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Subject: Arkansas Nuclear One - Unit 1
Docket No. 50-313
License No. DPR-51
Once Through Steam Generator Inservice Inspection Report

Gentlemen:

Arkansas Nuclear One, Unit 1 (ANO-1), Technical Specification 4.18.6 requires the complete results of each inservice inspection of the once through steam generator (OTSG) tubes to be submitted to the NRC within 90 days of the completion of the inspection. Attached is the Steam Generator Tubing Inservice Inspection Report for the ANO-1 fifteenth refueling outage (1R15). The OTSG tube inspections were completed on October 4, 1999.

The general inspection of the "A" OTSGs had Category C-3 results, as did the inspections of the repair rolls previously installed in both OTSGs. The attached report supplements the information provided to the NRC by letter dated October 4, 1999 (1CAN109905), which was required to be submitted per ANO-1 Technical Specifications 4.18.6 and 6.12.5 as a result of the C-3 inspection results. The complete results of the inspections are included in the attachment.

Should you have any questions concerning this submittal, please contact me.

Very truly yours,

for Dale E. Vandergrift

Jimmy D. Vandergrift
Director, Nuclear Safety

JDV/jjd
attachment

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1R15
ONCE THROUGH STEAM GENERATOR INSERVICE INSPECTION REPORT

The Arkansas Nuclear One, Unit 1 (ANO-1) 1R15 eddy current inspection of the once through steam generators (OTSGs) consisted of performing over 64,000 eddy current exams. The inspection was consistent with the exams performed during the 1R14 inspection, using the same processes and techniques. Several improvements were made to the eddy current process prior to the 1R14 outage that were continued during 1R15. Table 1 provides the inspection summary with the examination technique used.

Table 1
1R15 Inspection Summary

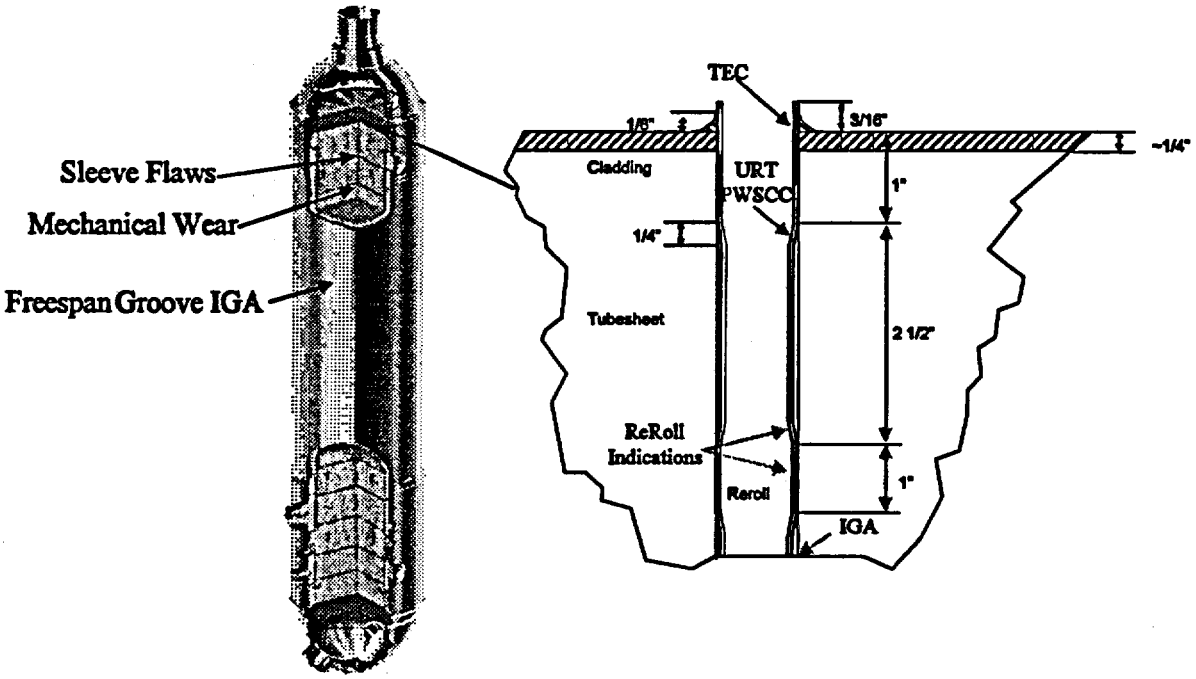
Inspection	Area	OTSG	Exams
100% Bobbin	Full Length of Tube[1]	A	14,898
		B	15,260
100% RPC/plus point	Upper Rolls (original)	A	12,460
		B	13,621
100% RPC/plus point	1R14 Re-rolls	A	1,963
		B	1,155
Sleeve plus point	100% Expansion Area[2]	A	475
	20% Expansion Area[2]	B	98
20% Dent RPC/plus point	Dents in Superheat Region	A	102
		B	28
	Dents in LTS	A	742
		B	420
Other RPC/plus point	Lower Rolls	A	393
		B	231
	Lower Tubesheet (+2-16 in.)	A	742
		B	420
	Upper Tubesheet IGA	A	295
		B	149
	Other Special Interest	A	602
		B	440

RPC = rotating pancake coil

1. Includes the unsleeved portion of the tubing
2. Expansion area consists of the 3 mechanical parent tube/sleeve joints

The degradation mechanisms identified during the 1R15 inspection were anticipated, with the exception of flaws detected in the tubes containing 1R14 re-rolls. Figure 1 illustrates the various modes of degradation confirmed during the 1R15 inspection.

Figure 1
OTSG Degradation Detected During 1R15 Inspection



IGA = intergranular attack, TEC = tube end cracking, URT = upper roll transition, PWSCC = primary water stress corrosion cracking

Table 2 provides a summary of the degradation mechanisms identified during the 1R15 inspection. Each mode of degradation is addressed in detail later in the report.

Table 2
1R15 Inspection Results

Damage Mechanism	OTSG	Number of Tubes
Tube End Cracking in the HAZ	A	805
	B	212
Upper Roll Transition Cracking	A	107
	B	47
Tubes Containing Flaws in the 1" Re-Roll	A	101
	B	21
Volumetric IGA Indications in the UTS*	A	Tubes 291 / Indications 332
	B	Tubes 145 / Indications 209
Sleeve Flaws	A	Sleeve 6 / Parent Tube 1
	B	0
Indications in Dents	A	0
	B	0
Lower Tubesheet	A	1
	B	0
Lower Rolls	A	0
	B	0
Newly Identified Mechanical Wear	A	87
	B	85
Previously Identified Mechanical Wear	A	210
	B	206
Tubes containing Freespan/TSP Flaws	A	27
	B	23

HAZ = heat affected zone, UTS = upper tube sheet, TSP = tube support plate

* The IGA numbers include both the previously identified patches and the newly identified IGA

Tube Repairs

This section provides a summary of the number of tubes repaired in the OTSGs during the 1R15 outage. The reason for repair is provided in Appendices 1 and 2. Two tubes in the "A" OTSG were plugged as a result of indications detected during post re-roll eddy current testing (all re-rolls installed in the "B" OTSG during 1R15 were found to be acceptable by post-installation eddy current testing). The totals listed in Table 3 provide the final number and repair type.

Table 3
1R15 OTSG Repair Summary

	A OTSG	B OTSG
Plugs	206	63
Sleeve tubes plugged	7	0
Stabilized tubes	22	12
New re-rolls left in service	78	33

Flaws in tubes that were located in the upper tubesheet, but within a defined exclusion zone were plugged. Several tubes contained degradation at the upper tube end area (e.g. URT, HAZ) that could have been re-rolled; however, based on the uncertainties associated with the re-rolled joint strength under a postulated accident scenario, a conservative exclusion zone was applied to the tubes during the 1R15 outage. This radial exclusion zone (> 42 inches and < 55 inches) for a 3.5" deep roll defines an area of the upper tubesheet that may not preclude joint slippage under a small break loss of coolant accident (SBLOCA). Joint slippage could occur as a result of the dilation effects of the tubesheet.

Table 4 shows the ANO-1 outage dates and cumulative operational time. Additionally, the table shows the OTSG repair history including plugs and sleeves.

Table 4
ANO-1 OTSG Repair Summary

				# Plugged Per Outage		# Plugged Cumulative		# Inservice Sleeves "A" OTSG		# Inservice Sleeves "B" OTSG		EQUIV. PLUGGED		% EQUIV. PLUGGED	
OUTAGE	DATE	EFPD	EFPY	A	B	A	B	31"	80"	31"	80"	A	B	A	B
PRE SERV	Dec-74			0	2	0	2	0	0	0	0	0	2	0.00%	0.01%
1	Jan-77	500	1.37	0	0	0	2	0	0	0	0	0	2	0.00%	0.01%
2	Feb-78	770	2.11	5	0	5	2	0	0	0	0	5	2	0.03%	0.01%
3	Mar-79	1060	2.90	0	0	5	2	0	0	0	0	5	2	0.03%	0.01%
1L4A	Jul-80			3	0	8	2	0	0	0	0	8	2	0.05%	0.01%
1L4B	Sep-80			1	0	9	2	0	0	0	0	9	2	0.06%	0.01%
4	Jan-81	1389	3.81	7	0	16	2	0	0	0	0	16	2	0.10%	0.01%
1L5	May-82			10	0	26	2	0	0	0	0	26	2	0.17%	0.01%
5	Nov-82	1835	5.03	84	48	110	50	0	0	0	0	110	50	0.71%	0.32%
1L6	Jul-83			43	0	153	50	0	0	0	0	153	50	0.99%	0.32%
1M6	Mar-84			43	37	196	87	0	0	0	0	196	87	1.26%	0.56%
6	Oct-84	2234	6.12	24	7	220	94	0	10	0	0	222	95	1.43%	0.61%
7	Sep-86	2678	7.34	1	4	221	98	0	50	0	0	229	103	1.47%	0.66%
1L8	Jan-87			1	0	222	98	0	50	0	0	230	103	1.48%	0.66%
8	Aug-88	3116	8.54	13	0	235	98	0	148	0	76	258	113	1.66%	0.73%
1F89-1	Feb-89			0	0	235	98	0	148	0	0	258	113	1.66%	0.73%
9	Oct-90	3511	9.62	0	9	235	107	0	176	0	147	263	125	1.69%	0.80%
10	Feb-92	3895	10.67	235	71	470	178	54	351	123	366	531	233	3.42%	1.50%
11	Sep-93	4371	11.98	22	12	492	190	54	427	123	366	565	253	3.64%	1.63%
12	Feb-95	4826	13.22	7	3	499	193	54	427	122	366	572	255	3.68%	1.65%
13	Sep-96	5334	14.61	68	48	567	241	54	422	121	363	639	303	4.12%	1.95%
14	Mar-98	5832	15.98	66	30	633	271	54	421	121	363	705	333	4.54%	2.14%
15	Sep-99	6333	17.35	213	63	846	334	54	414	121	363	917	404	5.90%	2.60%
16	April-01	6855	18.78*												

* Projected

Tube End Cracking in the Weld Heat Affected Zone

During the 1R14 refueling outage, a 100% plus point upper roll area inspection was performed and as a result indications were detected in the HAZ region of the tube end. A root cause analysis determined the flaws to be most likely PWSCC. PWSCC has been confirmed in this general area (URT) through tube pulls at ANO-1, Oconee and Davis Besse. The indications had been identified at ANO-1 and other OTSGs prior to 1R14, but were believed to be above the tubesheet and therefore outside the pressure boundary. During a 1R14 bubble test two of the tube end indications were leaking, and the subsequent investigation led to the conclusion that all TECs were contained within the reactor coolant system (RCS) pressure boundary and therefore, repaired. Since TECs are contained within the RCS pressure boundary, a licensing basis change was necessary to leave the flaws inservice. The Babcock and Wilcox Owners Group (B&WOG) developed an alternate repair criteria (ARC) for this specific degradation mechanism. The ARC was approved by the NRC for use at ANO-1 on September 14, 1999, by Technical Specifications Amendment 201 allowing TECs to remain in service based on meeting specific criteria.

Several conditions exist that have to be met in order for the ARC to be implemented. One of the requirements is that the average clad thickness be less than 0.625 inch. The average upper tubesheet clad measurement for the "A" OTSG was 0.25" and the average upper tubesheet clad measurement for the "B" OTSG was 0.265". Thus, the clad thicknesses in both OTSGs are below the 0.625" limit. No signs of degradation were observed in the lower roll areas; therefore, the ARC was not applied to the lower tube ends. The ARC was also limited to axially-oriented cracking located in the clad region of the tube ends. The ANO-1 eddy current analysis guidelines provides specific direction for the analysts in determining axial orientation and location relative to the clad/carbon steel interface. The ARC was not applied to flaws containing circumferential, mixed mode, or volumetric characteristics.

During the 1R15 upper roll area inspection, a total of 805 tubes containing TECs in the "A" OTSG and 212 tubes in the "B" OTSG were identified. Of these flaws, several did not meet the ARC criteria (e.g., circumferential orientation) and were repaired. The tubes that contained multiple indications required an additional leakage contribution to be utilized per the TEC ARC. Tables 5 and 6 illustrates the TEC flaws, radial position, and corresponding leakage as identified in the TEC ARC topical report (BAW-2346P, Alternate Repair Criteria for Tube End Cracking in the Tube-to-Tubesheet Roll Joint of Once-Through Steam Generators," Rev. 0). Additionally, the tubes containing single axial (SAA) and multiple axial flaws (MAA) are identified. A review of the MAAs was performed and the number of single flaws determined. The average number of flaws in the tubes containing an MAA call was 2.4 in the "A" OTSG and 2.3 in the "B" OTSG. There were 729 tubes with 1058 TECs identified in the "A" OTSG, while 207 tubes with 260 TECs were found in the "B" OTSG. The leakage calculation accounted for each of the indications and radial position. As described in the topical report for the ARC, an adjustment of 15% is also required to account for probability of detection (POD) factors.

Table 5
TEC ARC Results "A" OTSG

Radial Position of Flaw	Single Flaw Leakage	Total Number of Tubes with TEC Indications	Number of Single Flaws (SAA)	POD Adjustment	Number of Multiple Flaws (MAA)	POD/MAA Adjustment
≤ 35"	7.10E-5 gpm	172	120	138	131	150
> 35", ≤ 53"	1.90E-4 gpm	412	278	320	318	365
> 53", ≤ 55"	3.83E-4 gpm	87	56	64	74	85
> 55", ≤ 56"	5.41E-4 gpm	28	23	26	11	12
> 56"	1.37E-3 gpm	30	20	23	27	31
			SAA Leakage	*0.14 gpm*	*MAA Leakage*	*0.16 gpm*
		TOTAL LEAKAGE				*0.30 gpm*

Table 6
TEC ARC Results "B" OTSG

Radial Position of Flaw	Single Flaw Leakage	Total Number of Tubes with TEC Indications	Number of Single Flaws (SAA)	POD Adjustment	Number of Multiple Flaws (MAA)	POD/MAA Adjustment
≤ 35"	7.10E-5 gpm	20	19	22	3	3
> 35", ≤ 53"	1.90E-4 gpm	123	100	115	58	66
> 53", ≤ 55"	3.83E-4 gpm	24	17	20	12	13
> 55", ≤ 56"	5.41E-4 gpm	11	8	9	5	5
> 56"	1.37E-3 gpm	29	22	25	16	18
			SAA Leakage	*0.065 gpm*	*MAA Leakage*	*0.045 gpm*
		TOTAL LEAKAGE				*0.11 gpm*

The growth rate values used in the TEC ARC topical were developed from ANO-1 specific data. Based on the additional site specific data, growth comparisons are not required to validate the TEC growth evaluation used in the topical

Based on the implementation of the ARC, the operational assessment is performed for cycle 16 with the postulated end of cycle (EOC) accident induced main steam line break (MSLB) leakage calculated to be 0.3 gpm for the worst case steam generator ("A" OTSG). This value is added to the other contributing mechanisms to determine the total EOC leakage.

Upper Tubesheet Volumetric IGA

Intergranular Attack (IGA) in the upper tubesheet has been present since the early 1980s with very little change or growth observed. Based on the cause of the IGA (high sulfate) being eliminated, the IGA initiation rate is essentially zero. An ARC was implemented for the upper tubesheet IGA during the previous cycle. The ARC was based on comparing apparent growth rates; a similar approach has been implemented for cycle 16 by the approval of ANO-1 Technical Specifications Amendment 202 on October 4, 1999 (1CNA109901). The ARC allows the IGA detected during the 1R15 inspection to remain in service for the duration of cycle 16. The approach is based on comparing three eddy current parameters (plus point amplitude, axial length and circumferential extent). As part of the acceptance criteria, an overall population growth comparison was performed on the IGA flaws detected during 1R14. There were 279 IGA patches in the "A" OTSG and 173 IGA patches in "B" OTSG that made up the population for the growth comparison. Table 7 provides the growth information for the upper tubesheet IGA.

Table 7
Upper Tubesheet IGA
1R14 to 1R15 Growth Summary

	"A" OTSG			"B" OTSG		
	Change in Voltage	Change in Axial Extent	Change in Circ Extent	Change in Voltage	Change in Axial Extent	Change in Circ Extent
Number of Indications	279	279	279	173	173	173
Average	-0.012	-0.002	-0.008	-0.016	-0.004	-0.015
Standard Error	0.004	0.003	0.003	0.005	0.003	0.003
t	1.97	1.97	1.97	1.97	1.97	1.97
95% UCL	-0.004	0.004	-0.002	-0.007	0.002	-0.009
95% LCL	-0.019	-0.008	-0.013	-0.025	-0.009	-0.022
1 Sigma Upper Limit	-0.008	N/A	N/A	-0.012	N/A	N/A
1 Sigma Lower Limit	-0.015	N/A	N/A	-0.021	N/A	N/A
Maximum Change	0.21	0.26	0.14	0.1	0.1	0.09
Minimum Change	-0.36	-0.13	-0.2	-0.22	-0.13	-0.12
Apparent Growth?	No	No	No	No	No	No

As indicated in Table 7, the lower confidence limits (1 sigma for voltage and 95% lower bound for axial and circumferential extent) are below zero. This value implies no growth has occurred, as defined in BAW-10235P, " Management Program for Volumetric Outer Diameter Intergranular Attack in the Tubesheets of Once-Through Steam Generators," Rev. 1.

Based on the conclusion of no population growth, the ARC was implemented. An additional measure utilized is the requirement for each indication to be assessed against a set of repair limits. If any indications are predicted to exceed a repair limit before the next scheduled inspection, they are repaired. The indications that exceeded the repair limit are listed in Table 8. Note that tube 78/37 in the "B" OTSG exceeded the repair limit for voltage based on the 1998 EC measurement, and was conservatively selected for repair.

Table 8
Individual Flaw Growth

OTSG	Row/Tube	99 Position	99 Volts	99 Axial	99 Circ	98 Position	98 Volts	98 Axial	98 Circ
A	27/31	UTS+17.58	1.1	0.19	0.23	UTS+17.2	1.02	0.23	0.24
A	58/103	UTS+11.69	0.2	0.32	0.44	UTS+10.86	0.25	0.43	0.35
A	82/31	UTS+6.56	0.47	0.5	0.2	UTS+6.6	0.48	0.24	0.24
B	78/37	UTS+15.44	1.03	0.2	0.26	UTS+14.77	1.21	0.19	0.25

The condition monitoring assessment for upper tubesheet volumetric IGA is performed in accordance with section 8.3 of topical report BAW-10235P-01. The first step for implementation is to determine the population size. This is presented in Table 9. The total 1R15 number of IGA flaws detected is greater than the 1R14 number due to the POD of the bobbin coil. This increase is reflected in the POD adjustment row in Table 9. Additionally, credit is taken for previous in-situ and pulled tube pressure tests as described in the topical report and reflected in Table 9. The next step is to determine the distribution of axial extents in order to assign a cumulative leakage rate as shown in Table 10. Since this evaluation is addressing the inservice IGA, the previous testing numbers are not included.

Table 9
Population Size for Condition Monitoring

	A OTSG	B OTSG
Number of Detected Indications	332	209
POD Adjustment	33	21
Previous Testing Adjustment	34	20
Population	399	250

Table 10
Axial Extent for Condition Monitoring

	Detected (both Outages)		Undetected		Total	
Bin (inches)	"A" OTSG	"B" OTSG	"A" OTSG	"B" OTSG	"A" OTSG	"B" OTSG
0.2	201	151	25	19	226	170
0.4	76	22	8	2	84	24
0.6	2	0	0	0	2	0
0.8	0	0	0	0	0	0
1	0	0	0	0	0	0
1.2	0	0	0	0	0	0
1.4	0	0	0	0	0	0
Total	279	173	33	21	312	194

The data from Table 10 is used to determine the cumulative leakage rate under MSLB conditions for each steam generator. A hypergeometric equation is used in order to determine the postulated number of leaking indications in the population of each OTSG. The calculation is performed utilizing the number of indications previously tested as the sample size. The variables used and the resulting number of postulated leakers in the population of each OTSG are presented in Table 11.

Table 11
Hypergoemetric Distribution for Condition Monitoring

	A OTSG	B OTSG
Population size	399	250
Sample Size	34	20
Leakers in Sample	0	0
Leakers in Population	33	34
Confidence	95%	95%

Calculations were performed per the topical report with the results presented in Table 11, which predicts 33 leakers in the "A" OTSG and 34 leakers in the "B" OTSG. Using these numbers, the cumulative leakage rate associated with the largest 33 indications in OTSG "A" and the largest 34 indications in OTSG "B" are summed in Table 12

Table 12
Cumulative Leakage for Condition Monitoring

	"A" OTSG		"B" OTSG	
Bin (inches)	IND	Total Leakage	IND	Total Leakage
0.6	2	0.03	0	0
0.4	31	0.081	24	0.062
0.2	0	0	10	0.003
Total	33	0.11	34	0.07

Table 12 shows that the cumulative leakage rate associated with this damage mechanism is less than or equal to 0.11 gpm for each steam generator which satisfies the condition monitoring criteria of less than 1 gpm.

The operational assessment is performed in accordance with section 8.4 of topical report BAW-10235P-01. Because the population growth evaluation resulted in a conclusion that the indications are not growing, the ARC may be utilized. Therefore, the first step is to determine the population size to be returned to service. Only those tubes that are repaired due to the volumetric ODIGA indication exceeding the repair limit will be removed from the population. This conservative approach is used in order to complete this assessment more expeditiously. The population results are presented in Table 13.

Table 13
Population Adjusted for POD

	A OTSG	B OTSG
Number of Detected Indications	332	209
Indications Repaired/Plugged	4	1
POD Adjustment	33	21
Previous Testing Adjustment	34	20
Population	395	249

The next step is to determine the distribution of axial extents in order to assign a cumulative leakage rate. This is illustrated in Table 14.

Table 14
Axial Extent Distribution for Operational Assessments

	Detected (both Outages)		Undetected		Total	
Bin	A OTSG	B OTSG	A OTSG	B OTSG	A OTSG	B OTSG
0.2	195	140	27	18	222	158
0.4	79	32	8	3	87	35
0.6	1	0	0	0	1	0
0.8	0	0	0	0	0	0
1	0	0	0	0	0	0
1.2	0	0	0	0	0	0
1.4	0	0	0	0	0	0
Total	275	172	35	21	310	193

The data in Table 14 is used to determine the cumulative leakage rate under MSLB conditions for each steam generator. The hypergeometric equation is used in order to determine the postulated number of leaking indications in the population of each steam generator. The calculation is based on a sample size equal to what has been previously tested. The variables used and the resulting number of leakers in the population are presented in Table 15.

Table 15
Hypergeometric Distribution for Operational Assessment

	A OTSG	B OTSG
Population size	395	249
Sample Size	34	20
Leakers in Sample	0	0
Leakers in Population	32	34
Confidence	95%	95%

Table 15 predicts 32 leakers in the "A" OTSG and 34 leakers in the "B" OTSG. Using these numbers, the cumulative leakage rate associated with the 32 largest indications in the "A" OTSG and the largest 34 indications in the "B" OTSG are summed in Table 16.

Table 16
Cumulative Leakage Rate for Operational Assessment

	A OTSG		B OTSG	
Bin	# Indications	Leakage (gpm)	# Indications	Leakage (gpm)
0.6	1	0.015	0	0
0.4	31	0.081	34	0.088
0.2	0	0	0	0
Total	32	0.10	34	0.09

As a result of the eddy current examinations, 436 tubes were found to be affected by upper tubesheet volumetric IGA. A total of 541 indications were identified, 121 of which were newly reported in the 1R15 inspection.

Table 16 shows that the cumulative EOC accident induced leakage rate associated with this damage mechanism is less than or equal to 0.1 gpm for each steam generator. This value is based on the same EFPY duration as the previous cycle. The worst case value of 0.1 gpm is used when compiling the total EOC leakage from the combined damage mechanisms. Based on meeting the criteria for implementation, the condition monitoring and operational assessment performance criteria are met.

Mechanical Wear

A total of 181 new wear indications (91 in "A" and 90 in "B") were detected during the eddy current inspection. The majority of the flaws were sized with the 0.115" mid-range pancake coil at less than 20% TW. None of the flaws detected were sized greater than or

equal to 40% through wall (TW). An additional 223 wear indications in the "A" OTSG and 217 wear indications in the "B" OTSG were detected during previous exams and sized less than 40% TW. A comparison was performed on the indications using bobbin amplitude. The comparison did not identify any sign of change, indicating no growth. Based on the new wear indications being <40% TW and the conclusion that the previously identified wear flaws are not growing, the mechanical wear is considered inactive and does not challenge the EOC structural or leakage integrity of the OTSG tubing.

Freespan Degradation/Groove IGA

This form of degradation, classified as axially aligned IGA, is believed to be associated with grooves created by the broached lands when the tubes were inserted during assembly. The degradation is located in the freespan between the support structures, mainly in the upper bundle region (where elevated temperatures exist). A few indications have been detected at TSP locations and in the lower tubesheet (LTS). This degradation was identified in the ANO-1 OTSG tubing for the first time in the 1R13 inspection.

Consistent with the previous operational assessment, groove IGA indications detected in the lower tubesheet and the tube support plate locations are considered along with the freespan flaws for purposes of condition monitoring due to the small numbers detected. The number of defective tubes detected during the 1R15 inspection was well within the range of values contained in the previous cycle 15 operational assessment. Table 17 provides a history, along with the 1R15 projection, and actual freespan flaws detected.

Table 17
Confirmed Freespan Indications

	1R13 Actual	1R14 Actual	1R15 Projection	1R15 Actual
"A" OTSG	12	57	75	55
"B" OTSG	13	23	27	30

The size of the flaws detected is another benchmark used to compare the previous operational assessment to ensure the condition monitoring is satisfied. This comparison relates to the structural and leakage integrity. The flaws detected during 1R15 were compared to parameters (i.e. volts, length, depth) from previous ANO-1 flaws that were pressure tested both in-situ and in the lab (pulled tubes). One tube that contained eight axial flaws (110-2 in the "A" OTSG) was selected for testing based on the number of flaws and the parameter values. This tube was tested up to 4,350 psi with no leakage. This information ensures the OTSG condition monitoring is satisfied. Additionally, based on bounding the data used in the cycle 15 operational assessment (number of flaws projected and size of flaws), it is concluded that the postulated EOC 16 accident induced leakage is estimated to be the same as the EOC 15 (zero).

PWSCC at the Upper Roll Transition

Over the past three upper roll area inspections (1R13, 1R14, and 1R15) indications have been detected in the roll transition. These indications are detected with the 0.115" pancake coil and/or the plus point coil. Several OTSG tubes have been pulled that confirm the degradation mechanism as PWSCC with an axial orientation due to the residual stress fields in the roll transition. This mechanism was confirmed at ANO-1 by examination of tubes pulled during 1R13.

As with the other modes of degradation contained within the upper tubesheet, the flaws provide no burst concerns. However, a leakage assessment is necessary. The 1R15 inspection results are provided in Table 18 along with that projected by the operational assessment and the results from the previous two inspections. A total of 107 flaws were identified in the worst case steam generator ("A" OTSG), 104 of which were axially orientated.

Table 18
Upper Roll Transition Cracking

	1R13 Actual	1R14 Actual	1R15 Projection	1R15 Actual
"A" OTSG	57*	180	137	107
"B" OTSG	52*	172	131	47

* Projected based upon a 20% exam.

The approach used for evaluating the leakage integrity of the URT included generating the plus point depth distribution for the 1R15 flaws. The flaws measured as greater than a maximum depth of 80% TW are considered for leakage contribution. An assumption of a 20% error in measurement performance is included. No evidence of a URT flaw leaking has been found in the operating history of the ANO-1 OTSGs, which includes a "bubble" test performed in 1R14. For the 104 flaws in the "A" OTSG, 22 were measured to be greater than 80% TW and are considered to be leakage contributors. It was assumed that the same distribution will exist for the EOC 16 condition; therefore, the leakage calculations based on the 1R15 sizes are accurate for EOC 16. The flaws measured greater than 80% TW are typically profiled with the Eddynet crack draw program to further characterize flaw geometry. This provides a more accurate picture of the assumed through wall axial extent.

The EOC 16 leakage contribution from the URT PWSCC has been calculated based on the plus point measured length sizes. This value is conservative compared to the crack draw program. Additionally, 100% TW is assumed over the entire length of the crack. A B&WOG study performed this year demonstrated the conservatism associated with the plus point length measurements. Twenty-three PWSCC roll transition samples were generated, eddy current tested, and destructively analyzed. The plus point coil over-sized the destructive examination measured axial flaw length in 19 of 21 flaws. When the RPC

measured axial extents are used for the flaws, the EOC leakage contribution from the URT PWSCC flaws is 0.4 gpm.

Two identified PWSCC flaws at the URT were left inservice after the 1R15 inspection. The flaws are small and are included in the leakage evaluation. These flaws were addressed in a request for enforcement discretion (1CAN129905) and a Technical Specifications change request (1CAN129904), both dated December 16, 1999.

Sleeve Cracking

During the 1R15 sleeve plus point inspection, seven indications were detected in the "A" OTSG. Of the seven indications, one was a parent tube indication in a lower rolled joint. The other six were sleeve inner diameter (ID) indications in the upper roll transition of the upper joint. The exam consisted of 100% of the "A" OTSG and 20% of the "B" OTSG.

During a 1R13 (Oct. 1996) sleeve transition plus point exam, nine indications were detected in the parent tube of various roll locations (See Figure 2). Additionally, one indication was called in the sleeve heel transition of one of the lower joints. This was the first time inservice sleeves were repaired at ANO-1 due to eddy current indications. It is believed that the parent tube indications, both the nine tubes from 1R13 and an additional one detected during the 1R14 inspection (100% plus point), were all anomalous indications and have been present since installation. It should be noted that the parent tube indications are not necessarily signals from degradation. Nonetheless, the indications will continue to be conservatively plugged. The one indication detected in the lower joint of the parent tube during the 1R15 inspection is included in this category. However, the six indications in the sleeve ID are considered crack-like and believed to be PWSCC.

A historical list of the sleeved tubes and their associated indications are summarized below in Table 19.

Figure 2
OTSG Mechanical Sleeve Configuration

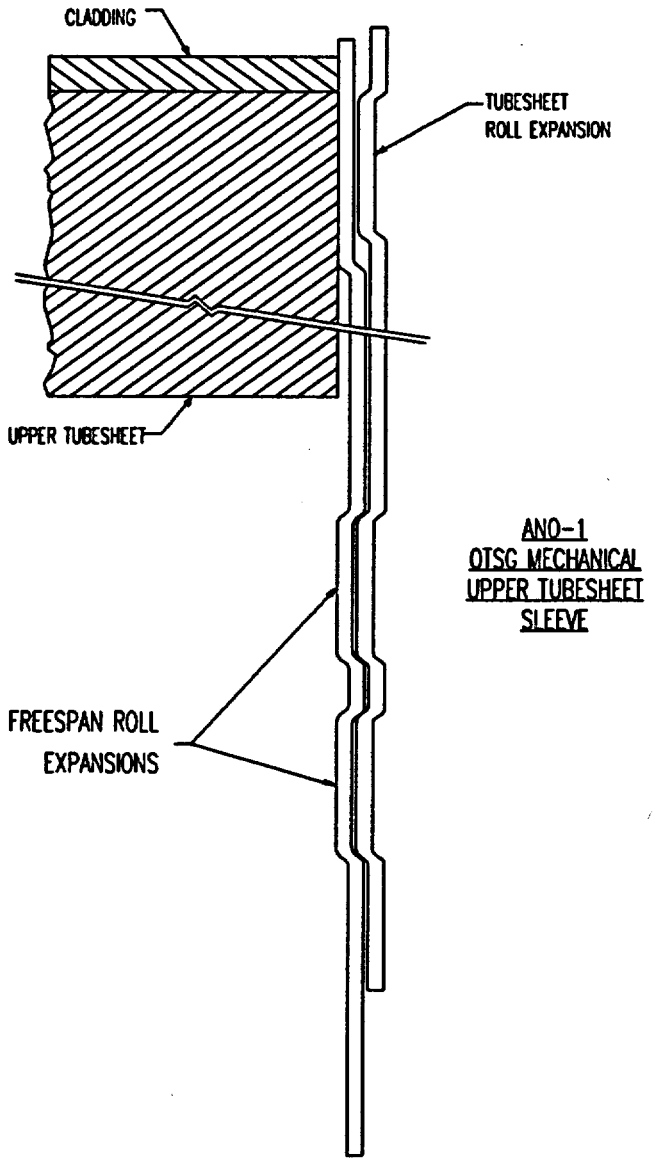


Table 19
OTSG Sleeve Indications

OTSG	Row	Col	Outage Detected	Joint Detected	Tube/ Sleeve	Sleeve Material	Date Installed	EFPY Inservice
A	77	2	1R15	1st	Sleeve	A-600	10/88	8.81
A	77	3	1R15	1st	Sleeve	A-600	10/88	8.81
A	78	6	1R15	1st	Sleeve	A-600	10/88	8.81
A	56	2	1R15	1st	Sleeve	A-600	10/88	8.81
A	70	29	1R15	1st	Sleeve	A-600	12/84	11.23
A	71	23	1R15	1st	Sleeve	A-600	12/84	11.23
A	78	8	1R15	2nd	Tube	A-690	3/92	6.68
A	81	53	1R14	3rd	Sleeve	A-600	10/88	8.81
A	75	17	1R13	2nd	Tube	A-690	11/90	7.73
A	79	1	1R13	1st	Tube	A-690	10/88	8.81
A	79	5	1R13	1st	Tube	A-690	3/92	6.68
A	81	1	1R13	1st	Tube	A-690	9/93	5.39
A	82	3	1R13	1st	Tube	A-690	9/93	5.39
A	102	4	1R13	1st	Tube	A-600	10/88	8.81
B	73	50	1R13	1st	Tube	A-690	3/92	6.68
B	81	18	1R13	1st	Tube	A-600	10/88	8.81
B	88	5	1R13	1st	Tube	A-600	10/88	8.81
B	129	7	1R13	3rd	Sleeve	A-600	10/88	8.81

Based on the mechanical sleeve/parent tube joints, the structural integrity is not challenged. The leakage integrity is addressed in the section on repair hardware.

Re-roll Indications

During the 1R14 outage, 1,963 tubes were re-rolled in the "A" OTSG and 1,155 tubes re-rolled in the "B" OTSG. The repair roll created a new RCS pressure boundary beyond the degraded section of tubing (below the flaw in the UTS). The process, which was developed and qualified by Framatome Technologies Inc. and the B&WOG, was approved for use at ANO-1 by Technical Specifications Amendment 190 in April 1998. This was the first repair roll effort performed in the ANO-1 OTSGs. As part of the requirements for implementation, a 100% eddy current exam was performed during 1R15 on the rolls installed during 1R14. This exam consisted of using an RPC/plus point technique for detection of degradation. During this exam, several indications were detected in both the roll transition and the one inch effective roll. These indications were divided into two categories (volumetric and axial/mixed mode). The volumetric indications are likely IGA flaws that were present when the 1R14 re-rolls were performed or an installation induced anomalous signal that was produced during the re-roll process. Regardless of the cause, the flaws detected in the 1" effective roll were repaired. The axial/mixed mode indications are likely PWSCC at the roll transition which, in some cases, extend into the 1" effective

roll. Table 20 provides a list of the indications, orientation, and whether they were inside the 1" roll.

Table 20
Re-roll Indications Detected During the 1R15 Exam

	"A" OTSG	"B" OTSG
Volumetric Indications in Upper Transition	13	0
Axial/Mixed Mode In Upper Transition	145	168
Total Number in the Upper Transition	158	168
Volumetric Indications in 1" Roll	82	0
Axial/Mixed Mode in the 1" Roll	19	21
Total Number in the 1" Roll	101	21

The axial degradation in the upper transition (heel transition) was unexpected after one cycle. Based on the location and prior industry experience, the cause is likely classical PWSCC. A root cause is being performed under the ANO corrective action program to further investigate the condition. Some preliminary indications exist of a contributing cause that deals with the tooling and rolling process. There are additional tensile stresses produced in the heel transition from the roller mandrel "walk out" during the retract step of the rolling process. The largest bobbin profile traces were reviewed (based on plus point amplitude) and evidence existed of a reduction in the inside diameter of the section of tubing between the re-roll and the original roll. This was verified for the worst case flaw (145-34 in the "B" OTSG) when a plug was not initially able to be inserted due to the restriction caused by a reduction in the inside diameter of the tube. The restriction was removed and the plug subsequently inserted. No other tubes containing re-roll flaws had tube ID restrictions that would not allow a plug to be inserted.

The maximum extent the flaw in the rolled area was determined to be 0.25" from the upper transition (111-6 in the "B" OTSG) for the flaws in-situ pressure tested. The leakage testing performed during the qualification process included joints as small as 0.638". The minimum undegraded roll length measurement of 0.75" is beyond the 0.638" length used in the testing.

To assess the end of cycle leakage for the re-roll flaws, both the indications in the transition and an undetected population was considered. There were 168 indications dispositioned as outside the pressure boundary in the worst case steam generator ("B" OTSG). The leakage is determined by assuming the flaws extend into the 1" effective roll by 0.5". This is conservative since the change in stress fields (hoop to axial) from the transition to the roll will cause the flaw to propagate. However, if these flaw sizes are assumed, then the TEC ARC leakage values can be adopted. The leakage values were obtained based on the radial position of the tube in the OTSG, similar to the TEC ARC. This accounts for dilation effects during a MSLB accident. The dilation effects are not as

severe for the re-rolls (3.5" from the tube end) as for the tube ends; therefore, these values are considered conservative. The leak rate for the 168 flaws is 0.06 gpm, which includes a 15% POD factor. To further support the leakage assessment, in-situ pressure testing was performed on four tubes that contained cracks located within the rolled area. The tubes were pressurized locally up to 2,850 psi with no leakage observed.

Hardware

Since the rolled plug and sleeve joints are leak limiting, they must be considered when determining the total EOC accident induced leakage. Failure due to burst is not a credible scenario and is addressed in the original qualification packages for the plugs and sleeves.

The sleeve leakage contribution is estimated to be 0.01 gpm for 500 sleeves under accident loading conditions is based upon the original qualification testing. For the mechanical plugs, a conservative 0.01 gpm contribution is considered under a postulated MSLB accident.

The re-roll accident induced leakage contribution is defined as 0.014 gpm for 31,062 re-rolled joints in the qualification report (BAW-10232P, "OTSG Repair Roll Qualification Report Including Hydraulic Expansion Evaluation," Rev. 00). This value conservatively assumes a complete severance of the tube above the re-rolled joint. Additionally, work performed by the B&WOG concluded that the dilation effects would increase the leak rate by a factor of 4.5. Given this information and the fact that there are less than 2,050 re-rolls inservice in the "A" OTSG, the EOC MSLB leakage estimate of 0.014 gpm used in the topical report is conservatively assumed.

Conclusion

A comprehensive eddy current examination was performed on the OTSGs to look for various degradation mechanisms. The techniques used were qualified or demonstrated equivalent with the EPRI PWR Steam Generator Examination Guidelines. Several modes of degradation were detected during the exams. Most forms were expected, with the exception of sleeve cracking and re-roll cracking. By benchmarking actual inspection results to the projected values, reasonable projections can be made for EOC 16. The structural aspects of the various modes of degradation are either bound by previous testing and 1R15 in-situ testing or considered not a concern based on location within the tubesheet (e.g., URT, re-roll flaws). Additionally, the HAZ flaws and the upper tubesheet IGA are being addressed through specific Technical Specification requirements. The conclusion of this condition monitoring evaluation is that none of the performance criteria in NEI-97-06 were exceeded and based on the comprehensive exams performed it is concluded that the EOC 16 condition would not exceed the performance criteria. The combined EOC accident induced leakage values are provided in Table 21. As shown in Table 21, the total leakage contribution is less than 0.9 gpm. Therefore, based on this evaluation, Entergy Operations has concluded that the OTSGs pose no concern relative to

the safe operation of the plant or the health and safety of the public for the remainder of cycle 16.

Table 21
End of Cycle Accident Induced Leakage

Degradation Mechanism/Repair Type	MSLB Leakage Contribution Worst Case OTSG
Tube End Cracking (TEC ARC)	0.30 gpm
Upper Tubesheet IGA (IGA ARC)	0.10 gpm
Mechanical Wear	0
Freespan Groove IGA	0
Upper Roll Transition PWSCC	0.40 gpm
Re-roll Cracking	0.06 gpm
Sleeves/Plugs	0.02 gpm
Re-rolls	0.014 gpm
Total Leakage	0.896 gpm

APPENDIX 1
ANO-1 "A" OTSG
1R15 INSPECTION RESULTS

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	4	36	UTS + 9.64	VOL		IN-SERV	ARC IGA
A	8	39	UTS + 6.82	VOL		IN-SERV	ARC IGA
A	9	10	UTS + 7.35	VOL		IN-SERV	ARC IGA
A	9	23	UTS + 4.91	VOL		IN-SERV	ARC IGA
A	9	32	UTS + 6.55	VOL		IN-SERV	ARC IGA
A	10	22	UTS + 10.72	VOL		IN-SERV	ARC IGA
A	10	35	UTS + 6.15	VOL		IN-SERV	ARC IGA
A	11	28	UTS + 5.68	VOL		IN-SERV	ARC IGA
A	11	30	UTS + 7.55	VOL		IN-SERV	ARC IGA
A	12	24	UTS + 6.12	VOL		IN-SERV	ARC IGA
A	13	15	UTS + 7.69	VOL		IN-SERV	ARC IGA
A	13	25	UTS + 7.54	VOL		IN-SERV	ARC IGA
A	15	37	UTS + 7.80	VOL		IN-SERV	ARC IGA
A	17	44	UTE - 4.39	VOL		IN-SERV	ARC IGA
A	19	53	UTS + 7.14	VOL		IN-SERV	ARC IGA
A	21	49	UTS + 6.14	VOL		IN-SERV	ARC IGA
A	23	42	UTE - 7.00	VOL		IN-SERV	ARC IGA
A	23	53	UTS + 5.95	VOL		IN-SERV	ARC IGA
A	23	56	UTS + 5.41	VOL		IN-SERV	ARC IGA
A	24	16	UTS + 8.69	VOL		IN-SERV	ARC IGA
A	25	70	UTS + 10.97	VOL		IN-SERV	ARC IGA
A	25	82	UTS + 5.61	VOL		IN-SERV	ARC IGA
A	26	32	UTS + 17.20	VOL		IN-SERV	ARC IGA
A	26	55	UTS + 7.53	VOL		IN-SERV	ARC IGA
A	26	97	UTS + 19.03	VOL		IN-SERV	ARC IGA
A	27	27	UTS + 5.05	VOL		IN-SERV	ARC IGA
A	27	27	UTS + 4.60	VOL		IN-SERV	ARC IGA
A	28	2	UTS + 9.93	VOL		IN-SERV	ARC IGA
A	28	8	UTE - 6.02	VOL		IN-SERV	ARC IGA
A	29	5	UTS + 5.95	VOL		IN-SERV	ARC IGA
A	29	53	UTS + 3.92	VOL		IN-SERV	ARC IGA
A	30	88	UTS + 14.26	VOL		IN-SERV	ARC IGA
A	30	104	UTS + 12.12	VOL		IN-SERV	ARC IGA
A	31	106	UTS + 12.28	VOL		IN-SERV	ARC IGA
A	32	94	UTS + 7.26	VOL		IN-SERV	ARC IGA
A	33	105	UTS + 11.39	VOL		IN-SERV	ARC IGA
A	34	13	UTS + 8.47	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	35	55	UTS + 6.74	VOL		IN-SERV	ARC IGA
A	36	24	UTS + 9.33	VOL		IN-SERV	ARC IGA
A	37	12	UTS + 5.34	VOL		IN-SERV	ARC IGA
A	37	13	UTE - 14.35	VOL		IN-SERV	ARC IGA
A	37	110	UTS + 11.95	VOL		IN-SERV	ARC IGA
A	37	113	UTS + 9.07	VOL		IN-SERV	ARC IGA
A	38	10	UTS + 4.04	VOL		IN-SERV	ARC IGA
A	38	15	UTS + 8.77	VOL		IN-SERV	ARC IGA
A	38	36	UTE - 2.16	VOL		IN-SERV	ARC IGA
A	38	104	UTS + 6.91	VOL		IN-SERV	ARC IGA
A	39	47	UTS + 5.82	VOL		IN-SERV	ARC IGA
A	40	13	UTS + 6.09	VOL		IN-SERV	ARC IGA
A	40	15	UTS + 8.90	VOL		IN-SERV	ARC IGA
A	40	36	UTS + 4.66	VOL		IN-SERV	ARC IGA
A	40	100	UTS + 5.65	VOL		IN-SERV	ARC IGA
A	41	7	UTE - 1.71	VOL		IN-SERV	ARC IGA
A	41	15	UTE - 11.97	VOL		IN-SERV	ARC IGA
A	43	11	UTS + 6.24	VOL		IN-SERV	ARC IGA
A	43	105	UTS + 12.11	VOL		IN-SERV	ARC IGA
A	43	107	UTS + 8.49	VOL		IN-SERV	ARC IGA
A	43	108	UTS + 9.37	VOL		IN-SERV	ARC IGA
A	46	117	UTS + 6.27	VOL		IN-SERV	ARC IGA
A	47	2	UTS + 14.39	VOL		IN-SERV	ARC IGA
A	48	21	UTS + 2.52	VOL		IN-SERV	ARC IGA
A	48	24	UTS + 5.04	VOL		IN-SERV	ARC IGA
A	48	73	UTS + 10.24	VOL		IN-SERV	ARC IGA
A	48	112	UTS + 5.13	VOL		IN-SERV	ARC IGA
A	49	5	UTE - 6.10	VOL		IN-SERV	ARC IGA
A	50	119	UTS + 8.72	VOL		IN-SERV	ARC IGA
A	51	21	UTE - 12.34	VOL		IN-SERV	ARC IGA
A	51	119	UTS + 8.44	VOL		IN-SERV	ARC IGA
A	52	125	UTS + 7.44	VOL		IN-SERV	ARC IGA
A	53	68	UTS + 9.60	VOL		IN-SERV	ARC IGA
A	53	97	UTS + 5.13	VOL		IN-SERV	ARC IGA
A	55	12	UTE - 7.31	VOL		IN-SERV	ARC IGA
A	55	123	UTS + 11.07	VOL		IN-SERV	ARC IGA
A	55	123	UTS + 8.39	VOL		IN-SERV	ARC IGA
A	55	124	UTS + 9.60	VOL		IN-SERV	ARC IGA
A	55	124	UTS + 6.76	VOL		IN-SERV	ARC IGA
A	56	3	UTS + 8.56	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	56	3	UTS + 6.56	VOL		IN-SERV	ARC IGA
A	56	23	UTS + 10.32	VOL		IN-SERV	ARC IGA
A	56	112	UTS + 10.71	VOL		IN-SERV	ARC IGA
A	56	125	UTS + 8.21	VOL		IN-SERV	ARC IGA
A	56	127	UTS + 8.04	VOL		IN-SERV	ARC IGA
A	57	12	UTS + 5.54	VOL		IN-SERV	ARC IGA
A	57	123	UTS + 8.42	VOL		IN-SERV	ARC IGA
A	58	8	UTS + 11.82	VOL		IN-SERV	ARC IGA
A	58	26	UTS + 7.50	VOL		IN-SERV	ARC IGA
A	58	26	UTS + 10.41	VOL		IN-SERV	ARC IGA
A	58	94	UTE - 3.48	VOL		IN-SERV	ARC IGA
A	59	5	UTE - 4.41	VOL		IN-SERV	ARC IGA
A	59	8	UTS + 10.75	VOL		IN-SERV	ARC IGA
A	59	9	UTS + 10.69	VOL		IN-SERV	ARC IGA
A	59	17	UTS + 8.31	VOL		IN-SERV	ARC IGA
A	59	113	UTS + 11.34	VOL		IN-SERV	ARC IGA
A	60	2	UTS + 6.79	VOL		IN-SERV	ARC IGA
A	60	121	UTS + 9.20	VOL		IN-SERV	ARC IGA
A	60	121	UTS + 8.94	VOL		IN-SERV	ARC IGA
A	60	121	UTS + 8.59	VOL		IN-SERV	ARC IGA
A	61	111	UTS + 3.94	VOL		IN-SERV	ARC IGA
A	62	99	UTS + 3.75	VOL		IN-SERV	ARC IGA
A	63	5	UTE - 1.44	VOL		IN-SERV	ARC IGA
A	63	61	UTS + 19.89	VOL		IN-SERV	ARC IGA
A	63	61	UTS + 11.03	VOL		IN-SERV	ARC IGA
A	63	61	UTS + 9.26	VOL		IN-SERV	ARC IGA
A	63	61	UTE - 6.44	VOL		IN-SERV	ARC IGA
A	63	106	UTE - 3.40	VOL		IN-SERV	ARC IGA
A	64	22	UTS + 3.97	VOL		IN-SERV	ARC IGA
A	64	53	UTS + 10.13	VOL		IN-SERV	ARC IGA
A	65	6	UTE - 2.29	VOL		IN-SERV	ARC IGA
A	65	6	UTE - 2.23	VOL		IN-SERV	ARC IGA
A	65	47	UTS + 4.47	VOL		IN-SERV	ARC IGA
A	65	47	UTS + 5.68	VOL		IN-SERV	ARC IGA
A	65	47	UTS + 7.58	VOL		IN-SERV	ARC IGA
A	65	56	UTS + 11.31	VOL		IN-SERV	ARC IGA
A	65	56	UTS + 10.34	VOL		IN-SERV	ARC IGA
A	65	63	UTE - 8.00	VOL		IN-SERV	ARC IGA
A	65	120	UTS + 8.62	VOL		IN-SERV	ARC IGA
A	65	124	UTS + 5.01	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	66	12	UTS + 6.36	VOL		IN-SERV	ARC IGA
A	66	12	UTS + 16.60	VOL		IN-SERV	ARC IGA
A	66	43	UTS + 9.09	VOL		IN-SERV	ARC IGA
A	66	123	UTS + 7.77	VOL		IN-SERV	ARC IGA
A	66	127	UTS + 7.11	VOL		IN-SERV	ARC IGA
A	66	127	UTS + 5.50	VOL		IN-SERV	ARC IGA
A	67	10	UTE - 12.64	VOL		IN-SERV	ARC IGA
A	67	25	UTS + 6.88	VOL		IN-SERV	ARC IGA
A	67	62	UTS + 8.96	VOL		IN-SERV	ARC IGA
A	67	120	UTS + 4.61	VOL		IN-SERV	ARC IGA
A	68	8	UTE - 13.09	VOL		IN-SERV	ARC IGA
A	68	9	UTS + 7.07	VOL		IN-SERV	ARC IGA
A	68	16	UTE - 11.74	VOL		IN-SERV	ARC IGA
A	68	17	UTE - 11.76	VOL		IN-SERV	ARC IGA
A	68	26	UTS + 6.01	VOL		IN-SERV	ARC IGA
A	68	36	UTS + 11.37	VOL		IN-SERV	ARC IGA
A	68	59	UTS + 6.07	VOL		IN-SERV	ARC IGA
A	68	130	UTS + 5.64	VOL		IN-SERV	ARC IGA
A	69	16	UTS + 2.73	VOL		IN-SERV	ARC IGA
A	69	20	UTE - 9.86	VOL		IN-SERV	ARC IGA
A	69	22	UTS + 7.15	VOL		IN-SERV	ARC IGA
A	69	23	UTS + 17.01	VOL		IN-SERV	ARC IGA
A	69	30	UTE - 12.90	VOL		IN-SERV	ARC IGA
A	69	39	UTS + 9.66	VOL		IN-SERV	ARC IGA
A	69	74	UTE - 6.08	VOL		IN-SERV	ARC IGA
A	69	117	UTS + 5.95	VOL		IN-SERV	ARC IGA
A	69	124	UTS + 7.59	VOL		IN-SERV	ARC IGA
A	69	127	UTS + 7.26	VOL		IN-SERV	ARC IGA
A	70	11	UTE - 9.42	VOL		IN-SERV	ARC IGA
A	70	19	UTE - 8.33	VOL		IN-SERV	ARC IGA
A	70	65	UTE - 8.74	VOL		IN-SERV	ARC IGA
A	70	65	UTS + 13.92	VOL		IN-SERV	ARC IGA
A	70	120	UTS + 9.07	VOL		IN-SERV	ARC IGA
A	71	32	UTS + 6.97	VOL		IN-SERV	ARC IGA
A	71	45	UTS + 6.88	VOL		IN-SERV	ARC IGA
A	72	56	UTS + 4.67	VOL		IN-SERV	ARC IGA
A	72	106	UTS + 12.14	VOL		IN-SERV	ARC IGA
A	73	65	UTS + 16.02	VOL		IN-SERV	ARC IGA
A	74	47	UTS + 1.60	VOL		IN-SERV	ARC IGA
A	76	78	UTS + 19.53	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	77	58	UTS + 13.50	VOL		IN-SERV	ARC IGA
A	78	34	UTS + 6.30	VOL		IN-SERV	ARC IGA
A	79	14	UTE - 2.87	VOL		IN-SERV	ARC IGA
A	79	18	UTS + 4.75	VOL		IN-SERV	ARC IGA
A	79	26	UTE - 2.24	VOL		IN-SERV	ARC IGA
A	79	65	UTS + 14.96	VOL		IN-SERV	ARC IGA
A	79	74	UTS + 20.10	VOL		IN-SERV	ARC IGA
A	79	123	UTS + 6.88	VOL		IN-SERV	ARC IGA
A	80	34	UTS + 6.16	VOL		IN-SERV	ARC IGA
A	80	64	UTS + 21.19	VOL		IN-SERV	ARC IGA
A	80	65	UTS + 5.64	VOL		IN-SERV	ARC IGA
A	81	25	UTE - 7.03	VOL		IN-SERV	ARC IGA
A	81	56	UTS + 11.12	VOL		IN-SERV	ARC IGA
A	81	56	UTS + 15.53	VOL		IN-SERV	ARC IGA
A	81	57	UTS + 9.90	VOL		IN-SERV	ARC IGA
A	82	23	UTS + 17.54	VOL		IN-SERV	ARC IGA
A	82	27	UTS + 7.16	VOL		IN-SERV	ARC IGA
A	82	32	UTS + 5.98	VOL		IN-SERV	ARC IGA
A	82	34	UTS + 8.55	VOL		IN-SERV	ARC IGA
A	82	37	UTS + 11.14	VOL		IN-SERV	ARC IGA
A	82	50	UTS + 11.79	VOL		IN-SERV	ARC IGA
A	82	55	UTS + 14.51	VOL		IN-SERV	ARC IGA
A	82	55	UTS + 12.37	VOL		IN-SERV	ARC IGA
A	82	64	UTS + 15.20	VOL		IN-SERV	ARC IGA
A	83	20	UTS + 3.04	VOL		IN-SERV	ARC IGA
A	83	48	UTS + 16.05	VOL		IN-SERV	ARC IGA
A	83	50	UTS + 21.75	VOL		IN-SERV	ARC IGA
A	83	51	UTS + 11.92	VOL		IN-SERV	ARC IGA
A	83	114	UTS + 5.81	VOL		IN-SERV	ARC IGA
A	83	114	UTS + 6.37	VOL		IN-SERV	ARC IGA
A	83	130	UTS + 6.45	VOL		IN-SERV	ARC IGA
A	84	12	UTS + 3.87	VOL		IN-SERV	ARC IGA
A	84	35	UTS + 12.94	VOL		IN-SERV	ARC IGA
A	84	45	UTS + 16.35	VOL		IN-SERV	ARC IGA
A	85	26	UTS + 8.48	VOL		IN-SERV	ARC IGA
A	85	43	UTS + 21.25	VOL		IN-SERV	ARC IGA
A	85	43	UTS + 19.06	VOL		IN-SERV	ARC IGA
A	85	53	UTS + 17.65	VOL		IN-SERV	ARC IGA
A	85	53	UTS + 17.89	VOL		IN-SERV	ARC IGA
A	85	53	UTS + 18.32	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	86	16	UTS + 5.51	VOL		IN-SERV	ARC IGA
A	86	32	UTS + 12.06	VOL		IN-SERV	ARC IGA
A	86	34	UTS + 8.85	VOL		IN-SERV	ARC IGA
A	86	74	UTS + 4.96	VOL		IN-SERV	ARC IGA
A	86	75	UTS + 4.53	VOL		IN-SERV	ARC IGA
A	86	113	UTS + 20.82	VOL		IN-SERV	ARC IGA
A	86	113	UTS + 22.25	VOL		IN-SERV	ARC IGA
A	86	121	UTS + 12.91	VOL		IN-SERV	ARC IGA
A	86	130	UTS + 8.37	VOL		IN-SERV	ARC IGA
A	86	130	UTS + 3.24	VOL		IN-SERV	ARC IGA
A	87	6	UTE - 2.25	VOL		IN-SERV	ARC IGA
A	87	6	UTS + 21.53	VOL		IN-SERV	ARC IGA
A	87	12	UTS + 6.12	VOL		IN-SERV	ARC IGA
A	88	59	UTS + 15.01	VOL		IN-SERV	ARC IGA
A	90	17	UTS + 8.49	VOL		IN-SERV	ARC IGA
A	92	109	UTS + 4.25	VOL		IN-SERV	ARC IGA
A	92	119	UTS + 6.55	VOL		IN-SERV	ARC IGA
A	92	127	UTS + 5.69	VOL		IN-SERV	ARC IGA
A	94	5	UTS + 12.80	VOL		IN-SERV	ARC IGA
A	94	58	UTS + 18.67	VOL		IN-SERV	ARC IGA
A	94	121	UTS + 5.70	VOL		IN-SERV	ARC IGA
A	95	30	UTS + 13.05	VOL		IN-SERV	ARC IGA
A	95	126	UTS + 5.28	VOL		IN-SERV	ARC IGA
A	96	7	UTS + 10.25	VOL		IN-SERV	ARC IGA
A	96	25	UTS + 8.68	VOL		IN-SERV	ARC IGA
A	97	109	UTS + 2.97	VOL		IN-SERV	ARC IGA
A	97	119	UTS + 3.64	VOL		IN-SERV	ARC IGA
A	98	6	UTS + 6.21	VOL		IN-SERV	ARC IGA
A	98	123	UTS + 7.29	VOL		IN-SERV	ARC IGA
A	99	120	UTS + 13.02	VOL		IN-SERV	ARC IGA
A	99	121	UTS + 10.83	VOL		IN-SERV	ARC IGA
A	100	110	UTS + 5.45	VOL		IN-SERV	ARC IGA
A	101	112	UTS + 10.13	VOL		IN-SERV	ARC IGA
A	101	112	UTS + 10.48	VOL		IN-SERV	ARC IGA
A	101	121	UTS + 13.39	VOL		IN-SERV	ARC IGA
A	102	14	UTS + 10.06	VOL		IN-SERV	ARC IGA
A	102	66	UTS + 20.96	VOL		IN-SERV	ARC IGA
A	102	112	UTS + 12.54	VOL		IN-SERV	ARC IGA
A	103	8	UTS + 10.80	VOL		IN-SERV	ARC IGA
A	103	52	UTS + 10.57	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	104	14	UTS + 8.76	VOL		IN-SERV	ARC IGA
A	104	14	UTS + 9.95	VOL		IN-SERV	ARC IGA
A	104	57	UTS + 20.41	VOL		IN-SERV	ARC IGA
A	105	9	UTS + 5.77	VOL		IN-SERV	ARC IGA
A	105	45	UTS + 11.24	VOL		IN-SERV	ARC IGA
A	105	112	UTS + 8.87	VOL		IN-SERV	ARC IGA
A	108	99	UTS + 4.51	VOL		IN-SERV	ARC IGA
A	111	107	UTS + 6.85	VOL		IN-SERV	ARC IGA
A	111	109	UTS + 5.29	VOL		IN-SERV	ARC IGA
A	114	2	UTS 3.73	VOL		IN-SERV	ARC IGA
A	114	10	UTS + 5.14	VOL		IN-SERV	ARC IGA
A	114	94	UTS + 3.35	VOL		IN-SERV	ARC IGA
A	114	113	UTS + 9.73	VOL		IN-SERV	ARC IGA
A	115	108	UTS + 9.93	VOL		IN-SERV	ARC IGA
A	115	113	UTS + 8.81	VOL		IN-SERV	ARC IGA
A	116	72	UTS + 15.10	VOL		IN-SERV	ARC IGA
A	116	85	UTS + 4.32	VOL		IN-SERV	ARC IGA
A	116	98	UTS + 17.01	VOL		IN-SERV	ARC IGA
A	116	104	UTS + 4.57	VOL		IN-SERV	ARC IGA
A	116	106	UTS + 6.68	VOL		IN-SERV	ARC IGA
A	116	112	UTS + 8.83	VOL		IN-SERV	ARC IGA
A	117	16	UTS + 6.55	VOL		IN-SERV	ARC IGA
A	117	66	UTE - 6.55	VOL		IN-SERV	ARC IGA
A	117	99	UTS +3.56	VOL		IN-SERV	ARC IGA
A	118	15	UTS + 12.71	VOL		IN-SERV	ARC IGA
A	118	42	UTS + 7.02	VOL		IN-SERV	ARC IGA
A	119	3	UTS + 8.00	VOL		IN-SERV	ARC IGA
A	119	105	UTS + 4.87	VOL		IN-SERV	ARC IGA
A	120	92	UTS + 5.98	VOL		IN-SERV	ARC IGA
A	120	99	UTS + 7.22	VOL		IN-SERV	ARC IGA
A	120	105	UTS + 4.61	VOL		IN-SERV	ARC IGA
A	120	106	UTS + 4.44	VOL		IN-SERV	ARC IGA
A	120	106	UTS + 3.48	VOL		IN-SERV	ARC IGA
A	121	72	UTS + 14.55	VOL		IN-SERV	ARC IGA
A	122	98	UTS + 8.75	VOL		IN-SERV	ARC IGA
A	122	104	UTS + 3.80	VOL		IN-SERV	ARC IGA
A	123	100	UTS + 6.31	VOL		IN-SERV	ARC IGA
A	124	12	UTS + 12.50	VOL		IN-SERV	ARC IGA
A	125	90	UTS + 11.88	VOL		IN-SERV	ARC IGA
A	125	96	UTS + 12.16	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	125	96	UTS + 10.52	VOL		IN-SERV	ARC IGA
A	125	98	UTS + 9.70	VOL		IN-SERV	ARC IGA
A	126	96	UTS + 8.50	VOL		IN-SERV	ARC IGA
A	126	99	UTS + 7.78	VOL		IN-SERV	ARC IGA
A	126	99	UTS + 7.76	VOL		IN-SERV	ARC IGA
A	126	99	UTS + 6.90	VOL		IN-SERV	ARC IGA
A	127	27	UTS + 3.74	VOL		IN-SERV	ARC IGA
A	127	67	UTS + 17.28	VOL		IN-SERV	ARC IGA
A	129	91	UTS + 7.75	VOL		IN-SERV	ARC IGA
A	130	3	UTS + 11.39	VOL		IN-SERV	ARC IGA
A	132	29	UTS + 7.37	VOL		IN-SERV	ARC IGA
A	132	80	UTS + 9.84	VOL		IN-SERV	ARC IGA
A	134	3	UTS + 7.37	VOL		IN-SERV	ARC IGA
A	134	31	UTS + 9.72	VOL		IN-SERV	ARC IGA
A	134	37	UTS + 13.29	VOL		IN-SERV	ARC IGA
A	136	2	UTS + 7.39	VOL		IN-SERV	ARC IGA
A	136	33	UTS + 12.14	VOL		IN-SERV	ARC IGA
A	136	76	UTS + 12.43	VOL		IN-SERV	ARC IGA
A	137	3	UTS + 6.45	VOL		IN-SERV	ARC IGA
A	137	12	UTS + 6.80	VOL		IN-SERV	ARC IGA
A	138	25	UTS + 10.92	VOL		IN-SERV	ARC IGA
A	138	31	UTS + 5.25	VOL		IN-SERV	ARC IGA
A	138	40	UTS + 9.53	VOL		IN-SERV	ARC IGA
A	138	72	UTS + 7.30	VOL		IN-SERV	ARC IGA
A	139	31	UTS + 6.00	VOL		IN-SERV	ARC IGA
A	139	51	UTS + 8.12	VOL		IN-SERV	ARC IGA
A	139	52	UTS + 6.07	VOL		IN-SERV	ARC IGA
A	140	29	UTS + 5.50	VOL		IN-SERV	ARC IGA
A	140	29	UTS + 5.91	VOL		IN-SERV	ARC IGA
A	142	28	UTS + 4.18	VOL		IN-SERV	ARC IGA
A	142	49	UTS + 7.09	VOL		IN-SERV	ARC IGA
A	142	49	UTS + 6.34	VOL		IN-SERV	ARC IGA
A	143	38	UTS + 10.27	VOL		IN-SERV	ARC IGA
A	143	52	UTS + 5.30	VOL		IN-SERV	ARC IGA
A	145	24	UTS + 7.10	VOL		IN-SERV	ARC IGA
A	146	28	UTS + 10.89	VOL		IN-SERV	ARC IGA
A	146	48	UTS + 8.15	VOL		IN-SERV	ARC IGA
A	147	37	UTS + 14.53	VOL		IN-SERV	ARC IGA
A	148	6	UTS + 7.21	VOL		IN-SERV	ARC IGA
A	3	4	UTE - 0.33	MAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	3	16	UTE - 0.40	SAA		IN-SERV	ARC TEC
A	4	21	UTE - 0.35	SAA		IN-SERV	ARC TEC
A	4	22	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	4	27	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	4	37	UTE - 0.42	MAA		IN-SERV	ARC TEC
A	5	1	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	5	4	UTE - 0.44	SAA		IN-SERV	ARC TEC
A	5	24	UTE - 0.36	MAA		IN-SERV	ARC TEC
A	5	25	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	5	26	UTE - 0.32	MAA		IN-SERV	ARC TEC
A	5	46	UTE - 0.12	SAA		IN-SERV	ARC TEC
A	6	28	UTE - 0.10	MAA		IN-SERV	ARC TEC
A	6	36	UTE - 0.10	MAA		IN-SERV	ARC TEC
A	6	48	UTE - 0.10	SAA		IN-SERV	ARC TEC
A	6	50	UTE - 0.10	SAA		IN-SERV	ARC TEC
A	7	2	UTE - 0.32	SAA		IN-SERV	ARC TEC
A	7	43	UTE - 0.37	MAA		IN-SERV	ARC TEC
A	7	52	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	8	6	UTE - 0.31	SAA		IN-SERV	ARC TEC
A	8	12	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	8	39	UTE - 0.14	SAA		IN-SERV	ARC TEC
A	8	49	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	9	9	UTE - 0.35	SAA		IN-SERV	ARC TEC
A	9	10	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	9	12	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	9	46	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	10	8	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	10	15	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	10	30	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	10	35	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	10	43	UTE - 0.10	SAA		IN-SERV	ARC TEC
A	10	47	UTE - 0.14	SAA		IN-SERV	ARC TEC
A	10	58	UTE - 0.32	SAA		IN-SERV	ARC TEC
A	11	50	UTE - 0.41	SAA		IN-SERV	ARC TEC
A	11	57	UTE - 0.50	SAA		IN-SERV	ARC TEC
A	11	60	UTE - 0.40	SAA		IN-SERV	ARC TEC
A	11	61	UTE - 0.51	MAA		IN-SERV	ARC TEC
A	11	63	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	12	11	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	12	32	UTE - 0.31	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	12	47	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	12	60	UTE - 0.49	SAA		IN-SERV	ARC TEC
A	12	62	UTE - 0.66	MAA		IN-SERV	ARC TEC
A	13	64	UTE - 0.39	SAA		IN-SERV	ARC TEC
A	14	4	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	14	39	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	14	62	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	14	65	UTE - 0.39	MAA		IN-SERV	ARC TEC
A	14	69	UTE - 0.64	SAA		IN-SERV	ARC TEC
A	14	72	UTE - 0.46	MAA		IN-SERV	ARC TEC
A	15	38	UTE - 0.33	MAA		IN-SERV	ARC TEC
A	15	55	UTE - 0.41	SAA		IN-SERV	ARC TEC
A	16	18	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	16	34	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	16	66	UTE - 0.56	SAA		IN-SERV	ARC TEC
A	17	8	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	17	21	UTE - 0.24	MAA		IN-SERV	ARC TEC
A	17	67	UTE - 0.21	MAA		IN-SERV	ARC TEC
A	17	69	UTE - 0.30	MAA		IN-SERV	ARC TEC
A	17	72	UTE - 0.55	MAA		IN-SERV	ARC TEC
A	18	14	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	18	20	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	18	26	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	18	36	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	18	55	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	18	67	UTE - 0.32	SAA		IN-SERV	ARC TEC
A	18	72	UTE - 0.63	SAA		IN-SERV	ARC TEC
A	18	78	UTE - 0.43	MAA		IN-SERV	ARC TEC
A	19	3	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	19	10	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	19	66	UTE - 0.51	SAA		IN-SERV	ARC TEC
A	19	68	UTE - 0.51	SAA		IN-SERV	ARC TEC
A	19	69	UTE - 0.31	SAA		IN-SERV	ARC TEC
A	19	70	UTE - 0.75	SAA		IN-SERV	ARC TEC
A	19	75	UTE - 0.36	SAA		IN-SERV	ARC TEC
A	20	6	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	20	10	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	20	13	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	20	28	UTE - 0.19	MAA		IN-SERV	ARC TEC
A	20	41	UTE - 0.32	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	20	64	UTE - 0.29	MAA		IN-SERV	ARC TEC
A	20	69	UTE - 0.32	SAA		IN-SERV	ARC TEC
A	21	3	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	21	8	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	21	9	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	21	10	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	21	17	UTE - 0.18	SAA		IN-SERV	ARC TEC
A	21	26	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	21	69	UTE - 0.29	MAA		IN-SERV	ARC TEC
A	22	4	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	22	7	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	22	9	UTE - 0.24	MAA		IN-SERV	ARC TEC
A	22	12	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	22	14	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	22	18	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	22	30	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	22	72	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	22	74	UTE - 0.32	SAA		IN-SERV	ARC TEC
A	22	76	UTE - 0.32	SAA		IN-SERV	ARC TEC
A	23	12	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	23	18	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	23	60	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	23	74	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	24	7	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	24	9	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	24	10	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	25	9	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	25	12	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	25	14	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	25	16	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	25	34	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	25	73	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	25	75	UTE - 0.48	MAA		IN-SERV	ARC TEC
A	26	15	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	26	18	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	26	50	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	26	73	UTE - 0.18	MAA		IN-SERV	ARC TEC
A	26	79	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	27	7	UTE - 0.21	MAA		IN-SERV	ARC TEC
A	27	12	UTE - 0.25	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	27	17	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	27	76	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	27	81	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	27	83	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	27	89	UTE - 0.35	MAA		IN-SERV	ARC TEC
A	28	8	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	28	9	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	28	15	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	28	31	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	28	32	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	28	47	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	28	51	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	28	74	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	29	9	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	29	11	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	29	12	UTE - 0.14	SAA		IN-SERV	ARC TEC
A	29	15	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	29	17	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	29	31	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	29	41	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	30	3	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	30	5	UTE - 0.14	MAA		IN-SERV	ARC TEC
A	30	9	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	30	14	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	30	16	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	30	21	UTE - 0.18	MAA		IN-SERV	ARC TEC
A	30	64	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	30	80	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	31	3	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	31	19	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	31	34	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	32	6	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	33	4	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	33	35	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	33	57	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	33	107	UTE - 0.38	SAA		IN-SERV	ARC TEC
A	34	8	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	34	22	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	34	97	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	34	102	UTE - 0.21	MAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	34	107	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	35	106	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	35	108	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	36	1	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	36	10	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	36	60	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	36	101	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	36	109	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	37	5	UTE - 0.35	SAA		IN-SERV	ARC TEC
A	37	67	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	37	103	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	37	107	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	37	111	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	38	8	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	38	17	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	38	102	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	38	110	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	38	112	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	39	6	UTE - 0.21	MAA		IN-SERV	ARC TEC
A	39	104	UTE - 0.15	MAA		IN-SERV	ARC TEC
A	39	106	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	39	110	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	39	112	UTE - 0.24	MAA		IN-SERV	ARC TEC
A	40	4	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	40	5	UTE - 0.33	SAA		IN-SERV	ARC TEC
A	40	15	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	40	21	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	40	85	UTE - 0.08	SAA		IN-SERV	ARC TEC
A	40	99	UTE - 0.09	SAA		IN-SERV	ARC TEC
A	40	102	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	40	115	UTE - 0.19	MAA		IN-SERV	ARC TEC
A	41	6	UTE - 0.33	MAA		IN-SERV	ARC TEC
A	41	17	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	41	19	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	41	36	UTE - 0.31	SAA		IN-SERV	ARC TEC
A	41	62	UTE - 0.12	SAA		IN-SERV	ARC TEC
A	41	63	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	41	113	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	42	2	UTE - 0.35	MAA		IN-SERV	ARC TEC
A	42	38	UTE - 0.26	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	42	47	UTE - 0.13	SAA		IN-SERV	ARC TEC
A	42	69	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	42	79	UTE - 0.10	SAA		IN-SERV	ARC TEC
A	42	103	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	42	104	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	42	111	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	42	112	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	42	113	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	43	2	UTE - 0.37	SAA		IN-SERV	ARC TEC
A	43	6	UTE - 0.17	MAA		IN-SERV	ARC TEC
A	43	12	UTE - 0.34	SAA		IN-SERV	ARC TEC
A	43	39	UTE - 0.14	SAA		IN-SERV	ARC TEC
A	43	53	UTE - 0.35	MAA		IN-SERV	ARC TEC
A	43	63	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	43	112	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	43	113	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	44	8	UTE - 0.18	SAA		IN-SERV	ARC TEC
A	44	10	UTE - 0.31	SAA		IN-SERV	ARC TEC
A	44	19	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	44	22	UTE - 0.11	SAA		IN-SERV	ARC TEC
A	44	31	UTE - 0.16	MAA		IN-SERV	ARC TEC
A	44	39	UTE - 0.18	MAA		IN-SERV	ARC TEC
A	44	54	UTE - 0.79	SAA		IN-SERV	ARC TEC
A	44	68	UTE - 0.74	SAA		IN-SERV	ARC TEC
A	44	70	UTE - 0.68	SAA		IN-SERV	ARC TEC
A	44	96	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	44	99	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	44	100	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	44	105	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	44	111	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	44	114	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	44	115	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	45	7	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	45	28	UTE - 0.11	MAA		IN-SERV	ARC TEC
A	45	78	UTE - 0.63	SAA		IN-SERV	ARC TEC
A	45	83	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	45	89	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	45	102	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	45	107	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	45	110	UTE - 0.20	MAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	45	115	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	46	6	UTE - 0.18	MAA		IN-SERV	ARC TEC
A	46	8	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	46	10	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	46	16	UTE - 0.13	MAA		IN-SERV	ARC TEC
A	46	22	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	46	85	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	46	99	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	46	104	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	46	106	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	46	107	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	46	110	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	46	113	UTE - 0.36	MAA		IN-SERV	ARC TEC
A	46	115	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	46	117	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	47	7	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	47	8	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	47	12	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	47	20	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	47	21	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	47	49	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	47	86	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	47	87	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	47	89	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	47	107	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	47	110	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	47	112	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	47	113	UTE - 0.33	MAA		IN-SERV	ARC TEC
A	47	115	UTE - 0.33	MAA		IN-SERV	ARC TEC
A	48	5	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	48	12	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	48	14	UTE - 0.29	MAA		IN-SERV	ARC TEC
A	48	16	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	48	17	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	48	19	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	48	21	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	48	24	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	48	25	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	48	26	UTE - 0.13	MAA		IN-SERV	ARC TEC
A	48	72	UTE - 0.32	MAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	48	115	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	48	118	UTE - 0.21	MAA		IN-SERV	ARC TEC
A	49	5	UTE - 0.18	SAA		IN-SERV	ARC TEC
A	49	21	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	49	68	UTE - 0.24	MAA		IN-SERV	ARC TEC
A	49	81	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	49	89	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	49	90	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	49	107	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	49	110	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	49	112	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	49	113	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	49	115	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	49	116	UTE - 0.32	SAA		IN-SERV	ARC TEC
A	49	117	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	49	120	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	49	123	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	50	5	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	50	79	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	50	85	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	50	90	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	50	112	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	50	115	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	50	117	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	50	119	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	51	26	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	51	27	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	51	89	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	51	90	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	51	104	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	51	109	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	51	119	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	52	8	UTE - 0.13	MAA		IN-SERV	ARC TEC
A	52	18	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	52	23	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	52	58	UTE - 0.32	SAA		IN-SERV	ARC TEC
A	52	89	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	52	103	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	52	104	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	52	117	UTE - 0.25	MAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	52	119	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	52	120	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	53	6	UTE - 0.21	MAA		IN-SERV	ARC TEC
A	53	9	UTE - 0.14	SAA		IN-SERV	ARC TEC
A	53	12	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	53	14	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	53	18	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	53	42	UTE - 0.32	MAA		IN-SERV	ARC TEC
A	53	52	UTE - 0.37	SAA		IN-SERV	ARC TEC
A	53	54	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	53	56	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	53	66	UTE - 0.33	MAA		IN-SERV	ARC TEC
A	53	76	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	53	78	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	53	89	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	53	104	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	53	115	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	53	119	UTE - 0.35	MAA		IN-SERV	ARC TEC
A	53	121	UTE - 0.17	MAA		IN-SERV	ARC TEC
A	54	3	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	54	14	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	54	23	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	54	24	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	54	25	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	54	29	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	54	53	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	54	63	UTE - 0.46	SAA		IN-SERV	ARC TEC
A	54	67	UTE - 0.38	SAA		IN-SERV	ARC TEC
A	54	90	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	54	92	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	54	104	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	54	109	UTE - 0.39	SAA		IN-SERV	ARC TEC
A	54	111	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	54	113	UTE - 0.31	MAA		IN-SERV	ARC TEC
A	54	119	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	54	121	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	54	125	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	55	4	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	55	8	UTE - 0.21	MAA		IN-SERV	ARC TEC
A	55	10	UTE - 0.23	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	55	22	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	55	31	UTE - 0.14	MAA		IN-SERV	ARC TEC
A	55	42	UTE - 0.21	MAA		IN-SERV	ARC TEC
A	55	56	UTE - 0.35	MAA		IN-SERV	ARC TEC
A	55	62	UTE - 0.50	SAA		IN-SERV	ARC TEC
A	55	76	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	55	80	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	55	91	UTE - 0.24	MAA		IN-SERV	ARC TEC
A	55	114	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	56	8	UTE - 0.12	SAA		IN-SERV	ARC TEC
A	56	9	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	56	18	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	56	32	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	56	36	UTE - 0.10	MAA		IN-SERV	ARC TEC
A	56	74	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	56	109	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	56	114	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	56	122	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	56	125	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	57	15	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	57	23	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	57	115	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	57	116	UTE - 0.33	MAA		IN-SERV	ARC TEC
A	57	122	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	58	4	UTE - 0.12	SAA		IN-SERV	ARC TEC
A	58	6	UTE - 0.11	SAA		IN-SERV	ARC TEC
A	58	25	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	58	26	UTE - 0.18	MAA		IN-SERV	ARC TEC
A	58	35	UTE - 0.34	SAA		IN-SERV	ARC TEC
A	58	106	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	58	112	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	58	116	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	58	119	UTE - 0.32	MAA		IN-SERV	ARC TEC
A	59	11	UTE - 0.13	MAA		IN-SERV	ARC TEC
A	59	12	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	59	122	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	60	15	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	60	17	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	60	25	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	60	105	UTE - 0.19	MAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	60	118	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	60	119	UTE - 0.33	MAA		IN-SERV	ARC TEC
A	60	120	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	60	121	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	60	122	UTE - 0.21	MAA		IN-SERV	ARC TEC
A	61	9	UTE - 0.13	MAA		IN-SERV	ARC TEC
A	61	25	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	61	26	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	61	32	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	61	106	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	61	108	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	61	109	UTE - 0.60	SAA		IN-SERV	ARC TEC
A	61	114	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	61	123	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	62	112	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	62	117	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	62	118	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	62	120	UTE - 0.33	MAA		IN-SERV	ARC TEC
A	62	126	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	63	17	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	63	24	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	63	26	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	63	39	UTE - 0.39	SAA		IN-SERV	ARC TEC
A	63	40	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	63	58	UTE - 0.40	SAA		IN-SERV	ARC TEC
A	63	69	UTE - 0.40	MAA		IN-SERV	ARC TEC
A	63	92	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	63	109	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	63	110	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	63	120	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	63	123	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	63	127	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	64	60	UTE - 0.54	SAA		IN-SERV	ARC TEC
A	64	62	UTE - 0.53	SAA		IN-SERV	ARC TEC
A	64	91	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	64	108	UTE - 0.12	MAA		IN-SERV	ARC TEC
A	64	110	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	64	120	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	64	121	UTE - 0.33	SAA		IN-SERV	ARC TEC
A	64	123	UTE - 0.21	MAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	64	125	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	65	26	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	65	27	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	65	55	UTE - 0.38	MAA		IN-SERV	ARC TEC
A	65	68	UTE - 0.34	SAA		IN-SERV	ARC TEC
A	65	93	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	65	120	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	65	127	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	65	130	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	66	19	UTE - 0.21	MAA		IN-SERV	ARC TEC
A	66	41	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	66	95	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	66	111	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	66	120	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	66	126	UTE - 0.31	SAA		IN-SERV	ARC TEC
A	67	20	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	67	21	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	67	24	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	67	67	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	67	93	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	67	123	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	68	17	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	68	38	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	68	119	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	69	16	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	69	26	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	69	121	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	69	124	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	70	23	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	70	94	UTE - 0.32	MAA		IN-SERV	ARC TEC
A	70	108	UTE - 0.40	SAA		IN-SERV	ARC TEC
A	70	118	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	71	41	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	71	56	UTE - 0.90	MAA		IN-SERV	ARC TEC
A	71	120	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	71	123	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	71	125	UTE - 0.24	MAA		IN-SERV	ARC TEC
A	72	91	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	72	113	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	72	114	UTE - 0.29	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	72	117	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	72	122	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	72	123	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	72	124	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	73	118	UTE - 0.24	MAA		IN-SERV	ARC TEC
A	73	119	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	73	123	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	74	36	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	74	115	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	74	117	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	74	120	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	74	125	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	75	116	UTE - 0.31	SAA		IN-SERV	ARC TEC
A	75	118	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	75	126	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	76	112	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	77	115	UTE - 0.41	MAA		IN-SERV	ARC TEC
A	78	55	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	78	68	UTE - 0.07	SAA		IN-SERV	ARC TEC
A	78	123	UTE - 0.47	MAA		IN-SERV	ARC TEC
A	79	49	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	79	73	UTE - 0.07	MAA		IN-SERV	ARC TEC
A	79	78	UTE - 0.08	MAA		IN-SERV	ARC TEC
A	79	129	UTE - 0.46	SAA		IN-SERV	ARC TEC
A	80	52	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	80	55	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	80	81	UTE - 0.07	SAA		IN-SERV	ARC TEC
A	81	67	UTE - 0.09	MAA		IN-SERV	ARC TEC
A	81	68	UTE - 0.09	MAA		IN-SERV	ARC TEC
A	81	101	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	81	106	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	81	110	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	82	35	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	82	73	UTE - 0.08	MAA		IN-SERV	ARC TEC
A	82	100	UTE - 0.18	MAA		IN-SERV	ARC TEC
A	83	38	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	83	55	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	83	59	UTE - 0.11	SAA		IN-SERV	ARC TEC
A	83	60	UTE - 0.06	SAA		IN-SERV	ARC TEC
A	83	67	UTE - 0.07	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	84	15	UTE - 0.35	SAA		IN-SERV	ARC TEC
A	84	24	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	84	68	UTE - 0.14	SAA		IN-SERV	ARC TEC
A	84	86	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	85	14	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	85	17	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	86	19	UTE - 0.35	SAA		IN-SERV	ARC TEC
A	86	51	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	86	79	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	86	81	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	86	82	UTE - 0.08	SAA		IN-SERV	ARC TEC
A	86	107	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	87	6	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	87	10	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	87	39	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	87	95	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	87	96	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	87	99	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	87	104	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	87	107	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	87	113	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	88	14	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	88	40	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	88	78	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	89	6	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	89	41	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	89	68	UTE - 0.09	SAA		IN-SERV	ARC TEC
A	89	73	UTE - 0.29	MAA		IN-SERV	ARC TEC
A	89	74	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	89	90	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	89	97	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	90	11	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	90	104	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	90	105	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	91	49	UTE - 0.22	MAA		IN-SERV	ARC TEC
A	92	40	UTE - 0.09	MAA		IN-SERV	ARC TEC
A	92	47	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	92	85	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	92	117	UTE - 0.43	SAA		IN-SERV	ARC TEC
A	93	70	UTE - 0.11	MAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	93	97	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	93	99	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	93	100	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	94	15	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	94	74	UTE - 0.24	MAA		IN-SERV	ARC TEC
A	94	106	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	95	3	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	95	6	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	95	8	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	95	9	UTE - 0.35	SAA		IN-SERV	ARC TEC
A	95	10	UTE - 0.29	MAA		IN-SERV	ARC TEC
A	95	15	UTE - 0.31	MAA		IN-SERV	ARC TEC
A	95	29	UTE - 0.18	MAA		IN-SERV	ARC TEC
A	95	69	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	96	8	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	96	9	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	96	29	UTE - 0.12	SAA		IN-SERV	ARC TEC
A	96	33	UTE - 0.11	MAA		IN-SERV	ARC TEC
A	96	49	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	96	55	UTE - 0.38	SAA		IN-SERV	ARC TEC
A	97	8	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	97	10	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	97	11	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	97	115	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	98	14	UTE - 0.51	SAA		IN-SERV	ARC TEC
A	98	19	UTE - 0.29	MAA		IN-SERV	ARC TEC
A	98	25	UTE - 0.31	MAA		IN-SERV	ARC TEC
A	99	3	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	99	28	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	99	30	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	99	38	UTE - 0.14	MAA		IN-SERV	ARC TEC
A	99	40	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	100	7	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	100	36	UTE - 0.13	SAA		IN-SERV	ARC TEC
A	100	54	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	100	62	UTE - 0.12	SAA		IN-SERV	ARC TEC
A	100	81	UTE - 0.13	SAA		IN-SERV	ARC TEC
A	100	115	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	101	12	UTE - 0.47	SAA		IN-SERV	ARC TEC
A	101	27	UTE - 0.28	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	101	43	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	102	20	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	102	32	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	102	119	UTE - 0.45	SAA		IN-SERV	ARC TEC
A	103	13	UTE - 0.46	MAA		IN-SERV	ARC TEC
A	103	81	UTE - 0.08	MAA		IN-SERV	ARC TEC
A	103	119	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	104	21	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	104	24	UTE - 0.19	MAA		IN-SERV	ARC TEC
A	104	53	UTE - 0.11	SAA		IN-SERV	ARC TEC
A	104	73	UTE - 0.07	MAA		IN-SERV	ARC TEC
A	104	79	UTE - 0.11	MAA		IN-SERV	ARC TEC
A	105	5	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	105	36	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	105	52	UTE - 0.14	SAA		IN-SERV	ARC TEC
A	105	54	UTE - 0.14	MAA		IN-SERV	ARC TEC
A	105	62	UTE - 0.10	SAA		IN-SERV	ARC TEC
A	105	73	UTE - 0.12	SAA		IN-SERV	ARC TEC
A	106	6	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	106	37	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	106	64	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	106	97	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	107	23	UTE - 0.29	MAA		IN-SERV	ARC TEC
A	107	33	UTE - 0.09	MAA		IN-SERV	ARC TEC
A	107	37	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	107	53	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	107	59	UTE - 0.13	SAA		IN-SERV	ARC TEC
A	107	60	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	107	120	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	108	76	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	109	64	UTE - 0.33	SAA		IN-SERV	ARC TEC
A	109	70	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	110	60	UTE - 1.16	MAA	NOTE	IN-SERV	ARC TEC
A	110	60	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	111	9	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	111	30	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	111	33	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	111	45	UTE - 0.10	SAA		IN-SERV	ARC TEC
A	111	68	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	112	3	UTE - 0.22	MAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	112	44	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	112	59	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	113	14	UTE - 0.14	SAA		IN-SERV	ARC TEC
A	113	50	UTE - 0.15	MAA		IN-SERV	ARC TEC
A	113	75	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	114	15	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	114	22	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	115	7	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	115	14	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	115	15	UTE - 0.18	SAA		IN-SERV	ARC TEC
A	115	16	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	115	62	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	115	69	UTE - 0.35	SAA		IN-SERV	ARC TEC
A	116	16	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	116	88	UTE - 0.57	SAA		IN-SERV	ARC TEC
A	117	5	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	117	108	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	118	1	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	118	4	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	118	16	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	118	102	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	118	105	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	119	3	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	119	45	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	119	105	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	120	4	UTE - 0.16	SAA		IN-SERV	ARC TEC
A	120	13	UTE - 0.20	MAA		IN-SERV	ARC TEC
A	120	20	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	120	21	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	120	26	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	120	34	UTE - 0.24	MAA		IN-SERV	ARC TEC
A	120	98	UTE - 0.15	MAA		IN-SERV	ARC TEC
A	120	99	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	120	105	UTE - 0.30	MAA		IN-SERV	ARC TEC
A	121	8	UTE - 0.19	SAA		IN-SERV	ARC TEC
A	121	22	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	121	29	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	121	35	UTE - 0.15	MAA		IN-SERV	ARC TEC
A	121	37	UTE - 0.14	SAA		IN-SERV	ARC TEC
A	121	104	UTE - 0.26	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	121	106	UTE - 0.69	SAA		IN-SERV	ARC TEC
A	122	7	UTE - 0.27	MAA		IN-SERV	ARC TEC
A	122	10	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	122	37	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	122	65	UTE - 0.24	SAA		IN-SERV	ARC TEC
A	122	66	UTE - 0.32	SAA		IN-SERV	ARC TEC
A	122	70	UTE - 0.37	SAA		IN-SERV	ARC TEC
A	122	105	UTE - 0.46	MAA		IN-SERV	ARC TEC
A	123	35	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	123	64	UTE - 0.31	SAA		IN-SERV	ARC TEC
A	124	16	UTE - 0.25	MAA		IN-SERV	ARC TEC
A	124	18	UTE - 0.21	MAA		IN-SERV	ARC TEC
A	124	30	UTE - 0.21	SAA		IN-SERV	ARC TEC
A	124	62	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	124	98	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	125	75	UTE - 0.28	MAA		IN-SERV	ARC TEC
A	125	78	UTE - 0.29	SAA		IN-SERV	ARC TEC
A	126	44	UTE - 0.18	SAA		IN-SERV	ARC TEC
A	126	60	UTE - 0.12	MAA		IN-SERV	ARC TEC
A	126	95	UTE - 0.30	MAA		IN-SERV	ARC TEC
A	127	1	UTE - 0.11	SAA		IN-SERV	ARC TEC
A	127	28	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	127	37	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	127	40	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	127	43	UTE - 0.18	SAA		IN-SERV	ARC TEC
A	128	26	UTE - 0.15	SAA		IN-SERV	ARC TEC
A	128	58	UTE - 0.26	SAA		IN-SERV	ARC TEC
A	129	29	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	130	18	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	131	7	UTE - 0.22	SAA		IN-SERV	ARC TEC
A	132	16	UTE - 0.28	SAA		IN-SERV	ARC TEC
A	133	22	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	133	39	UTE - 0.23	SAA		IN-SERV	ARC TEC
A	133	52	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	134	53	UTE - 0.26	MAA		IN-SERV	ARC TEC
A	134	63	UTE - 0.17	SAA		IN-SERV	ARC TEC
A	135	51	UTE - 0.13	SAA		IN-SERV	ARC TEC
A	135	81	UTE - 0.18	SAA		IN-SERV	ARC TEC
A	137	25	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	137	29	UTE - 0.22	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	139	31	UTE - 0.18	SAA		IN-SERV	ARC TEC
A	140	27	UTE - 0.20	SAA		IN-SERV	ARC TEC
A	140	43	UTE - 0.07	MAA		IN-SERV	ARC TEC
A	141	29	UTE - 0.27	SAA		IN-SERV	ARC TEC
A	141	45	UTE - 0.23	MAA		IN-SERV	ARC TEC
A	145	16	UTE - 0.30	SAA		IN-SERV	ARC TEC
A	147	24	UTE - 0.34	MAA		IN-SERV	ARC TEC
A	148	23	UTE - 0.25	SAA		IN-SERV	ARC TEC
A	149	18	UTE - 0.11	SAA		IN-SERV	ARC TEC
A	2	8	10S + 0.43	DSS	15	IN-SERV	WEAR < 40
A	3	5	11S - 0.26	DSS	11	IN-SERV	WEAR < 40
A	3	5	10S + 0.33	DSS	18	IN-SERV	WEAR < 40
A	3	7	10S + 0.22	DSS	14	IN-SERV	WEAR < 40
A	4	1	10S + 0.56	DSS	11	IN-SERV	WEAR < 40
A	4	34	09S - 0.37	DSS	13	IN-SERV	WEAR < 40
A	5	1	10S + 0.39	DSS	12	IN-SERV	WEAR < 40
A	5	37	09S + 0.00	DSS	15	IN-SERV	WEAR < 40
A	6	41	08S - 0.56	DSS	18	IN-SERV	WEAR < 40
A	10	7	08S - 0.50	DSS	27	IN-SERV	WEAR < 40
A	10	12	07S + 0.70	DSS	12	IN-SERV	WEAR < 40
A	12	2	09S + 0.13	DSS	14	IN-SERV	WEAR < 40
A	12	10	07S - 0.19	DSS	17	IN-SERV	WEAR < 40
A	12	61	07S - 0.30	DSS	14	IN-SERV	WEAR < 40
A	12	69	10S + 0.58	DSS	21	IN-SERV	WEAR < 40
A	14	75	10S + 0.49	DSS	20	IN-SERV	WEAR < 40
A	16	80	10S + 0.71	DSS	25	IN-SERV	WEAR < 40
A	18	84	10S + 0.61	DSS	16	IN-SERV	WEAR < 40
A	19	78	08S + 0.58	DSS	16	IN-SERV	WEAR < 40
A	19	80	08S + 0.71	DSS	23	IN-SERV	WEAR < 40
A	19	83	08S - 0.74	DSS	7	IN-SERV	WEAR < 40
A	19	83	09S - 0.43	DSS	13	IN-SERV	WEAR < 40
A	20	75	08S - 0.30	DSS	29	IN-SERV	WEAR < 40
A	20	84	11S – 0.77	DSS	15	IN-SERV	WEAR < 40
A	21	86	07S - 0.34	DSS	14	IN-SERV	WEAR < 40
A	22	82	08S - 0.26	DSS	17	IN-SERV	WEAR < 40
A	22	87	08S - 0.04	DSS	10	IN-SERV	WEAR < 40
A	23	4	03S + 0.72	DSS	12	IN-SERV	WEAR < 40
A	23	94	10S + 0.67	DSS	11	IN-SERV	WEAR < 40
A	24	48	07S - 0.21	DSS	8	IN-SERV	WEAR < 40
A	26	47	05S + 0.43	DSS	12	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	32	4	09S + 0.58	DSS	34	IN-SERV	WEAR < 40
A	32	5	09S + 0.62	DSS	31	IN-SERV	WEAR < 40
A	32	6	09S + 0.58	DSS	18	IN-SERV	WEAR < 40
A	37	6	09S + 0.58	DSS	33	IN-SERV	WEAR < 40
A	37	113	13S - 0.78	DSS	12	IN-SERV	WEAR < 40
A	38	112	09S - 0.41	DSS	28	IN-SERV	WEAR < 40
A	40	114	08S + 0.57	DSS	15	IN-SERV	WEAR < 40
A	42	115	08S + 0.55	DSS	21	IN-SERV	WEAR < 40
A	43	45	06S + 0.62	DSS	9	IN-SERV	WEAR < 40
A	44	58	06S - 0.60	DSS	16	IN-SERV	WEAR < 40
A	48	24	07S + 0.36	DSS	12	IN-SERV	WEAR < 40
A	49	59	05S + 0.49	DSS	10	IN-SERV	WEAR < 40
A	49	121	05S + 0.00	DSS	12	IN-SERV	WEAR < 40
A	50	2	09S + 0.59	DSS	12	IN-SERV	WEAR < 40
A	50	11	09S + 0.61	DSS	19	IN-SERV	WEAR < 40
A	50	67	06S + 0.24	DSS	15	IN-SERV	WEAR < 40
A	52	50	05S + 0.64	DSS	12	IN-SERV	WEAR < 40
A	52	65	06S + 0.50	DSS	3	IN-SERV	WEAR < 40
A	52	67	07S + 0.67	DSS	6	IN-SERV	WEAR < 40
A	52	67	06S + 0.65	DSS	4	IN-SERV	WEAR < 40
A	52	67	05S + 0.58	DSS	12	IN-SERV	WEAR < 40
A	52	73	06S + 0.43	DSS	6	IN-SERV	WEAR < 40
A	53	27	12S + 0.79	DSS	17	IN-SERV	WEAR < 40
A	53	68	06S + 0.65	DSS	9	IN-SERV	WEAR < 40
A	54	56	05S + 0.71	DSS	11	IN-SERV	WEAR < 40
A	54	64	05S + 0.60	DSS	3	IN-SERV	WEAR < 40
A	54	75	05S + 0.57	DSS	8	IN-SERV	WEAR < 40
A	54	118	06S - 0.13	DSS	7	IN-SERV	WEAR < 40
A	54	126	09S + 0.35	DSS	11	IN-SERV	WEAR < 40
A	55	55	06S - 0.13	DSS	7	IN-SERV	WEAR < 40
A	55	55	06S + 0.56	DSS	9	IN-SERV	WEAR < 40
A	55	67	06S + 0.30	DSS	7	IN-SERV	WEAR < 40
A	57	64	05S + 0.52	DSS	7	IN-SERV	WEAR < 40
A	57	69	05S + 0.72	DSS	6	IN-SERV	WEAR < 40
A	57	70	06S + 0.35	DSS	13	IN-SERV	WEAR < 40
A	58	128	10S + 0.48	DSS	12	IN-SERV	WEAR < 40
A	60	77	06S + 0.06	DSS	8	IN-SERV	WEAR < 40
A	60	87	15S + 0.52	DSS	10	IN-SERV	WEAR < 40
A	60	98	06S + 0.63	DSS	13	IN-SERV	WEAR < 40
A	61	100	05S + 0.63	DSS	17	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	62	111	08S - 0.89	DSS	7	IN-SERV	WEAR < 40
A	62	126	09S - 0.76	DSS	10	IN-SERV	WEAR < 40
A	63	89	06S - 0.63	DSS	20	IN-SERV	WEAR < 40
A	63	124	08S + 0.57	DSS	8	IN-SERV	WEAR < 40
A	65	2	09S + 0.55	DSS	10	IN-SERV	WEAR < 40
A	65	41	06S + 0.69	DSS	22	IN-SERV	WEAR < 40
A	65	77	06S - 0.46	DSS	14	IN-SERV	WEAR < 40
A	66	109	07S - 0.32	DSS	18	IN-SERV	WEAR < 40
A	66	125	08S + 0.67	DSS	12	IN-SERV	WEAR < 40
A	66	126	08S + 0.54	DSS	15	IN-SERV	WEAR < 40
A	67	114	06S + 0.56	DSS	17	IN-SERV	WEAR < 40
A	67	119	06S + 0.54	DSS	15	IN-SERV	WEAR < 40
A	68	3	09S + 0.51	DSS	8	IN-SERV	WEAR < 40
A	68	28	09S + 0.68	DSS	11	IN-SERV	WEAR < 40
A	68	96	06S + 0.15	DSS	19	IN-SERV	WEAR < 40
A	69	98	06S + 0.65	DSS	5	IN-SERV	WEAR < 40
A	69	122	06S + 0.59	DSS	17	IN-SERV	WEAR < 40
A	70	73	06S - 0.13	DSS	11	IN-SERV	WEAR < 40
A	70	98	06S + 0.63	DSS	5	IN-SERV	WEAR < 40
A	70	116	06S + 0.50	DSS	12	IN-SERV	WEAR < 40
A	70	125	08S + 0.59	DSS	12	IN-SERV	WEAR < 40
A	70	126	08S + 0.63	DSS	9	IN-SERV	WEAR < 40
A	71	64	08S + 0.15	DSS	6	IN-SERV	WEAR < 40
A	71	91	06S + 0.32	DSS	19	IN-SERV	WEAR < 40
A	71	105	06S + 0.54	DSS	19	IN-SERV	WEAR < 40
A	71	115	06S + 0.57	DSS	12	IN-SERV	WEAR < 40
A	71	131	10S + 0.57	DSS	11	IN-SERV	WEAR < 40
A	72	46	07S + 0.64	DSS	10	IN-SERV	WEAR < 40
A	72	71	08S - 0.13	DSS	11	IN-SERV	WEAR < 40
A	72	71	07S + 0.24	DSS	9	IN-SERV	WEAR < 40
A	72	130	10S + 0.61	DSS	14	IN-SERV	WEAR < 40
A	73	59	09S + 0.70	DSS	12	IN-SERV	WEAR < 40
A	73	69	11S + 0.73	DSS	15	IN-SERV	WEAR < 40
A	73	83	06S - 0.45	DSS	10	IN-SERV	WEAR < 40
A	73	117	06S + 0.58	DSS	13	IN-SERV	WEAR < 40
A	73	119	06S + 0.56	DSS	11	IN-SERV	WEAR < 40
A	74	30	08S + 0.51	DSS	18	IN-SERV	WEAR < 40
A	74	115	06S + 0.54	DSS	13	IN-SERV	WEAR < 40
A	74	116	06S + 0.54	DSS	17	IN-SERV	WEAR < 40
A	75	90	06S - 0.11	DSS	12	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	75	115	06S + 0.61	DSS	14	IN-SERV	WEAR < 40
A	75	118	06S + 0.52	DSS	12	IN-SERV	WEAR < 40
A	76	68	06S + 0.48	DSS	8	IN-SERV	WEAR < 40
A	76	109	06S + 0.59	DSS	19	IN-SERV	WEAR < 40
A	76	110	06S + 0.53	DSS	21	IN-SERV	WEAR < 40
A	76	122	08S - 0.15	DSS	10	IN-SERV	WEAR < 40
A	77	68	09S - 0.62	DSS	6	IN-SERV	WEAR < 40
A	79	36	11S + 0.54	DSS	19	IN-SERV	WEAR < 40
A	79	80	03S + 0.41	DSS	15	IN-SERV	WEAR < 40
A	79	121	06S + 0.51	DSS	10	IN-SERV	WEAR < 40
A	80	51	08S + 0.36	DSS	23	IN-SERV	WEAR < 40
A	80	51	07S + 0.67	DSS	24	IN-SERV	WEAR < 40
A	80	53	07S - 0.78	DSS	28	IN-SERV	WEAR < 40
A	80	53	08S + 0.49	DSS	23	IN-SERV	WEAR < 40
A	80	53	07S + 0.71	DSS	20	IN-SERV	WEAR < 40
A	80	58	08S - 0.63	DSS	16	IN-SERV	WEAR < 40
A	82	7	08S + 0.69	DSS	14	IN-SERV	WEAR < 40
A	82	27	13S + 0.71	DSS	15	IN-SERV	WEAR < 40
A	82	52	08S + 0.07	DSS	17	IN-SERV	WEAR < 40
A	82	52	08S - 0.68	DSS	16	IN-SERV	WEAR < 40
A	82	56	08S - 0.71	DSS	7	IN-SERV	WEAR < 40
A	82	127	07S - 0.73	DSS	16	IN-SERV	WEAR < 40
A	83	50	09S - 0.32	DSS	17	IN-SERV	WEAR < 40
A	83	53	08S - 0.53	DSS	16	IN-SERV	WEAR < 40
A	84	5	08S + 0.38	DSS	24	IN-SERV	WEAR < 40
A	84	11	06S + 0.28	DSS	15	IN-SERV	WEAR < 40
A	84	77	06S - 0.54	DSS	13	IN-SERV	WEAR < 40
A	84	82	06S + 0.36	DSS	11	IN-SERV	WEAR < 40
A	85	37	09S - 0.71	DSS	10	IN-SERV	WEAR < 40
A	85	94	06S + 0.36	DSS	12	IN-SERV	WEAR < 40
A	86	12	10S - 0.73	DSS	8	IN-SERV	WEAR < 40
A	86	13	10S - 0.75	DSS	16	IN-SERV	WEAR < 40
A	86	16	10S - 0.75	DSS	11	IN-SERV	WEAR < 40
A	87	12	10S - 0.49	DSS	20	IN-SERV	WEAR < 40
A	87	22	08S + 0.19	DSS	15	IN-SERV	WEAR < 40
A	87	58	05S + 0.56	DSS	7	IN-SERV	WEAR < 40
A	91	5	08S + 0.43	DSS	17	IN-SERV	WEAR < 40
A	93	2	09S + 0.47	DSS	13	IN-SERV	WEAR < 40
A	95	53	03S - 0.09	DSS	23	IN-SERV	WEAR < 40
A	95	109	05S + 0.43	DSS	13	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	98	59	05S + 0.71	DSS	27	IN-SERV	WEAR < 40
A	98	64	05S + 0.49	DSS	15	IN-SERV	WEAR < 40
A	99	60	05S + 0.53	DSS	30	IN-SERV	WEAR < 40
A	100	20	15S + 0.78	DSS	23	IN-SERV	WEAR < 40
A	100	62	05S + 0.50	DSS	12	IN-SERV	WEAR < 40
A	101	69	05S + 0.71	DSS	17	IN-SERV	WEAR < 40
A	101	76	06S - 0.21	DSS	17	IN-SERV	WEAR < 40
A	101	108	06S + 0.34	DSS	11	IN-SERV	WEAR < 40
A	102	45	03S + 0.23	DSS	7	IN-SERV	WEAR < 40
A	102	95	14S + 0.38	DSS	18	IN-SERV	WEAR < 40
A	103	71	06S + 0.13	DSS	15	IN-SERV	WEAR < 40
A	103	119	09S - 0.58	DSS	8	IN-SERV	WEAR < 40
A	104	8	06S + 0.50	DSS	16	IN-SERV	WEAR < 40
A	104	39	07S + 0.54	DSS	18	IN-SERV	WEAR < 40
A	105	40	07S + 0.11	DSS	13	IN-SERV	WEAR < 40
A	105	71	08S + 0.32	DSS	8	IN-SERV	WEAR < 40
A	105	73	06S - 0.26	DSS	9	IN-SERV	WEAR < 40
A	105	80	12S + 0.28	DSS	9	IN-SERV	WEAR < 40
A	106	4	10S + 0.58	DSS	25	IN-SERV	WEAR < 40
A	106	4	07S + 0.52	DSS	11	IN-SERV	WEAR < 40
A	106	8	06S + 0.50	DSS	14	IN-SERV	WEAR < 40
A	106	66	05S - 0.45	DSS	13	IN-SERV	WEAR < 40
A	107	2	08S + 0.37	DSS	12	IN-SERV	WEAR < 40
A	107	69	06S + 0.49	DSS	11	IN-SERV	WEAR < 40
A	108	50	05S + 0.36	DSS	9	IN-SERV	WEAR < 40
A	108	54	05S + 0.40	DSS	13	IN-SERV	WEAR < 40
A	108	68	06S - 0.09	DSS	17	IN-SERV	WEAR < 40
A	109	1	01S - 0.66	DSS	13	IN-SERV	WEAR < 40
A	109	2	08S + 0.39	DSS	15	IN-SERV	WEAR < 40
A	109	41	07S + 0.53	DSS	13	IN-SERV	WEAR < 40
A	110	51	05S + 0.61	DSS	23	IN-SERV	WEAR < 40
A	110	90	06S + 0.45	DSS	16	IN-SERV	WEAR < 40
A	111	53	05S + 0.36	DSS	18	IN-SERV	WEAR < 40
A	111	58	05S + 0.60	DSS	15	IN-SERV	WEAR < 40
A	112	80	07S + 0.11	DSS	15	IN-SERV	WEAR < 40
A	113	3	08S + 0.49	DSS	21	IN-SERV	WEAR < 40
A	114	44	07S + 0.27	DSS	14	IN-SERV	WEAR < 40
A	115	4	08S + 0.40	DSS	20	IN-SERV	WEAR < 40
A	115	50	06S + 0.19	DSS	17	IN-SERV	WEAR < 40
A	116	6	10S - 0.22	DSS	16	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	116	31	07S + 0.64	DSS	17	IN-SERV	WEAR < 40
A	119	42	07S - 0.34	DSS	11	IN-SERV	WEAR < 40
A	120	47	06S + 0.60	DSS	21	IN-SERV	WEAR < 40
A	122	49	06S + 0.57	DSS	7	IN-SERV	WEAR < 40
A	123	93	06S + 0.62	DSS	11	IN-SERV	WEAR < 40
A	124	67	06S + 0.47	DSS	19	IN-SERV	WEAR < 40
A	132	30	07S - 0.49	DSS	12	IN-SERV	WEAR < 40
A	132	83	10S - 0.84	DSS	24	IN-SERV	WEAR < 40
A	133	61	07S + 0.00	DSS	15	IN-SERV	WEAR < 40
A	135	2	10S + 0.66	DSS	30	IN-SERV	WEAR < 40
A	137	76	09S + 0.30	DSS	18	IN-SERV	WEAR < 40
A	143	49	03S + 0.39	DSS	15	IN-SERV	WEAR < 40
A	148	7	08S + 0.15	DSS	12	IN-SERV	WEAR < 40
A	149	2	09S + 0.30	DSS	11	IN-SERV	WEAR < 40
A	149	27	10S + 0.68	DSS	9	IN-SERV	WEAR < 40
A	149	28	10S - 0.68	DSS	10	IN-SERV	WEAR < 40
A	149	28	10S + 0.70	DSS	16	IN-SERV	WEAR < 40
A	150	10	10S + 0.64	DSS	15	IN-SERV	WEAR < 40
A	150	12	10S + 0.69	DSS	13	IN-SERV	WEAR < 40
A	150	18	10S - 0.51	DSS	22	IN-SERV	WEAR < 40
A	150	20	10S + 0.60	DSS	19	IN-SERV	WEAR < 40
A	150	21	10S - 0.65	DSS	15	IN-SERV	WEAR < 40
A	151	5	10S + 0.63	DSS	16	IN-SERV	WEAR < 40
A	151	9	10S + 0.66	DSS	20	IN-SERV	WEAR < 40
A	151	10	07S - 0.83	DSS	13	IN-SERV	WEAR < 40
A	5	22	08S – 0.66	WAR	11	IN-SERV	WEAR < 40
A	6	41	08S – 0.73	WAR	12	IN-SERV	WEAR < 40
A	6	41	09S – 0.2	WAR	9	IN-SERV	WEAR < 40
A	7	50	08S + 0.63	WAR	9	IN-SERV	WEAR < 40
A	8	57	10S + 0.54	WAR	15	IN-SERV	WEAR < 40
A	9	61	10S + 0.62	WAR	6	IN-SERV	WEAR < 40
A	11	59	09S – 0.74	WAR	12	IN-SERV	WEAR < 40
A	11	61	07S + 0.3	WAR	10	IN-SERV	WEAR < 40
A	11	67	10S + 0.6	WAR	8	IN-SERV	WEAR < 40
A	12	68	10S + 0.6	WAR	15	IN-SERV	WEAR < 40
A	12	70	10S + 0.67	WAR	13	IN-SERV	WEAR < 40
A	13	73	10S + 0.75	WAR	11	IN-SERV	WEAR < 40
A	14	73	10S + 0.7	WAR	11	IN-SERV	WEAR < 40
A	15	77	10S + 0.67	WAR	10	IN-SERV	WEAR < 40
A	18	80	09S – 0.51	WAR	7	IN-SERV	WEAR < 40
A	22	88	07S – 0.75	WAR	9	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	29	1	10S – 0.47	WAR	16	IN-SERV	WEAR < 40
A	31	103	05S – 0.17	WAR	10	IN-SERV	WEAR < 40
A	31	104	08S + 0.67	WAR	9	IN-SERV	WEAR < 40
A	41	111	09S – 0.41	WAR	16	IN-SERV	WEAR < 40
A	41	111	01S – 0.47	WAR	3	IN-SERV	WEAR < 40
A	41	115	08S + 0.58	WAR	9	IN-SERV	WEAR < 40
A	47	2	09S + 0.69	WAR	12	IN-SERV	WEAR < 40
A	52	120	09S – 0.63	WAR	11	IN-SERV	WEAR < 40
A	54	68	06S + 0.21	WAR	12	IN-SERV	WEAR < 40
A	55	4	08S + 0.54	WAR	10	IN-SERV	WEAR < 40
A	56	58	07S + 0.61	WAR	17	IN-SERV	WEAR < 40
A	56	63	06S + 0.49	WAR	14	IN-SERV	WEAR < 40
A	57	67	06S + 0.28	WAR	10	IN-SERV	WEAR < 40
A	58	42	05S + 0.61	WAR	9	IN-SERV	WEAR < 40
A	58	79	06S + 0.22	WAR	21	IN-SERV	WEAR < 40
A	59	124	10S + 0.59	WAR	8	IN-SERV	WEAR < 40
A	60	89	07S – 0.58	WAR	10	IN-SERV	WEAR < 40
A	62	26	06S + 0.66	WAR	8	IN-SERV	WEAR < 40
A	64	123	08S + 0.59	WAR	4	IN-SERV	WEAR < 40
A	65	92	06S – 0.28	WAR	9	IN-SERV	WEAR < 40
A	66	25	07S + 0.38	WAR	18	IN-SERV	WEAR < 40
A	69	72	09S + 0.55	WAR	18	IN-SERV	WEAR < 40
A	69	72	09S – 0.49	WAR	16	IN-SERV	WEAR < 40
A	69	118	06S + 0.62	WAR	9	IN-SERV	WEAR < 40
A	70	95	06S – 0.39	WAR	8	IN-SERV	WEAR < 40
A	71	65	07S + 0.54	WAR	16	IN-SERV	WEAR < 40
A	71	67	07S + 0.62	WAR	9	IN-SERV	WEAR < 40
A	72	9	09S + 0.54	WAR	13	IN-SERV	WEAR < 40
A	73	57	10S + 0.33	WAR	12	IN-SERV	WEAR < 40
A	73	60	10S – 0.07	WAR	10	IN-SERV	WEAR < 40
A	73	93	06S – 0.14	WAR	9	IN-SERV	WEAR < 40
A	74	4	11S + 0.63	WAR	12	IN-SERV	WEAR < 40
A	74	99	06S + 0.68	WAR	9	IN-SERV	WEAR < 40
A	74	113	06S + 0.6	WAR	13	IN-SERV	WEAR < 40
A	75	113	06S + 0.54	WAR	7	IN-SERV	WEAR < 40
A	76	68	09S – 0.6	WAR	14	IN-SERV	WEAR < 40
A	79	29	11S – 0.4	WAR	8	IN-SERV	WEAR < 40
A	79	36	11S + 0.59	WAR	14	IN-SERV	WEAR < 40
A	79	70	08S – 0.56	WAR	14	IN-SERV	WEAR < 40
A	80	49	08S + 0.53	WAR	14	IN-SERV	WEAR < 40
A	81	32	09S – 0.65	WAR	11	IN-SERV	WEAR < 40
A	81	43	11S + 0.89	WAR	6	IN-SERV	WEAR < 40
A	81	47	07S – 0.64	WAR	13	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	82	54	08S – 0.02	WAR	12	IN-SERV	WEAR < 40
A	82	54	08S – 0.65	WAR	11	IN-SERV	WEAR < 40
A	82	70	08S – 0.15	WAR	31	IN-SERV	WEAR < 40
A	83	54	08S – 0.59	WAR	6	IN-SERV	WEAR < 40
A	85	15	07S – 0.04	WAR	11	IN-SERV	WEAR < 40
A	86	14	07S + 0.45	WAR	14	IN-SERV	WEAR < 40
A	86	46	05S + 0.52	WAR	9	IN-SERV	WEAR < 40
A	87	22	09S – 0.63	WAR	7	IN-SERV	WEAR < 40
A	94	24	08S – 0.43	WAR	9	IN-SERV	WEAR < 40
A	94	52	05S + 0.51	WAR	9	IN-SERV	WEAR < 40
A	99	119	09S – 0.33	WAR	6	IN-SERV	WEAR < 40
A	100	9	09S – 0.79	WAR	8	IN-SERV	WEAR < 40
A	103	64	05S + 0.67	WAR	17	IN-SERV	WEAR < 40
A	104	4	10S + 0.63	WAR	11	IN-SERV	WEAR < 40
A	105	7	06S + 0.47	WAR	14	IN-SERV	WEAR < 40
A	105	44	05S + 0.66	WAR	13	IN-SERV	WEAR < 40
A	106	7	06S + 0.54	WAR	15	IN-SERV	WEAR < 40
A	110	5	08S – 0.54	WAR	8	IN-SERV	WEAR < 40
A	110	13	08S + 0.35	WAR	10	IN-SERV	WEAR < 40
A	111	7	08S + 0.43	WAR	14	IN-SERV	WEAR < 40
A	113	4	07S + 0.54	WAR	8	IN-SERV	WEAR < 40
A	115	8	08S + 0.48	WAR	25	IN-SERV	WEAR < 40
A	115	38	06S + 0.65	WAR	12	IN-SERV	WEAR < 40
A	115	48	06S + 0.41	WAR	9	IN-SERV	WEAR < 40
A	121	52	08S + 0.87	WAR	6	IN-SERV	WEAR < 40
A	125	7	08S + 0.68	WAR	11	IN-SERV	WEAR < 40
A	128	9	06S – 0.1	WAR	9	IN-SERV	WEAR < 40
A	129	93	10S + 0.47	WAR	11	IN-SERV	WEAR < 40
A	130	6	10S + 0.68	WAR	15	IN-SERV	WEAR < 40
A	136	3	10S + 0.72	WAR	12	IN-SERV	WEAR < 40
A	149	26	10S + 0.65	WAR	7	IN-SERV	WEAR < 40
A	150	22	10S + 0.62	WAR	13	IN-SERV	WEAR < 40
A	4	7	UTE - 2.05	SAI		IN-SERV	RRT
A	20	1	UTE - 1.56	SAI		IN-SERV	RRT
A	20	4	UTE - 2.28	MAI		IN-SERV	RRT
A	21	1	UTE - 0.24	MAA		IN-SERV	RRT
A	21	1	UTE - 1.38	SAI		IN-SERV	RRT
A	22	47	UTE - 2.03	MAI		IN-SERV	RRT
A	23	2	UTE - 1.41	SAI		IN-SERV	RRT
A	23	3	UTE - 1.36	MAI		IN-SERV	RRT
A	26	1	UTE - 1.62	SAI		IN-SERV	RRT
A	26	31	UTE - 1.82	SAI		IN-SERV	RRT

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	27	46	UTE - 2.76	MAI		IN-SERV	RRT
A	29	2	UTE - 1.43	SAI		IN-SERV	RRT
A	30	105	UTE - 0.22	MAI		IN-SERV	RRT
A	30	105	UTE - 0.31	SCI		IN-SERV	RRT
A	31	105	UTE - 0.44	SCI		IN-SERV	RRT
A	32	48	UTE - 0.42	SCI		IN-SERV	RRT
A	34	32	UTE - 0.28	SAA		IN-SERV	RRT
A	34	32	UTE - 1.72	SAI		IN-SERV	RRT
A	34	46	UTE - 1.54	SAI		IN-SERV	RRT
A	35	78	UTE - 1.46	SAI		IN-SERV	RRT
A	36	48	UTE - 0.27	SCI		IN-SERV	RRT
A	40	63	UTE - 1.51	SAI		IN-SERV	RRT
A	46	24	UTE - 0.25	MAA		IN-SERV	RRT
A	46	24	UTE - 1.62	SAI		IN-SERV	RRT
A	48	1	UTE - 0.20	SCI		IN-SERV	RRT
A	49	25	UTE - 0.27	SCI		IN-SERV	RRT
A	51	71	UTE - 2.61	SAI		IN-SERV	RRT
A	52	57	UTE - 0.21	SCI		IN-SERV	RRT
A	52	64	UTE - 3.03	SAI		IN-SERV	RRT
A	53	23	UTE - 0.46	SCI		IN-SERV	RRT
A	54	124	UTE - 0.22	SAA		IN-SERV	RRT
A	54	124	UTE - 0.23	SCI		IN-SERV	RRT
A	55	125	UTE - 1.47	SAI		IN-SERV	RRT
A	56	89	UTE - 3.06	SVI		IN-SERV	RRT
A	58	92	UTE - 1.84	SAI		IN-SERV	RRT
A	62	89	UTE - 2.28	MAI		IN-SERV	RRT
A	62	90	UTE - 1.26	SAI		IN-SERV	RRT
A	63	100	UTE - 2.61	SVI		IN-SERV	RRT
A	63	130	UTE - 0.34	SCI		IN-SERV	RRT
A	67	36	UTE - 2.44	SAI		IN-SERV	RRT
A	67	112	UTE - 1.49	SAI		IN-SERV	RRT
A	77	53	UTE - 0.79	SCI		IN-SERV	RRT
A	81	46	UTE - 0.20	SCI		IN-SERV	RRT
A	82	46	UTE - 0.31	MCI		IN-SERV	RRT
A	83	39	UTS + 22.43	VOL		IN-SERV	RRT
A	83	39	UTS + 21.76	VOL		IN-SERV	RRT
A	83	39	UTE - 2.95	VOL		IN-SERV	RRT
A	83	45	09S - 0.77	DSS	13	IN-SERV	RRT
A	83	45	UTE - 1.49	MAI		IN-SERV	RRT
A	83	93	UTE - 1.62	SAI		IN-SERV	RRT

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	86	28	UTE - 2.04	MAI		IN-SERV	RRT
A	89	26	UTE - 1.91	SAI		IN-SERV	RRT
A	91	52	UTE - 1.46	SAI		IN-SERV	RRT
A	94	37	UTE - 1.50	SAI		IN-SERV	RRT
A	94	89	UTE - 0.20	SAA		IN-SERV	RRT
A	94	89	UTE - 1.79	SAI		IN-SERV	RRT
A	96	51	UTE - 1.47	SAI		IN-SERV	RRT
A	96	83	UTE - 1.10	SAI		IN-SERV	RRT
A	97	22	UTE - 1.93	MAI		IN-SERV	RRT
A	97	51	UTE - 1.47	MAI		IN-SERV	RRT
A	98	126	UTE - 2.05	MAI		IN-SERV	RRT
A	99	125	UTE - 2.05	MAI		IN-SERV	RRT
A	99	126	UTE - 2.11	MAI		IN-SERV	RRT
A	100	125	UTE - 1.77	MAI		IN-SERV	RRT
A	101	33	UTE - 0.15	SAA		IN-SERV	RRT
A	101	33	UTE - 1.44	SAI		IN-SERV	RRT
A	101	123	UTE - 1.88	SAI		IN-SERV	RRT
A	102	2	UTE - 1.93	SAI		IN-SERV	RRT
A	102	2	UTS + 11.54	VOL		IN-SERV	RRT
A	102	2	UTS + 11.54	VOL		IN-SERV	RRT
A	102	2	UTS + 12.88	VOL		IN-SERV	RRT
A	102	49	UTE - 1.49	SAI		IN-SERV	RRT
A	104	1	UTE - 1.74	SAI		IN-SERV	RRT
A	104	43	UTE - 0.29	SCI		IN-SERV	RRT
A	104	102	UTE - 1.79	SAI		IN-SERV	RRT
A	105	3	UTE - 1.80	SAI		IN-SERV	RRT
A	105	3	UTS + 9.34	VOL		IN-SERV	RRT
A	105	3	UTS + 9.34	VOL		IN-SERV	RRT
A	105	3	UTS + 14.68	VOL		IN-SERV	RRT
A	105	29	UTE - 1.50	SAI		IN-SERV	RRT
A	106	41	UTE - 0.28	SCI		IN-SERV	RRT
A	106	85	UTE - 1.85	SAI		IN-SERV	RRT
A	106	117	UTE - 1.72	SAI		IN-SERV	RRT
A	107	1	UTE - 1.80	SAI		IN-SERV	RRT
A	107	51	UTE - 0.15	SAA		IN-SERV	RRT
A	107	51	UTE - 2.24	SAI		IN-SERV	RRT
A	108	80	UTE - 1.72	SAI		IN-SERV	RRT
A	112	39	UTE - 0.17	SCI		IN-SERV	RRT
A	113	40	UTE - 0.21	MCI		IN-SERV	RRT
A	115	3	UTE - 0.25	SAA		IN-SERV	RRT

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	115	3	UTE - 1.79	SAI		IN-SERV	RRT
A	122	33	UTE - 0.25	SCI		IN-SERV	RRT
A	146	3	UTE - 1.68	SAI		IN-SERV	RRT
A	148	9	UTE - 1.81	SAI		IN-SERV	RRT
A	150	25	UTE - 1.55	SAI		IN-SERV	RRT
A	151	15	10S + 0.62	DSS	25	IN-SERV	RRT
A	151	15	UTE - 0.31	SCI		IN-SERV	RRT
A	2	20	14S - 4.16	SAI		OOS	PLG
A	3	21	15S - 5.81	SAI		OOS	PLG
A	3	29	UTE - 0.75	MAI		OOS	PLG
A	3	29	UTE - 0.39	SAA		OOS	PLG
A	3	29	UTE - 0.66	SCI		OOS	PLG
A	6	13	UTE - 2.03	SAI		OOS	PLG
A	6	23	UTE - 2.08	SAI		OOS	PLG
A	8	14	UTE - 2.01	MAI		OOS	PLG
A	8	16	UTE - 1.99	SAI		OOS	PLG
A	8	26	UTE - 2.15	SAI		OOS	PLG
A	8	32	UTE - 1.00	SAI		OOS	PLG
A	9	29	UTE - 2.32	SAI		OOS	PLG
A	10	19	UTE - 4.09	SVI		OOS	PLG
A	11	13	UTE - 3.72	SVI		OOS	PLG
A	16	27	UTE - 2.12	SAI		OOS	PLG
A	17	7	UTE - 1.72	SAI		OOS	PLG
A	17	38	UTE - 1.95	SAI		OOS	PLG
A	18	11	UTE - 3.22	MAI		OOS	PLG
A	19	9	UTE - 4.55	SVI		OOS	PLG
A	19	38	UTE - 0.31	SAA		OOS	PLG
A	19	38	UTE - 2.69	SAI		OOS	PLG
A	19	50	12S + 16.49	SVI		OOS	PLG
A	20	24	UTE - 1.80	SAI		OOS	PLG
A	22	27	UTE - 1.87	SAI		OOS	PLG
A	22	70	UTE - 3.27	MAI		OOS	PLG
A	23	10	UTE - 4.00	SVI		OOS	PLG
A	26	28	UTE - 2.54	SAI		OOS	PLG
A	27	31	UTS + 6.27	VOL		OOS	PLG
A	27	31	UTS + 6.27	VOL		OOS	PLG
A	27	31	UTS + 5.23	VOL		OOS	PLG
A	28	10	UTE - 0.27	MAA		OOS	PLG
A	28	10	UTE - 2.18	SAI		OOS	PLG
A	28	12	15S + 11.14	SAI		OOS	PLG

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	28	18	UTE - 0.26	SAA		OOS	PLG
A	28	18	14S + 28.42	SAI		OOS	PLG
A	28	29	UTE - 3.49	SVI		OOS	PLG
A	29	8	07S + 0.66	DSS	19	OOS	PLG
A	29	8	UTE - 3.46	MMI		OOS	PLG
A	30	11	UTE - 3.77	SVI		OOS	PLG
A	31	62	UTE - 0.39	MAI		OOS	PLG
A	31	62	UTE - 0.39	MAI		OOS	PLG
A	31	62	15S + 12.87	SVI		OOS	PLG
A	31	83	02S + 23.18	SVI		OOS	PLG
A	32	102	UTE - 3.37	SVI		OOS	PLG
A	34	9	UTE - 3.80	SVI		OOS	PLG
A	35	7	UTE - 4.00	SVI		OOS	PLG
A	35	10	UTE - 1.69	SAI		OOS	PLG
A	35	15	UTE - 3.72	SVI		OOS	PLG
A	36	12	UTE - 3.98	SVI		OOS	PLG
A	37	15	UTE - 3.49	SVI		OOS	PLG
A	38	105	UTE - 3.61	SVI		OOS	PLG
A	38	113	UTE - 4.16	SVI		OOS	PLG
A	39	84	UTE - 3.80	SVI		OOS	PLG
A	39	105	UTE - 3.25	SAI		OOS	PLG
A	39	105	UTE - 3.95	SVI		OOS	PLG
A	40	112	11S + 10.32	SAI		OOS	PLG
A	40	112	11S + 10.96	SAI		OOS	PLG
A	40	112	11S + 11.72	SAI		OOS	PLG
A	40	112	11S + 12.99	SAI		OOS	PLG
A	41	111	UTE - 0.22	SAA		OOS	PLG
A	41	111	15S - 3.00	SAI		OOS	PLG
A	42	14	UTE - 3.50	MMI		OOS	PLG
A	43	115	UTE - 0.23	SAA		OOS	PLG
A	43	115	14S + 12.03	SAI		OOS	PLG
A	43	115	14S + 13.75	SAI		OOS	PLG
A	43	115	14S + 12.95	SAI		OOS	PLG
A	43	115	15S + 14.89	SAI		OOS	PLG
A	45	106	UTE - 5.12	SVI		OOS	PLG
A	45	108	14S + 15.74	SAI		OOS	PLG
A	45	117	UTE - 0.26	SCI		OOS	PLG
A	46	11	UTE - 3.96	SVI		OOS	PLG
A	46	11	UTE - 3.55	SVI		OOS	PLG
A	46	19	UTE - 3.77	SVI		OOS	PLG

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	47	71	11S - 4.62	SAI		OOS	PLG
A	47	71	15S + 11.62	SAI		OOS	PLG
A	47	71	15S + 15.41	SAI		OOS	PLG
A	47	71	15S + 16.56	SAI		OOS	PLG
A	47	71	15S + 17.62	SAI		OOS	PLG
A	47	71	15S + 18.76	SAI		OOS	PLG
A	47	101	UTE - 0.20	MAA		OOS	PLG
A	47	101	LTS - 1.77	SVI		OOS	PLG
A	48	110	10S + 23.94	SAI		OOS	PLG
A	48	110	10S + 22.80	SAI		OOS	PLG
A	48	110	10S + 21.13	SAI		OOS	PLG
A	48	110	10S + 22.17	SAI		OOS	PLG
A	49	29	UTE - 3.25	SAI		OOS	PLG
A	50	17	UTE - 4.44	SVI		OOS	PLG
A	50	39	UTE - 3.57	SVI		OOS	PLG
A	50	107	UTE - 3.72	MCI		OOS	PLG
A	50	111	UTE - 4.85	SVI		OOS	PLG
A	50	120	UTE - 0.30	SAA		OOS	PLG
A	50	120	UTE - 1.04	SAI		OOS	PLG
A	51	17	UTE - 3.66	SVI		OOS	PLG
A	51	17	UTE - 4.25	SVI		OOS	PLG
A	51	29	UTE - 3.34	MAI		OOS	PLG
A	51	30	UTE - 3.39	MAI		OOS	PLG
A	51	31	UTE - 3.42	MAI		OOS	PLG
A	51	44	UTE - 3.37	MAI		OOS	PLG
A	51	111	UTE - 3.76	MCI		OOS	PLG
A	51	112	UTE - 5.30	SVI		OOS	PLG
A	51	114	08S + 20.84	SAI		OOS	PLG
A	51	114	08S + 4.60	SAI		OOS	PLG
A	51	114	UTS + 5.08	VOL		OOS	PLG
A	52	5	UTE - 1.47	SAI		OOS	PLG
A	52	31	UTE - 3.39	MAI		OOS	PLG
A	52	46	UTE - 3.62	SVI		OOS	PLG
A	52	46	UTE - 4.11	SVI		OOS	PLG
A	52	113	10S + 4.37	SAI		OOS	PLG
A	52	113	14S + 7.95	SAI		OOS	PLG
A	53	21	UTE - 3.37	SCI		OOS	PLG
A	53	21	UTE - 3.85	SVI		OOS	PLG
A	54	43	UTE - 4.34	SVI		OOS	PLG
A	54	117	UTE - 3.23	SAI		OOS	PLG

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	55	14	UTE - 4.18	SVI		OOS	PLG
A	55	41	UTE - 3.89	SVI		OOS	PLG
A	55	41	UTE - 4.43	SVI		OOS	PLG
A	55	50	UTE - 4.18	SVI		OOS	PLG
A	55	113	11S - 10.56	SAI		OOS	PLG
A	55	121	UTE - 0.23	MAA		OOS	PLG
A	55	121	UTE - 2.23	SAI		OOS	PLG
A	56	2	UTE - 0.89	MAI		OOS	PLG
A	56	16	UTE - 3.87	SVI		OOS	PLG
A	57	16	UTE - 1.65	MAI		OOS	PLG
A	57	16	UTE - 0.20	SAA		OOS	PLG
A	57	128	UTE - 0.37	MCI		OOS	PLG
A	57	128	15S - 1.03	SAI		OOS	PLG
A	58	2	UTS + 0.75	SVI		OOS	PLG
A	58	10	UTE - 0.13	SAA		OOS	PLG
A	58	10	UTE - 1.15	SAI		OOS	PLG
A	58	20	UTE - 3.81	SVI		OOS	PLG
A	58	103	UTS + 13.33	VOL		OOS	PLG
A	58	103	UTS + 13.33	VOL		OOS	PLG
A	59	15	UTE - 1.55	SAI		OOS	PLG
A	59	42	UTE - 3.94	SVI		OOS	PLG
A	60	18	UTE - 3.86	SVI		OOS	PLG
A	60	18	UTE - 4.23	SVI		OOS	PLG
A	60	19	UTE - 3.87	SAI		OOS	PLG
A	60	20	UTE - 4.12	SVI		OOS	PLG
A	60	124	UTE - 0.27	SAA		OOS	PLG
A	60	124	UTE - 0.33	SCI		OOS	PLG
A	60	124	UTS + 10.03	VOL		OOS	PLG
A	60	124	UTS + 10.03	VOL		OOS	PLG
A	61	19	UTE - 0.23	SCI		OOS	PLG
A	61	24	14S + 8.49	SAI		OOS	PLG
A	61	24	14S + 7.66	SAI		OOS	PLG
A	61	116	UTE - 0.37	SCI		OOS	PLG
A	62	14	UTE - 3.89	SVI		OOS	PLG
A	62	23	UTE - 3.54	SVI		OOS	PLG
A	62	25	UTE - 0.23	SAA		OOS	PLG
A	62	25	07S + 9.20	SVI		OOS	PLG
A	62	40	UTE - 3.47	SVI		OOS	PLG
A	63	15	UTE - 0.28	SCI		OOS	PLG
A	63	18	UTE - 1.70	SAI		OOS	PLG

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	63	20	UTE + 0.24	SCI		OOS	PLG
A	63	35	UTE - 0.38	MAA		OOS	PLG
A	63	35	15S + 18.93	SAI		OOS	PLG
A	63	119	UTE - 0.29	MAA		OOS	PLG
A	63	119	UTE - 1.66	SAI		OOS	PLG
A	64	5	UTE - 1.13	MAI		OOS	PLG
A	64	117	UTE - 0.09	SAA		OOS	PLG
A	64	117	UTE - 0.52	SCI		OOS	PLG
A	65	39	UTE - 3.35	SVI		OOS	PLG
A	65	116	UTE - 0.20	SCI		OOS	PLG
A	66	9	UTE - 0.26	SAA		OOS	PLG
A	66	9	UTE - 1.67	SAI		OOS	PLG
A	66	14	UTE - 0.25	MAA		OOS	PLG
A	66	14	04S + 27.39	SVI		OOS	PLG
A	66	21	UTE - 3.81	SVI		OOS	PLG
A	66	21	UTE - 3.45	SVI		OOS	PLG
A	67	17	UTE - 3.13	SAI		OOS	PLG
A	67	17	UTE - 3.42	SVI		OOS	PLG
A	67	35	UTE - 3.43	SVI		OOS	PLG
A	68	23	UTE - 3.34	SVI		OOS	PLG
A	68	106	UTE - 0.23	SAA		OOS	PLG
A	68	106	UTE - 1.69	SAI		OOS	PLG
A	68	106	UTE - 0.83	SCI		OOS	PLG
A	69	18	UTE - 0.20	MAA		OOS	PLG
A	69	18	UTE - 1.59	SAI		OOS	PLG
A	69	27	UTE - 4.24	SVI		OOS	PLG
A	70	29	UTE - 1.40	SAI		OOS	PLG
A	70	123	UTE - 0.26	SAA		OOS	PLG
A	70	123	UTE - 0.37	SCI		OOS	PLG
A	71	23	UTE - 0.79	SAI		OOS	PLG
A	72	120	UTE - 0.33	MMI		OOS	PLG
A	73	37	UTE - 4.06	SVI		OOS	PLG
A	74	46	UTE - 3.46	SVI		OOS	PLG
A	74	113	UTE - 0.25	SCI		OOS	PLG
A	74	119	UTE - 0.23	MAA		OOS	PLG
A	74	119	UTE - 0.34	SCI		OOS	PLG
A	77	2	UTE - 0.90	SAI		OOS	PLG
A	77	3	UTE - 0.64	SAI		OOS	PLG
A	77	71	06S - 0.53	DSS	17	OOS	PLG
A	77	71	UTE - 5.10	SVI		OOS	PLG

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	78	6	UTE -0.79	SAI		OOS	PLG
A	78	8	15S - 2.68	SCI		OOS	PLG
A	78	69	06S - 0.17	DSS	18	OOS	PLG
A	78	69	06S + 0.17	DSS	11	OOS	PLG
A	78	69	UTE - 5.85	SVI		OOS	PLG
A	79	66	UTS + 0.27	SAI		OOS	PLG
A	80	59	UTS + 0.12	SVI		OOS	PLG
A	81	17	UTE - 3.96	SVI		OOS	PLG
A	81	17	UTE - 4.01	SVI		OOS	PLG
A	81	17	UTS + 16.40	VOL		OOS	PLG
A	82	31	UTE - 7.10	SVI		OOS	PLG
A	83	16	UTE - 4.38	SVI		OOS	PLG
A	83	16	UTE - 3.35	SVI		OOS	PLG
A	83	49	UTE - 3.44	SVI		OOS	PLG
A	83	49	UTE - 4.03	SVI		OOS	PLG
A	83	132	UTE - 0.19	SCI		OOS	PLG
A	84	67	UTE - 6.58	SVI		OOS	PLG
A	85	13	UTS + 0.70	SVI		OOS	PLG
A	85	13	UTS + 0.70	SVI		OOS	PLG
A	85	13	UTS + 7.14	VOL		OOS	PLG
A	85	15	UTE - 2.97	SAI		OOS	PLG
A	85	15	UTE - 3.90	SVI		OOS	PLG
A	86	9	10S - 0.71	DSS	17	OOS	PLG
A	86	9	UTS + 0.82	SVI		OOS	PLG
A	86	47	UTE - 4.18	SVI		OOS	PLG
A	87	25	15S + 7.36	SAI		OOS	PLG
A	87	82	UTE - 5.62	SVI		OOS	PLG
A	89	5	UTS + 0.19	SVI		OOS	PLG
A	89	18	UTE - 3.05	MAI		OOS	PLG
A	89	19	UTE - 3.82	SVI		OOS	PLG
A	90	4	UTS + 20.53	MMI		OOS	PLG
A	90	4	UTE - 3.41	MMI		OOS	PLG
A	90	4	UTS + 0.59	SVI		OOS	PLG
A	90	4	UTS + 20.53	SVI		OOS	PLG
A	90	4	UTS + 0.59	SVI		OOS	PLG
A	90	13	UTE - 4.62	SVI		OOS	PLG
A	90	15	UTE - 4.02	SVI		OOS	PLG
A	90	15	UTE - 4.80	SVI		OOS	PLG
A	90	15	UTE - 4.02	SVI		OOS	PLG
A	90	15	UTE - 4.80	SVI		OOS	PLG

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	90	124	UTE - 0.80	SAI		OOS	PLG
A	91	17	UTE - 3.99	SVI		OOS	PLG
A	91	17	UTE - 3.77	SVI		OOS	PLG
A	91	121	UTE - 1.57	MAI		OOS	PLG
A	91	122	UTE - 1.10	SAI		OOS	PLG
A	92	51	UTE - 4.52	SVI		OOS	PLG
A	92	51	UTE - 4.52	SVI		OOS	PLG
A	92	51	UTE - 3.49	SVI		OOS	PLG
A	92	87	15S + 1.10	SVI		OOS	PLG
A	92	113	UTE - 4.43	SVI		OOS	PLG
A	92	115	UTE - 3.32	SAI		OOS	PLG
A	92	116	UTE - 3.85	MAI		OOS	PLG
A	93	6	UTE - 1.95	SAI		OOS	PLG
A	93	7	UTE - 2.15	MAI		OOS	PLG
A	93	7	UTE - 0.30	SAA		OOS	PLG
A	93	52	09S +18.65	SVI		OOS	PLG
A	94	117	UTE - 1.30	SAI		OOS	PLG
A	95	24	UTE - 0.32	SAA		OOS	PLG
A	95	24	UTS - 15.42	SAI		OOS	PLG
A	95	52	UTE - 1.48	SAI		OOS	PLG
A	95	52	UTE - 4.78	SVI		OOS	PLG
A	95	114	UTE - 0.20	SAA		OOS	PLG
A	95	114	UTE - 1.68	SAI		OOS	PLG
A	96	14	UTE - 1.90	SAI		OOS	PLG
A	96	44	UTE - 3.33	SVI		OOS	PLG
A	96	44	UTE - 3.64	SVI		OOS	PLG
A	96	117	UTE - 1.44	MAI		OOS	PLG
A	99	23	UTE - 2.96	SAI		OOS	PLG
A	99	23	UTE - 3.94	SVI		OOS	PLG
A	99	23	UTE - 3.94	SVI		OOS	PLG
A	99	123	UTE - 1.95	SAI		OOS	PLG
A	99	123	UTS + 9.55	VOL		OOS	PLG
A	100	5	UTE - 0.31	MAA		OOS	PLG
A	100	5	UTE - 1.91	MAI		OOS	PLG
A	100	13	UTE - 0.25	SAA		OOS	PLG
A	100	13	UTE - 2.27	SAI		OOS	PLG
A	100	44	UTE - 3.56	SVI		OOS	PLG
A	101	5	UTE - 4.10	SVI		OOS	PLG
A	102	12	UTE - 1.84	SAI		OOS	PLG
A	102	21	14S + 30.72	SAI		OOS	PLG

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	102	21	14S + 31.17	SAI		OOS	PLG
A	102	21	15S + 23.18	SAI		OOS	PLG
A	102	21	15S + 24.10	SAI		OOS	PLG
A	102	21	UTS - 13.68	SAI		OOS	PLG
A	103	27	UTE - 3.90	SVI		OOS	PLG
A	103	33	UTE - 3.16	SAI		OOS	PLG
A	104	112	UTE - 2.07	MAI		OOS	PLG
A	105	113	UTE - 2.01	MAI		OOS	PLG
A	106	99	UTE - 4.31	SAI		OOS	PLG
A	106	99	UTE - 5.37	SVI		OOS	PLG
A	110	2	14S + 30.96	SAI		OOS	PLG
A	110	2	14S + 29.05	SAI		OOS	PLG
A	110	2	14S + 27.06	SAI		OOS	PLG
A	110	2	14S + 24.70	SAI		OOS	PLG
A	110	2	15S + 0.14	SAI		OOS	PLG
A	110	2	11S - 4.76	SAI		OOS	PLG
A	110	2	11S + 21.64	SAI		OOS	PLG
A	110	2	11S + 24.89	SAI		OOS	PLG
A	112	9	UTE - 1.66	SAI		OOS	PLG
A	113	86	UTS + 0.62	SVI		OOS	PLG
A	113	86	UTS + 0.62	SVI		OOS	PLG
A	113	86	UTS + 2.05	VOL		OOS	PLG
A	115	29	UTE - 4.00	SVI		OOS	PLG
A	117	13	UTE - 0.27	SCI		OOS	PLG
A	117	13	UTS + 9.24	VOL		OOS	PLG
A	117	13	UTS + 9.24	VOL		OOS	PLG
A	118	104	UTE - 0.25	MAA		OOS	PLG
A	118	104	UTS + 0.17	SVI		OOS	PLG
A	120	103	UTE - 0.29	MAA		OOS	PLG
A	120	103	UTS + 0.32	SVI		OOS	PLG
A	123	20	UTE - 1.36	SAI		OOS	PLG
A	125	94	UTE - 4.30	SVI		OOS	PLG
A	128	87	UTE - 3.96	SVI		OOS	PLG
A	129	55	UTE - 4.16	SVI		OOS	PLG
A	130	27	UTE - 0.08	MCI		OOS	PLG
A	131	2	UTS + 0.58	SVI		OOS	PLG
A	131	55	UTE - 3.40	SVI		OOS	PLG
A	132	25	UTE - 4.40	SVI		OOS	PLG
A	133	34	UTE - 2.17	SAI		OOS	PLG
A	135	12	UTE - 2.17	MAI		OOS	PLG

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
A	135	20	UTE - 3.72	SVI		OOS	PLG
A	138	34	UTE - 3.68	SVI		OOS	PLG

UTE = upper tube end
VOL = volumetric indication (IGA ARC)
SAA = single axial anomaly (TEC ARC)
MAA = multiple axial anomaly (TEC ARC)
SAI = single axial indication
MAI = multiple axial indication
SCI = single circumferential indication
MCI = multiple axial indication
SVI = single volumetric indication (does not meet IGA ARC criteria)
DSS = distorted support signal (previously identified wear)
WAR = newly identified wear
MMI = mixed mode indication
S = support plate
RRT = re-roll
PLG = plugged tube
OOS = out of service

NOTE: Tube 110/60 was initially mischaracterized as MAA, when the correct code was MAI. This tube was subsequently left inservice. For additional detail, refer to the ANO-1 request for enforcement discretion dated December 16, 1999 (1CAN129905).

APPENDIX 2
ANO-1 "B" OTSG
1R15 INSPECTION RESULTS

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	22	90	UTS + 6.44	VOL		IN-SERV	ARC IGA
B	26	18	UTS + 5.67	VOL		IN-SERV	ARC IGA
B	29	102	UTS + 6.03	VOL		IN-SERV	ARC IGA
B	48	7	UTS + 4.57	VOL		IN-SERV	ARC IGA
B	50	1	UTS + 10.17	VOL		IN-SERV	ARC IGA
B	52	102	UTS + 3.05	VOL		IN-SERV	ARC IGA
B	52	122	UTS + 3.12	VOL		IN-SERV	ARC IGA
B	53	3	UTS + 6.37	VOL		IN-SERV	ARC IGA
B	53	3	UTS + 7.53	VOL		IN-SERV	ARC IGA
B	53	5	UTS + 5.71	VOL		IN-SERV	ARC IGA
B	54	2	UTS + 4.47	VOL		IN-SERV	ARC IGA
B	54	106	UTS + 4.51	VOL		IN-SERV	ARC IGA
B	55	3	UTS + 6.84	VOL		IN-SERV	ARC IGA
B	55	8	UTS + 6.42	VOL		IN-SERV	ARC IGA
B	56	9	UTS + 4.71	VOL		IN-SERV	ARC IGA
B	58	41	UTS + 4.45	VOL		IN-SERV	ARC IGA
B	59	115	UTS + 8.96	VOL		IN-SERV	ARC IGA
B	60	9	UTS + 4.56	VOL		IN-SERV	ARC IGA
B	60	96	UTS + 5.55	VOL		IN-SERV	ARC IGA
B	60	113	UTS + 4.46	VOL		IN-SERV	ARC IGA
B	62	4	UTS + 5.92	VOL		IN-SERV	ARC IGA
B	63	6	UTS + 5.42	VOL		IN-SERV	ARC IGA
B	63	6	UTS + 5.84	VOL		IN-SERV	ARC IGA
B	64	6	UTS + 6.82	VOL		IN-SERV	ARC IGA
B	64	8	UTS + 5.93	VOL		IN-SERV	ARC IGA
B	65	11	UTS + 3.16	VOL		IN-SERV	ARC IGA
B	65	11	UTS + 4.13	VOL		IN-SERV	ARC IGA
B	68	8	UTS + 12.24	VOL		IN-SERV	ARC IGA
B	68	15	UTS + 4.92	VOL		IN-SERV	ARC IGA
B	68	23	UTS + 7.53	VOL		IN-SERV	ARC IGA
B	69	11	UTS + 5.14	VOL		IN-SERV	ARC IGA
B	69	25	UTS + 9.38	VOL		IN-SERV	ARC IGA
B	69	40	UTS + 5.54	VOL		IN-SERV	ARC IGA
B	69	41	UTS + 4.79	VOL		IN-SERV	ARC IGA
B	69	51	UTS + 7.34	VOL		IN-SERV	ARC IGA
B	70	19	UTS + 3.31	VOL		IN-SERV	ARC IGA
B	70	19	UTS + 3.41	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	71	15	UTS + 4.84	VOL		IN-SERV	ARC IGA
B	71	15	UTS + 5.57	VOL		IN-SERV	ARC IGA
B	71	15	UTS + 7.04	VOL		IN-SERV	ARC IGA
B	71	18	UTS + 5.48	VOL		IN-SERV	ARC IGA
B	71	28	UTS + 3.61	VOL		IN-SERV	ARC IGA
B	71	50	UTS + 11.66	VOL		IN-SERV	ARC IGA
B	72	14	UTS + 2.83	VOL		IN-SERV	ARC IGA
B	72	14	UTS + 3.30	VOL		IN-SERV	ARC IGA
B	72	14	UTS + 4.30	VOL		IN-SERV	ARC IGA
B	72	16	UTS + 4.82	VOL		IN-SERV	ARC IGA
B	72	23	UTS + 4.55	VOL		IN-SERV	ARC IGA
B	72	27	UTS + 4.57	VOL		IN-SERV	ARC IGA
B	72	27	UTS + 4.57	VOL		IN-SERV	ARC IGA
B	72	56	UTS + 5.32	VOL		IN-SERV	ARC IGA
B	73	25	UTS + 4.81	VOL		IN-SERV	ARC IGA
B	73	25	UTS + 6.40	VOL		IN-SERV	ARC IGA
B	73	51	UTS + 7.16	VOL		IN-SERV	ARC IGA
B	73	65	UTS + 7.32	VOL		IN-SERV	ARC IGA
B	73	65	UTS + 7.45	VOL		IN-SERV	ARC IGA
B	73	65	UTS + 4.08	VOL		IN-SERV	ARC IGA
B	73	65	UTS + 2.89	VOL		IN-SERV	ARC IGA
B	73	93	UTS + 22.09	VOL		IN-SERV	ARC IGA
B	73	93	UTS + 21.78	VOL		IN-SERV	ARC IGA
B	74	58	UTS + 4.45	VOL		IN-SERV	ARC IGA
B	74	58	UTS + 3.38	VOL		IN-SERV	ARC IGA
B	75	37	UTS + 5.15	VOL		IN-SERV	ARC IGA
B	75	44	UTS + 5.12	VOL		IN-SERV	ARC IGA
B	77	66	UTS + 4.00	VOL		IN-SERV	ARC IGA
B	78	44	UTS + 4.05	VOL		IN-SERV	ARC IGA
B	78	58	UTS + 3.54	VOL		IN-SERV	ARC IGA
B	78	63	UTS + 5.90	VOL		IN-SERV	ARC IGA
B	78	68	UTS + 5.00	VOL		IN-SERV	ARC IGA
B	79	24	UTS + 19.29	VOL		IN-SERV	ARC IGA
B	79	24	UTS + 18.52	VOL		IN-SERV	ARC IGA
B	79	24	UTS + 2.46	VOL		IN-SERV	ARC IGA
B	79	32	UTS + 4.82	VOL		IN-SERV	ARC IGA
B	79	35	UTS + 4.15	VOL		IN-SERV	ARC IGA
B	79	53	UTS + 5.92	VOL		IN-SERV	ARC IGA
B	79	57	UTS + 6.20	VOL		IN-SERV	ARC IGA
B	80	13	UTS + 3.16	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	80	13	UTS + 4.26	VOL		IN-SERV	ARC IGA
B	80	22	UTS + 5.09	VOL		IN-SERV	ARC IGA
B	80	22	UTS + 4.65	VOL		IN-SERV	ARC IGA
B	80	22	UTS + 3.89	VOL		IN-SERV	ARC IGA
B	80	28	UTS + 7.97	VOL		IN-SERV	ARC IGA
B	80	28	UTS + 4.14	VOL		IN-SERV	ARC IGA
B	80	31	UTS + 3.99	VOL		IN-SERV	ARC IGA
B	80	53	UTS + 11.12	VOL		IN-SERV	ARC IGA
B	80	101	UTS + 22.21	VOL		IN-SERV	ARC IGA
B	80	101	UTS + 20.93	VOL		IN-SERV	ARC IGA
B	81	37	UTS + 7.33	VOL		IN-SERV	ARC IGA
B	82	31	UTS + 13.76	VOL		IN-SERV	ARC IGA
B	82	45	UTS + 6.83	VOL		IN-SERV	ARC IGA
B	82	56	UTS + 8.79	VOL		IN-SERV	ARC IGA
B	82	58	UTS + 7.98	VOL		IN-SERV	ARC IGA
B	83	14	UTS + 14.01	VOL		IN-SERV	ARC IGA
B	83	14	UTS + 11.40	VOL		IN-SERV	ARC IGA
B	83	14	UTS + 10.67	VOL		IN-SERV	ARC IGA
B	83	14	UTS + 4.76	VOL		IN-SERV	ARC IGA
B	83	38	UTS + 7.22	VOL		IN-SERV	ARC IGA
B	84	12	UTS + 9.21	VOL		IN-SERV	ARC IGA
B	84	20	UTS + 20.56	VOL		IN-SERV	ARC IGA
B	84	20	UTS + 19.07	VOL		IN-SERV	ARC IGA
B	84	30	UTS + 5.71	VOL		IN-SERV	ARC IGA
B	84	30	UTS + 4.64	VOL		IN-SERV	ARC IGA
B	85	14	UTS + 9.79	VOL		IN-SERV	ARC IGA
B	85	14	UTS + 3.38	VOL		IN-SERV	ARC IGA
B	85	16	UTS + 3.50	VOL		IN-SERV	ARC IGA
B	85	18	UTS + 5.19	VOL		IN-SERV	ARC IGA
B	85	18	UTS + 3.58	VOL		IN-SERV	ARC IGA
B	85	18	UTS + 2.72	VOL		IN-SERV	ARC IGA
B	85	19	UTS + 21.36	VOL		IN-SERV	ARC IGA
B	85	19	UTS + 17.46	VOL		IN-SERV	ARC IGA
B	85	19	UTS + 15.70	VOL		IN-SERV	ARC IGA
B	85	19	UTS + 16.22	VOL		IN-SERV	ARC IGA
B	85	21	UTS + 12.49	VOL		IN-SERV	ARC IGA
B	85	21	UTS + 5.43	VOL		IN-SERV	ARC IGA
B	85	25	UTS + 6.89	VOL		IN-SERV	ARC IGA
B	85	25	UTS + 5.74	VOL		IN-SERV	ARC IGA
B	85	45	UTS + 7.91	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	85	45	UTS + 6.04	VOL		IN-SERV	ARC IGA
B	85	56	UTS + 5.52	VOL		IN-SERV	ARC IGA
B	86	25	UTS + 6.23	VOL		IN-SERV	ARC IGA
B	86	25	UTS + 4.35	VOL		IN-SERV	ARC IGA
B	86	29	UTS + 5.50	VOL		IN-SERV	ARC IGA
B	87	5	UTS + 5.08	VOL		IN-SERV	ARC IGA
B	87	11	UTS + 5.13	VOL		IN-SERV	ARC IGA
B	87	25	UTS + 7.88	VOL		IN-SERV	ARC IGA
B	87	25	UTS + 7.23	VOL		IN-SERV	ARC IGA
B	87	25	UTS + 4.91	VOL		IN-SERV	ARC IGA
B	87	61	UTS + 4.30	VOL		IN-SERV	ARC IGA
B	88	15	UTS + 12.29	VOL		IN-SERV	ARC IGA
B	89	10	UTS + 5.94	VOL		IN-SERV	ARC IGA
B	89	110	UTS + 22.72	VOL		IN-SERV	ARC IGA
B	89	110	UTS + 22.28	VOL		IN-SERV	ARC IGA
B	89	110	UTS + 21.31	VOL		IN-SERV	ARC IGA
B	92	10	UTS + 4.56	VOL		IN-SERV	ARC IGA
B	93	5	UTS + 7.87	VOL		IN-SERV	ARC IGA
B	93	5	UTS + 5.70	VOL		IN-SERV	ARC IGA
B	93	5	UTS + 4.80	VOL		IN-SERV	ARC IGA
B	96	1	UTS + 5.09	VOL		IN-SERV	ARC IGA
B	96	1	UTS + 4.58	VOL		IN-SERV	ARC IGA
B	96	8	UTS + 6.24	VOL		IN-SERV	ARC IGA
B	96	14	UTS + 5.35	VOL		IN-SERV	ARC IGA
B	96	18	UTS + 5.80	VOL		IN-SERV	ARC IGA
B	96	34	UTS + 3.89	VOL		IN-SERV	ARC IGA
B	97	23	UTS + 5.81	VOL		IN-SERV	ARC IGA
B	98	9	UTS + 6.42	VOL		IN-SERV	ARC IGA
B	98	9	UTS + 5.91	VOL		IN-SERV	ARC IGA
B	100	5	UTS + 6.86	VOL		IN-SERV	ARC IGA
B	100	11	UTS + 6.74	VOL		IN-SERV	ARC IGA
B	101	3	UTS + 4.43	VOL		IN-SERV	ARC IGA
B	101	10	UTS + 7.69	VOL		IN-SERV	ARC IGA
B	101	10	UTS + 6.73	VOL		IN-SERV	ARC IGA
B	101	10	UTS + 6.75	VOL		IN-SERV	ARC IGA
B	102	9	UTS + 5.45	VOL		IN-SERV	ARC IGA
B	102	9	UTS + 3.14	VOL		IN-SERV	ARC IGA
B	102	9	UTS + 5.86	VOL		IN-SERV	ARC IGA
B	102	9	UTS + 5.09	VOL		IN-SERV	ARC IGA
B	103	15	UTS + 4.52	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	103	18	UTS + 4.22	VOL		IN-SERV	ARC IGA
B	103	19	UTS + 4.74	VOL		IN-SERV	ARC IGA
B	103	22	UTS + 6.50	VOL		IN-SERV	ARC IGA
B	104	2	UTS + 5.17	VOL		IN-SERV	ARC IGA
B	104	2	UTS + 4.00	VOL		IN-SERV	ARC IGA
B	106	17	UTS + 5.72	VOL		IN-SERV	ARC IGA
B	106	17	UTS + 5.41	VOL		IN-SERV	ARC IGA
B	106	74	UTS + 20.79	VOL		IN-SERV	ARC IGA
B	106	74	UTS + 20.79	VOL		IN-SERV	ARC IGA
B	107	9	UTS + 3.36	VOL		IN-SERV	ARC IGA
B	107	73	UTE - 2.52	VOL		IN-SERV	ARC IGA
B	107	73	UTS + 22.37	VOL		IN-SERV	ARC IGA
B	109	117	UTS + 6.82	VOL		IN-SERV	ARC IGA
B	110	2	UTS + 5.98	VOL		IN-SERV	ARC IGA
B	110	3	UTS + 3.47	VOL		IN-SERV	ARC IGA
B	110	3	UTS + 6.64	VOL		IN-SERV	ARC IGA
B	111	115	UTS + 5.14	VOL		IN-SERV	ARC IGA
B	116	2	UTS + 7.14	VOL		IN-SERV	ARC IGA
B	116	13	UTS + 5.03	VOL		IN-SERV	ARC IGA
B	117	3	UTS + 4.99	VOL		IN-SERV	ARC IGA
B	117	4	UTS + 5.86	VOL		IN-SERV	ARC IGA
B	117	4	UTS + 5.42	VOL		IN-SERV	ARC IGA
B	117	5	UTS + 4.79	VOL		IN-SERV	ARC IGA
B	118	3	UTS + 5.66	VOL		IN-SERV	ARC IGA
B	118	3	UTS + 5.10	VOL		IN-SERV	ARC IGA
B	118	3	UTS + 4.35	VOL		IN-SERV	ARC IGA
B	119	4	UTS + 4.94	VOL		IN-SERV	ARC IGA
B	119	4	UTS + 3.90	VOL		IN-SERV	ARC IGA
B	121	4	UTS + 4.47	VOL		IN-SERV	ARC IGA
B	122	1	UTS + 2.97	VOL		IN-SERV	ARC IGA
B	123	8	UTS + 8.48	VOL		IN-SERV	ARC IGA
B	125	5	UTS + 7.49	VOL		IN-SERV	ARC IGA
B	126	8	UTS + 3.88	VOL		IN-SERV	ARC IGA
B	131	7	UTS + 4.99	VOL		IN-SERV	ARC IGA
B	131	7	UTS + 4.09	VOL		IN-SERV	ARC IGA
B	134	11	UTS + 2.61	VOL		IN-SERV	ARC IGA
B	137	6	UTS + 6.29	VOL		IN-SERV	ARC IGA
B	137	22	UTS + 4.11	VOL		IN-SERV	ARC IGA
B	144	18	UTS + 5.16	VOL		IN-SERV	ARC IGA
B	145	11	UTS + 6.28	VOL		IN-SERV	ARC IGA

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	145	11	UTS + 5.74	VOL		IN-SERV	ARC IGA
B	146	38	UTS + 4.57	VOL		IN-SERV	ARC IGA
B	149	13	UTS + 4.50	VOL		IN-SERV	ARC IGA
B	150	18	UTS + 6.90	VOL		IN-SERV	ARC IGA
B	150	18	UTS + 6.00	VOL		IN-SERV	ARC IGA
B	1	5	UTE - 0.33	SAA		IN-SERV	ARC TEC
B	2	21	UTE - 0.18	MAA		IN-SERV	ARC TEC
B	3	15	UTE - 0.25	MAA		IN-SERV	ARC TEC
B	4	22	UTE - 0.17	MAA		IN-SERV	ARC TEC
B	4	24	UTE - 0.12	SAA		IN-SERV	ARC TEC
B	5	13	UTE - 0.35	SAA		IN-SERV	ARC TEC
B	6	6	UTE - 0.19	SAA		IN-SERV	ARC TEC
B	6	19	UTE - 0.19	SAA		IN-SERV	ARC TEC
B	6	29	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	6	42	UTE - 0.18	MAA		IN-SERV	ARC TEC
B	7	27	UTE - 0.27	SAA		IN-SERV	ARC TEC
B	9	1	UTE - 0.17	SAA		IN-SERV	ARC TEC
B	10	32	UTE - 0.45	SAA		IN-SERV	ARC TEC
B	10	33	UTE - 0.32	SAA		IN-SERV	ARC TEC
B	10	56	UTE - 0.35	SAA		IN-SERV	ARC TEC
B	10	62	UTE - 0.18	SAA		IN-SERV	ARC TEC
B	11	25	UTE - 0.17	SAA		IN-SERV	ARC TEC
B	11	27	UTE - 0.14	SAA		IN-SERV	ARC TEC
B	12	60	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	13	49	UTE - 0.21	SAA		IN-SERV	ARC TEC
B	13	66	UTE - 0.12	SAA		IN-SERV	ARC TEC
B	14	52	UTE - 0.15	MAA		IN-SERV	ARC TEC
B	14	73	UTE - 0.16	SAA		IN-SERV	ARC TEC
B	16	78	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	17	2	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	17	34	UTE - 0.18	SAA		IN-SERV	ARC TEC
B	18	66	UTE - 0.14	MAA		IN-SERV	ARC TEC
B	19	70	UTE - 0.13	SAA		IN-SERV	ARC TEC
B	20	3	UTE - 0.20	MAA		IN-SERV	ARC TEC
B	20	66	UTE - 0.14	SAA		IN-SERV	ARC TEC
B	22	47	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	23	31	UTE - 0.32	MAA		IN-SERV	ARC TEC
B	24	45	UTE - 0.35	SAA		IN-SERV	ARC TEC
B	26	87	UTE - 0.28	SAA		IN-SERV	ARC TEC
B	28	5	UTE - 0.25	MAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	28	6	UTE - 0.57	MAA		IN-SERV	ARC TEC
B	28	68	UTE - 0.25	SAA		IN-SERV	ARC TEC
B	28	82	UTE - 0.27	MAA		IN-SERV	ARC TEC
B	29	41	UTE - 0.30	SAA		IN-SERV	ARC TEC
B	30	9	UTE - 0.30	SAA		IN-SERV	ARC TEC
B	32	84	UTE - 0.25	SAA		IN-SERV	ARC TEC
B	33	8	UTE - 0.26	SAA		IN-SERV	ARC TEC
B	34	10	UTE - 0.26	SAA		IN-SERV	ARC TEC
B	34	40	UTE - 0.25	SAA		IN-SERV	ARC TEC
B	34	51	UTE - 0.35	SAA		IN-SERV	ARC TEC
B	35	9	UTE - 0.28	SAA		IN-SERV	ARC TEC
B	35	14	UTE - 0.18	SAA		IN-SERV	ARC TEC
B	35	81	UTE - 0.41	SAA		IN-SERV	ARC TEC
B	36	12	UTE - 0.25	SAA		IN-SERV	ARC TEC
B	36	69	UTE - 0.38	SAA		IN-SERV	ARC TEC
B	36	95	UTE - 0.10	SAA		IN-SERV	ARC TEC
B	37	10	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	37	16	UTE - 0.19	SAA		IN-SERV	ARC TEC
B	37	68	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	37	92	UTE - 0.18	SAA		IN-SERV	ARC TEC
B	38	98	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	39	4	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	39	9	UTE - 0.23	SAA		IN-SERV	ARC TEC
B	39	59	UTE - 0.10	SAA		IN-SERV	ARC TEC
B	39	109	UTE - 0.29	SAA		IN-SERV	ARC TEC
B	40	98	UTE - 0.10	SAA		IN-SERV	ARC TEC
B	40	102	UTE - 0.05	SAA		IN-SERV	ARC TEC
B	40	103	UTE - 0.26	SAA		IN-SERV	ARC TEC
B	40	106	UTE - 0.20	MAA		IN-SERV	ARC TEC
B	40	110	UTE - 0.27	MAA		IN-SERV	ARC TEC
B	41	7	UTE - 0.13	SAA		IN-SERV	ARC TEC
B	41	105	UTE - 0.27	SAA		IN-SERV	ARC TEC
B	41	110	UTE - 0.27	SAA		IN-SERV	ARC TEC
B	42	111	UTE - 0.30	MAA		IN-SERV	ARC TEC
B	43	16	UTE - 0.23	SAA		IN-SERV	ARC TEC
B	43	20	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	44	15	UTE - 0.23	SAA		IN-SERV	ARC TEC
B	47	7	UTE - 0.22	SAA		IN-SERV	ARC TEC
B	48	22	UTE - 0.28	SAA		IN-SERV	ARC TEC
B	50	7	UTE - 0.07	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	51	19	UTE - 0.23	SAA		IN-SERV	ARC TEC
B	51	117	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	52	8	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	52	11	UTE - 0.14	SAA		IN-SERV	ARC TEC
B	52	61	UTE - 0.16	SAA		IN-SERV	ARC TEC
B	53	20	UTE - 0.30	SAA		IN-SERV	ARC TEC
B	53	61	UTE - 0.27	SAA		IN-SERV	ARC TEC
B	54	10	UTE - 0.14	MAA		IN-SERV	ARC TEC
B	54	14	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	56	10	UTE - 0.14	MAA		IN-SERV	ARC TEC
B	56	23	UTE - 0.25	MAA		IN-SERV	ARC TEC
B	56	127	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	58	14	UTE - 0.28	SAA		IN-SERV	ARC TEC
B	58	19	UTE - 0.18	SAA		IN-SERV	ARC TEC
B	58	22	UTE - 0.29	SAA		IN-SERV	ARC TEC
B	58	24	UTE - 0.17	MAA		IN-SERV	ARC TEC
B	58	120	UTE - 0.21	SAA		IN-SERV	ARC TEC
B	59	22	UTE - 0.26	SAA		IN-SERV	ARC TEC
B	60	24	UTE - 0.27	SAA		IN-SERV	ARC TEC
B	61	1	UTE - 0.16	MAA		IN-SERV	ARC TEC
B	61	6	UTE - 0.16	SAA		IN-SERV	ARC TEC
B	61	20	UTE - 0.19	SAA		IN-SERV	ARC TEC
B	63	4	UTE - 0.18	MAA		IN-SERV	ARC TEC
B	64	6	UTE - 0.18	SAA		IN-SERV	ARC TEC
B	64	7	UTE - 0.16	SAA		IN-SERV	ARC TEC
B	66	11	UTE - 0.16	SAA		IN-SERV	ARC TEC
B	67	14	UTE - 0.19	SAA		IN-SERV	ARC TEC
B	67	106	UTE - 0.34	SAA		IN-SERV	ARC TEC
B	68	8	UTE - 0.19	SAA		IN-SERV	ARC TEC
B	69	23	UTE - 0.32	MAA		IN-SERV	ARC TEC
B	69	24	UTE - 0.24	MAA		IN-SERV	ARC TEC
B	69	27	UTE - 0.22	SAA		IN-SERV	ARC TEC
B	70	27	UTE - 0.26	SAA		IN-SERV	ARC TEC
B	77	101	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	78	76	UTE - 0.28	SAA		IN-SERV	ARC TEC
B	81	12	UTE - 0.06	SAA		IN-SERV	ARC TEC
B	84	13	UTE - 0.17	MAA		IN-SERV	ARC TEC
B	85	17	UTE - 0.22	MAA		IN-SERV	ARC TEC
B	86	13	UTE - 0.23	MAA		IN-SERV	ARC TEC
B	86	15	UTE - 0.30	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	86	18	UTE - 0.25	SAA		IN-SERV	ARC TEC
B	87	8	UTS + 23.68	SAA		IN-SERV	ARC TEC
B	87	59	UTE - 0.31	SAA		IN-SERV	ARC TEC
B	89	5	UTE - 0.08	SAA		IN-SERV	ARC TEC
B	90	53	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	91	5	UTE - 0.05	SAA		IN-SERV	ARC TEC
B	91	6	UTE - 0.22	SAA		IN-SERV	ARC TEC
B	91	49	UTE - 0.24	SAA		IN-SERV	ARC TEC
B	92	8	UTE - 0.14	SAA		IN-SERV	ARC TEC
B	92	99	UTE - 0.20	MAA		IN-SERV	ARC TEC
B	93	76	UTE - 0.68	SAA		IN-SERV	ARC TEC
B	94	38	UTE - 0.14	SAA		IN-SERV	ARC TEC
B	95	1	UTE - 0.15	SAA		IN-SERV	ARC TEC
B	96	4	UTE - 0.18	SAA		IN-SERV	ARC TEC
B	96	98	UTE - 0.30	SAA		IN-SERV	ARC TEC
B	99	6	UTE - 0.20	MAA		IN-SERV	ARC TEC
B	99	37	UTE - 0.14	SAA		IN-SERV	ARC TEC
B	101	76	UTE - 0.22	SAA		IN-SERV	ARC TEC
B	104	8	UTE - 0.30	SAA		IN-SERV	ARC TEC
B	104	9	UTE - 0.27	MAA		IN-SERV	ARC TEC
B	104	13	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	105	13	UTE - 0.26	SAA		IN-SERV	ARC TEC
B	105	17	UTE - 0.54	MAA		IN-SERV	ARC TEC
B	105	112	UTE - 0.63	SAA		IN-SERV	ARC TEC
B	106	3	UTE - 0.30	SAA		IN-SERV	ARC TEC
B	106	9	UTE - 0.28	SAA		IN-SERV	ARC TEC
B	106	16	UTE - 0.21	SAA		IN-SERV	ARC TEC
B	107	14	UTE - 0.22	SAA		IN-SERV	ARC TEC
B	107	16	UTE - 0.59	MAA		IN-SERV	ARC TEC
B	107	17	UTE - 0.47	SAA		IN-SERV	ARC TEC
B	107	96	UTE - 0.15	MAA		IN-SERV	ARC TEC
B	108	23	UTE - 0.29	MAA		IN-SERV	ARC TEC
B	108	117	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	109	8	UTE - 0.28	MAA		IN-SERV	ARC TEC
B	109	88	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	110	16	UTE - 0.21	SAA		IN-SERV	ARC TEC
B	110	17	UTE - 0.21	SAA		IN-SERV	ARC TEC
B	110	117	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	111	19	UTE - 0.25	SAA		IN-SERV	ARC TEC
B	111	34	UTE - 0.24	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	112	3	UTE - 0.39	SAA		IN-SERV	ARC TEC
B	113	111	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	114	5	UTE - 0.31	SAA		IN-SERV	ARC TEC
B	116	16	UTE - 0.18	SAA		IN-SERV	ARC TEC
B	117	108	UTE - 0.20	MAA		IN-SERV	ARC TEC
B	118	9	UTE - 0.16	SAA		IN-SERV	ARC TEC
B	118	18	UTE - 0.18	SAA		IN-SERV	ARC TEC
B	118	107	UTE - 0.18	SAA		IN-SERV	ARC TEC
B	120	99	UTE - 0.23	SAA		IN-SERV	ARC TEC
B	121	33	UTE - 0.22	SAA		IN-SERV	ARC TEC
B	123	3	UTE - 0.19	SAA		IN-SERV	ARC TEC
B	125	14	UTE - 0.29	SAA		IN-SERV	ARC TEC
B	125	50	UTE - 0.25	SAA		IN-SERV	ARC TEC
B	126	22	UTE - 0.33	SAA		IN-SERV	ARC TEC
B	127	16	UTE - 0.32	SAA		IN-SERV	ARC TEC
B	127	19	UTE - 0.17	SAA		IN-SERV	ARC TEC
B	127	77	UTE - 0.21	SAA		IN-SERV	ARC TEC
B	128	94	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	130	84	UTE - 0.19	MAA		IN-SERV	ARC TEC
B	132	76	UTE - 0.51	SAA		IN-SERV	ARC TEC
B	133	14	UTE - 0.16	SAA		IN-SERV	ARC TEC
B	133	67	UTE - 0.28	SAA		IN-SERV	ARC TEC
B	134	13	UTE - 0.26	MAA		IN-SERV	ARC TEC
B	134	58	UTE - 0.29	SAA		IN-SERV	ARC TEC
B	136	22	UTE - 0.40	SAA		IN-SERV	ARC TEC
B	136	50	UTE - 0.27	SAA		IN-SERV	ARC TEC
B	136	80	UTE - 0.35	SAA		IN-SERV	ARC TEC
B	136	81	UTE - 0.33	SAA		IN-SERV	ARC TEC
B	137	8	UTE - 0.25	SAA		IN-SERV	ARC TEC
B	137	39	UTE - 0.24	SAA		IN-SERV	ARC TEC
B	137	48	UTE - 0.38	SAA		IN-SERV	ARC TEC
B	138	18	UTE - 0.35	SAA		IN-SERV	ARC TEC
B	138	72	UTE - 0.32	MAA		IN-SERV	ARC TEC
B	139	13	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	140	38	UTE - 0.25	MAA		IN-SERV	ARC TEC
B	140	69	UTE - 0.22	MAA		IN-SERV	ARC TEC
B	141	4	UTE - 0.20	MAA		IN-SERV	ARC TEC
B	141	44	UTE - 0.27	SAA		IN-SERV	ARC TEC
B	141	64	UTE - 0.34	SAA		IN-SERV	ARC TEC
B	142	55	UTE - 0.37	SAA		IN-SERV	ARC TEC

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	143	3	UTE - 0.19	SAA		IN-SERV	ARC TEC
B	144	51	UTE - 0.33	SAA		IN-SERV	ARC TEC
B	146	2	UTE - 0.20	SAA		IN-SERV	ARC TEC
B	146	3	UTE - 0.29	SAA		IN-SERV	ARC TEC
B	146	19	UTE - 0.30	SAA		IN-SERV	ARC TEC
B	147	1	UTE - 0.30	SAA		IN-SERV	ARC TEC
B	149	3	UTE - 0.27	SAA		IN-SERV	ARC TEC
B	149	16	UTE - 0.28	SAA		IN-SERV	ARC TEC
B	150	4	UTE - 0.31	SAA		IN-SERV	ARC TEC
B	150	23	UTE - 0.33	SAA		IN-SERV	ARC TEC
B	150	26	UTE - 0.37	MAA		IN-SERV	ARC TEC
B	3	33	10S - 0.77	DSS	12	IN-SERV	WEAR < 40
B	4	1	11S + 0.64	DSS	14	IN-SERV	WEAR < 40
B	4	21	14S - 0.77	DSS	11	IN-SERV	WEAR < 40
B	4	41	11S + 0.70	DSS	7	IN-SERV	WEAR < 40
B	5	3	11S + 0.64	DSS	14	IN-SERV	WEAR < 40
B	5	16	10S + 0.50	DSS	16	IN-SERV	WEAR < 40
B	6	15	10S + 0.55	DSS	15	IN-SERV	WEAR < 40
B	7	13	09S - 0.75	DSS	21	IN-SERV	WEAR < 40
B	7	44	09S + 0.19	DSS	10	IN-SERV	WEAR < 40
B	11	6	08S - 0.13	DSS	6	IN-SERV	WEAR < 40
B	12	66	07S - 0.54	DSS	9	IN-SERV	WEAR < 40
B	12	70	11S + 0.54	DSS	15	IN-SERV	WEAR < 40
B	12	71	11S + 0.41	DSS	15	IN-SERV	WEAR < 40
B	13	1	05S - 0.85	DSS	10	IN-SERV	WEAR < 40
B	13	2	07S + 0.65	DSS	10	IN-SERV	WEAR < 40
B	14	6	06S - 0.36	DSS	5	IN-SERV	WEAR < 40
B	15	56	10S - 0.79	DSS	11	IN-SERV	WEAR < 40
B	15	73	07S - 0.56	DSS	6	IN-SERV	WEAR < 40
B	16	2	14S - 0.80	DSS	11	IN-SERV	WEAR < 40
B	16	11	08S - 0.77	DSS	13	IN-SERV	WEAR < 40
B	16	75	10S + 0.37	DSS	7	IN-SERV	WEAR < 40
B	18	85	03S - 0.73	DSS	5	IN-SERV	WEAR < 40
B	19	48	07S + 0.36	DSS	15	IN-SERV	WEAR < 40
B	21	82	06S - 0.28	DSS	5	IN-SERV	WEAR < 40
B	22	43	03S + 0.71	DSS	17	IN-SERV	WEAR < 40
B	23	32	10S - 0.75	DSS	18	IN-SERV	WEAR < 40
B	23	91	08S - 0.52	DSS	6	IN-SERV	WEAR < 40
B	24	1	03S + 0.67	DSS	20	IN-SERV	WEAR < 40
B	27	44	05S + 0.28	DSS	18	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	29	70	07S - 0.52	DSS	12	IN-SERV	WEAR < 40
B	30	11	14S - 0.82	DSS	14	IN-SERV	WEAR < 40
B	32	19	07S - 0.47	DSS	18	IN-SERV	WEAR < 40
B	33	43	07S + 0.17	DSS	13	IN-SERV	WEAR < 40
B	33	107	10S - 0.73	DSS	6	IN-SERV	WEAR < 40
B	33	108	14S - 0.79	DSS	9	IN-SERV	WEAR < 40
B	34	20	05S - 0.52	DSS	23	IN-SERV	WEAR < 40
B	34	25	07S - 0.23	DSS	20	IN-SERV	WEAR < 40
B	34	36	07S - 0.17	DSS	9	IN-SERV	WEAR < 40
B	34	105	08S - 0.26	DSS	8	IN-SERV	WEAR < 40
B	34	107	08S + 0.65	DSS	12	IN-SERV	WEAR < 40
B	36	13	11S - 0.60	DSS	13	IN-SERV	WEAR < 40
B	36	102	15S + 0.71	DSS	10	IN-SERV	WEAR < 40
B	36	111	08S + 0.17	DSS	7	IN-SERV	WEAR < 40
B	36	113	14S - 0.75	DSS	15	IN-SERV	WEAR < 40
B	39	98	13S - 0.82	DSS	8	IN-SERV	WEAR < 40
B	40	2	10S + 0.73	DSS	13	IN-SERV	WEAR < 40
B	40	50	06S + 0.43	DSS	13	IN-SERV	WEAR < 40
B	41	110	14S - 0.82	DSS	29	IN-SERV	WEAR < 40
B	41	110	13S + 0.58	DSS	17	IN-SERV	WEAR < 40
B	41	110	12S + 0.67	DSS	12	IN-SERV	WEAR < 40
B	43	30	07S + 0.63	DSS	16	IN-SERV	WEAR < 40
B	44	54	10S - 0.77	DSS	21	IN-SERV	WEAR < 40
B	44	92	08S - 0.78	DSS	10	IN-SERV	WEAR < 40
B	47	9	05S - 0.74	DSS	12	IN-SERV	WEAR < 40
B	47	32	07S - 0.34	DSS	10	IN-SERV	WEAR < 40
B	47	119	09S - 0.80	DSS	10	IN-SERV	WEAR < 40
B	48	110	14S + 0.44	DSS	9	IN-SERV	WEAR < 40
B	48	118	08S - 0.76	DSS	13	IN-SERV	WEAR < 40
B	49	35	09S - 0.78	DSS	10	IN-SERV	WEAR < 40
B	49	119	08S - 0.74	DSS	9	IN-SERV	WEAR < 40
B	50	6	14S - 0.63	DSS	24	IN-SERV	WEAR < 40
B	50	35	07S - 0.62	DSS	22	IN-SERV	WEAR < 40
B	50	119	14S - 0.79	DSS	13	IN-SERV	WEAR < 40
B	51	6	14S - 0.71	DSS	19	IN-SERV	WEAR < 40
B	52	1	11S + 0.66	DSS	12	IN-SERV	WEAR < 40
B	55	95	06S + 0.67	DSS	10	IN-SERV	WEAR < 40
B	55	122	14S - 0.83	DSS	5	IN-SERV	WEAR < 40
B	59	37	07S - 0.60	DSS	11	IN-SERV	WEAR < 40
B	59	93	06S + 0.43	DSS	5	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	59	122	07S - 0.32	DSS	10	IN-SERV	WEAR < 40
B	60	18	08S + 0.74	DSS	6	IN-SERV	WEAR < 40
B	61	1	14S - 0.66	DSS	21	IN-SERV	WEAR < 40
B	62	3	09S - 0.34	DSS	15	IN-SERV	WEAR < 40
B	62	27	07S - 0.26	DSS	8	IN-SERV	WEAR < 40
B	62	71	06S - 0.02	DSS	14	IN-SERV	WEAR < 40
B	63	26	07S + 0.04	DSS	19	IN-SERV	WEAR < 40
B	63	124	04S - 0.78	DSS	12	IN-SERV	WEAR < 40
B	64	126	09S + 0.43	DSS	17	IN-SERV	WEAR < 40
B	67	29	07S + 0.64	DSS	4	IN-SERV	WEAR < 40
B	67	47	03S + 0.04	DSS	18	IN-SERV	WEAR < 40
B	68	26	10S - 0.75	DSS	10	IN-SERV	WEAR < 40
B	68	115	06S + 0.06	DSS	7	IN-SERV	WEAR < 40
B	69	21	09S + 0.62	DSS	10	IN-SERV	WEAR < 40
B	69	53	06S + 0.19	DSS	12	IN-SERV	WEAR < 40
B	70	47	08S - 0.77	DSS	16	IN-SERV	WEAR < 40
B	70	47	04S - 0.77	DSS	9	IN-SERV	WEAR < 40
B	71	24	04S + 0.00	DSS	13	IN-SERV	WEAR < 40
B	71	43	07S + 0.43	DSS	11	IN-SERV	WEAR < 40
B	72	31	09S + 0.62	DSS	10	IN-SERV	WEAR < 40
B	72	64	08S - 0.72	DSS	9	IN-SERV	WEAR < 40
B	72	64	08S + 0.61	DSS	18	IN-SERV	WEAR < 40
B	72	88	06S + 0.35	DSS	5	IN-SERV	WEAR < 40
B	73	31	10S - 0.82	DSS	13	IN-SERV	WEAR < 40
B	73	126	07S + 0.76	DSS	14	IN-SERV	WEAR < 40
B	74	3	13S - 0.41	DSS	9	IN-SERV	WEAR < 40
B	75	9	14S + 0.66	DSS	17	IN-SERV	WEAR < 40
B	75	9	13S + 0.68	DSS	17	IN-SERV	WEAR < 40
B	76	119	05S – 0.87	DSS	12	IN-SERV	WEAR < 40
B	78	24	04S - 0.80	DSS	9	IN-SERV	WEAR < 40
B	79	7	08S + 0.63	DSS	17	IN-SERV	WEAR < 40
B	79	29	10S - 0.80	DSS	7	IN-SERV	WEAR < 40
B	79	46	09S - 0.39	DSS	9	IN-SERV	WEAR < 40
B	79	59	10S + 0.37	DSS	8	IN-SERV	WEAR < 40
B	79	66	01S - 0.70	DSS	6	IN-SERV	WEAR < 40
B	79	112	05S - 0.72	DSS	6	IN-SERV	WEAR < 40
B	80	87	06S + 0.49	DSS	10	IN-SERV	WEAR < 40
B	81	26	09S - 0.75	DSS	10	IN-SERV	WEAR < 40
B	81	27	05S - 0.73	DSS	11	IN-SERV	WEAR < 40
B	81	56	07S - 0.23	DSS	7	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	81	64	07S + 0.78	DSS	17	IN-SERV	WEAR < 40
B	81	80	06S - 0.43	DSS	20	IN-SERV	WEAR < 40
B	82	1	07S - 0.78	DSS	7	IN-SERV	WEAR < 40
B	82	128	08S + 0.34	DSS	6	IN-SERV	WEAR < 40
B	83	1	11S - 0.62	DSS	13	IN-SERV	WEAR < 40
B	83	21	10S - 0.77	DSS	4	IN-SERV	WEAR < 40
B	83	118	02S + 0.08	DSS	8	IN-SERV	WEAR < 40
B	83	118	02S - 0.23	DSS	7	IN-SERV	WEAR < 40
B	83	130	08S + 0.00	DSS	11	IN-SERV	WEAR < 40
B	84	126	04S - 0.53	DSS	11	IN-SERV	WEAR < 40
B	85	39	06S + 0.15	DSS	11	IN-SERV	WEAR < 40
B	85	114	04S + 0.66	DSS	8	IN-SERV	WEAR < 40
B	86	84	05S + 0.47	DSS	14	IN-SERV	WEAR < 40
B	87	118	04S - 0.61	DSS	8	IN-SERV	WEAR < 40
B	87	130	08S - 0.85	DSS	7	IN-SERV	WEAR < 40
B	88	50	06S + 0.51	DSS	8	IN-SERV	WEAR < 40
B	89	18	08S + 0.65	DSS	6	IN-SERV	WEAR < 40
B	90	21	10S - 0.83	DSS	4	IN-SERV	WEAR < 40
B	90	31	07S - 0.36	DSS	8	IN-SERV	WEAR < 40
B	91	126	06S - 0.79	DSS	13	IN-SERV	WEAR < 40
B	93	1	08S + 0.69	DSS	6	IN-SERV	WEAR < 40
B	96	66	05S - 0.68	DSS	9	IN-SERV	WEAR < 40
B	101	68	12S - 0.56	DSS	11	IN-SERV	WEAR < 40
B	103	47	06S + 0.00	DSS	7	IN-SERV	WEAR < 40
B	103	58	05S - 0.79	DSS	18	IN-SERV	WEAR < 40
B	103	110	08S - 0.49	DSS	3	IN-SERV	WEAR < 40
B	104	35	05S + 0.00	DSS	17	IN-SERV	WEAR < 40
B	105	119	14S - 0.77	DSS	14	IN-SERV	WEAR < 40
B	107	115	14S - 0.64	DSS	11	IN-SERV	WEAR < 40
B	108	106	15S + 0.53	DSS	4	IN-SERV	WEAR < 40
B	110	56	05S - 0.81	DSS	7	IN-SERV	WEAR < 40
B	110	113	13S - 0.04	DSS	15	IN-SERV	WEAR < 40
B	110	115	13S – 0.75	DSS	18	IN-SERV	WEAR < 40
B	111	113	09S + 0.62	DSS	12	IN-SERV	WEAR < 40
B	112	84	05S - 0.81	DSS	7	IN-SERV	WEAR < 40
B	113	57	05S - 0.89	DSS	9	IN-SERV	WEAR < 40
B	113	58	05S - 0.83	DSS	7	IN-SERV	WEAR < 40
B	113	111	09S + 0.70	DSS	10	IN-SERV	WEAR < 40
B	114	31	07S - 0.19	DSS	7	IN-SERV	WEAR < 40
B	114	109	09S + 0.28	DSS	9	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	114	112	09S + 0.84	DSS	6	IN-SERV	WEAR < 40
B	115	108	09S + 0.66	DSS	11	IN-SERV	WEAR < 40
B	116	109	13S - 0.69	DSS	18	IN-SERV	WEAR < 40
B	116	109	09S + 0.53	DSS	11	IN-SERV	WEAR < 40
B	117	78	06S - 0.80	DSS	9	IN-SERV	WEAR < 40
B	118	27	02S - 0.81	DSS	7	IN-SERV	WEAR < 40
B	119	69	06S - 0.72	DSS	19	IN-SERV	WEAR < 40
B	119	106	09S + 0.55	DSS	20	IN-SERV	WEAR < 40
B	119	108	07S - 0.80	DSS	12	IN-SERV	WEAR < 40
B	121	39	06S - 0.84	DSS	12	IN-SERV	WEAR < 40
B	121	95	05S + 0.30	DSS	6	IN-SERV	WEAR < 40
B	122	29	04S - 0.72	DSS	9	IN-SERV	WEAR < 40
B	122	39	07S - 0.49	DSS	9	IN-SERV	WEAR < 40
B	125	96	09S + 0.68	DSS	11	IN-SERV	WEAR < 40
B	125	97	09S + 0.60	DSS	13	IN-SERV	WEAR < 40
B	126	96	09S + 0.66	DSS	11	IN-SERV	WEAR < 40
B	127	91	06S - 0.88	DSS	16	IN-SERV	WEAR < 40
B	130	2	10S + 0.34	DSS	16	IN-SERV	WEAR < 40
B	130	9	02S - 0.77	DSS	10	IN-SERV	WEAR < 40
B	130	28	07S + 0.62	DSS	9	IN-SERV	WEAR < 40
B	131	7	06S - 0.79	DSS	10	IN-SERV	WEAR < 40
B	131	43	05S - 0.64	DSS	11	IN-SERV	WEAR < 40
B	132	1	10S + 0.67	DSS	13	IN-SERV	WEAR < 40
B	132	26	02S - 0.79	DSS	13	IN-SERV	WEAR < 40
B	132	27	06S - 0.81	DSS	8	IN-SERV	WEAR < 40
B	133	3	10S - 0.76	DSS	11	IN-SERV	WEAR < 40
B	133	26	05S - 0.77	DSS	14	IN-SERV	WEAR < 40
B	134	2	10S + 0.62	DSS	10	IN-SERV	WEAR < 40
B	134	24	02S - 0.79	DSS	10	IN-SERV	WEAR < 40
B	136	4	10S + 0.41	DSS	15	IN-SERV	WEAR < 40
B	137	3	09S + 0.80	DSS	15	IN-SERV	WEAR < 40
B	139	4	06S - 0.79	DSS	10	IN-SERV	WEAR < 40
B	141	9	06S - 0.49	DSS	7	IN-SERV	WEAR < 40
B	142	3	10S + 0.64	DSS	13	IN-SERV	WEAR < 40
B	142	3	09S + 0.63	DSS	11	IN-SERV	WEAR < 40
B	142	55	08S - 0.11	DSS	9	IN-SERV	WEAR < 40
B	143	1	08S - 0.77	DSS	9	IN-SERV	WEAR < 40
B	143	23	13S - 0.58	DSS	14	IN-SERV	WEAR < 40
B	144	9	07S - 0.47	DSS	7	IN-SERV	WEAR < 40
B	145	7	06S - 0.04	DSS	5	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	146	8	08S + 0.68	DSS	11	IN-SERV	WEAR < 40
B	146	10	08S - 0.82	DSS	12	IN-SERV	WEAR < 40
B	146	16	11S - 0.75	DSS	10	IN-SERV	WEAR < 40
B	146	34	14S - 0.73	DSS	10	IN-SERV	WEAR < 40
B	146	35	13S + 0.60	DSS	11	IN-SERV	WEAR < 40
B	147	1	08S + 0.72	DSS	13	IN-SERV	WEAR < 40
B	147	3	06S - 0.73	DSS	6	IN-SERV	WEAR < 40
B	147	15	13S - 0.62	DSS	25	IN-SERV	WEAR < 40
B	147	27	09S + 0.69	DSS	12	IN-SERV	WEAR < 40
B	147	41	06S - 0.77	DSS	14	IN-SERV	WEAR < 40
B	147	44	07S + 0.00	DSS	9	IN-SERV	WEAR < 40
B	148	7	08S + 0.64	DSS	21	IN-SERV	WEAR < 40
B	148	7	06S - 0.81	DSS	4	IN-SERV	WEAR < 40
B	149	1	08S + 0.55	DSS	21	IN-SERV	WEAR < 40
B	149	1	06S - 0.82	DSS	7	IN-SERV	WEAR < 40
B	149	3	06S - 0.80	DSS	14	IN-SERV	WEAR < 40
B	149	14	10S + 0.62	DSS	17	IN-SERV	WEAR < 40
B	149	16	10S + 0.62	DSS	16	IN-SERV	WEAR < 40
B	149	19	10S + 0.68	DSS	13	IN-SERV	WEAR < 40
B	150	8	10S + 0.75	DSS	6	IN-SERV	WEAR < 40
B	150	14	11S - 0.68	DSS	14	IN-SERV	WEAR < 40
B	150	16	10S + 0.60	DSS	16	IN-SERV	WEAR < 40
B	150	16	11S - 0.75	DSS	11	IN-SERV	WEAR < 40
B	150	17	10S + 0.68	DSS	12	IN-SERV	WEAR < 40
B	150	23	10S + 0.70	DSS	13	IN-SERV	WEAR < 40
B	151	1	06S - 0.76	DSS	8	IN-SERV	WEAR < 40
B	3	16	08S + 0.79	WAR	7	IN-SERV	WEAR < 40
B	4	14	10S + 0.71	WAR	6	IN-SERV	WEAR < 40
B	4	15	10S + 0.70	WAR	9	IN-SERV	WEAR < 40
B	4	21	08S + 0.19	WAR	6	IN-SERV	WEAR < 40
B	4	28	09S - 0.51	WAR	9	IN-SERV	WEAR < 40
B	5	9	10S + 0.56	WAR	19	IN-SERV	WEAR < 40
B	5	14	10S + 0.72	WAR	11	IN-SERV	WEAR < 40
B	5	15	10S + 0.52	WAR	12	IN-SERV	WEAR < 40
B	6	12	10S + 0.71	WAR	17	IN-SERV	WEAR < 40
B	6	14	10S + 0.45	WAR	14	IN-SERV	WEAR < 40
B	7	33	13S - 0.72	WAR	18	IN-SERV	WEAR < 40
B	7	33	14S - 0.90	WAR	10	IN-SERV	WEAR < 40
B	10	8	10S - 0.74	WAR	11	IN-SERV	WEAR < 40
B	10	65	11S + 0.70	WAR	13	IN-SERV	WEAR < 40
B	11	21	14S - 0.79	WAR	7	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	12	34	03S + 0.80	WAR	16	IN-SERV	WEAR < 40
B	13	63	07S + 0.67	WAR	6	IN-SERV	WEAR < 40
B	20	83	10S + 0.72	WAR	12	IN-SERV	WEAR < 40
B	22	91	10S + 0.70	WAR	13	IN-SERV	WEAR < 40
B	23	6	09S - 0.73	WAR	13	IN-SERV	WEAR < 40
B	24	1	11S + 0.64	WAR	14	IN-SERV	WEAR < 40
B	24	3	10S + 0.64	WAR	14	IN-SERV	WEAR < 40
B	24	19	08S - 0.40	WAR	10	IN-SERV	WEAR < 40
B	24	47	07S + 0.52	WAR	10	IN-SERV	WEAR < 40
B	29	15	07S - 0.33	WAR	9	IN-SERV	WEAR < 40
B	32	6	12S - 0.62	WAR	10	IN-SERV	WEAR < 40
B	32	7	11S + 0.62	WAR	11	IN-SERV	WEAR < 40
B	32	7	13S - 0.72	WAR	12	IN-SERV	WEAR < 40
B	36	20	05S + 0.07	WAR	9	IN-SERV	WEAR < 40
B	40	117	14S - 0.50	WAR	10	IN-SERV	WEAR < 40
B	42	4	08S - 0.57	WAR	28	IN-SERV	WEAR < 40
B	50	119	08S - 0.61	WAR	14	IN-SERV	WEAR < 40
B	50	120	15S + 0.87	WAR	10	IN-SERV	WEAR < 40
B	51	83	04S + 0.50	WAR	7	IN-SERV	WEAR < 40
B	51	119	14S + 0.84	WAR	12	IN-SERV	WEAR < 40
B	52	95	03S + 0.73	WAR	8	IN-SERV	WEAR < 40
B	52	121	15S + 0.79	WAR	11	IN-SERV	WEAR < 40
B	55	99	09S - 0.81	WAR	10	IN-SERV	WEAR < 40
B	56	122	15S + 0.71	WAR	6	IN-SERV	WEAR < 40
B	59	93	06S + 0.45	WAR	10	IN-SERV	WEAR < 40
B	59	122	08S + 0.59	WAR	7	IN-SERV	WEAR < 40
B	59	122	08S - 0.73	WAR	15	IN-SERV	WEAR < 40
B	60	14	07S + 0.43	WAR	4	IN-SERV	WEAR < 40
B	62	105	07S - 0.43	WAR	2	IN-SERV	WEAR < 40
B	63	130	11S - 0.41	WAR	15	IN-SERV	WEAR < 40
B	63	130	11S + 0.63	WAR	14	IN-SERV	WEAR < 40
B	67	105	05S + 0.70	WAR	7	IN-SERV	WEAR < 40
B	68	117	13S - 0.89	WAR	12	IN-SERV	WEAR < 40
B	69	127	08S - 0.41	WAR	12	IN-SERV	WEAR < 40
B	70	74	01S - 0.30	WAR	9	IN-SERV	WEAR < 40
B	74	47	02S + 0.55	WAR	8	IN-SERV	WEAR < 40
B	75	126	11S - 0.11	WAR	12	IN-SERV	WEAR < 40
B	76	121	04S - 0.69	WAR	11	IN-SERV	WEAR < 40
B	78	68	07S + 0.74	WAR	11	IN-SERV	WEAR < 40
B	78	68	07S - 0.67	WAR	17	IN-SERV	WEAR < 40
B	80	36	10S - 0.68	WAR	11	IN-SERV	WEAR < 40
B	81	118	06S + 0.27	WAR	12	IN-SERV	WEAR < 40
B	82	116	08S - 0.37	WAR	9	IN-SERV	WEAR < 40

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	84	57	06S - 0.79	WAR	9	IN-SERV	WEAR < 40
B	84	111	06S - 0.38	WAR	18	IN-SERV	WEAR < 40
B	84	126	04S - 0.48	WAR	12	IN-SERV	WEAR < 40
B	94	128	07S - 0.70	WAR	17	IN-SERV	WEAR < 40
B	97	12	08S - 0.61	WAR	11	IN-SERV	WEAR < 40
B	97	44	06S - 0.40	WAR	12	IN-SERV	WEAR < 40
B	100	26	07S + 0.50	WAR	5	IN-SERV	WEAR < 40
B	102	84	05S - 0.79	WAR	7	IN-SERV	WEAR < 40
B	104	13	04S - 0.79	WAR	8	IN-SERV	WEAR < 40
B	107	37	02S - 0.77	WAR	14	IN-SERV	WEAR < 40
B	109	6	08S + 0.36	WAR	5	IN-SERV	WEAR < 40
B	110	108	15S + 0.57	WAR	10	IN-SERV	WEAR < 40
B	116	1	10S + 0.48	WAR	17	IN-SERV	WEAR < 40
B	121	41	15S - 0.89	WAR	7	IN-SERV	WEAR < 40
B	126	95	09S + 0.70	WAR	16	IN-SERV	WEAR < 40
B	128	1	11S - 0.75	WAR	14	IN-SERV	WEAR < 40
B	134	3	10S + 0.68	WAR	10	IN-SERV	WEAR < 40
B	137	78	08S + 0.69	WAR	16	IN-SERV	WEAR < 40
B	138	53	04S + 0.45	WAR	11	IN-SERV	WEAR < 40
B	144	1	10S + 0.65	WAR	11	IN-SERV	WEAR < 40
B	144	23	06S - 0.73	WAR	13	IN-SERV	WEAR < 40
B	145	1	10S - 0.65	WAR	19	IN-SERV	WEAR < 40
B	146	13	06S - 0.69	WAR	11	IN-SERV	WEAR < 40
B	146	21	11S - 0.77	WAR	12	IN-SERV	WEAR < 40
B	148	18	11S - 0.61	WAR	22	IN-SERV	WEAR < 40
B	149	19	09S + 0.64	WAR	8	IN-SERV	WEAR < 40
B	149	20	10S + 0.72	WAR	13	IN-SERV	WEAR < 40
B	150	20	10S + 0.82	WAR	15	IN-SERV	WEAR < 40
B	151	8	10S + 0.80	WAR	11	IN-SERV	WEAR < 40
B	151	9	10S + 0.66	WAR	9	IN-SERV	WEAR < 40
B	151	12	09S - 0.75	WAR	12	IN-SERV	WEAR < 40
B	151	14	10S + 0.66	WAR	5	IN-SERV	WEAR < 40
B	2	17	UTE - 1.25	SAI		IN-SERV	RRT
B	5	43	UTE - 1.33	SAI		IN-SERV	RRT
B	7	1	UTE - 1.15	SCI		IN-SERV	RRT
B	9	62	UTE - 1.47	SAI		IN-SERV	RRT
B	13	3	UTE - 1.43	SCI		IN-SERV	RRT
B	31	48	UTE - 1.73	SAI		IN-SERV	RRT
B	31	54	UTE - 0.19	SAA		IN-SERV	RRT
B	31	54	UTE - 1.41	SAI		IN-SERV	RRT
B	32	55	UTE - 1.78	SAI		IN-SERV	RRT
B	40	60	UTE - 1.33	SAI		IN-SERV	RRT

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	43	59	UTE - 1.38	SAI		IN-SERV	RRT
B	52	123	UTE - 0.34	SCI		IN-SERV	RRT
B	61	101	UTE - 1.62	SAI		IN-SERV	RRT
B	65	50	UTE - 1.95	SAI		IN-SERV	RRT
B	82	26	UTE - 1.41	SAI		IN-SERV	RRT
B	82	26	UTS + 16.10	VOL		IN-SERV	RRT
B	82	26	UTS + 15.65	VOL		IN-SERV	RRT
B	82	26	UTS + 3.38	VOL		IN-SERV	RRT
B	82	79	UTE - 1.80	SAI		IN-SERV	RRT
B	85	69	05S - 0.71	DSS	10	IN-SERV	RRT
B	85	69	UTE - 1.74	SAI		IN-SERV	RRT
B	88	29	UTE - 1.81	MAI		IN-SERV	RRT
B	88	29	UTE - 1.81	MAI		IN-SERV	RRT
B	89	23	UTE - 0.88	SVI		IN-SERV	RRT
B	91	63	UTE - 1.78	MAI		IN-SERV	RRT
B	94	1	UTE - 1.34	SAI		IN-SERV	RRT
B	95	28	UTE - 1.44	SAI		IN-SERV	RRT
B	95	66	UTE - 1.23	SAI		IN-SERV	RRT
B	99	27	UTE - 2.18	SAI		IN-SERV	RRT
B	100	28	UTE - 1.62	MAI		IN-SERV	RRT
B	104	22	UTE - 1.30	MAI		IN-SERV	RRT
B	104	38	UTE - 2.00	MAI		IN-SERV	RRT
B	104	55	UTE - 1.96	SAI		IN-SERV	RRT
B	109	92	UTE - 1.60	MAI		IN-SERV	RRT
B	110	69	UTE - 1.22	SAI		IN-SERV	RRT
B	110	73	UTE - 2.35	SAI		IN-SERV	RRT
B	113	23	UTE - 1.90	MAI		IN-SERV	RRT
B	113	74	UTE - 1.50	SAI		IN-SERV	RRT
B	113	92	UTE - 1.50	SAI		IN-SERV	RRT
B	4	20	UTE - 3.50	MAI		OOS	PLG
B	6	18	UTE - 3.35	SAI		OOS	PLG
B	6	30	13S + 0.50	SAI		OOS	PLG
B	6	30	13S - 0.33	SAI		OOS	PLG
B	8	12	UTE - 1.25	MAI		OOS	PLG
B	9	23	08S + 8.62	SVI		OOS	PLG
B	9	34	UTE - 1.48	SAI		OOS	PLG
B	13	28	09S + 16.44	SVI		OOS	PLG
B	13	37	UTE - 2.91	SAI		OOS	PLG
B	18	26	UTE - 3.19	SAI		OOS	PLG
B	18	34	UTE - 1.75	SAI		OOS	PLG

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	24	66	UTE - 1.50	SAI		OOS	PLG
B	32	39	UTE - 3.61	MCI		OOS	PLG
B	32	41	UTE - 3.62	SAI		OOS	PLG
B	36	29	UTE - 2.87	SAI		OOS	PLG
B	38	12	UTE - 3.74	SCI		OOS	PLG
B	40	54	UTE - 3.07	SCI		OOS	PLG
B	40	113	UTE - 0.32	MAA		OOS	PLG
B	40	113	UTE - 1.49	SAI		OOS	PLG
B	43	104	UTE - 1.44	SAI		OOS	PLG
B	44	97	UTS + 0.27	SVI		OOS	PLG
B	44	97	UTS + 0.51	SVI		OOS	PLG
B	45	1	UTE - 3.07	SAI		OOS	PLG
B	48	1	UTE - 3.27	SCI		OOS	PLG
B	50	2	UTE - 3.85	SAI		OOS	PLG
B	50	2	UTS + 4.59	VOL		OOS	PLG
B	50	2	UTS + 4.59	VOL		OOS	PLG
B	50	2	UTS + 5.47	VOL		OOS	PLG
B	50	2	UTS + 10.06	VOL		OOS	PLG
B	50	2	UTS + 9.79	VOL		OOS	PLG
B	51	1	UTE - 3.17	SAI		OOS	PLG
B	51	3	UTE - 3.85	SAI		OOS	PLG
B	51	3	UTE - 3.51	SAI		OOS	PLG
B	52	2	UTE - 4.08	MAI		OOS	PLG
B	52	3	UTE - 3.53	SCI		OOS	PLG
B	52	3	UTE - 3.47	SAI		OOS	PLG
B	52	125	UTE - 3.63	SCI		OOS	PLG
B	60	1	15S - 5.77	SAI		OOS	PLG
B	63	91	05S + 21.06	SVI		OOS	PLG
B	71	20	15S + 2.16	SVI		OOS	PLG
B	74	64	UTS + 3.57	VOL		OOS	PLG
B	74	64	UTS + 0.23	SVI		OOS	PLG
B	75	88	11S + 16.60	SVI		OOS	PLG
B	78	37	UTS + 8.50	VOL		OOS	PLG
B	78	37	UTS + 8.50	VOL		OOS	PLG
B	83	55	UTS - 1.07	SAI		OOS	PLG
B	84	54	UTS - 1.25	SAI		OOS	PLG
B	84	128	UTE - 1.51	SAI		OOS	PLG
B	89	15	15S - 2.37	SVI		OOS	PLG
B	89	19	15S + 19.48	SVI		OOS	PLG
B	89	57	UTE - 3.68	SAI		OOS	PLG

SG	ROW	TUBE	LOCATION	IND	%TW	STATUS	REPAIR
B	90	19	UTE - 0.25	SAA		OOS	PLG
B	90	19	UTS - 11.18	SVI		OOS	PLG
B	90	46	14S - 13.11	SVI		OOS	PLG
B	95	17	15S + 14.82	SVI		OOS	PLG
B	96	21	15S + 23.81	SVI		OOS	PLG
B	96	21	15S + 21.04	SVI		OOS	PLG
B	97	22	04S - 9.02	SVI		OOS	PLG
B	98	16	15S - 4.04	SVI		OOS	PLG
B	98	113	UTE - 2.08	SAI		OOS	PLG
B	106	119	UTE - 3.43	MCI		OOS	PLG
B	107	12	UTE - 1.42	SAI		OOS	PLG
B	110	11	UTE - 0.21	SAA		OOS	PLG
B	110	11	UTE - 1.62	SAI		OOS	PLG
B	110	11	UTS + 3.88	VOL		OOS	PLG
B	111	6	UTE - 2.53	MAI		OOS	PLG
B	115	3	15S - 4.39	SAI		OOS	PLG
B	115	3	15S - 3.93	SAI		OOS	PLG
B	115	3	15S - 3.24	SAI		OOS	PLG
B	118	103	09S + 0.59	DSS	10	OOS	PLG
B	118	103	UTE - 1.75	SVI		OOS	PLG
B	123	5	15S - 10.79	SAI		OOS	PLG
B	127	1	15S - 6.14	SAI		OOS	PLG
B	127	5	14S + 15.42	SAI		OOS	PLG
B	129	32	UTE - 2.24	SAI		OOS	PLG
B	129	77	UTE - 1.97	SVI		OOS	PLG
B	139	9	UTE - 1.86	SVI		OOS	PLG
B	142	16	UTE - 1.69	SAI		OOS	PLG
B	143	17	UTE - 1.73	SAI		OOS	PLG
B	145	33	13S + 15.85	SVI		OOS	PLG
B	145	33	13S + 16.95	SVI		OOS	PLG
B	145	33	13S + 19.03	SVI		OOS	PLG
B	145	34	UTE - 4.42	MAI		OOS	PLG
B	148	10	15S + 1.30	SAI		OOS	PLG
B	148	10	15S + 1.51	SAI		OOS	PLG