LG&E
a PPL company

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State Regulation and Rates
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Mr. Jeff DeRouen
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602-0615

March 30, 2012

RE: ***The Application of Louisville Gas and Electric Company for Approval of a Permanent Statistical Meter Sampling Plan***
Case No. 2000-00278
and
The Application of Louisville Gas and Electric Company to Implement a Gas Regulator Inspection and Replacement Program
Case No. 2002-00262

Dear Mr. DeRouen:

Enclosed please find five copies of Louisville Gas and Electric Company's 2011 Gas Meter Performance Control Plan and the 2011 Regulator Inspection and Replacement Report pursuant to the Commission's Order in the above mentioned proceedings.

Should you have any questions concerning the enclosed, please contact me at your convenience.

Sincerely,

Rick E. Lovekamp

Rick E. Lovekamp

Enclosure

Louisville Gas & Electric

Gas Meter Performance
Control Plan Year 2011

Year 2011 Gas Meter Sampling Plan Results

I. Introduction

The 2011 LG&E Gas Meter Performance Control Program required 8,390 gas meters within 149 control groups be tested and their accuracy performance documented.

One (1) prior residential meter from install year 1983 remains located within a vacant and boarded up structure and no access could be gained to remove the meter. Annual multiple attempts will continue to be made in removing this meter from service.

Two (2) commercial class meters in the 2011 sample are located in vacant structures and no access could be gained to remove/change the meters. These two meters will be classified as "Prior Meters" beginning in service year 2012, and annual multiple attempts will continue to be made in removing these meters from service.

Any sampled meter which proof tested beyond +/- 2% (fast or slow) was considered to be a failed meter. The control groups sampled during 2011 performed extremely well and only one control group failed the sampling criteria. This report summarizes the results of the 2011 LG&E Gas Meter Sampling Program.

II. Meter Performance

The meter groups were separated into three capacity classifications. Meters with capacities up to and including 500 CFH, which consist of primarily residential meters, represented the largest group with ninety-seven (97) control groups and 7,215 meters. Meters with capacities which range from 501 CFH to 1500 CFH (Commercial), made up the second largest group with forty-four (44) control groups and 1,008 meters. Meters with capacities 1501 CFH (Industrial) and above comprised the balance of the sampling with eight (8) control groups and 167 meters.

A summary of each control group, along with statistical analysis data, is shown in appendix A. The definitions of selected statistical categories are included, and the sample groups are arranged from low to high capacity.

In the 2011 sampling program, 148 out of 149 control groups passed the sampling criteria. The one (1) failed group, model size 041 installed in 1986, had a population of only six (6) gas meters and was exhausted by the 2011 sampling. A total of twelve (12) control groups had their remaining population removed through the sampling program in 2011.

A. Residential Class - Up to and including 500 cfh

1. Strong Performing Groups - Reduced Sampling

The stronger performing meter groups in this capacity continue to be the American AL175, AL250, AC250, and the AL425 model. Of the 1,664 meters in the twenty-five (25) control groups of AL175 meters, only thirty-three (33) individual meters failed the sampling criteria, a 1.98 percent failure rate. The twenty-two (22) AC250 control groups had a total of eleven (11) failures out of the 1,436 meters tested, a 0.77 percent failure rate. The twelve (12) AL425 control groups totaling 384 meters experienced seven (7) failures, a 1.82 percent failure rate.

The Actaris 250 Metris gas meter, size codes, 018 and 18T, continued to perform moderately well. The five (5) control groups tested this year experienced eighteen (18) failures out of 640 meters tested, which was a 2.81 percent failure rate. These models are not being refurbished and placed back into service.

The one (1) American AL250 control group, size code 030, totaling twenty-one (21) meters experienced zero (0) failures. Although this model performs well, it was being phased out as the meters are removed due to the small number of this model installed. Sampling year 2011 exhausted the last meters of this model.

The American Meter Company AC250 residential model was the primary type of residential gas meter LG&E purchased as additional stock, which continues to improve the overall accuracy of the installed meter population.

Test results from year 2011 were analyzed for the below groups to verify each model did not exceed the Limit Numbers For Reduced Inspection, Table VIII, under the American Standard – Sampling Procedures and Tables For Inspection By Attributes guidelines.

Model – American AL175 CFH – 033 and 33A
Oldest 10 Control Groups Tested = 824 Meters Tested
Limit Number For Reduced Testing - 42
Actual Deviate Meters - 19

Model – American AL425CFH
Oldest 10 Control Groups Tested = 320 Meters Tested
Limit Number For Reduced Testing - 14
Actual Deviate Meters - 6

Model – American AC250 CFH
Oldest 10 Control Groups Tested = 536 Meters Tested
Limit Number For Reduced Testing - 25
Actual Deviate Meters - 6

The below models will remain on Reduced Sampling in year 2012.

American Model AL175 Model Code 033 and 33A
American Model AL425 Model Code 015
American Model AC250 Model Code 078

2. Weaker Performing Residential Group

The older models of Rockwell residential class 250 CFH meters continue to be the poorest performing control group. The two (2) Rockwell R250 Code 057 control groups, consisting of 64 meters sampled this year, had nine (9) of the individual meters failed the sampling criteria for a 14.06 percent failure rate. Rockwell R250 gas meters removed from the system are being replaced by better performing models.

The Rockwell 175 CFH meters, size codes 024, 24T, and 24B, continue to be one of the weaker performing models. Of the twenty-three (23) Rockwell R175 control groups consisting of 2,866 meters sampled this year, 125 of the individual meters failed the sampling criteria for a 4.36 percent failure rate.

Beginning in 2010 the above 024 Rockwell R175 meters were divided into two sub-groups when remanufactured, becoming either size code 024T (top badge) or 024B (bottom badge). The 024T size code is the oldest vintage of the R175 models by original manufacturing year in the LG&E meter population and the 024B being the newer vintage. Due to the R175 model in general being a poorer performer in proof retention, this group of meters was sub-grouped to help LG&E determine at some future date if either sub-group should no longer be remanufactured and placed back into service.

B. Commercial Class - 501 cfh up to and including 1500 cfh

Forty-four (44) control groups in the Commercial Meter Class were tested in 2012 and there were no control group failures.

The strongest performing meters in this class was the American AL800 meter which experienced one (1) individual meter failures within the eight (8) control groups tested, the AL1400 which experienced zero (0) individual meter failures within the eight (8) control groups tested, and the

Rockwell #3 Emco control groups which experienced zero (0) individual meter failure within the eight (8) control groups tested.

The American AL1000 commercial control groups demonstrated weaker performance with twenty (20) individual meter failures within the 280 meters tested, which resulted in a 7.14 percent failure rate. All eight (8) control groups passed the sampling criteria.

The Rockwell R750 control groups demonstrated acceptable performance with thirteen (13) individual meter failures within the 285 meters tested, which resulted in a 4.56 percent failure rate. All eight (8) control groups passed the sampling criteria.

Beginning in the 2003 test year, all Commercial Class Control Groups, regardless of whether they meet the Limit Numbers For Reduced Inspection, Table VIII, under the American Standard – Sampling Procedures and Tables For Inspection By Attributes guidelines, have been placed on the Single Sampling Plan For Normal Inspection due to the small volume of meters in the Commercial Class Control Groups.

C. Industrial Class - Over 1500 cfh

The eight (8) control groups in this capacity range performed extremely well and there were no individual meter failures with the eight (8) control groups tested. Two (2) of the control groups were exhausted by the 2012 Sampling Program.

Beginning in 2003 test year, all Industrial Class control groups, regardless of whether they meet the Limit Numbers For Reduced Inspection, Table VIII, under the American Standard – Sampling Procedures and Tables For Inspection By Attributes guidelines, have been placed on the Single Sampling Plan For Normal Inspection due to the small volume of meters in the Industrial Class control groups.

III. Safety

As part of the LG&E Meter Sampling change-out activities, safety inspections were performed and "red-tags" were issued when deficiencies were found which resulted in a customers appliance being left off or the customers gas service partially or fully suspended until the deficiency was corrected by the customer. The results of these safety inspections directly associated with LG&E's Meter Sampling Program are summarized in Table 2 below.

Table 2: Year 2011 Safety Inspection Results

Type of Problem/Appliance	# of "Red Tags"
Flex-line Through Furnace Wall	142
Water Heater Not Venting Correctly	72
Furnace Not Venting Properly	2
Furnace Leaking	9
House Line Leak	14
Garage House Line Leak	2
Brass Flex-Line On Water Heater	21
Brass Flex-Line On Clothes Dryer	4
Water Heater Leaking	6
Fireplace Leaking	2
Stove Had Defective Control Valve	2
Furnace Had Been Under Water	1
Stove Leaking	1
Boiler Leaking	1
Dryer Leaking	1

Additionally, 3,104 Customer Surveillance Notices were issued to customers to correct outside deficiencies on their meter loop or exposed outside gas piping.

Table 3: Year 2011 Customer Surveillance Notices Issued

Type Of Customer Notice Issued	Number Issued
Corrosion / Rust On Outside Meter Loop & Associated Piping	2,834
Tree / Shrubbery Growing Inside / Against Meter Loop	26
Gas Piping Not Properly Supported	175
Meter Loop Too Low - In Contact With Soil / Pavement	11
Meter Not Protected From Vehicular Damage	30
Customer Built Over Service Line / Around Meter	3
No Plastic Sleeve Around Riser Going Through Pavement	12
Other	13

IV. Year 2011 Residential Meter Sampling Savings

Table 4, highlights the estimated savings between a periodic change schedule and the LG&E Gas Meter Performance Control Program for the purchase of new/remanufactured residential class gas meters.

Table 4: 2011 Residential Class Meter Sampling Program Estimated Savings

Metering Savings: Residential Gas Meters	
Periodic Program Costs (10-year Program):	
Number of Meters under Periodic Program [1]	32,339
Unit Remanufacture Cost – Average Blended Cost	$ 26.22
Residential Meter Costs Under Periodic Program	$847,929
Sampling Program Costs:	
Number of Meters under Sampling Program	7,215
Number of poor performing meters scrapped	880
Number of Meters for Remanufacture	6,335
Remanufactured Meters	6,335
Average Unit Remanufacture Cost – All Models	$26.22
Remanufactured Meter Costs	$166,104
Replacement Meters (including FST Replacements)	880
Average Replacement Meter Cost (per unit)	$ 39.50
Replacement Meter Costs	$34,760
Total Meter Costs Under 2011 Program	$200,864
Meter Cost Savings From 2011 Program	$647,065

[1] Based On Residential Meters On Line Beginning Year 2011

APPENDIX A

Control Group Data/Analysis

Control Group Test Data Range

Frequency Histograms (Examples)

Statistical Definitions

MEDIAN

The median is the number in the middle of a set of numbers; that is, half the numbers have values that are greater than the median and half have values that are less.

STANDARD DEVIATION

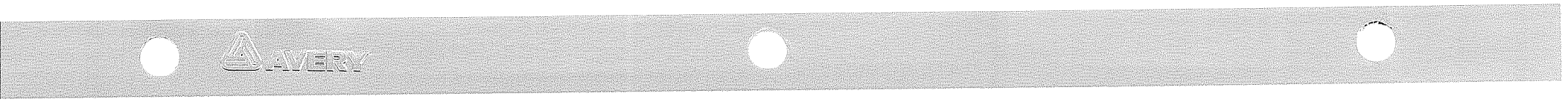
The standard deviation is a measure of how widely values are dispersed from the average value (the mean).

SKEWNESS

Skewness characterizes the degree of asymmetry of a distribution around its mean. Positive skewness indicates a distribution with an asymmetric tail extending towards more positive values. Negative skewness indicates a distribution with an asymmetric tail extending to[illegible]ds more negative values.

CONFIDENCE

The confidence interval is a range on either side of a sample mean. For example, if you order a product through the mail, you can determine, with a particular level of confidence, the earliest and latest the product should arrive.


AVERY

American AL425	Test Year 2011											
425 CFH	Control Group-Installed Year											
Code: 015	1995	1996	1997	1998	1999	2000	2001	2002	2003	2005	2007	2009
Sample Plan	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced
Sample Size	32	32	32	32	32	32	32	32	32	32	32	32
Original Population	69	410	325	431	316	344	467	268	293	472	486	675
# of Slow Failures	1	2	0	1	0	0	0	0	0	0	0	0
# of Fast Failures	0	1	0	0	0	0	0	0	1	0	1	0
Total Failures:	1	3	0	1	0	0	0	0	1	0	1	0
Accept Level	5	5	5	5	5	5	5	5	5	5	5	5
Reject Level	8	8	8	8	8	8	8	8	8	8	8	8
Pass/ Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
If Failed - Remove By:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Statistical Data:												
Mean (Average Proof)	-0.48281	-0.46563	-0.39375	-0.4875	-0.30625	-0.32969	-0.19844	-0.43281	-0.27656	-0.35313	-0.13594	-0.22969
Median	-0.375	-0.6	-0.475	-0.35	-0.525	-0.25	-0.2	-0.475	-0.5	-0.275	-0.05	-0.25
Standard Deviation	0.85408	1.511165	0.641665	0.732979	0.861614	0.553269	0.557859	0.551773	2.015544	0.566389	0.7741	0.530955
Sample Variance	0.729453	2.283619	0.411734	0.537258	0.742379	0.306106	0.311207	0.304453	4.062417	0.320796	0.599231	0.281913
Skewness	-0.66189	3.615398	0.382666	-0.82187	0.906862	-0.07469	0.063007	0.173091	4.852071	-0.23578	0.542064	-0.37865
Minimum	-3.15	-2.1	-1.5	-2.55	-1.85	-1.45	-1.1	-1.6	-1.8	-1.5	-2	-1.7
Maximum	1.45	6.75	0.85	0.95	1.8	0.7	0.85	0.6	10.25	0.8	2.35	0.8
Count	32	32	32	32	32	32	32	32	32	32	32	32
Confidence Level(95.0%)	0.307929	0.544833	0.231345	0.264267	0.310645	0.199475	0.20113	0.198935	0.726681	0.204205	0.279093	0.19143

Year 2011

Meter Code 015 American AL 425

Code & Year:	1995
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	12
-.4 to .4	13
.4 to 1.2	2
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	1996
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	2
-.2 to -1.2	5
-1.2 to -.4	11
-.4 to .4	11
.4 to 1.2	2
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	32

Code & Year:	1997
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	15
-.4 to .4	8
.4 to 1.2	6
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	1998
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	3
-1.2 to -.4	9
-.4 to .4	17
.4 to 1.2	2
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	1999
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	15
-.4 to .4	9
.4 to 1.2	2
1.2 to 2.0	3
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	2000
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	11
-.4 to .4	16
.4 to 1.2	3
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	2001
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	14
-.4 to .4	13
.4 to 1.2	5
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	2002
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	15
-.4 to .4	12
.4 to 1.2	3
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	2003
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	5
-1.2 to -.4	13
-.4 to .4	12
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	32

Code & Year:	2005
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	4
-1.2 to -.4	10
-.4 to .4	15
.4 to 1.2	3
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

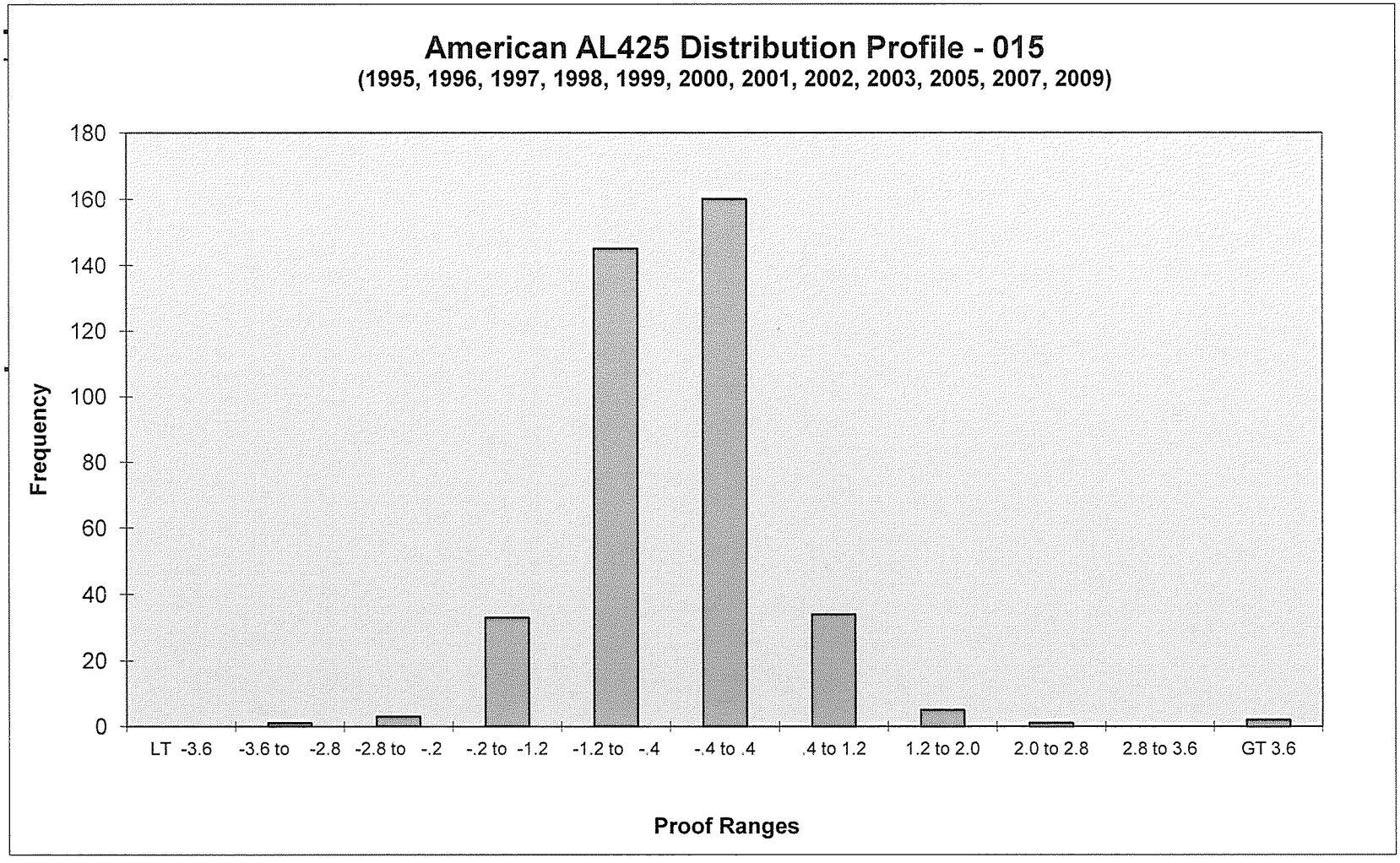
Year 2011

Meter Code 015 American AL 425

Code & Year:	2007
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	8
-.4 to .4	19
.4 to 1.2	1
1.2 to 2.0	1
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	12
-.4 to .4	15
.4 to 1.2	4
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	3
-.2 to -1.2	33
-1.2 to -.4	145
-.4 to .4	160
.4 to 1.2	34
1.2 to 2.0	5
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	2
Total	384


American AL425 Distribution Profile - 015
(1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2005, 2007, 2009)
Frequency
180
160
140
120
100
80
60
40
20
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Metris 250	Test Year 2011								
250 CFH	Control Group-Installed Year								
Code: 018	2000	2001	2002	2003					
Sample Plan	Single	Single	Single	Single					
Sample Size	80	80	200	200					
Original Population	1078	639	3825	4972					
# of Slow Failures	3	0	4	7					
# of Fast Failures	0	0	1	0					
Total Failures:	3	0	5	7					
Accept Level	10	10	21	21					
Reject Level	11	11	22	22					
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**					
If Failed - Remove By:									
Statistical Data:									
Mean (Average Proof)	-0.07062	0.169375	-0.596	-0.58875					
Median	0.175	0.15	-0.625	-0.6					
Standard Deviation	1.44572	0.631679	0.827531	0.872218					
Sample Variance	2.090107	0.399019	0.684808	0.760765					
Skewness	-3.77703	-0.04665	0.027	-0.31426					
Minimum	-8.35	-1.25	-4	-4					
Maximum	1.45	1.8	2.7	1.4					
Count	80	80	200	200					
Confidence Level(95.0%)	0.321729	0.140573	0.11539	0.121621					

Year 2011 Meter Code 018 Metris 250

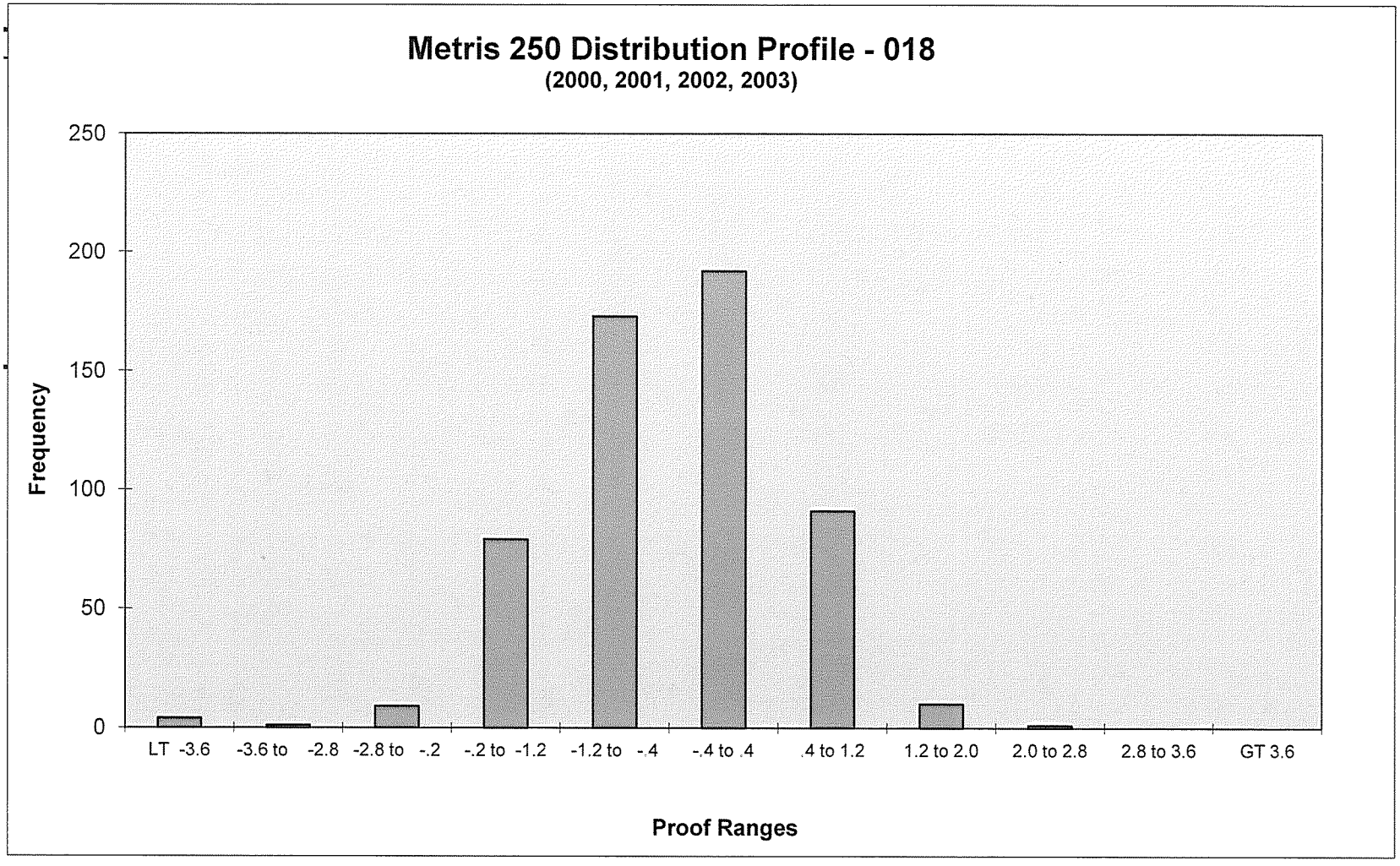
Code & Year:	2000
Data Range	Number
LT -3.6	2
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	4
-1.2 to -.4	8
-.4 to .4	38
.4 to 1.2	22
1.2 to 2.0	5
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	2001
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	14
-.4 to .4	33
.4 to 1.2	29
1.2 to 2.0	3
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	2002
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	3
-.2 to -1.2	38
-1.2 to -.4	80
-.4 to .4	59
.4 to 1.2	17
1.2 to 2.0	1
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	200

Code & Year:	2003
Data Range	Number
LT -3.6	1
-3.6 to -2.8	1
-2.8 to -.2	5
-.2 to -1.2	36
-1.2 to -.4	71
-.4 to .4	62
.4 to 1.2	23
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	200

Code & Year:	Total
Data Range	Number
LT -3.6	4
-3.6 to -2.8	1
-2.8 to -.2	9
-.2 to -1.2	79
-1.2 to -.4	173
-.4 to .4	192
.4 to 1.2	91
1.2 to 2.0	10
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	560

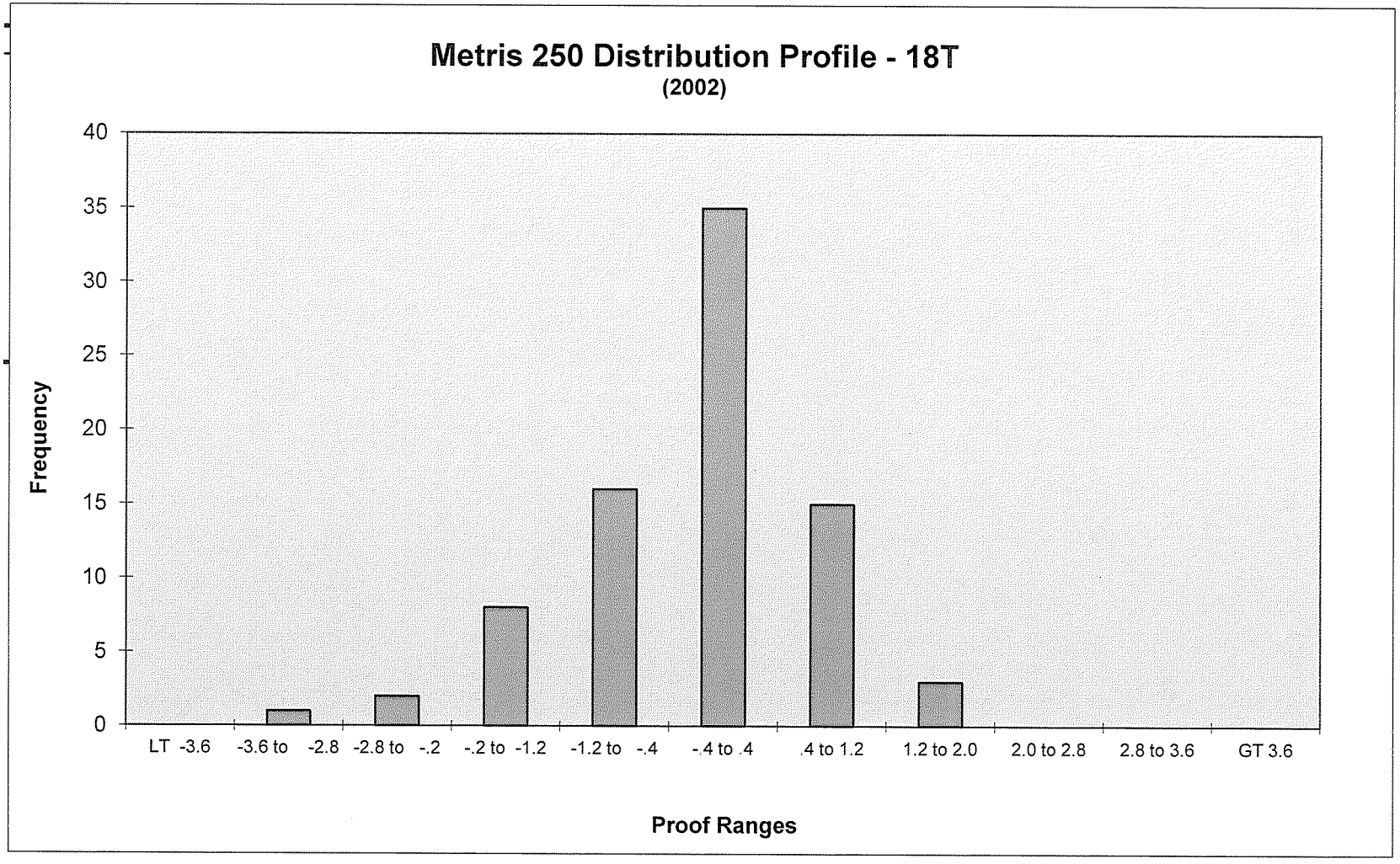

Metris 250 Distribution Profile - 018
(2000, 2001, 2002, 2003)
Frequency
250
200
150
100
50
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Metris 250 TC	Test Year 2011								
175 CFH	Control Group-Installed Year								
Code: 18T	2002								
Sample Plan	Single								
Sample Size	80								
Original Population	535								
# of Slow Failures	3								
# of Fast Failures	0								
Total Failures:	3								
Accept Level	10								
Reject Level	11								
Pass / Fail?	**Pass**								
If Failed - Remove By:	NA								
Statistical Data:									
Mean (Average Proof)	-0.19625								
Median	-0.075								
Standard Deviation	0.878281								
Sample Variance	0.771378								
Skewness	-0.57225								
Minimum	-2.9								
Maximum	1.8								
Count	80								
Confidence Level(95.0%)	0.195452								

Year 2011 Meter Code 18T Mteris 250 TC

Code & Year:	2002
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	2
-.2 to -1.2	8
-1.2 to -.4	16
-.4 to .4	35
.4 to 1.2	15
1.2 to 2.0	3
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	Totals
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	2
-.2 to -1.2	8
-1.2 to -.4	16
-.4 to .4	35
.4 to 1.2	15
1.2 to 2.0	3
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80


Metris 250 Distribution Profile - 18T
(2002)
Frequency
40
35
30
25
20
15
10
5
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Rockwell R175	Test Year 2011										
175 CFH	Control Group-Installed Year										
Code: 024	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Sample Plan	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single
Sample Size	200	200	125	200	125	200	200	200	125	125	80
Original Population	3669	3488	2486	3619	3027	3426	3964	4197	2990	2819	1195
# of Slow Failures	5	4	4	3	2	5	9	8	4	2	1
# of Fast Failures	14	8	3	3	4	6	1	9	3	4	0
Total Failures:	19	12	7	6	6	11	10	17	7	6	1
Accept Level	21	21	14	21	14	21	21	21	14	14	10
Reject Level	22	22	15	22	15	22	22	22	15	15	11
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
If Failed - Remove By:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Statistical Data:											
Mean (Average Proof)	0.443	0.214	-0.0556	0.1645	-0.0312	0.399	-0.0975	-0.03575	-0.0944	0.0364	-0.215
Median	0.5	0.3	-0.05	0.225	0.05	0.55	0.05	-0.05	0.15	0	-0.15
Standard Deviation	1.194502	1.094632	1.285076	0.91555	2.08122	1.643366	1.074753	1.170678	1.650076	0.96571	0.906077
Sample Variance	1.426835	1.19822	1.65142	0.838231	4.331478	2.700652	1.155094	1.370487	2.722751	0.932596	0.820975
Skewness	-0.61545	-0.30118	-2.16963	0.035855	-7.92657	-7.50625	-0.8415	-0.27717	-3.9398	-0.37013	-0.89617
Minimum	-4.65	-4.9	-8.15	-2.45	-20.65	-18.25	-4.75	-4.85	-10.55	-3.95	-4
Maximum	4.05	3.5	2.4	4.25	2.85	2.4	2.45	3.55	2.25	2.8	2
Count	200	200	125	200	125	200	200	200	125	125	80
Confidence Level(95.0%)	0.166559	0.152634	0.2275	0.127663	0.368443	0.229148	0.149862	0.163237	0.292117	0.170962	0.201637

Rockwell R175	Test Year 2011									
175 CFH	Control Group-Installed Year									
Code: 024	1997	1998	1999	2000	2001	2002	2003	2005	2007	2009
Sample Plan	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single
Sample Size	80	80	125	80	80	125	125	200	125	32
Original Population	529	955	1678	1023	1080	1544	2294	3354	2778	43
# of Slow Failures	3	2	2	0	1	3	2	2	2	1
# of Fast Failures	2	2	0	1	0	0	0	0	0	0
Total Failures:	5	4	2	1	1	3	2	2	2	1
Accept Level	10	10	14	10	10	14	14	21	14	5
Reject Level	11	11	15	11	11	15	15	22	15	6
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
If Failed - Remove By:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Statistical Data:										
Mean (Average Proof)	-0.3325	-0.30375	-0.0768	-0.115	-0.15563	0.1464	-0.0868	0.06175	-0.1988	0.234375
Median	-0.275	-0.125	-0.1	-0.15	-0.05	0.25	-0.05	0.075	0	0.1
Standard Deviation	1.337391	1.749245	0.884853	0.785687	0.77928	1.067352	0.758212	0.70324	1.884909	0.884129
Sample Variance	1.788614	3.059859	0.782965	0.617304	0.607278	1.139241	0.574885	0.494547	3.552882	0.781683
Skewness	-3.35614	-4.58407	-0.16785	1.135697	-0.54192	-2.90481	-0.40028	-0.57496	-8.23904	-0.78132
Minimum	-8.95	-12.5	-2.55	-1.5	-2.7	-5.95	-2.3	-3	-19	-2.75
Maximum	2.1	3	1.85	3.4	1.5	1.7	1.6	2	1.7	1.95
Count	80	80	125	80	80	125	125	200	125	32
Confidence Level(95.0%)	0.297622	0.389275	0.156648	0.174846	0.17342	0.188956	0.134228	0.098059	0.33369	0.318762

Year 2011 Meter Code 024 Rockwell R175

Code & Year:	1986
Data Range	Number
LT -3.6	2
-3.6 to -2.8	2
-2.8 to -.2	1
-.2 to -1.2	10
-1.2 to -.4	19
-.4 to .4	53
.4 to 1.2	77
1.2 to 2.0	22
2.0 to 2.8	9
2.8 to 3.6	4
GT 3.6	1
Total	200

Code & Year:	1987
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	3
-.2 to -1.2	15
-1.2 to -.4	29
-.4 to .4	68
.4 to 1.2	57
1.2 to 2.0	19
2.0 to 2.8	5
2.8 to 3.6	3
GT 3.6	0
Total	200

Code & Year:	1988
Data Range	Number
LT -3.6	2
-3.6 to -2.8	0
-2.8 to -.2	2
-.2 to -1.2	11
-1.2 to -.4	28
-.4 to .4	41
.4 to 1.2	28
1.2 to 2.0	10
2.0 to 2.8	3
2.8 to 3.6	0
GT 3.6	0
Total	125

Code & Year:	1989
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	3
-.2 to -1.2	10
-1.2 to -.4	35
-.4 to .4	75
.4 to 1.2	56
1.2 to 2.0	18
2.0 to 2.8	2
2.8 to 3.6	0
GT 3.6	1
Total	200

Code & Year:	1990
Data Range	Number
LT -3.6	1
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	6
-1.2 to -.4	23
-.4 to .4	52
.4 to 1.2	26
1.2 to 2.0	12
2.0 to 2.8	3
2.8 to 3.6	1
GT 3.6	0
Total	125

Code & Year:	1991
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	4
-.2 to -1.2	7
-1.2 to -.4	18
-.4 to .4	61
.4 to 1.2	63
1.2 to 2.0	40
2.0 to 2.8	6
2.8 to 3.6	0
GT 3.6	0
Total	200

Code & Year:	1992
Data Range	Number
LT -3.6	2
-3.6 to -2.8	3
-2.8 to -.2	4
-.2 to -1.2	16
-1.2 to -.4	45
-.4 to .4	65
.4 to 1.2	46
1.2 to 2.0	18
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	200

Code & Year:	1993
Data Range	Number
LT -3.6	1
-3.6 to -2.8	4
-2.8 to -.2	3
-.2 to -1.2	16
-1.2 to -.4	54
-.4 to .4	52
.4 to 1.2	47
1.2 to 2.0	14
2.0 to 2.8	7
2.8 to 3.6	2
GT 3.6	0
Total	200

Code & Year:	1994
Data Range	Number
LT -3.6	2
-3.6 to -2.8	1
-2.8 to -.2	1
-.2 to -1.2	12
-1.2 to -.4	21
-.4 to .4	44
.4 to 1.2	28
1.2 to 2.0	13
2.0 to 2.8	3
2.8 to 3.6	0
GT 3.6	0
Total	125

Code & Year:	1995
Data Range	Number
LT -3.6	1
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	5
-1.2 to -.4	27
-.4 to .4	55
.4 to 1.2	26
1.2 to 2.0	6
2.0 to 2.8	4
2.8 to 3.6	0
GT 3.6	0
Total	125

Year 2011 Meter Code 024 Rockwell R175

Code & Year:	1996
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	7
-1.2 to -.4	18
-.4 to .4	40
.4 to 1.2	11
1.2 to 2.0	3
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1997
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	2
-.2 to -1.2	10
-1.2 to -.4	17
-.4 to .4	30
.4 to 1.2	16
1.2 to 2.0	2
2.0 to 2.8	2
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1998
Data Range	Number
LT -3.6	2
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	6
-1.2 to -.4	23
-.4 to .4	29
.4 to 1.2	15
1.2 to 2.0	3
2.0 to 2.8	1
2.8 to 3.6	1
GT 3.6	0
Total	80

Code & Year:	1999
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	2
-.2 to -1.2	10
-1.2 to -.4	32
-.4 to .4	43
.4 to 1.2	31
1.2 to 2.0	7
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	125

Code & Year:	2000
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	5
-1.2 to -.4	24
-.4 to .4	31
.4 to 1.2	18
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	1
GT 3.6	0
Total	80

Code & Year:	2001
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	5
-1.2 to -.4	20
-.4 to .4	40
.4 to 1.2	12
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	2002
Data Range	Number
LT -3.6	2
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	6
-1.2 to -.4	10
-.4 to .4	57
.4 to 1.2	37
1.2 to 2.0	12
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	125

Code & Year:	2003
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	2
-.2 to -1.2	7
-1.2 to -.4	29
-.4 to .4	56
.4 to 1.2	27
1.2 to 2.0	4
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	125

Code & Year:	2005
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	1
-.2 to -1.2	7
-1.2 to -.4	29
-.4 to .4	110
.4 to 1.2	42
1.2 to 2.0	10
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	200

Code & Year:	2007
Data Range	Number
LT -3.6	2
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	6
-1.2 to -.4	24
-.4 to .4	57
.4 to 1.2	31
1.2 to 2.0	5
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	125

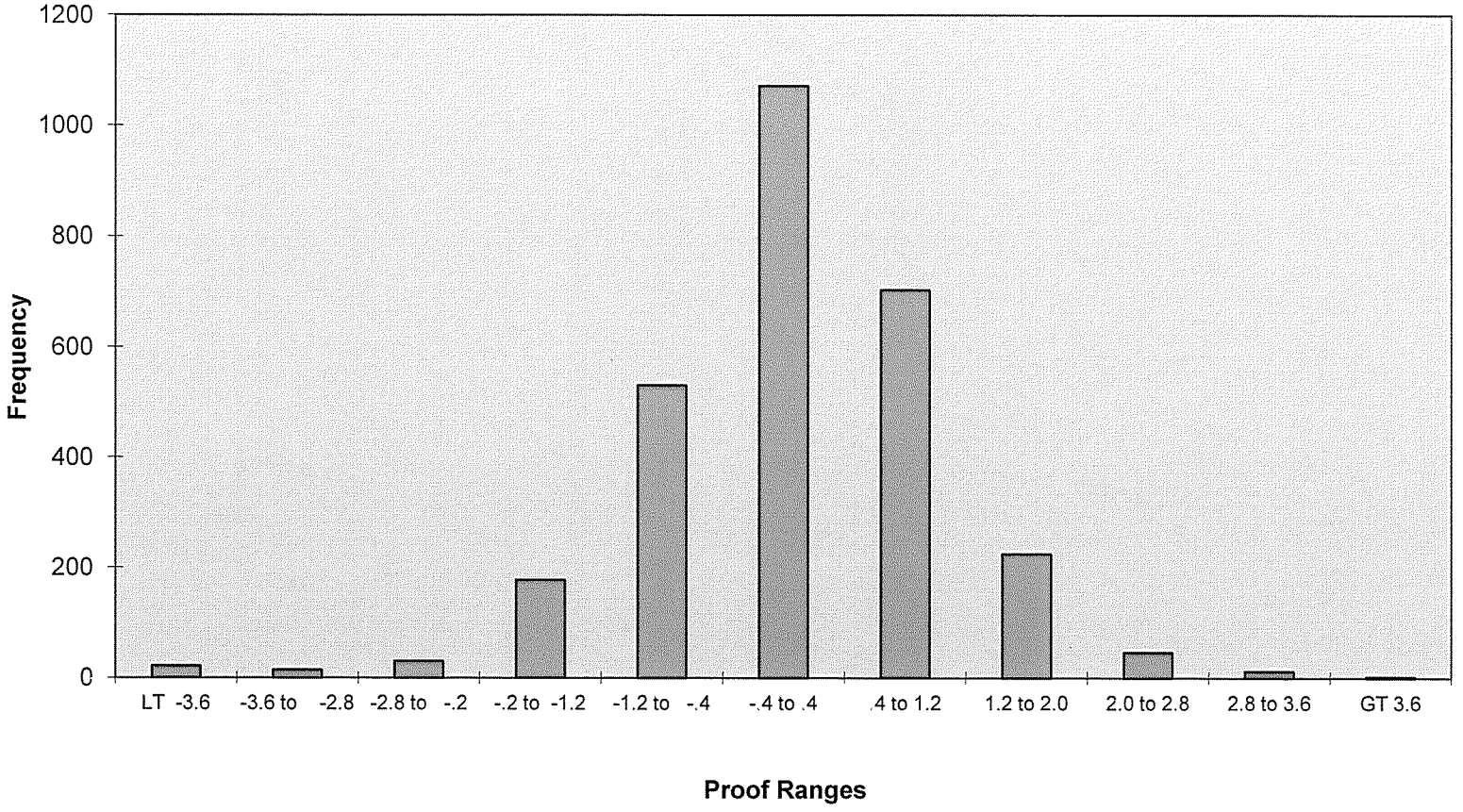
Year 2011 Meter Code 024 Rockwell R175

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	0
-1.2 to -.4	5
-.4 to .4	13
.4 to 1.2	9
1.2 to 2.0	4
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	Total
Data Range	Number
LT -3.6	21
-3.6 to -2.8	14
-2.8 to -.2	30
-.2 to -1.2	177
-1.2 to -.4	530
-.4 to .4	1072
.4 to 1.2	703
1.2 to 2.0	225
2.0 to 2.8	46
2.8 to 3.6	12
GT 3.6	2
Total	2832

Rockwell R175 Distribution Profile - 024

(1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2005, 2007, 2009)



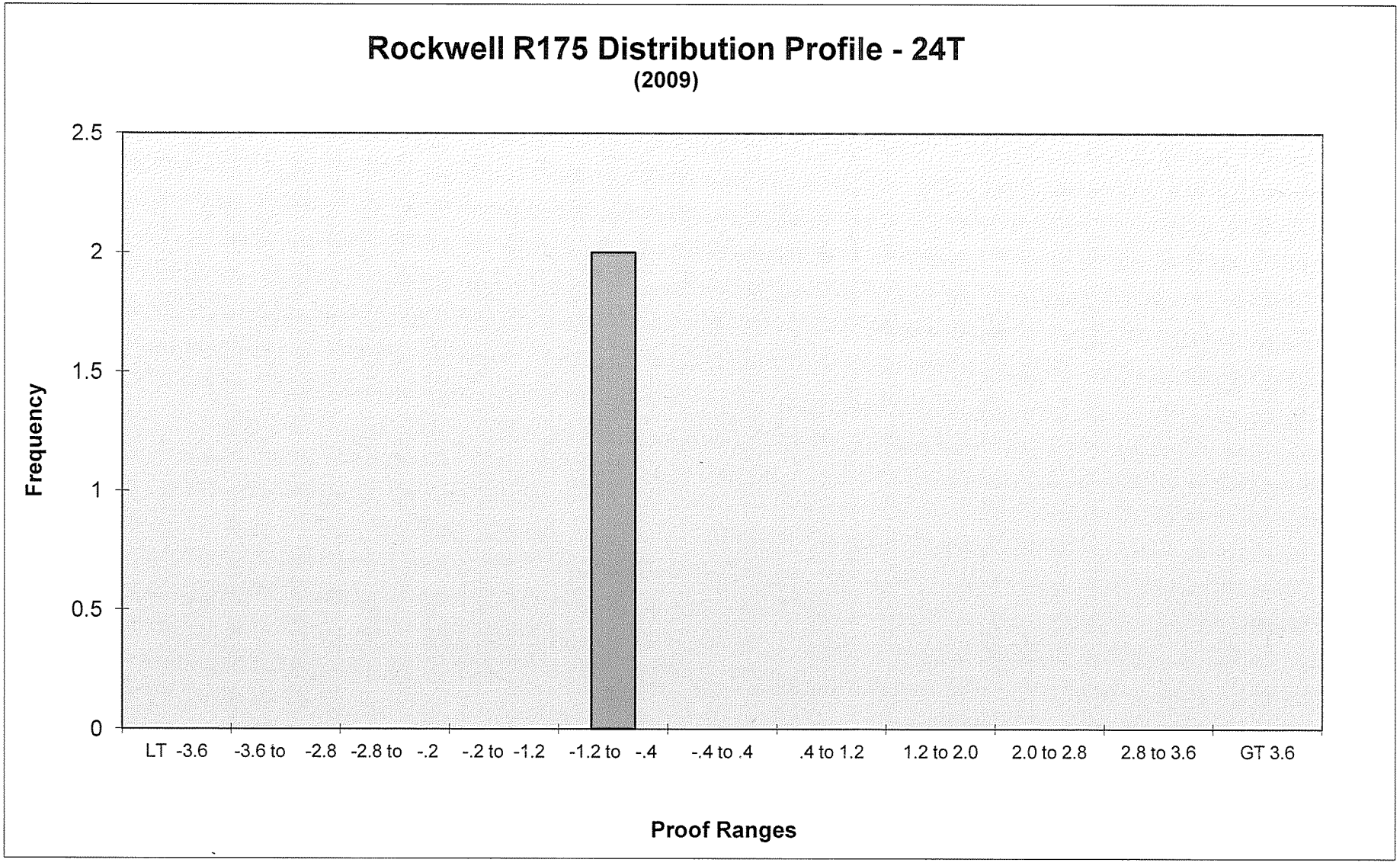
Rockwell R175	Year 2011							
175 CFH	Control Group-Installed Year							
Code: 24T	**2009**							
Sample Plan	Single							
Sample Size	2*							
Original Population	10							
# of Slow Failures	0							
# of Fast Failures	0							
Total Failures:	0							
Accept Level	0							
Reject Level	1							
Pass / Fail?	**Pass**							
If Failed - Remove By:	Exhaust							
Statistical Data:								
Mean (Average Proof)	-0.85							
Median	-0.85							
Standard Deviation	0.070711							
Sample Variance	0.005							
Skewness	NA							
Minimum	-0.9							
Maximum	-0.8							
Count	2							
Confidence Level(95.0%)	0.63531							

* Population less than required 32 minimum sample size - all meters to be changed - Single Sampling Plan For Normal inspection used to obtain obtain sample size to determine if control passed or failed.

Year 2011 Meter Code 24T Rockwell 175

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	2
-.4 to .4	0
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	Totals
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	2
-.4 to .4	0
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2


Rockwell R175 Distribution Profile - 24T
(2009)
Frequency
2.5
2
1.5
1
0.5
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Rockwell R175	Year 2011							
175 CFH	Control Group-Installed Year							
Code: 24B	**2009**							
Sample Plan	Single							
Sample Size	32							
Original Population	125							
# of Slow Failures	0							
# of Fast Failures	0							
Total Failures:	0							
Accept Level	5							
Reject Level	6							
Pass / Fail?	**Pass**							
If Failed - Remove By:	NA							
Statistical Data:								
Mean (Average Proof)	0.307813							
Median	0.3							
Standard Deviation	0.704835							
Sample Variance	0.496792							
Skewness	-0.35372							
Minimum	-1.35							
Maximum	1.65							
Count	32							
Confidence Level(95.0%)	0.25412							

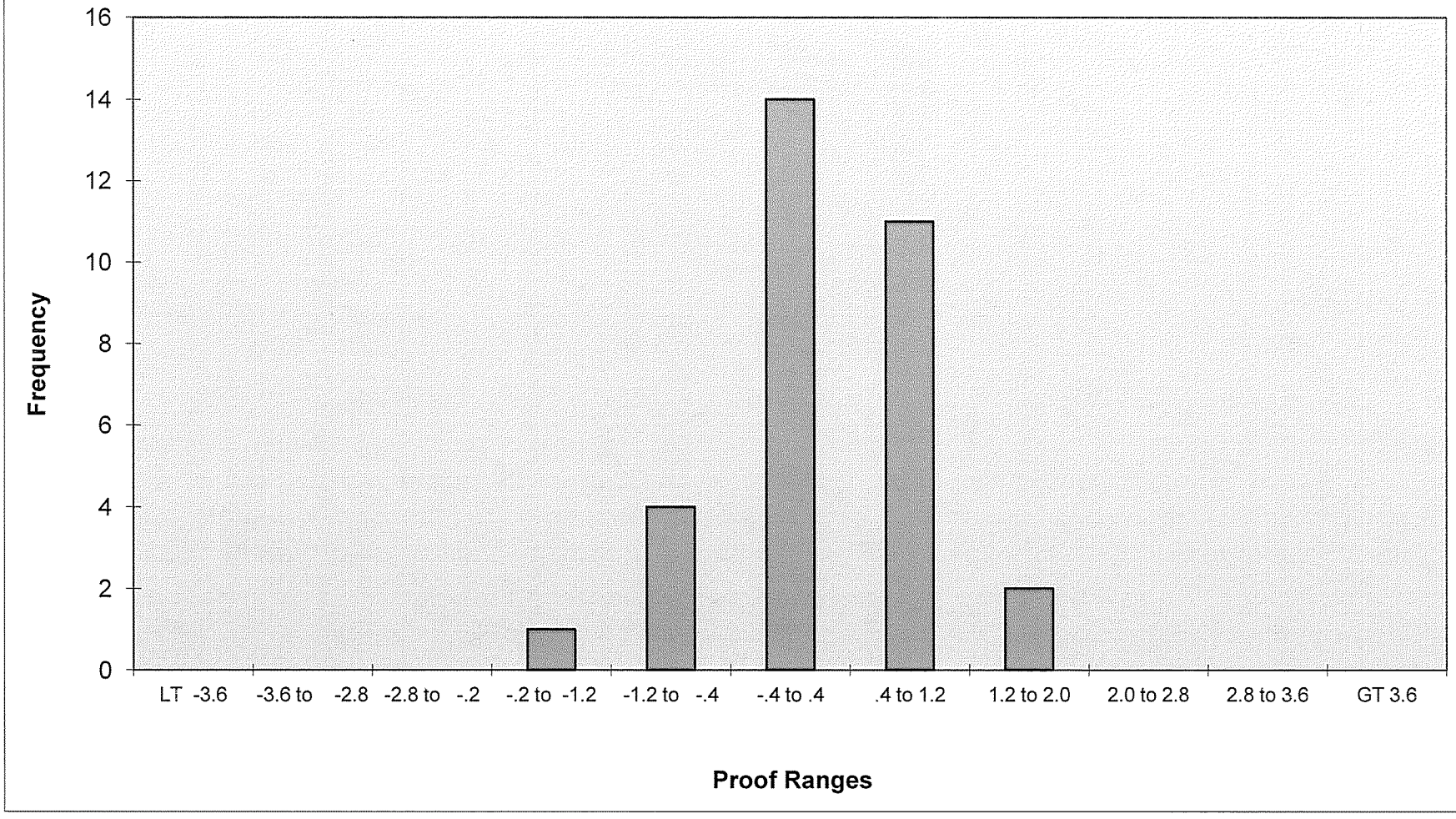
Year 2009 Meter Code 24B Rockwell 175

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	4
-.4 to .4	14
.4 to 1.2	11
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	Totals
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	4
-.4 to .4	14
.4 to 1.2	11
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Rockwell R175 Distribution Profile - 24B

(2009)



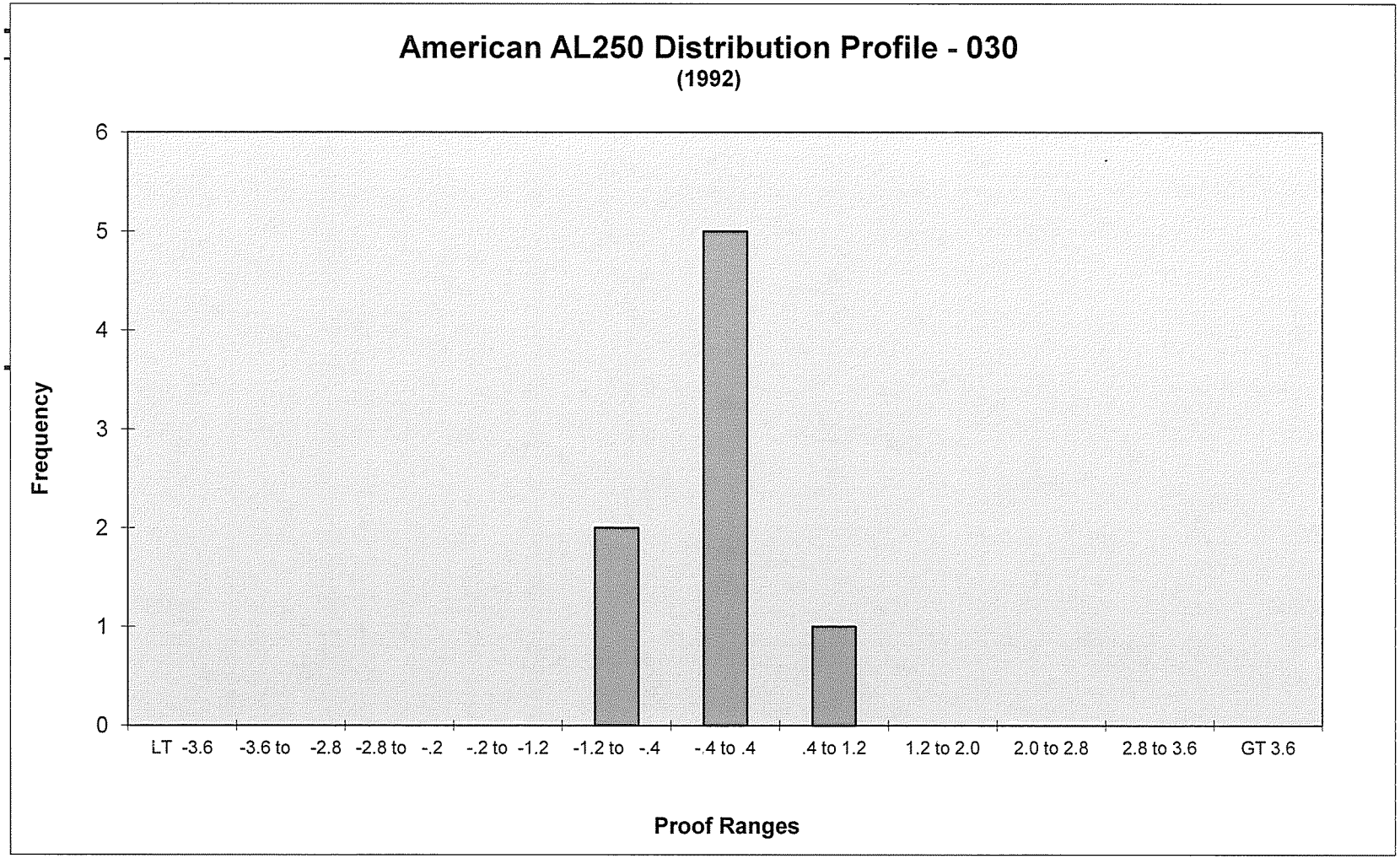
American AL 250	Test Year 2011								
250 CFH	Control Group-Installed Year								
Code: 030	1992								
Sampling Plan	Single								
Sample Size	8*								
Original Population	21								
# of Slow Failures	0								
# of Fast Failures	0								
Total Failures:	0								
Accept Level	1								
Reject Level	2								
Pass/ Fail?	**Pass**								
If Failed - Remove By:	Exhaust								
Statistical Data:									
Mean (Average Proof)	-0.00625								
Median	0.2								
Standard Deviation	0.548659								
Sample Variance	0.301027								
Skewness	-0.61713								
Minimum	-0.85								
Maximum	0.65								
Count	8								
Confidence Level(95.0%)	0.45869								

* Population less than required 32 minimum sample size - all meters to be changed - Single Sampling Plan For Normal Inspection used to obtain obtain sample size to determine if control passed or failed.

Year 2011 Meter Code 030 American AL250

Code & Year:	1992
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	2
-.4 to .4	5
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	2
-.4 to .4	5
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8


American AL250 Distribution Profile - 030
(1992)
Frequency
0
1
2
3
4
5
6
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

American AL175	Test Year 2011										
175 CFH	Control Group-Installed Year										
Code: 033	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Sample Plan	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced
Sample Size	32	50	32	80	50	80	80	80	80	80	80
Original Population	1106	1720	800	3494	2103	6295	7709	7476	7538	7832	7800
# of Slow Failures	1	0	1	0	1	0	0	0	2	1	2
# of Fast Failures	0	0	0	1	0	1	2	2	3	1	3
Total Failures:	1	0	1	1	1	1	2	2	5	2	5
Accept Level	5	7	5	10	7	10	10	10	10	10	10
Reject Level	8	10	8	13	10	13	13	13	13	13	13
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
If Failed - Remove By:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Statistical Data:											
Mean (Average Proof)	0.145313	-0.001	0.142188	0.463125	0.356	0.249375	0.423125	0.565	0.409375	0.27625	-0.015
Median	0.425	0	0.2	0.4	0.5	0.25	0.475	0.4	0.45	0.35	0.075
Standard Deviation	1.369799	0.5932	0.829799	0.74178	0.677303	0.705606	0.806616	1.107209	1.158625	1.101322	1.425633
Sample Variance	1.876348	0.351887	0.688566	0.550237	0.458739	0.497879	0.650629	1.225911	1.342411	1.21291	2.03243
Skewness	-3.80531	-0.43035	-1.85549	1.459419	-2.15136	0.04133	-0.30587	5.799761	-1.41203	1.093113	-4.31922
Minimum	-6.45	-1.8	-3.1	-0.95	-2.45	-1.6	-2	-1.1	-6	-4.6	-10
Maximum	1.65	1.15	1.4	4.05	1.45	2.75	2.7	9.05	5.1	6.55	3
Count	32	50	32	80	50	80	80	80	80	80	80
Confidence Level(95.0%)	0.493865	0.168586	0.299174	0.165075	0.192487	0.157025	0.179504	0.246397	0.257839	0.245087	0.317259

American AL175	Test Year 2011										
175 CFH	Control Group-Installed Year										
Code: 033	1996	1997	1998	1999	2000	2001	2002	2003	2005	2007	2009
Sample Plan	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced
Sample Size	80	80	80	80	80	80	50	50	50	80	50
Original Population	4975	9162	5513	8243	7549	4351	2665	2716	2218	3329	2761
# of Slow Failures	0	0	0	0	1	1	0	0	0	0	0
# of Fast Failures	0	1	1	1	1	0	0	1	1	0	1
Total Failures:	0	1	1	1	2	1	0	1	1	0	1
Accept Level	10	10	10	10	10	10	7	7	7	10	7
Reject Level	13	13	13	13	13	13	10	10	10	13	10
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
If Failed - Remove By:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Statistical Data:											
Mean (Average Proof)	0.145313	-0.09125	-0.18188	0.0675	0.249375	-0.0675	-0.052	-0.071	-0.309	0.091875	0.227
Median	0.425	-0.225	-0.25	0.15	0.15	-0.05	-0.075	-0.125	-0.4	0.15	0.2
Standard Deviation	1.369799	0.73544	1.243216	0.673837	1.230789	0.636252	0.523816	0.780508	0.810561	0.495897	0.830061
Sample Variance	1.876348	0.540872	1.545585	0.454057	1.514841	0.404816	0.274384	0.609193	0.657009	0.245914	0.689001
Skewness	-3.80531	0.415936	6.239718	0.253584	4.619775	-0.31115	-0.56185	0.754962	1.384932	-0.55307	3.661518
Minimum	-6.45	-1.75	-1.65	-1.45	-2.6	-2.45	-1.8	-1.6	-1.9	-1.55	-1.55
Maximum	1.65	2.25	9.6	2.4	9.1	1.75	1.3	2.55	3.1	1.3	4.95
Count	32	80	80	80	80	80	50	50	50	80	50
Confidence Level(95.0%)	0.493865	0.163664	0.276664	0.149955	0.273899	0.141591	0.148867	0.221818	0.230359	0.110357	0.235901

Year 2011

Meter Code 033 American AL175

Code & Year:	1985
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	2
-.4 to .4	12
.4 to 1.2	14
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	1986
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	9
-.4 to .4	27
.4 to 1.2	12
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	1987
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	4
-.4 to .4	16
.4 to 1.2	9
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	1988
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	8
-.4 to .4	36
.4 to 1.2	24
1.2 to 2.0	11
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	80

Code & Year:	1989
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	1
-1.2 to -.4	0
-.4 to .4	19
.4 to 1.2	28
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	1990
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	8
-.4 to .4	40
.4 to 1.2	26
1.2 to 2.0	3
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1991
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	5
-.4 to .4	31
.4 to 1.2	33
1.2 to 2.0	6
2.0 to 2.8	2
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1992
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	3
-.4 to .4	39
.4 to 1.2	33
1.2 to 2.0	3
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	1
Total	80

Code & Year:	1993
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	1
-1.2 to -.4	4
-.4 to .4	29
.4 to 1.2	35
1.2 to 2.0	6
2.0 to 2.8	1
2.8 to 3.6	1
GT 3.6	1
Total	80

Code & Year:	1994
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	9
-.4 to .4	34
.4 to 1.2	31
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	80

Year 2011 Meter Code 033 American AL175

Code & Year:	1995
Data Range	Number
LT -3.6	1
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	16
-.4 to .4	36
.4 to 1.2	17
1.2 to 2.0	4
2.0 to 2.8	2
2.8 to 3.6	1
GT 3.6	0
Total	80

Code & Year:	1996
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	23
-.4 to .4	38
.4 to 1.2	16
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1997
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	5
-1.2 to -.4	19
-.4 to .4	39
.4 to 1.2	14
1.2 to 2.0	2
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1998
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	27
-.4 to .4	43
.4 to 1.2	6
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	80

Code & Year:	1999
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	13
-.4 to .4	45
.4 to 1.2	18
1.2 to 2.0	1
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	2000
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	2
-1.2 to -.4	9
-.4 to .4	39
.4 to 1.2	23
1.2 to 2.0	5
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	80

Code & Year:	2001
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	1
-1.2 to -.4	18
-.4 to .4	45
.4 to 1.2	14
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	2002
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	6
-.4 to .4	34
.4 to 1.2	7
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	2003
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	14
-.4 to .4	22
.4 to 1.2	9
1.2 to 2.0	1
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	2005
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	4
-1.2 to -.4	20
-.4 to .4	21
.4 to 1.2	3
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	1
GT 3.6	0
Total	50

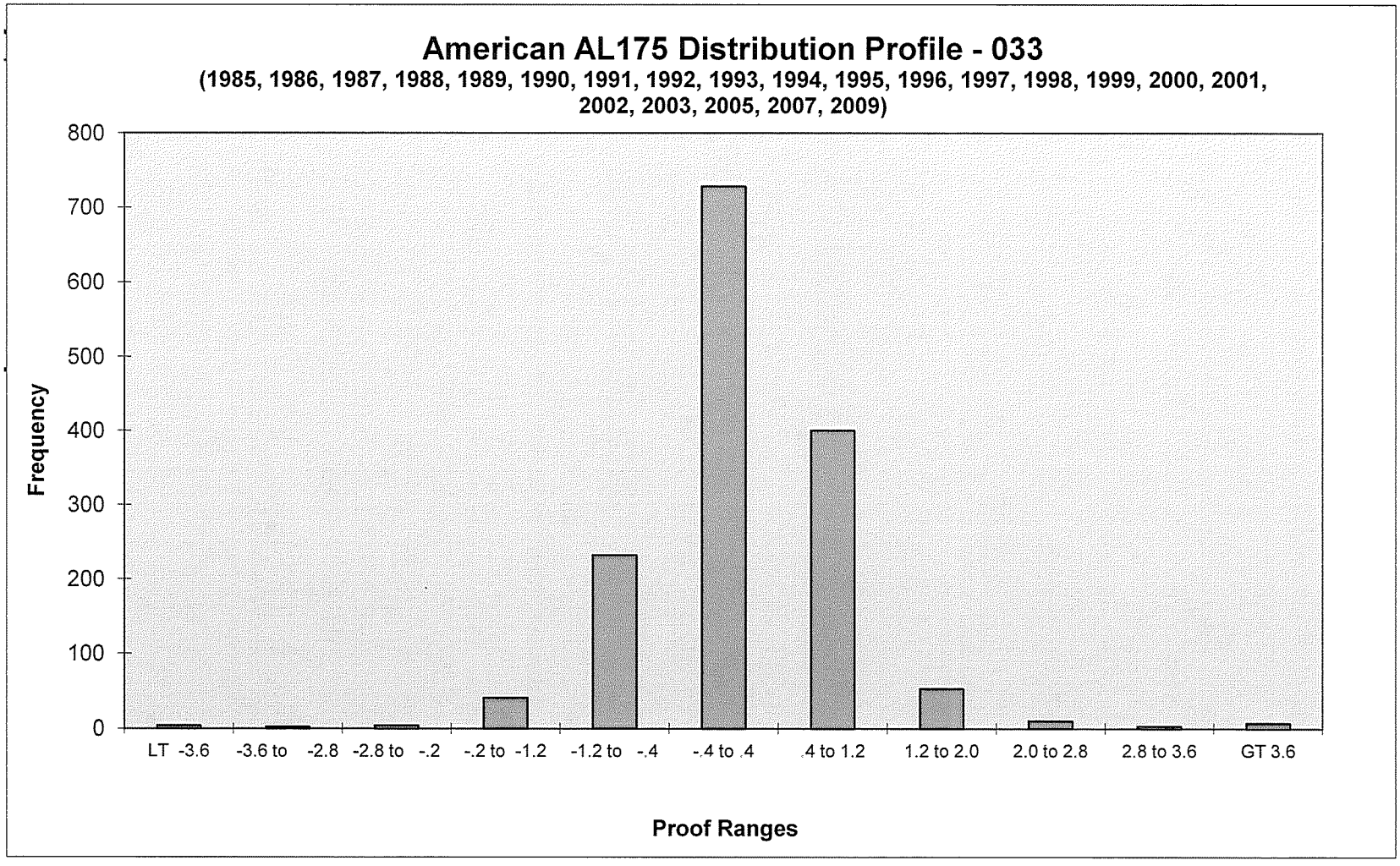
Year 2011

Meter Code 033 American AL175

Code & Year:	2007
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	10
-.4 to .4	51
.4 to 1.2	17
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	5
-.4 to .4	32
.4 to 1.2	11
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	50

Code & Year:	Total
Data Range	Number
LT -3.6	4
-3.6 to -2.8	2
-2.8 to -.2	4
-.2 to -1.2	41
-1.2 to -.4	232
-.4 to .4	728
.4 to 1.2	400
1.2 to 2.0	53
2.0 to 2.8	10
2.8 to 3.6	3
GT 3.6	7
Total	1484


American AL175 Distribution Profile - 033
(1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2005, 2007, 2009)
Frequency
800
700
600
500
400
300
200
100
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

American AL175	Test Year 2011								
175 CFH	Control Group-Installed Year								
Code: 33A	**1992**	**1993**	**1994**						
Sample Plan	Reduced	Reduced	Reduced						
Sample Size	80	50	50						
Original Population	4900	1932	2518						
# of Slow Failures	1	0	0						
# of Fast Failures	1	0	1						
Total Failures:	2	0	1						
Accept Level	10	7	7						
Reject Level	13	10	10						
Pass / Fail?	**Pass**	**Pass**	**Pass**						
If Failed - Remove By:	NA	NA	NA						
Statistical Data:									
Mean (Average Proof)	0.25125	0.295	0.256						
Median	0.25	0.3	0.25						
Standard Deviation	0.764479	0.710149	1.108945						
Sample Variance	0.584429	0.504311	1.229759						
Skewness	-0.22355	-0.51574	4.089495						
Minimum	-2.1	-2	-1.15						
Maximum	2.3	1.9	6.75						
Count	80	50	50						
Confidence Level(95.0%)	0.170127	0.201822	0.315159						

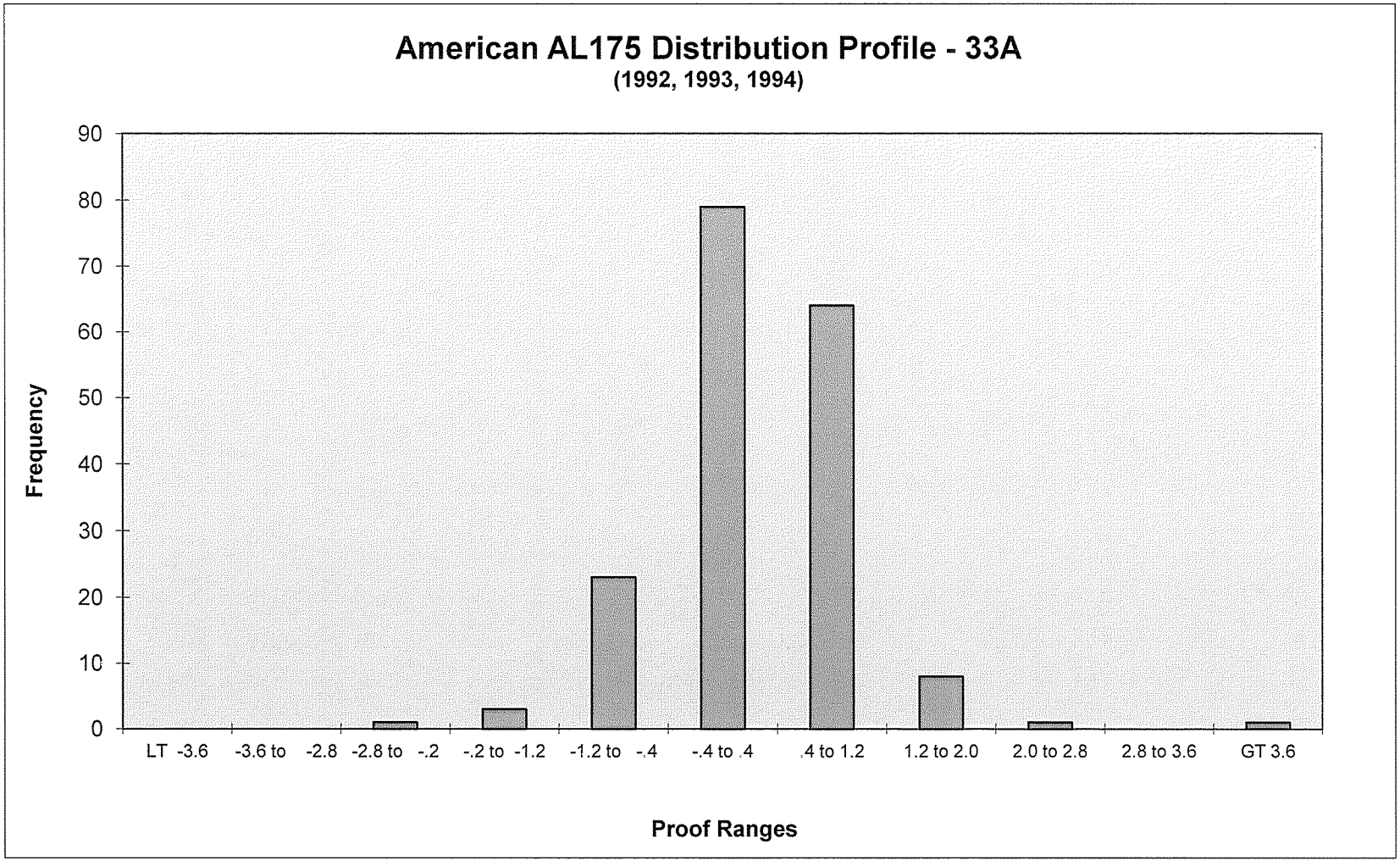
Year 2011 Meter Code 33A American AL175

Code & Year:	1992
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	2
-1.2 to -.4	8
-.4 to .4	35
.4 to 1.2	28
1.2 to 2.0	5
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1993
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	4
-.4 to .4	24
.4 to 1.2	18
1.2 to 2.0	3
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	1994
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	11
-.4 to .4	20
.4 to 1.2	18
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	50

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	3
-1.2 to -.4	23
-.4 to .4	79
.4 to 1.2	64
1.2 to 2.0	8
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	1
Total	180


American AL175 Distribution Profile - 33A
(1992, 1993, 1994)
Frequency
90
80
70
60
50
40
30
20
10
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

American 5B225	Test Year 2011							
225 CFH	Control Group-Installed Year							
Code: 041	1986	1989	1990	1995	1996			
Sample Plan	Single	Single	Single	Single	Single			
Sample Size	2*	2*	2*	32	32			
Original Population	6	15	6	77	119			
# of Slow Failures	1	0	0	0	4			
# of Fast Failures	0	0	0	0	0			
Total Failures:	1	0	0	0	4			
Accept Level	0	0	0	5	5			
Reject Level	1	1	1	6	6			
Pass / Fail?	**Fail**	**Pass**	**Pass**	**Pass**	**Pass**			
If Failed - Remove By:	Exhaust	NA	NA	NA	NA			
Statistical Data:								
Mean (Average Proof)	-11.6	-0.7	0.475	-0.08281	-1.63438			
Median	-11.6	-0.7	0.475	-0.05	-0.425			
Standard Deviation	15.202796	0.848528	1.378858	0.727414	4.897768			
Sample Variance	231.125	0.72	1.90125	0.529131	23.98814			
Skewness	NA	NA	NA	0.357492	-4.77825			
Minimum	-22.35	-1.3	-0.5	-1.35	-26.95			
Maximum	-0.85	-0.1	1.45	1.95	0.75			
Count	2	2	2	32	32			
Confidence Level(95.0%)	136.5917	7.623723	12.38855	0.262261	1.765834			

* Population less than required 32 minimum sample size - all meters to be changed - Single Sampling Plan for Normal Inspection used to obtain sample size to determine if control group passed or failed.

Year 2011 Meter Code 041 American 5B-225

Code & Year:	1986
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	0
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

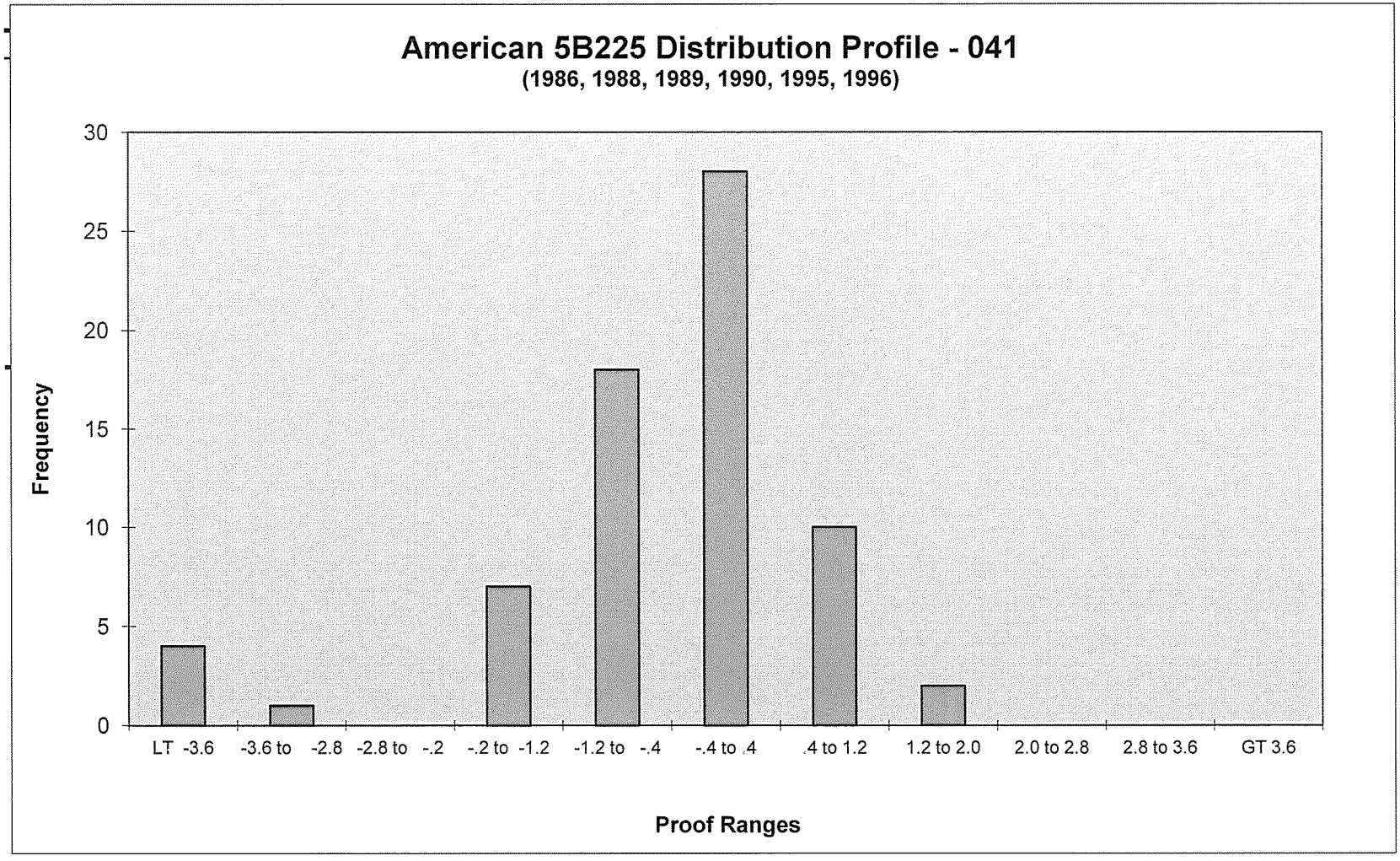
Code & Year:	1989
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	0
-.4 to .4	1
.4 to 1.2	0
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	1990
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	1
-.4 to .4	0
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	1995
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	8
-.4 to .4	15
.4 to 1.2	6
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	1996
Data Range	Number
LT -3.6	3
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	4
-1.2 to -.4	8
-.4 to .4	12
.4 to 1.2	4
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	Total
Data Range	Number
LT -3.6	4
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	7
-1.2 to -.4	18
-.4 to .4	28
.4 to 1.2	10
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	70


American 5B225 Distribution Profile - 041
(1986, 1988, 1989, 1990, 1995, 1996)
Frequency
30
25
20
15
10
5
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Rockwell R250	Test Year 2011								
250 CFH	Control Group-Installed Year								
Code: 057	1990	1995							
Sample Plan	Single	Single							
Sample Size	32	32							
Original Population	219	101							
# of Slow Failures	3	4							
# of Fast Failures	1	1							
Total Failures:	4	5							
Accept Level	5	5							
Reject Level	6	6							
Pass / Fail?	**Pass**	**Pass**							
If Failed - Remove By:	NA	NA							
Statistical Data:									
Mean (Average Proof)	-1.12188	-0.44219							
Median	-0.35	-0.4							
Standard Deviation	3.690702	1.445299							
Sample Variance	13.62128	2.088889							
Skewness	-4.2036	0.507794							
Minimum	-19.4	-3.25							
Maximum	2.5	4							
Count	32	32							
Confidence Level(95.0%)	1.33064	0.521086							

Year 2011

Meter Code 057 Rockwell R250

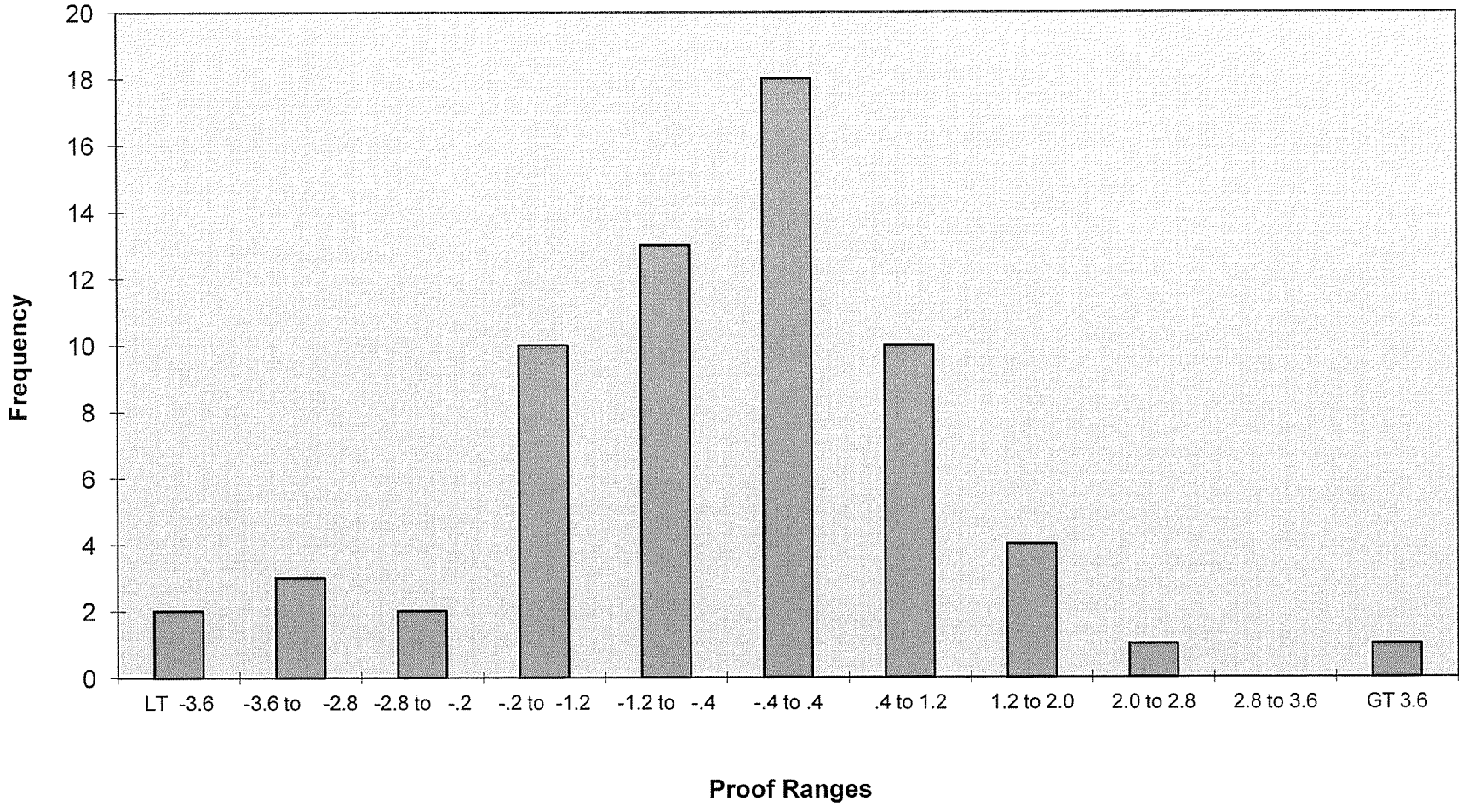
Code & Year:	1990
Data Range	Number
LT -3.6	2
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	6
-1.2 to -.4	5
-.4 to .4	12
.4 to 1.2	2
1.2 to 2.0	3
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	1995
Data Range	Number
LT -3.6	0
-3.6 to -2.8	2
-2.8 to -.2	2
-.2 to -1.2	4
-1.2 to -.4	8
-.4 to .4	6
.4 to 1.2	8
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	32

Code & Year:	Total
Data Range	Number
LT -3.6	2
-3.6 to -2.8	3
-2.8 to -.2	2
-.2 to -1.2	10
-1.2 to -.4	13
-.4 to .4	18
.4 to 1.2	10
1.2 to 2.0	4
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	1
Total	64

Rockwell R250 Distribution Profile - 057

(1990, 1995)



American AC250	Test Year 2011										
250 CFH	Control Group-Installed Year										
Code: 078	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Sample Plan	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced
Sample Size	32	80	80	80	50	80	50	2*	32	50	80
Original Population	858	3911	3388	3942	3003	4240	2582	8	570	2239	4258
# of Slow Failures	0	1	0	0	0	0	0	0	0	0	0
# of Fast Failures	0	2	0	0	1	2	0	0	0	0	0
Total Failures:	0	3	0	0	1	2	0	0	0	0	0
Accept Level	5	10	10	10	7	10	7	0	5	7	10
Reject Level	8	13	13	13	10	13	10	1	8	10	13
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
If Failed - Remove By:	NA	NA	NA	NA	NA	NA	NA	Exhaust	NA	NA	NA
Statistical Data:											
Mean (Average Proof)	0.29375	0.02375	-0.2675	-0.1725	0.061	-0.16125	-0.581	0.05	0.46875	-0.057	0.00125
Median	0.2	0.075	-0.25	-0.125	-0.175	-0.275	-0.575	0.05	0.475	-0.125	0.05
Standard Deviation	0.517399	0.856804	0.545412	0.572519	1.478737	0.745577	0.53327	1.343503	0.530178	0.674235	0.589785
Sample Variance	0.267702	0.734112	0.297475	0.327778	2.186662	0.555884	0.284377	1.805	0.281089	0.454593	0.347847
Skewness	0.156471	0.775859	-0.18005	-0.41257	5.923342	0.838477	0.150523	NA	-0.10283	0.148647	-0.53552
Minimum	-0.6	-3.1	-1.5	-1.7	-1.5	-1.8	-1.7	-0.9	-0.5	-1.6	-1.85
Maximum	1.45	4.15	1.05	1.2	9.75	2.65	0.8	1	1.6	1.45	1
Count	32	80	80	80	50	80	50	2	32	50	80
Confidence Level(95.0%)	0.186542	0.190672	0.121376	0.127408	0.420252	0.16592	0.151554	12.07089	0.19115	0.191615	0.13125

American AC250	Test Year 2011										
250 CFH	Control Group-Installed Year										
Code: 078	1996	1997	1998	1999	2000	2001	2002	2003	2005	2007	2009
Sample Plan	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced
Sample Size	80	80	80	80	80	80	50	50	80	80	80
Original Population	9177	8450	6376	4589	5495	5275	2349	2094	7269	5287	6857
# of Slow Failures	0	1	0	0	0	0	0	0	0	0	0
# of Fast Failures	0	3	0	0	0	0	0	1	0	0	0
Total Failures:	0	4	0	0	0	0	0	1	0	0	0
Accept Level	10	10	10	10	10	10	7	7	10	10	10
Reject Level	13	13	13	13	13	13	10	10	13	13	13
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
If Failed - Remove By:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Statistical Data:											
Mean (Average Proof)	-0.06313	0.284375	0.05375	-0.0575	0.165	0.115625	0.193	-0.023	0.378	0.24	0.180625
Median	0	0.2	0.1	-0.025	0.175	0.1	0.2	-0.05	0.425	0.275	0.2
Standard Deviation	0.538384	0.944424	0.557332	0.538816	0.455931	0.525345	0.37444	0.747595	0.591536	0.517504	0.482641
Sample Variance	0.289857	0.891936	0.310619	0.290323	0.207873	0.275987	0.140205	0.558899	0.349914	0.26781	0.232943
Skewness	-0.50067	1.385872	-0.18758	-0.45731	-0.20185	-0.04459	0.322598	1.50084	-0.88168	-0.11327	0.338705
Minimum	-1.6	-3	-1.25	-1.95	-1.2	-1.4	-0.6	-2	-1.5	-1.05	-1
Maximum	1.15	4.95	1.3	1.05	1.2	1.25	1.2	3.4	1.45	1.4	1.85
Count	80	80	80	80	80	80	50	50	50	80	80
Confidence Level(95.0%)	0.119811	0.210171	0.124028	0.119908	0.101463	0.11691	0.106415	0.212464	0.168113	0.115165	0.107407

Year 2011

Meter Code 078 American AC250

Code & Year:	1985
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	3
-.4 to .4	16
.4 to 1.2	12
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	1986
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	11
-.4 to .4	49
.4 to 1.2	13
1.2 to 2.0	1
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	1
Total	80

Code & Year:	1987
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	4
-1.2 to -.4	23
-.4 to .4	48
.4 to 1.2	5
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1988
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	5
-1.2 to -.4	18
-.4 to .4	46
.4 to 1.2	11
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1989
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	10
-.4 to .4	33
.4 to 1.2	5
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	50

Code & Year:	1990
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	6
-1.2 to -.4	21
-.4 to .4	40
.4 to 1.2	11
1.2 to 2.0	0
2.0 to 2.8	2
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1991
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	5
-1.2 to -.4	27
-.4 to .4	16
.4 to 1.2	2
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	1992
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	0
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	1993
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	13
.4 to 1.2	17
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	1994
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	15
-.4 to .4	22
.4 to 1.2	10
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Year 2011

Meter Code 078 American AC250

Code & Year:	1995
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	11
-.4 to .4	44
.4 to 1.2	22
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1996
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	14
-.4 to .4	49
.4 to 1.2	14
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1997
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	12
-.4 to .4	38
.4 to 1.2	22
1.2 to 2.0	4
2.0 to 2.8	1
2.8 to 3.6	1
GT 3.6	1
Total	80

Code & Year:	1998
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	15
-.4 to .4	54
.4 to 1.2	9
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	1999
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	15
-.4 to .4	50
.4 to 1.2	14
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	2000
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	6
-.4 to .4	51
.4 to 1.2	23
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

Code & Year:	2001
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	13
-.4 to .4	46
.4 to 1.2	19
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	80

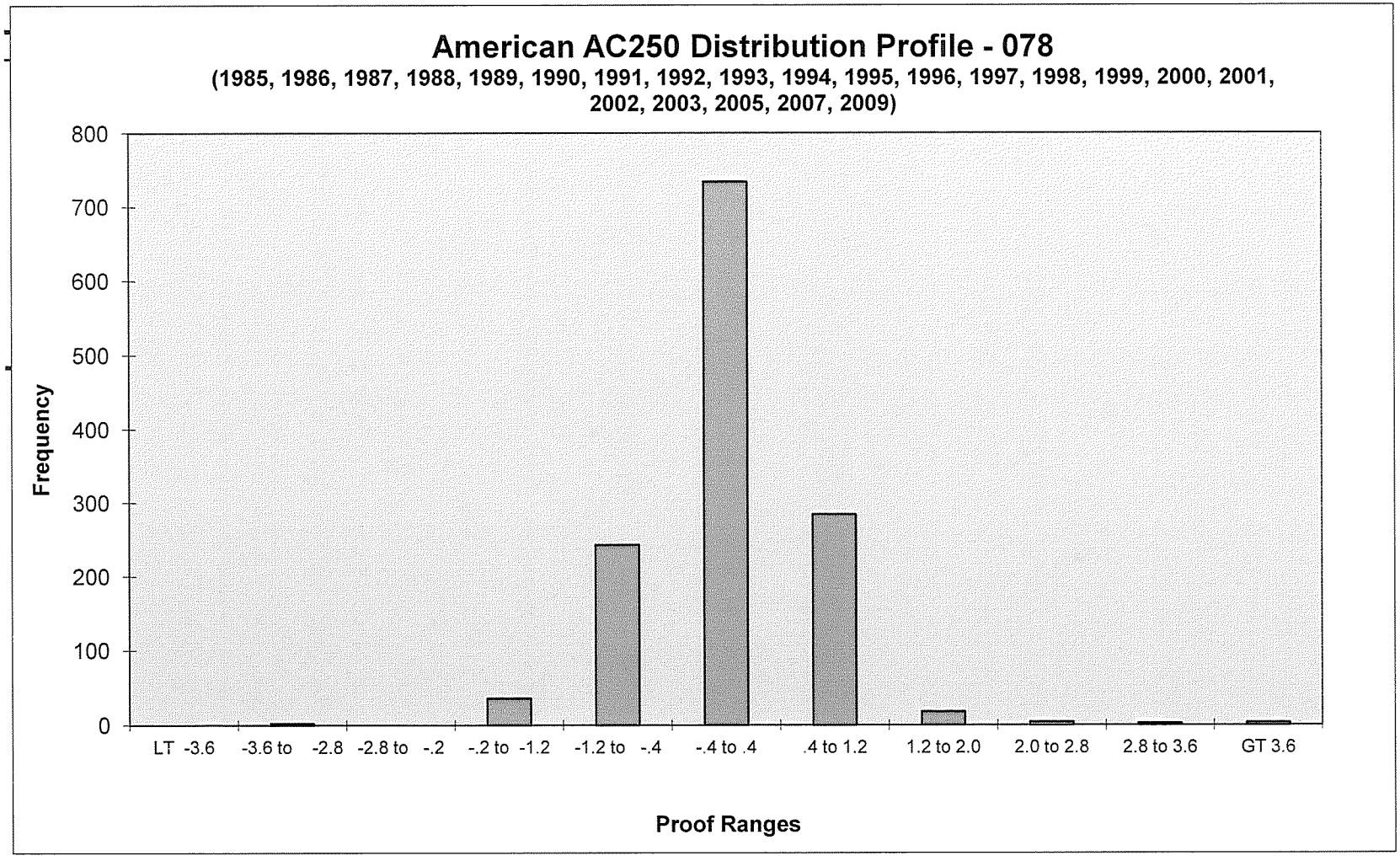
Code & Year:	2002
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	3
-.4 to .4	35
.4 to 1.2	12
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	2003
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	11
-.4 to .4	27
.4 to 1.2	10
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	1
GT 3.6	0
Total	50

Code & Year:	2005
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	4
-.4 to .4	20
.4 to 1.2	22
1.2 to 2.0	3
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Error

An error occurred while processing this page. See the system log for more details.


American AC250 Distribution Profile - 078
(1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2005, 2007, 2009)
Frequency
800
700
600
500
400
300
200
100
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Rockwell R200	Test Year 2011								
200 CFH	Control Group-Installed Year								
Code: 079	1985	1996							
Sample Plan	Single	Single							
Sample Size	32	32							
Original Population	171	146							
# of Slow Failures	0	1							
# of Fast Failures	2	0							
Total Failures:	2	1							
Accept Level	5	5							
Reject Level	6	6							
Pass/ Fail?	**Pass**	**Pass**							
If Failed - Remove By:	NA	NA							
Statistical Data:									
Mean (Average Proof)	0.69375	-0.00937							
Median	0.725	-0.025							
Standard Deviation	0.92202	0.846572							
Sample Variance	0.850121	0.716683							
Skewness	0.453594	-1.28933							
Minimum	-1.3	-3.25							
Maximum	3.15	2							
Count	32	32							
Confidence Level(95.0%)	0.332424	0.305222							

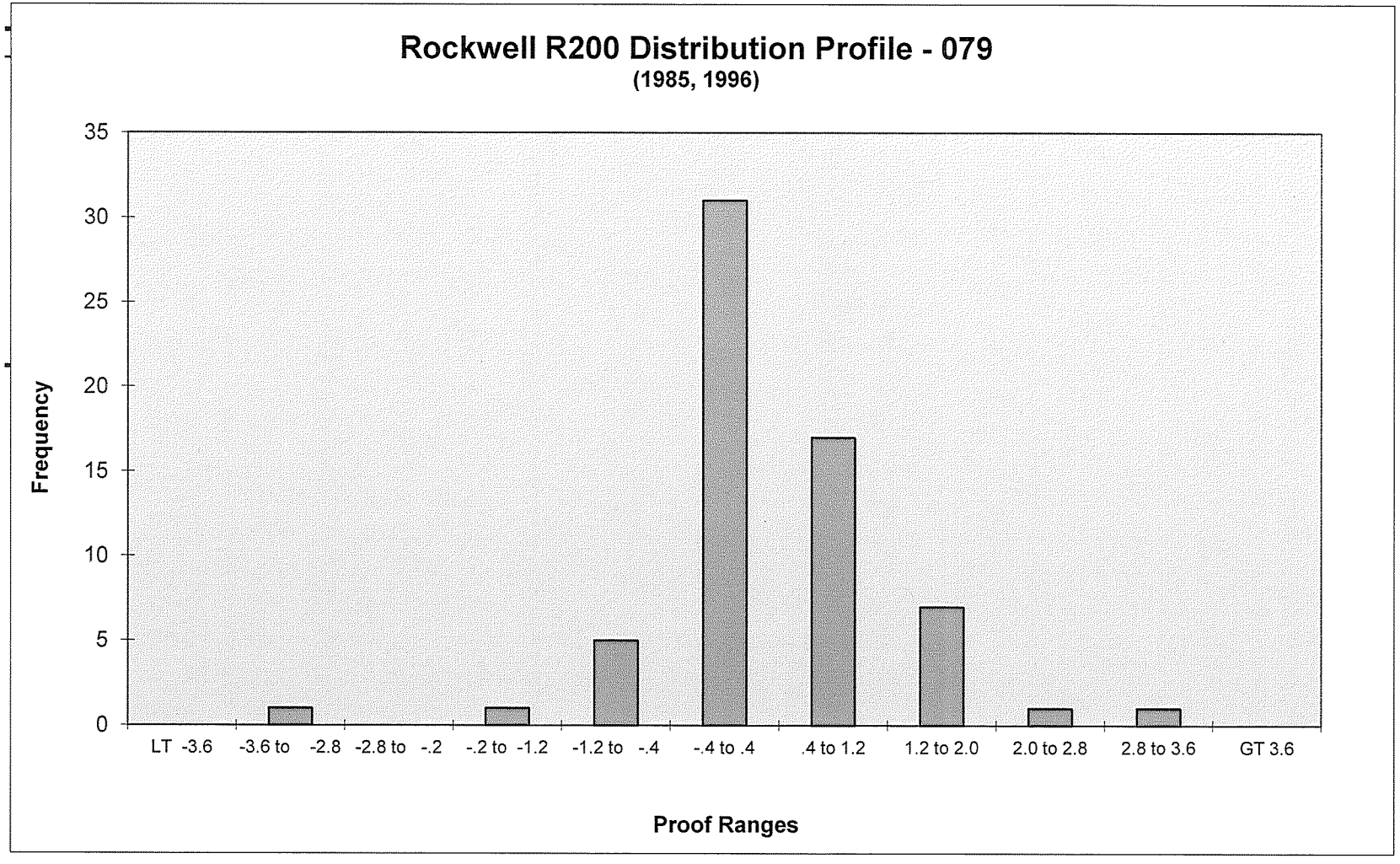
Year 2011

Meter Code 079 Rockwell R200

Code & Year:	1985
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	0
-.4 to .4	12
.4 to 1.2	12
1.2 to 2.0	5
2.0 to 2.8	1
2.8 to 3.6	1
GT 3.6	0
Total	32

Code & Year:	1996
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	5
-.4 to .4	19
.4 to 1.2	5
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	5
-.4 to .4	31
.4 to 1.2	17
1.2 to 2.0	7
2.0 to 2.8	1
2.8 to 3.6	1
GT 3.6	0
Total	64


Rockwell R200 Distribution Profile - 079
(1985, 1996)
Frequency
35
30
25
20
15
10
5
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

American AL1000	Test Year 2011								
1000 CFH	Control Group-Installed Year								
Code: 014	2001	2002	2003	2004	2005	2006	2007	2009	
Sample Plan	Single	Single	Single	Single	Single	Single	Single	Single	
Sample Size	20*	8	20	32	50	50	50	50	
Original Population	122	20	119	244	305	285	344	457	
# of Slow Failures	1	1	1	4	2	6	0	3	
# of Fast Failures	1	0	0	0	1	0	0	0	
Total Failures:	2	1	1	4	3	6	0	3	
Accept Level	3	1	3	5	7	7	7	7	
Reject Level	4	2	4	6	8	8	8	8	
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	
If Failed - Remove By:	Exhaust	NA	NA	NA	NA	NA	NA	NA	
Statistical Data:									
Mean (Average Proof)	0.22	-0.8875	-0.6775	-0.73906	-0.136	-0.328	0.2	-0.108	
Median	0.5	-0.7	-0.85	-0.6	-0.25	-0.175	0.225	0.05	
Standard Deviation	1.294055	1.458167	0.947639	0.993831	1.703808	1.559669	0.735402	1.117	
Sample Variance	1.674579	2.12625	0.89802	0.987699	2.902963	2.432567	0.540816	1.24769	
Skewness	-1.33322	-1.40851	0.209124	-0.28715	4.151169	-1.94912	-0.18449	-0.87169	
Minimum	-3.6	-3.95	-2.1	-2.7	-2.75	-7.45	-1.55	-3.35	
Maximum	2.25	0.5	0.85	0.9	9.9	1.85	1.7	1.85	
Count	20	8	20	32	50	50	50	50	
Confidence Level(95.0%)	0.605636	1.219058	0.443509	0.358314	0.484217	0.443253	0.208999	0.317448	

* Control group in 10th year of service - maximum service period - all meters to be removed/tested. Sample size based on population was used to determine if group passed/failed in it's last year of service.

Year 2011 Meter Code 014 American AL1000

Code & Year:	2001
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	3
-.4 to .4	5
.4 to 1.2	6
1.2 to 2.0	3
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	0
Total	20

Code & Year:	2002
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	0
-.4 to .4	3
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2003
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	6
-1.2 to -.4	5
-.4 to .4	4
.4 to 1.2	4
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	20

Code & Year:	2004
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	4
-.2 to -1.2	5
-1.2 to -.4	10
-.4 to .4	9
.4 to 1.2	4
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	32

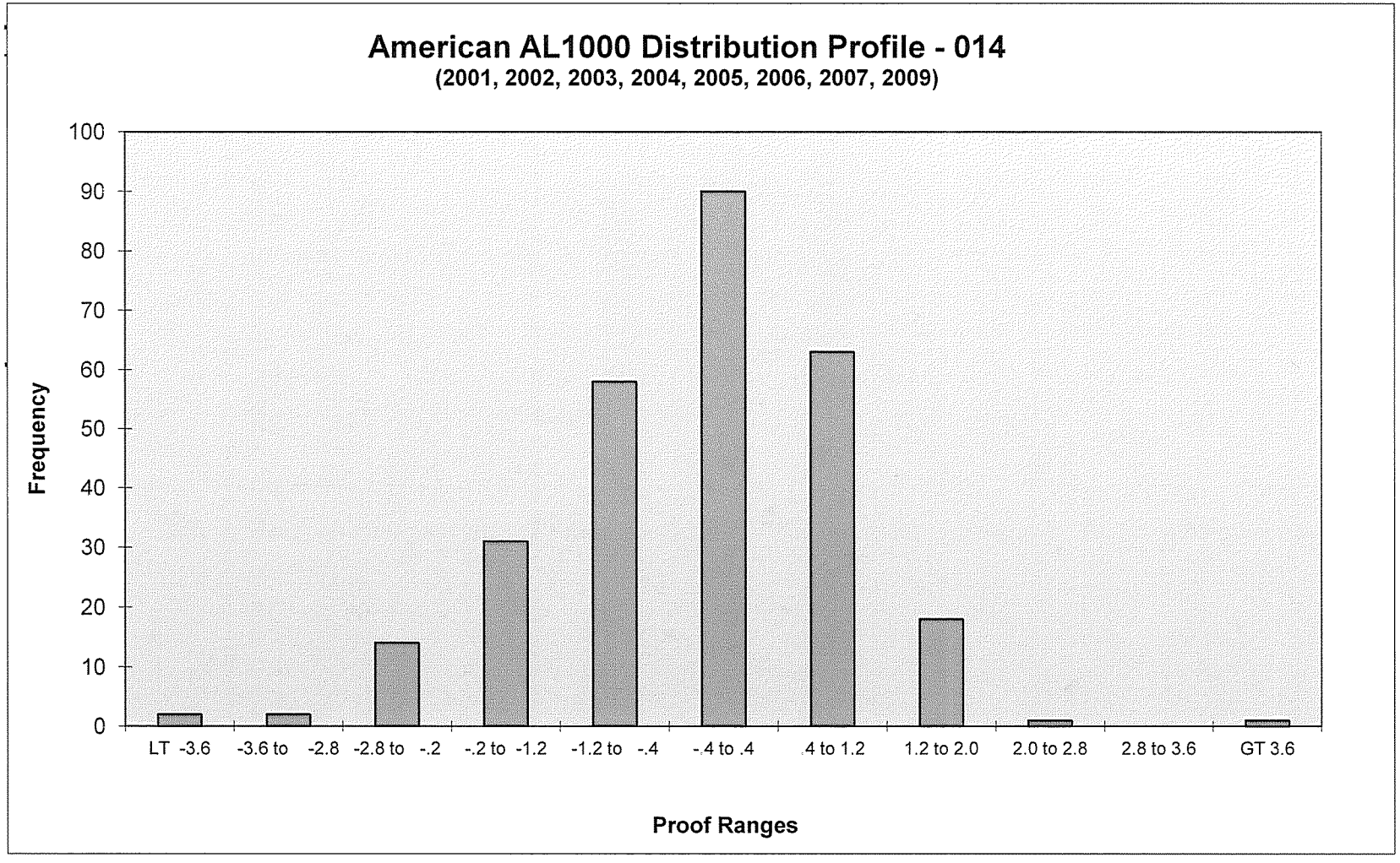
Code & Year:	2005
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	2
-.2 to -1.2	5
-1.2 to -.4	13
-.4 to .4	20
.4 to 1.2	7
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	1
Total	50

Code & Year:	2006
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	5
-.2 to -1.2	5
-1.2 to -.4	9
-.4 to .4	14
.4 to 1.2	10
1.2 to 2.0	6
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	2007
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	9
-.4 to .4	18
.4 to 1.2	17
1.2 to 2.0	4
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	1
-2.8 to -.2	2
-.2 to -1.2	4
-1.2 to -.4	9
-.4 to .4	17
.4 to 1.2	14
1.2 to 2.0	3
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	Total
Data Range	Number
LT -3.6	2
-3.6 to -2.8	2
-2.8 to -.2	14
-.2 to -1.2	31
-1.2 to -.4	58
-.4 to .4	90
.4 to 1.2	63
1.2 to 2.0	18
2.0 to 2.8	1
2.8 to 3.6	0
GT 3.6	1
Total	280


American AL1000 Distribution Profile - 014
(2001, 2002, 2003, 2004, 2005, 2006, 2007, 2009)
Frequency
100
90
80
70
60
50
40
30
20
10
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

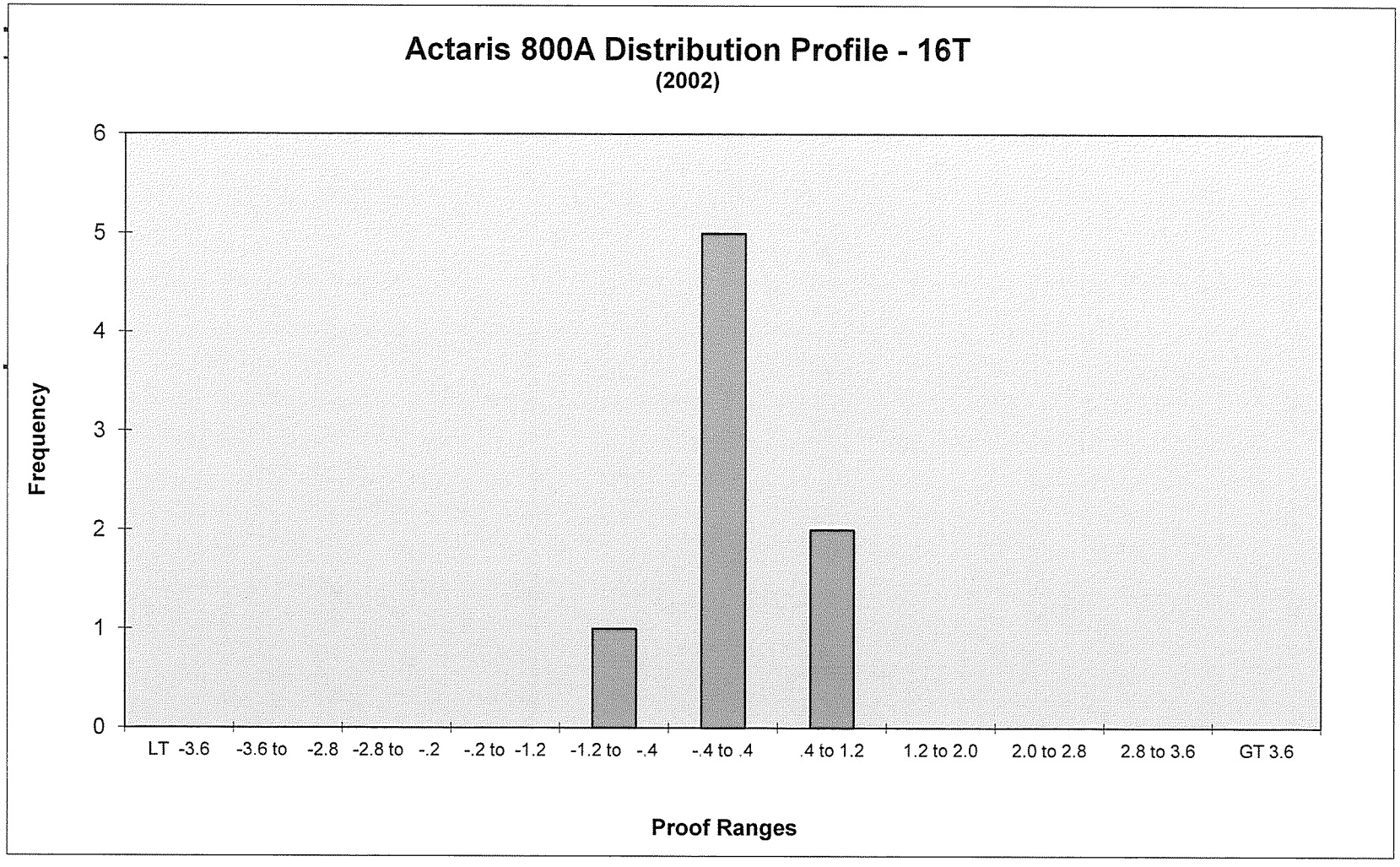
Actaris 800A	Test Year 2011								
800 CFH	Control Group-Installed Year								
Code 16T	2002								
Sample Plan	Single								
Sample Size	8								
Original Population	41								
# of Slow Failures	0								
# of Fast Failures	0								
Total Failures:	0								
Acept Level	1								
Reject Level	2								
Pass / Fail ?	**Pass**								
If Failed - Remove By:	NA								
Statistical Data:									
Mean (Average Proof)	0.23125								
Median	0.35								
Standard Deviation	0.478791								
Sample Variance	0.229241								
Skewness	-0.96586								
Minimum	-0.65								
Maximum	0.85								
Count	8								
Confidence Level(95.0%)	0.40028								

Year 2011

Meter Code 16T Actaris 800A

Code & Year:	2002
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	5
.4 to 1.2	2
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	5
.4 to 1.2	2
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8


Actaris 800A Distribution Profile - 16T
(2002)
Frequency
0
1
2
3
4
5
6
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Actaris 1000A	Test Year 2011								
1000 CFH	Control Group-Installed Year								
Code 017	2002	2003							
Sample Plan	Single	Single							
Sample Size	8	2							
Original Population	39	4							
# of Slow Failures	0	0							
# of Fast Failures	0	0							
Total Failures:	0	0							
Accept Level	1	0							
Reject Level	2	1							
Pass / Fail ?	**Pass**	**Pass**							
If Failed - Remove By:	NA	NA							
Statistical Data:									
Mean (Average Proof)	-0.01875	0.9							
Median	-0.075	0.9							
Standard Deviation	0.587937	0.070711							
Sample Variance	0.34567	0.005							
Skewness	0.788717	NA							
Minimum	-0.65	0.85							
Maximum	1	0.95							
Count	8	2							
Confidence Level(95.0%)	0.491527	0.63531							

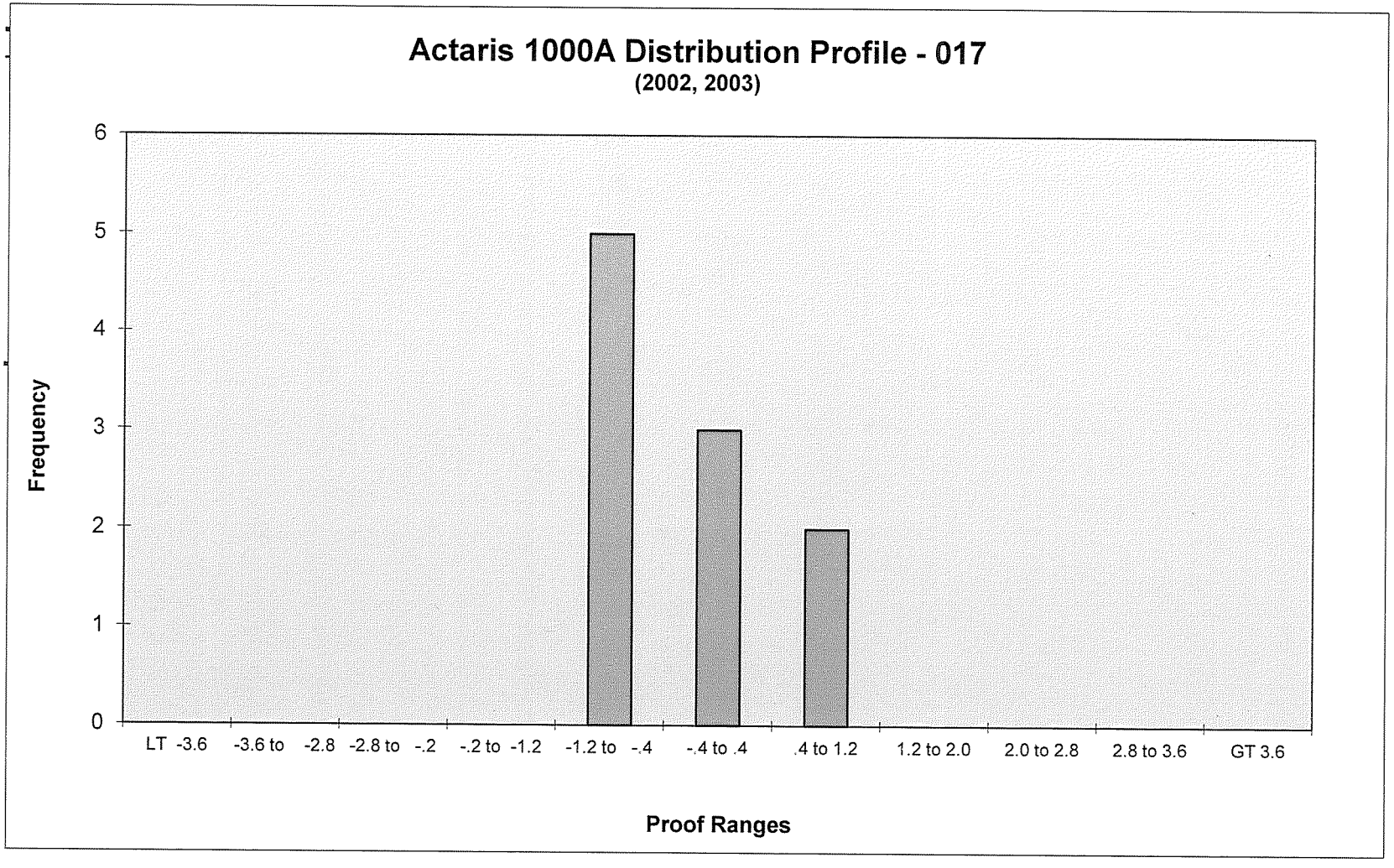
Year 2011

Meter Code 017 Actaris 1000A

Code & Year:	2003
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	3
-.4 to .4	3
.4 to 1.2	2
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2003
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	2
-.4 to .4	0
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	5
-.4 to .4	3
.4 to 1.2	2
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	10


Actaris 1000A Distribution Profile - 017
(2002, 2003)
Frequency
0
1
2
3
4
5
6
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

American AL 1400	Test Year 2011								
1400 CFH	Control Group-Installed Year								
Code: 019	2001	2002	2003	2004	2005	2006	2007	2009	
Sample Plan	Single	Single	Single	Single	Single	Single	Single	Single	
Sample Size	2*	2	2	2	8	8	8	2	
Original Population	9	8	11	12	22	16	31	7	
# of Slow Failures	0	0	0	0	0	0	0	0	
# of Fast Failures	0	0	0	0	0	0	0	0	
Total Failures:	0	0	0	0	0	0	0	0	
Accept Level	0	0	0	0	1	1	1	0	
Reject Level	1	1	1	1	2	2	2	1	
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	
If Failed - Remove By:	Exhaust	NA	NA	NA	NA	NA	NA	NA	
Statistical Data:									
Mean (Average Proof)	-0.75	-0.05	-0.65	-0.2	-0.28125	-1.0375	-0.51875	-1.075	
Median	-0.75	-0.05	-0.65	-0.2	-0.35	-1.25	-0.375	-1.075	
Standard Deviation	0.848528	0.636396	0.141421	0.141421	0.63972	0.818426	1.008867	1.237437	
Sample Variance	0.72	0.405	0.02	0.02	0.409241	0.669821	1.017813	1.53125	
Skewness	NA	NA	NA	NA	0.573819	0.206357	0.168885	NA	
Minimum	-1.35	-0.5	-0.75	-0.3	-1	-1.95	-2	-1.95	
Maximum	-0.15	0.4	-0.55	-0.1	0.8	-0.1	1.2	-0.2	
Count	2	2	2	2	8	8	8	2	
Confidence Level(95.0%)	7.623723	5.717792	1.27062	1.27062	0.534819	0.684221	0.843434	11.11793	

* Control group in 10th year of service - maximum service period - all meters to be removed/tested. Sample size based on population was used to determine if group passed/failed in it's last year of service.

Year 2011 Meter Code 019 American AL 1400

Code & Year:	2001
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	0
-.4 to .4	1
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	2002
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	1
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	2003
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	2
-.4 to .4	0
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	2004
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	0
-.4 to .4	2
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

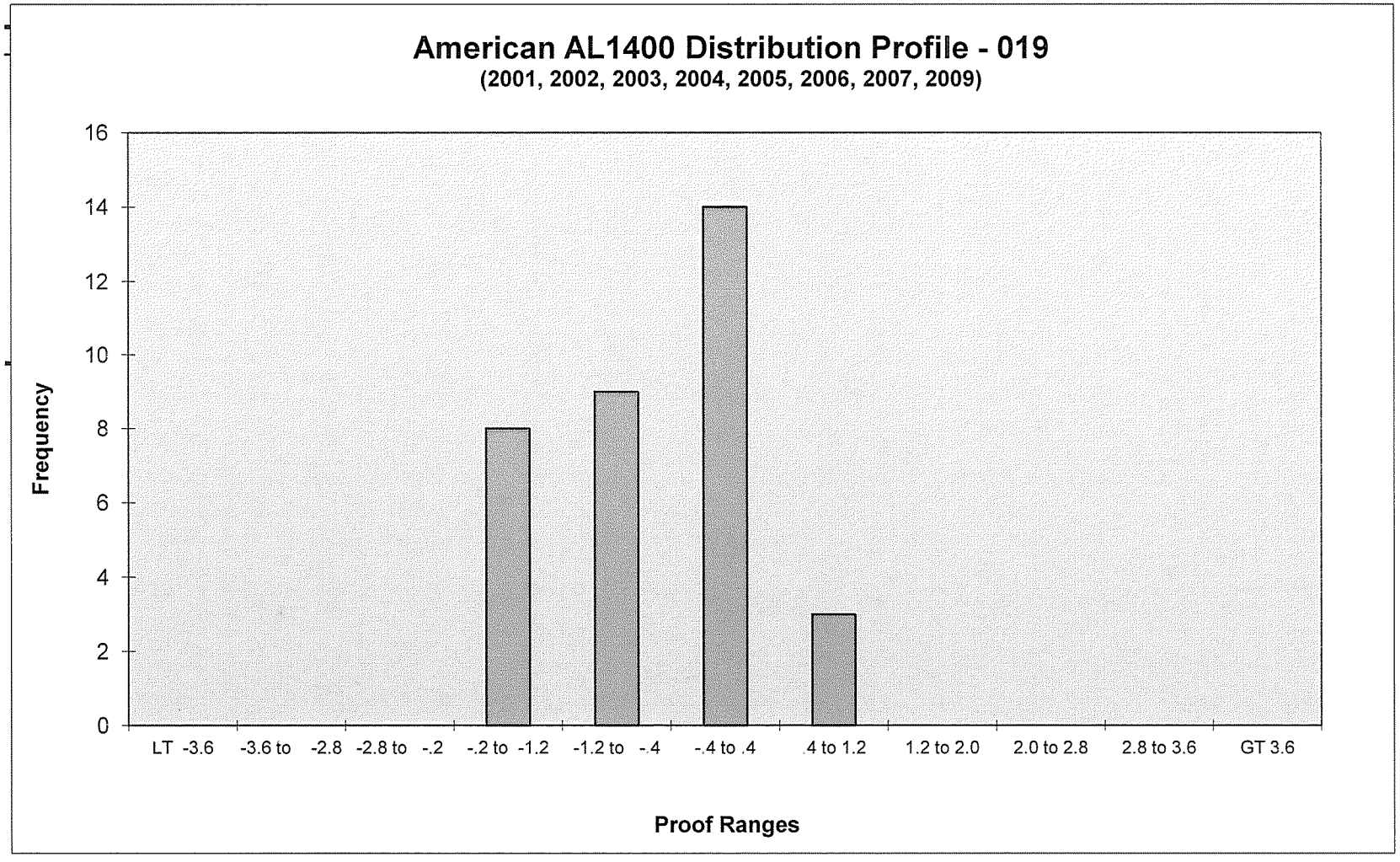
Code & Year:	2005
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	3
-.4 to .4	3
.4 to 1.2	2
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2006
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	4
-1.2 to -.4	1
-.4 to .4	3
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2007
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	2
-.4 to .4	3
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	0
-.4 to .4	1
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	8
-1.2 to -.4	9
-.4 to .4	14
.4 to 1.2	3
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	34

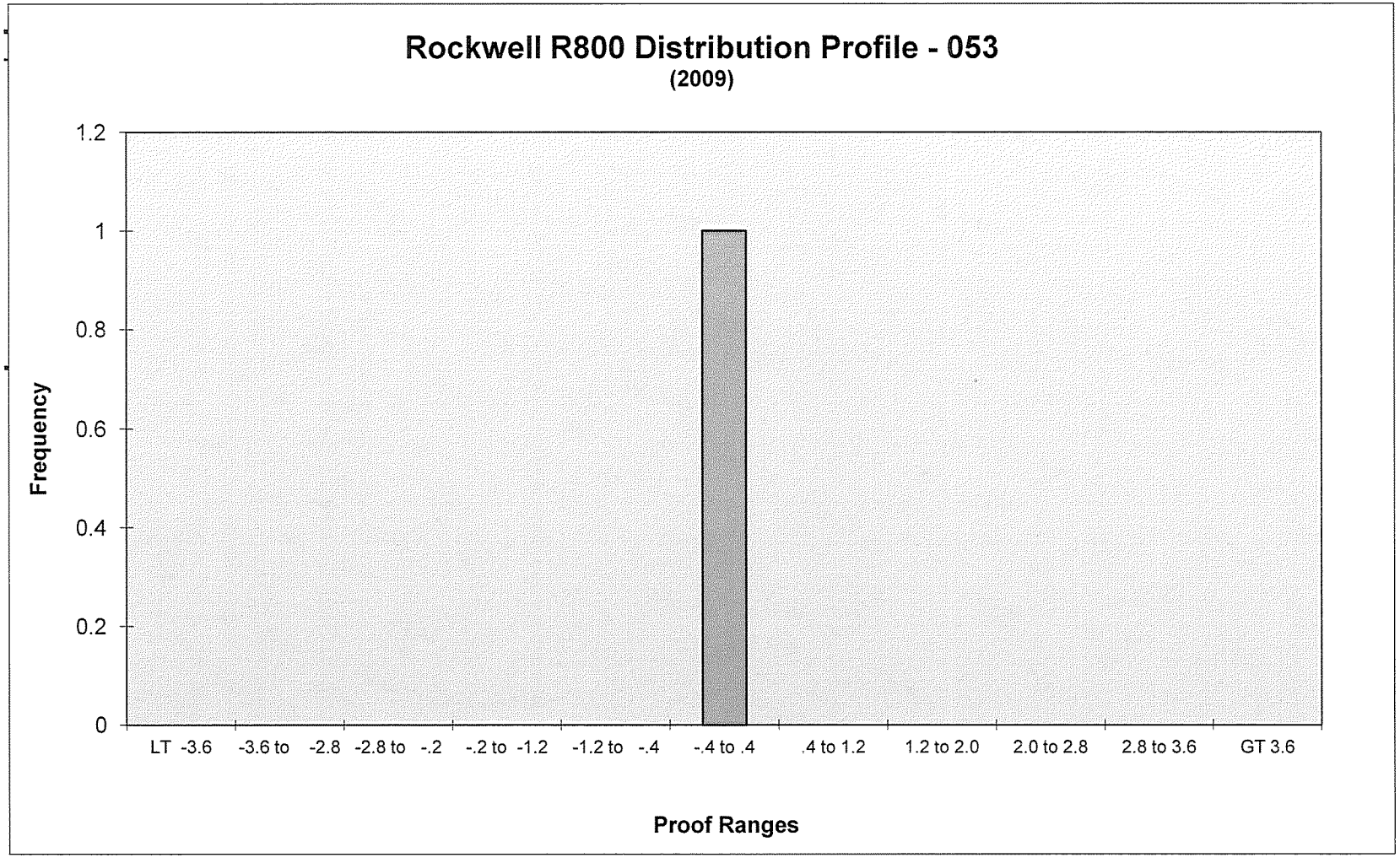

American AL1400 Distribution Profile - 019
(2001, 2002, 2003, 2004, 2005, 2006, 2007, 2009)
Frequency
16
14
12
10
8
6
4
2
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Rockwell R800	Test Year 2011								
800 CFH	Control Group-Installed Year								
Code: 053	2009								
Sample Plan	Single								
Sample Size	1								
Original Population	1								
# of Slow Failures	0								
# of Fast Failures	0								
Total Failures:	0								
Accept Level	0								
Reject Level	1								
Pass / Fail?	**Pass**								
If Failed - Remove By:	Exhaust								
Statistical Data:									
Mean (Average Proof)	0.3								
Median	0.3								
Standard Deviation	NA								
Sample Variance	NA								
Skewness	NA								
Minimum	0.3								
Maximum	0.3								
Count	1								
Confidence Level(95.0%)	NA								

Year 2011 Meter Code 053 Rockwell R800

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	0
-.4 to .4	1
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	1

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	0
-.4 to .4	1
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	1


Rockwell R800 Distribution Profile - 053
(2009)
Frequency
1.2
1
0.8
0.6
0.4
0.2
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Rockwell #3 Emco	Test Year 2011								
1200 CFH	Control Group-Installed Year								
Code: 056	2001	2002	2003	2004	2005	2006	2007	2009	
Sample Plan	Single	Single	Single	Single	Single	Single	Single	Single	
Sample Size	2*	8	8	13	8	8	13	8	
Original Population	12	20	25	63	45	38	71	20	
# of Slow Failures	0	0	0	0	0	0	0	0	
# of Fast Failures	0	0	0	0	0	0	0	0	
Total Failures:	0	0	0	0	0	0	0	0	
Accept Level	0	1	1	2	1	1	2	1	
Reject Level	1	2	2	3	2	2	3	2	
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	
If Failed - Remove By:	Exhaust	NA	NA	NA	NA	NA	NA	NA	
Statistical Data:									
Mean (Average Proof)	-0.95	0.00625	-0.09375	-0.66154	-0.95625	-0.61875	-0.13846	-0.00625	
Median	-0.95	0	-0.275	-0.5	-0.75	-0.65	-0.35	-0.2	
Standard Deviation	0.070711	0.971904	0.995862	0.675202	0.451535	0.694847	0.704791	0.742793	
Sample Variance	0.005	0.944598	0.991741	0.455897	0.203884	0.482813	0.496731	0.551741	
Skewness	NA	0.068601	-0.04981	-0.60396	-0.89147	-0.32872	0.098395	1.103034	
Minimum	-1	-1.3	-1.75	-1.95	-1.7	-1.8	-1.45	-1	
Maximum	-0.9	1.35	1.35	0.6	-0.45	0.3	1.1	1.5	
Count	2	8	8	13	8	8	13	8	
Confidence Level(95.0%)	0.63531	0.812532	0.832561	0.40802	0.377493	0.580907	0.425901	0.62099	

* Control group in 10th year of service - maximum service period - all meters to be removed/tested. Sample size based on population was used to determine if group passed/failed in it's last year of service.

Year 2011 Meter Code 056 Rockwell #3 Emco

Code & Year:	2001
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	2
-.4 to .4	0
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	2002
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	1
-.4 to .4	4
.4 to 1.2	1
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2003
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	2
-.4 to .4	3
.4 to 1.2	1
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2004
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	6
-.4 to .4	4
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	13

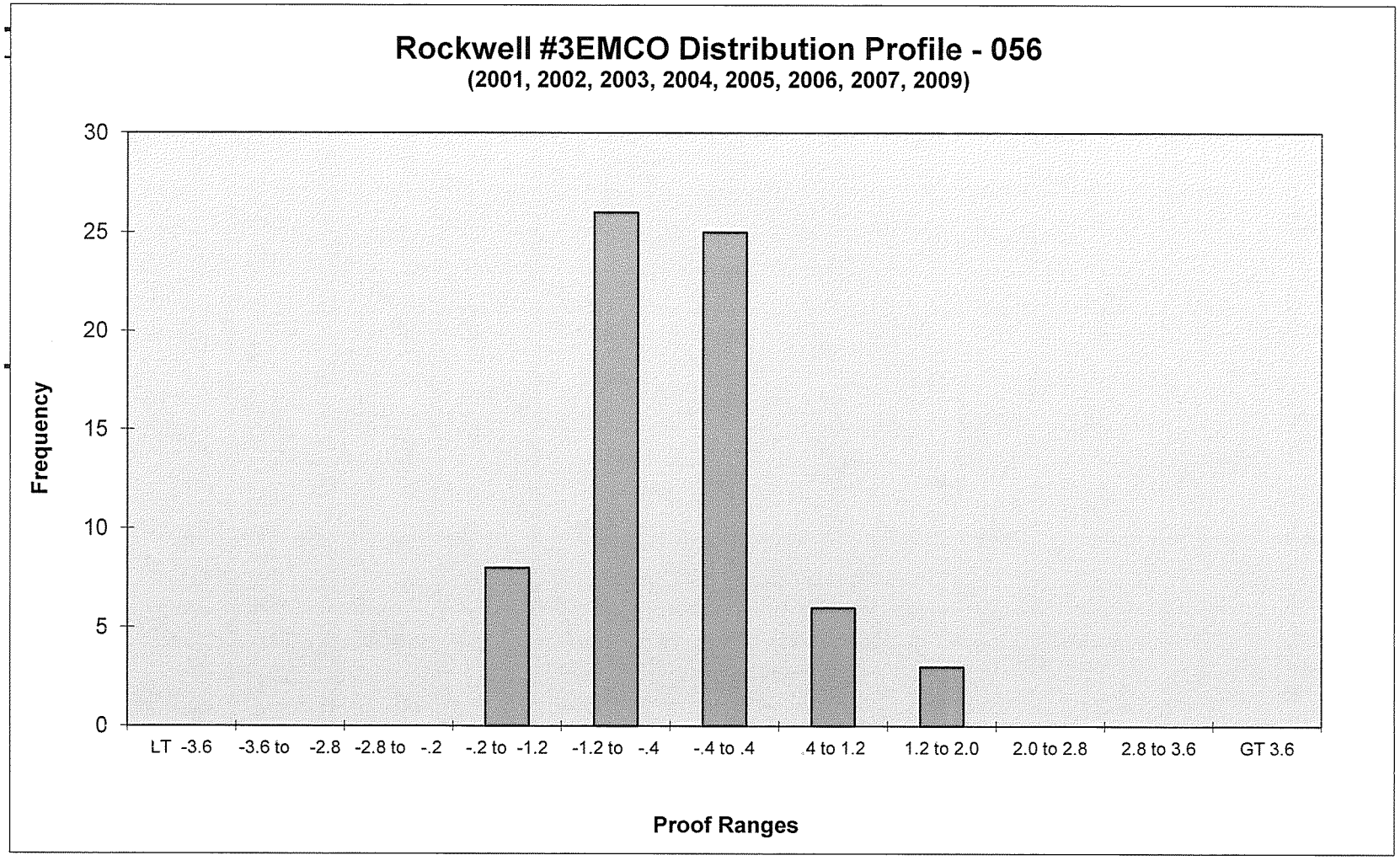
Code & Year:	2005
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	6
-.4 to .4	0
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2006
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	4
-.4 to .4	3
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2007
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	4
-.4 to .4	5
.4 to 1.2	3
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	13

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	6
.4 to 1.2	0
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	8
-1.2 to -.4	26
-.4 to .4	25
.4 to 1.2	6
1.2 to 2.0	3
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	68


Rockwell #3EMCO Distribution Profile - 056
(2001, 2002, 2003, 2004, 2005, 2006, 2007, 2009)
Frequency
30
25
20
15
10
5
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Rockwell R750	Test Year 2011								
750 CFH	Control Group-Installed Year								
Code: 058	2001	2002	2003	2004	2005	2006	2007	2009	
Sample Plan	Single	Single	Single	Single	Single	Single	Single	Single	
Sample Size	20*	13	20	32	50	50	50	50	
Original Population	131	56	129	174	317	332	380	403	
# of Slow Failures	1	1	1	2	2	0	0	0	
# of Fast Failures	0	0	0	2	0	2	2	0	
Total Failures:	1	1	1	4	2	2	2	0	
Accept Level	3	2	3	5	7	7	7	7	
Reject Level	4	3	4	6	8	8	8	8	
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	
If Failed - Remove By:	Exhaust	NA	NA	NA	NA	NA	NA	NA	
Statistical Data:									
Mean (Average Proof)	0.0375	-0.5	0.275	-0.04844	0.037	0.62	0.519	0.395	
Median	0.35	-0.2	0.475	-0.05	-0.05	0.525	0.425	0.4	
Standard Deviation	1.749727	1.431928	2.012298	1.817766	1.278105	0.780568	0.868196	0.720137	
Sample Variance	3.061546	2.050417	4.049342	3.304272	1.633552	0.609286	0.753764	0.518597	
Skewness	-2.7654	-1.40905	-3.4431	-2.39718	-2.49794	-0.27992	0.116109	-0.01595	
Minimum	-6.35	-4.15	-7.65	-7.5	-6.35	-1.95	-1.5	-0.9	
Maximum	1.85	1	2	2.4	1.85	2.5	2.3	1.85	
Count	20	13	20	32	50	50	50	50	
Confidence Level(95.0%)	0.818898	0.865305	0.941784	0.655374	0.363233	0.221835	0.246739	0.204661	

* Control group in 10th year of service - maximum service period - all meters to be removed/tested. Sample size based on population was used to determine if group passed/failed in it's last year of service.

Year 2011 Meter Code 058 Rockwell R750

Code & Year:	2001
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	1
-.4 to .4	10
.4 to 1.2	4
1.2 to 2.0	3
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	20

Code & Year:	2002
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	2
-1.2 to -.4	2
-.4 to .4	4
.4 to 1.2	4
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	13

Code & Year:	2003
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	0
-.4 to .4	8
.4 to 1.2	6
1.2 to 2.0	5
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	20

Code & Year:	2004
Data Range	Number
LT -3.6	2
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	6
-.4 to .4	10
.4 to 1.2	7
1.2 to 2.0	4
2.0 to 2.8	2
2.8 to 3.6	0
GT 3.6	0
Total	32

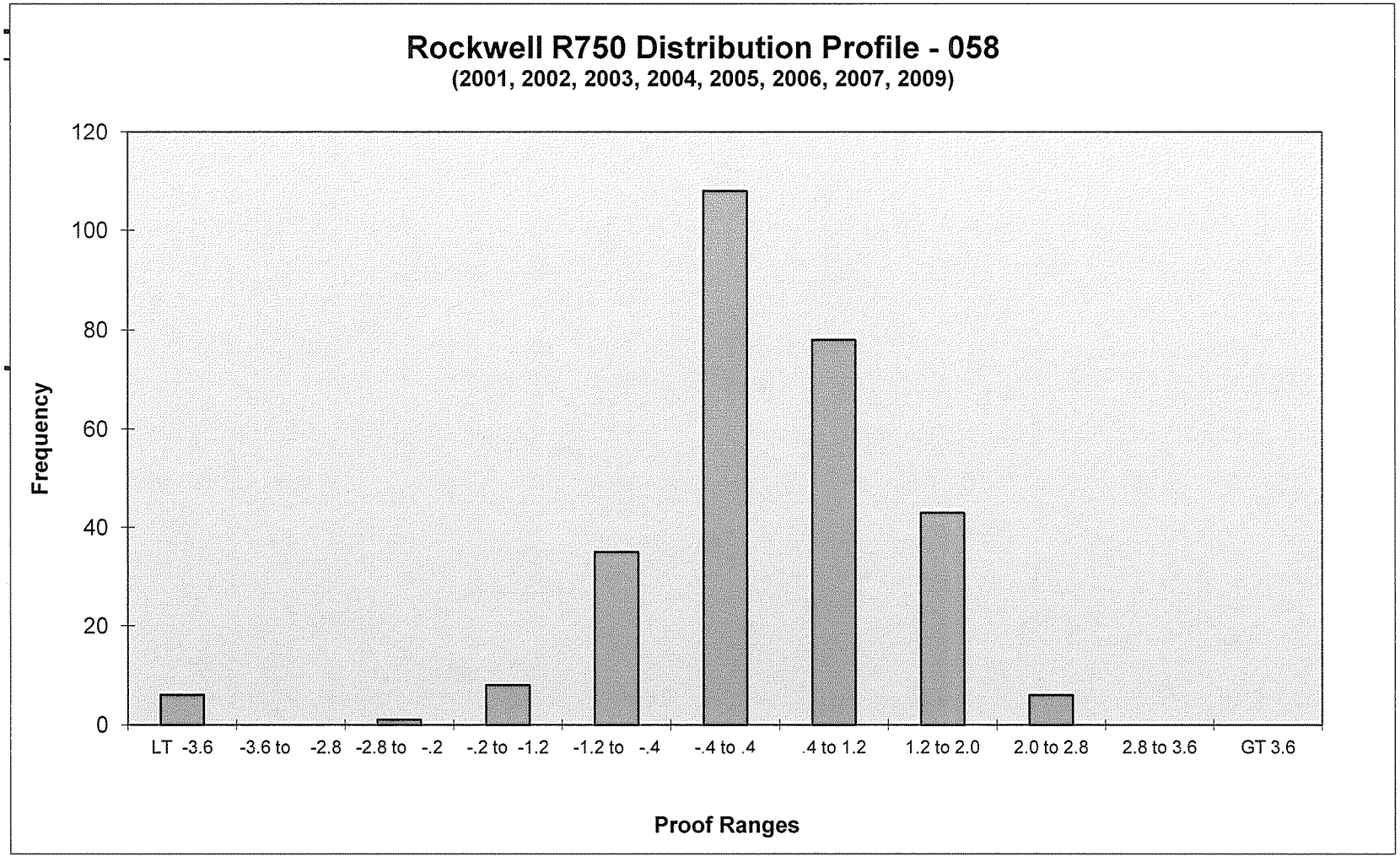
Code & Year:	2005
Data Range	Number
LT -3.6	1
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	2
-1.2 to -.4	8
-.4 to .4	24
.4 to 1.2	7
1.2 to 2.0	7
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	2006
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	2
-.4 to .4	19
.4 to 1.2	18
1.2 to 2.0	8
2.0 to 2.8	2
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	2007
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	7
-.4 to .4	17
.4 to 1.2	14
1.2 to 2.0	9
2.0 to 2.8	2
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	9
-.4 to .4	16
.4 to 1.2	18
1.2 to 2.0	7
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	50

Code & Year:	Total
Data Range	Number
LT -3.6	6
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	8
-1.2 to -.4	35
-.4 to .4	108
.4 to 1.2	78
1.2 to 2.0	43
2.0 to 2.8	6
2.8 to 3.6	0
GT 3.6	0
Total	285


Rockwell R750 Distribution Profile - 058
(2001, 2002, 2003, 2004, 2005, 2006, 2007, 2009)
120
100
80
60
40
20
0
Frequency
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

American AL 800	Test Year 2011							
800 CFH	Control Group-Installed Year							
Code: 076	2001	2002	2003	2004	2005	2006	2007	2009
Sample Plan	Single	Single	Single	Single	Single	Single	Single	Single
Sample Size	8*	2	8	13	8	13	13	20
Original Popuiation	20	6	48	76	23	58	67	128
# of Slow Failures	0	0	0	1	0	0	0	0
# of Fast Failures	0	0	0	0	0	0	0	0
Total Failures:	0	0	0	1	0	0	0	0
Accept Level	0	0	1	2	1	2	2	3
Reject Level	1	1	2	3	2	3	3	4
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
If Failed - Remove By:	Exhaust	NA	NA	NA	NA	NA	NA	NA
Statistical Data:								
Mean (Average Proof)	0.3	0.225	-0.69375	-0.75	-0.29375	-0.37308	0.25	0.57
Median	0.375	0.225	-0.5	-0.8	-0.25	-0.25	0.1	0.675
Standard Deviation	0.439155	0.388909	0.930222	1.054158	0.809955	1.002001	0.538129	0.70625
Sample Variance	0.192857	0.15125	0.865313	1.11125	0.656027	1.004006	0.289583	0.498789
Skewness	-1.23469	NA	0.083722	-0.00214	-0.05663	0.091729	0.361181	-0.35223
Minimum	-0.6	-0.05	-1.9	-2.8	-1.7	-1.9	-0.5	-0.95
Maximum	0.8	0.5	0.8	1	1.1	1.55	1.15	1.65
Count	8	2	8	13	8	13	13	20
Confidence Level(95.0%)	0.367143	3.494206	0.777685	0.637022	0.677139	0.605503	0.325188	0.330535

* Control group in 10th year of service - maximum service period - all meters to be removed/tested. Sample size based on population was used to determine if group passed/failed in it's last year of service.

Year 2011 Meter Code 076 American AL800

Code & Year:	2001
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	3
.4 to 1.2	4
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2002
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	0
-.4 to .4	1
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	2003
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	2
-.4 to .4	2
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2004
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	4
-1.2 to -.4	4
-.4 to .4	1
.4 to 1.2	3
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	13

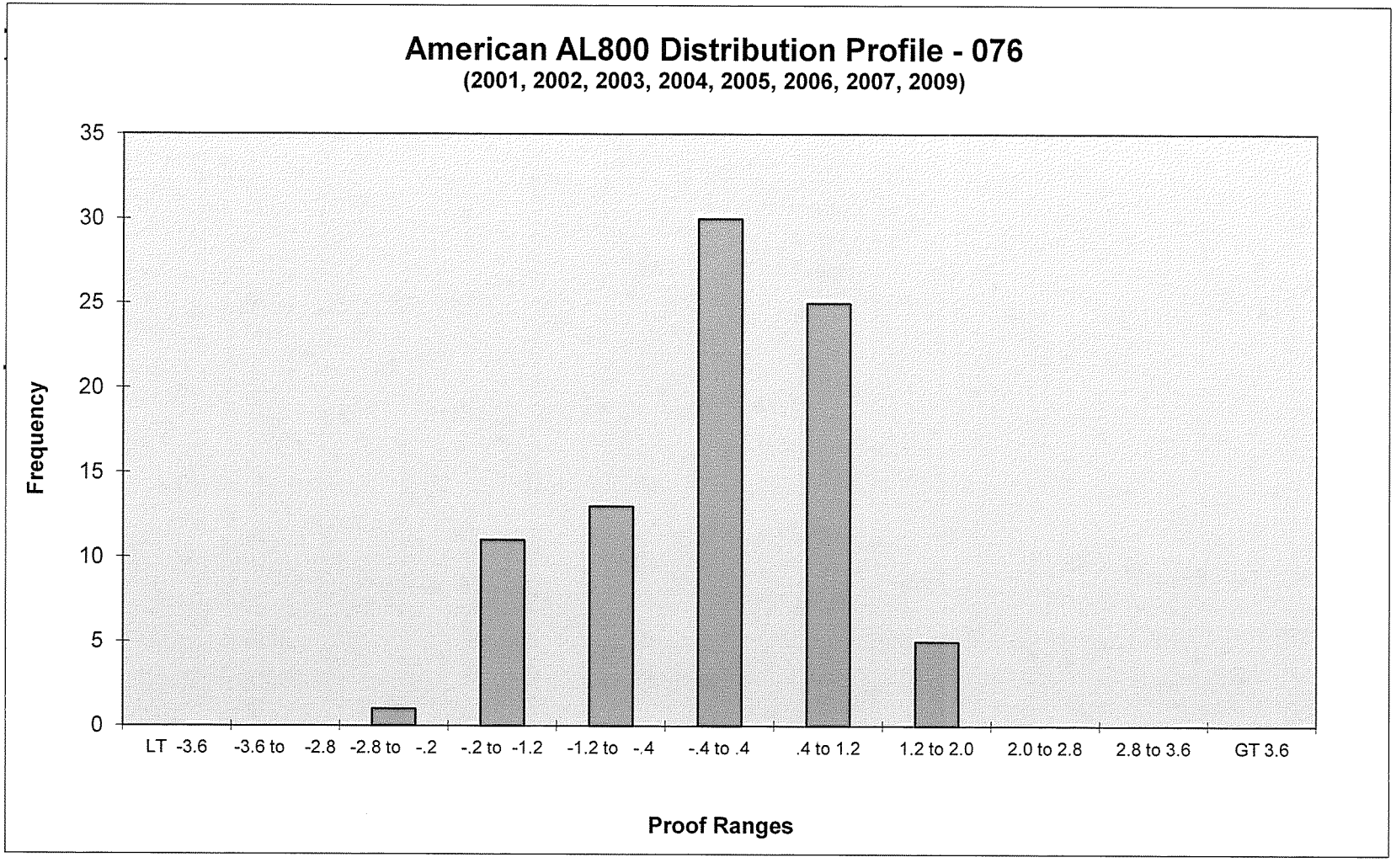
Code & Year:	2005
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	2
-.4 to .4	4
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2006
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	2
-.4 to .4	6
.4 to 1.2	1
1.2 to 2.0	1
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	13

Code & Year:	2007
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	7
.4 to 1.2	5
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	13

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	6
.4 to 1.2	9
1.2 to 2.0	4
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	20

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	1
-.2 to -1.2	11
-1.2 to -.4	13
-.4 to .4	30
.4 to 1.2	25
1.2 to 2.0	5
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	85


American AL800 Distribution Profile - 076
(2001, 2002, 2003, 2004, 2005, 2006, 2007, 2009)
Frequency
35
30
25
20
15
10
5
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Rockwell #4 Emco	Test Year 2011								
2250 CFH	Control Group-Installed Year								
Code: 028	2006	2007	2008	2009					
Sample Plan	Single	Single	Single	Single					
Sample Size	13*	20	20	20					
Original Population	69	93	108	97					
# of Slow Failures	0	0	0	0					
# of Fast Failures	0	0	0	0					
Total Failures:	0	0	0	0					
Accept Level	2	3	3	3					
Reject Level	3	4	4	4					
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**					
If Failed - Remove By:	Exhaust	NA	NA	NA					
Statistical Data:									
Mean (Average Proof)	-0.02308	-0.37	-0.0125	0.055					
Median	0.1	-0.25	0.15	-0.175					
Standard Deviation	1.256254	0.640189	0.617694	0.907266					
Sample Variance	1.578173	0.409842	0.381546	0.823132					
Skewness	-0.13627	-0.97041	-0.52523	0.628738					
Minimum	-1.95	-1.95	-1.35	-1.45					
Maximum	2	0.4	1.2	1.65					
Count	13	20	20	20					
Confidence Level(95.0%)	0.759146	0.299618	0.28909	0.424614					

* Control group in 5th year of service - maximum service period - all meters to be removed/tested. Sample size based on population was used to dertermine if group passed/failed in it's last year of service.

Year 2011

Meter Code 028 Rockwell #4 Emco

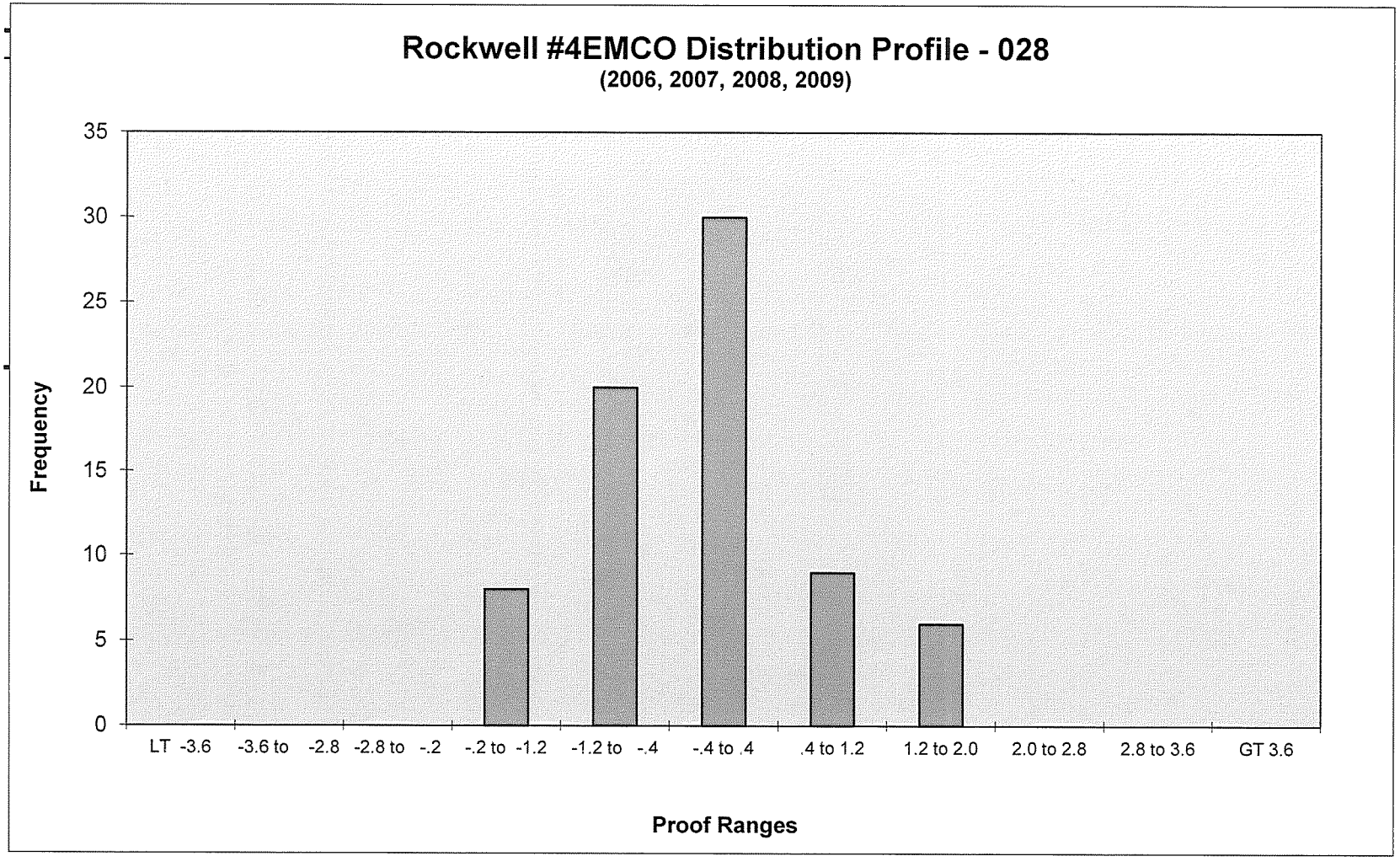
Code & Year:	2006
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	2
-.4 to .4	3
.4 to 1.2	3
1.2 to 2.0	2
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	13

Code & Year:	2007
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	3
-1.2 to -.4	6
-.4 to .4	11
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	20

Code & Year:	2008
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	4
-.4 to .4	11
.4 to 1.2	4
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	20

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	1
-1.2 to -.4	8
-.4 to .4	5
.4 to 1.2	2
1.2 to 2.0	4
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	20

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	8
-1.2 to -.4	20
-.4 to .4	30
.4 to 1.2	9
1.2 to 2.0	6
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	73


Rockwell #4EMCO Distribution Profile - 028
(2006, 2007, 2008, 2009)
Frequency
35
30
25
20
15
10
5
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Rockwell 10Emco	Test Year 2011								
5000 CFH	Control Group-Installed Year								
Code: 061	2006	2007	2008	2009					
Sample Plan	Single	Single	Single	Single					
Sample Size	8*	8	8	2					
Original Population	21	32	32	15					
# of Slow Failures	0	0	0	0					
# of Fast Failures	0	0	0	0					
Total Failures:	0	0	0	0					
Accept Level	1	1	1	0					
Reject Level	2	2	2	1					
Pass / Fail?	**Pass**	**Pass**	**Pass**	**Pass**					
If Failed - Remove By:	Exhaust	NA	NA	NA					
Statistical Data:									
Mean (Average Proof)	-0.175	0.05625	-0.16875	-0.15					
Median	-0.275	0.15	-0.3	-0.15					
Standard Deviation	0.670288	0.335344	0.339051	0.777817					
Sample Variance	0.449286	0.112455	0.114955	0.605					
Skewness	-0.05692	-0.58155	0.333255	NA					
Minimum	-1.15	-0.45	-0.6	-0.7					
Maximum	0.6	0.5	0.3	0.4					
Count	8	8	8	2					
Confidence Level(95.0%)	0.560375	0.280354	0.283453	6.988413					

* Control group in 5th year of service - maximum service period - all meters to be removed/tested. Sample size based on population was used to dertermine if group passed/failed in it's last year of service.

Year 2011

Meter Code 061 Rockwell 10M Emco

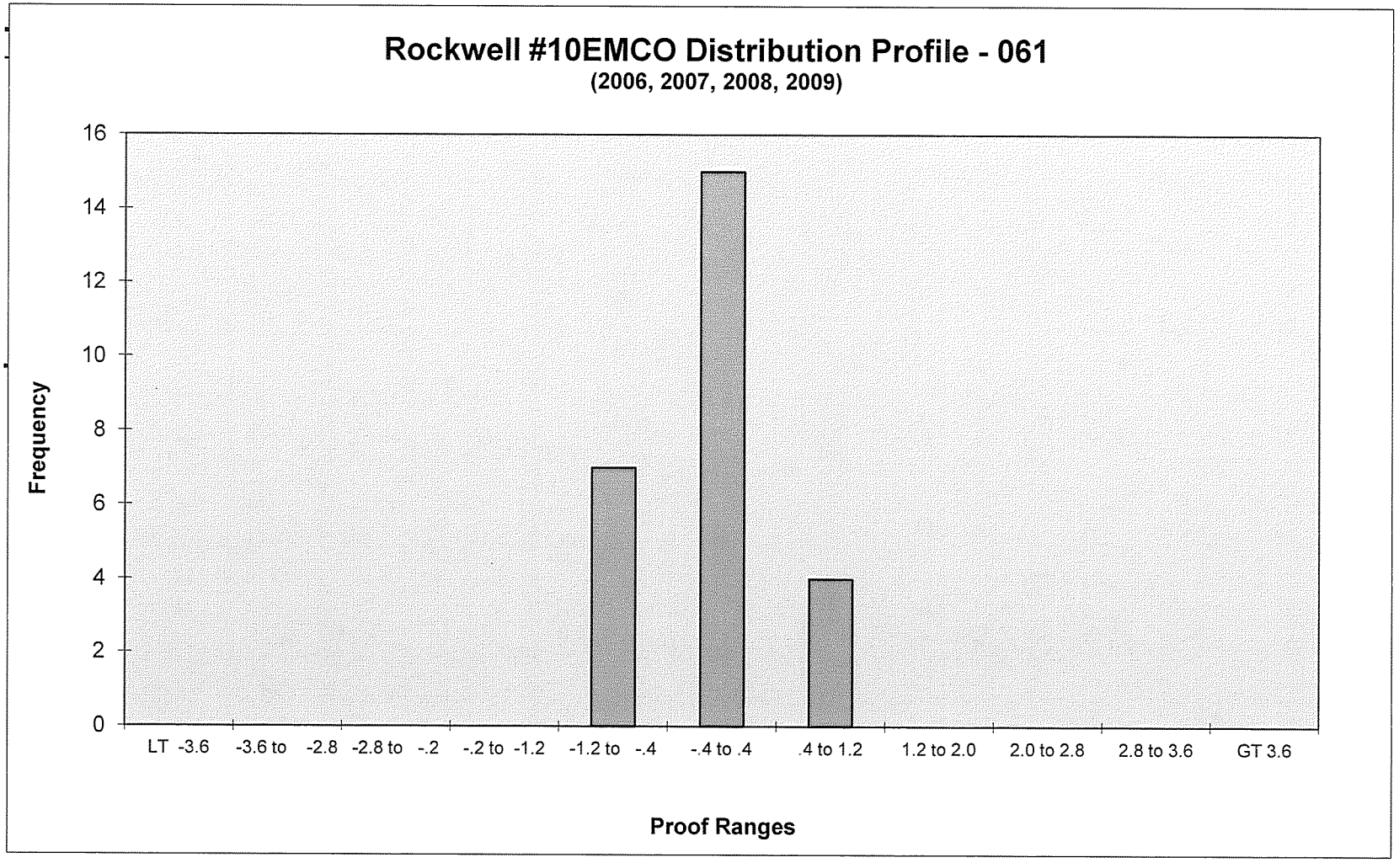
Code & Year:	2006
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	4
-.4 to .4	1
.4 to 1.2	3
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2007
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	6
.4 to 1.2	1
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2008
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	7
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	8

Code & Year:	2009
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	1
-.4 to .4	1
.4 to 1.2	0
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	2

Code & Year:	Total
Data Range	Number
LT -3.6	0
-3.6 to -2.8	0
-2.8 to -.2	0
-.2 to -1.2	0
-1.2 to -.4	7
-.4 to .4	15
.4 to 1.2	4
1.2 to 2.0	0
2.0 to 2.8	0
2.8 to 3.6	0
GT 3.6	0
Total	26


Rockwell #10EMCO Distribution Profile - 061
(2006, 2007, 2008, 2009)
Frequency
16
14
12
10
8
6
4
2
0
LT -3.6
-3.6 to -2.8
-2.8 to -.2
-.2 to -1.2
-1.2 to -.4
-.4 to .4
.4 to 1.2
1.2 to 2.0
2.0 to 2.8
2.8 to 3.6
GT 3.6
Proof Ranges

Louisville Gas & Electric

Regulator Inspection and Replacement Program Report 2011

Year 2011 Regulator Inspection and Replacement Program

I.Progress Summary

During 2011, LG&E replaced a total of 4,434 gas pressure regulators as part of LG&E's regulator inspection and upgrade program. An additional 738 regulators were replaced for other reasons such as improper function of the regulator, damage/vandalism, service line replacement, or meter loop repairs. The distribution of the reasons for these regulator replacements is shown in Table 1 below.

Table 1: Year 2011 Regulator Change Reasons

Reason	Quantity
Regulator Replacement Program	4,434
Failed Lockup Test	6
Vent Leaking	63
Leak on Regulator	7
Routine Change During Meter Loop Repair	185
Could Not Adjust Pressure	9
Damage/Vandalism	18
Routine Change During Service Renewal	450
Total	**5,172**

For the time period of 2002 – 2011, a total of 172,481 regulator replacements have been made.

II. Safety

As part of LG&E's regulator replacement activities, safety inspections were performed and "red-tags" were issued when deficiencies were found. The results of these safety inspections directly associated with LG&E's regulator replacement program are summarized in Table 2 below.

Table 2: Year 2011 Safety Inspection Results

Reason	Quantity
Houseline Leak (includes lines to gas grills, pool heaters, appliance flexible hook-up lines, fireplace, etc.)	4
Furnace Problem (internal leak, not burning correctly)	3
Leak or Not Venting Properly (dryer, range, water heater)	7
Flex Lines/Brass Connectors	43
Other Leaks (leaks on space heater, riser, etc.)	1
Total	**58**

Additionally, the following Customer Surveillance Notices were issued to customers to correct outside deficiencies on their meter loop. The results of these safety inspections directly associated with LG&E's regulator replacement program, are summarized in Table 3 below.

Table 3: Year 2011 Customer Surveillance Notices Issued

Reason	Quantity
Corrosion / Rust On Outside Meter Loop & Associated Piping	927
Gas Meter In Contact With Soil / Pavement	10
Meter partially buried	5
Asphalt or Concrete Paving in Contact With Piping Entering Ground	32
Gas Piping Not Properly Supported	36
Meter Not Protected From Vehicular Damage	3
Customer Built Over Service Line / Around Meter	0
Tree / Shrubbery Growing Inside / Against Meter Loop	9
Total	**1,022**