-Weighted and Volume-Weighted Well Means (cont.)

Technology Category/Subcategory	Results w/o Backup Data	Foreign Data	Weighting	Number of Wells	Mean of Wells	Variance of Wells	95th Percentile	99th Percentile
*Cuttings Dryer 3	Include	Include	Uniform	49	4.32	3.72	7.49	8.80
			Volume	49	4.05	2.72	6.76	7.89
		Exclude	Uniform	35	3.45	1.53	5.48	6.32
			Volume	35	3.44	1.51	5.47	6.30
	Exclude	Include	Uniform	34	3.82	3.56	6.93	8.21
			Volume	34	3.72	2.94	6.54	7.71
		Exclude	Uniform	32	3.48	1.74	5.65	6.55
			Volume	32	3.44	1.77	5.63	6.54
Decanting Centrifuge	Include	Include	Uniform	28	9.97	4.23	13.3	14.7
			Volume	23	10.1	5.11	13.8	15.4
		Exclude	Uniform	26	10.0	4.14	13.4	14.7
			Volume	21	10.2	4.83	13.8	15.3
	Exclude	Include	Uniform	22	9.97	5.13	13.7	15.2
			Volume	22	10.1	5.32	13.9	15.5
		Exclude	Uniform	20	10.0	5.11	13.8	15.3
			Volume	20	10.2	5.05	13.9	15.4

Table 3. Summary Statistics for Uniformly-Weighted and Volume-Weighted Well Means (cont.)

Technology Category/Subcategory	Results w/o Backup Data	Foreign Data	Weighting	Number of Wells	Mean of Wells	Variance of Wells	95th Percentile	99th Percentile
Mud Cleaner	Include	Include	Uniform	22	11.9	6.79	16.2	18.0
			Volume	21	11.8	8.91	16.7	18.8
		Exclude	Uniform	22	11.9	6.79	16.2	18.0
			Volume	21	11.8	8.91	16.7	18.8
	Exclude	Include	Uniform	21	11.9	6.97	16.2	18.0
			Volume	21	11.8	8.81	16.7	18.7
		Exclude	Uniform	21	11.9	6.97	16.2	18.0
			Volume	21	11.8	8.81	16.7	18.7
*Fines Removal	Include	Include	Uniform	46	10.8	5.74	14.7	16.3
			Volume	40	10.9	7.07	15.2	17.1
		Exclude	Uniform	44	10.8	5.68	14.7	16.4
			Volume	38	10.9	6.97	15.3	17.1
	Exclude	Include	Uniform	39	10.8	6.30	14.9	16.7
			Volume	39	10.9	7.15	15.3	17.1
		Exclude	Uniform	37	10.9	6.25	15.0	16.7
			Volume	37	10.9	7.05	15.3	17.1

Table 3. Summary Statistics for Uniformly-Weighted and Volume-Weighted Well Means (cont.)

Technology Category/Subcategory	Results w/o Backup Data	Foreign Data	Weighting	Number of Wells	Mean of Wells	Variance of Wells	95th Percentile	99th Percentile
Primary SS	Include	Include	Uniform	82	10.3	10.5	15.6	17.9
			Volume	51	9.47	9.62	14.6	16.7
		Exclude	Uniform	80	10.2	10.0	15.4	17.6
			Volume	49	9.33	9.45	14.4	16.5
	Exclude	Include	Uniform	32	9.32	9.28	14.3	16.4
			Volume	32	9.04	8.17	13.7	15.7
		Exclude	Uniform	30	8.90	7.01	13.3	15.1
			Volume	30	8.77	7.51	13.3	15.1
Secondary SS	Include	Include	Uniform	56	13.9	14.4	20.1	22.7
			Volume	39	14.7	15.7	21.2	23.9
		Exclude	Uniform	56	13.9	14.4	20.1	22.7
			Volume	39	14.7	15.7	21.2	23.9
	Exclude	Include	Uniform	22	13.8	12.1	19.5	21.8
			Volume	22	13.9	15.5	20.3	23.0
		Exclude	Uniform	22	13.8	12.1	19.5	21.8
			Volume	22	13.9	15.5	20.3	23.0