Technical Specification 5.6.8

Palo Verde Nuclear Generating Station

Thomas N. Weber
Department Leader
Regulatory Affairs

Tel. 623-393-5764
Fax 623-393-5442

Mail Station 7636
PO Box 52034
Phoenix, Arizona 85072-2034

102-05917-TNW/RJR
October 28, 2008

ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Palo Verde Nuclear Generating Station (PVNGS) Unit 2
Docket No. STN 50-529
License No. NPF-51
Steam Generator Tube Inspection Report

Attached please find PVNGS' Steam Generator Tube Inspection Report prepared and submitted by Arizona Public Service Company (APS) pursuant to Technical Specification (TS) Reporting Requirement 5.6.8. This report describes steam generator tube inspection and plugging results from the Unit 2 fourteenth refueling outage.

By copy of this letter and the enclosure, this report is being provided to the NRC Region IV Administrator and the PVNGS Resident Inspector.

No commitments are being made to the NRC by this letter.

Should you have questions regarding this submittal, please contact Russell A. Stroud, Licensing Section Leader, at (623) 393-5111.

Sincerely,

Thomas N. Weber

TNW/RAS/RJR/gat

Attachment

cc: (with attachment)
E. E. Collins Jr. NRC Region IV Regional Administrator
B. K. Singal NRC NRR Project Manager
R. I. Treadway NRC Senior Resident Inspector

A047
NRR

Attachment

Unit 2 – 14th Refueling Outage
Steam Generator Tube Inspection Report

Palo Verde Nuclear Generating Station

UNIT 2
U2R14

ARIZONA PUBLIC SERVICE
P. O. BOX 52034
PHOENIX, AZ 85072

Prepared by: Douglas B Hansen Date: 5-4-2008

Reviewed by: Date: 7/8/2008

Approved by: Report Date: 7/24/08

Commercial Service Date: 9-19-86

Table of Contents

UNIT 2

STEAM GENERATOR EDDY CURRENT

U2 R14 Refueling Outage

1.0 Summary

This report is intended to satisfy the requirements of PVNGS Technical Specifications 5.6.8 for the submittal of a Steam Generator Tube Inspection Report. The steam generator (SG) eddy current examination for the 14th refueling outage in Unit 2 (U2R14) was conducted during April 2008. Mode 4 entry of Unit 2 Cycle 14 was entered on May 22, 2008. The initial examination plan for both steam generators is listed in Table 1. This table summarizes the examinations performed for each of the various categories, examination types, extents, and the number of tubes or tube locations completed. This was the third examination performed in Unit 2 following steam generator replacement in U2R11. This examination is considered a 100% full length tubing inspection (see Table 1) with the Row 1-4 u-bends inspected via rotating coil in lieu of bobbin due to access limitations of the selected bobbin probe sizes.

The examinations resulted in a total of **83** tubes being plugged in SG 21, and **90** tubes being plugged in SG 22. A description of the previous plugging history for these replacement steam generators is contained in Appendix E.

2.0 Original Examination Plan

The original examination plan was developed based on the "PVNGS Steam Generator Degradation Assessment" developed per PVNGS Procedure 81DP-9RC01 as required by NEI 97-06. In addition, possible damage mechanisms were reviewed along with the specific requirements set forth in Procedure 73TI-9RC01 and the PVNGS Technical Specifications. The plan is summarized in Table 1 of this report.

3.0 Condition Monitoring Assessment

Per the Steam Generator Program, as defined in PVNGS Procedure 81DP-9RC01, a condition monitoring evaluation was conducted by PVNGS Engineering. As indicated above, no defects exceeding the Technical Specification repair limits or the PVNGS Administrative Plugging criteria were identified. The results of the eddy current examinations are provided in Section 4.0. An engineering evaluation of the as-found condition of inservice tubes did not reveal any degradation exceeding the threshold values for structural and leakage integrity. As such, all steam generator performance criteria were satisfied for Unit 2 Cycle 14. No tube pulls or insitu pressure testing were required based on the results of the examinations.

Tubesheet and Flow Distribution Plate Foreign Object Search and Retrieval (FOSAR) were conducted using a power cart mounted with a remotely operated camera and retrieval tooling. The

applicable requirements of the Revision 2 of the EPRI Steam Generator Integrity Assessment Guidelines Section 10.5, *Secondary Side Visual Inspections*, were applied for the FOSAR inspections. Two (2) loose parts were identified in RSG 21 cold leg; one sludge rock and a small piece of wire (Note- sludge rocks have never caused SG tube wear, however Engineering identifies them and removes them when accessible). The small piece of wire had been left in the SG after U2R13 and was seen in the same location during the U2R14 pre-lance inspection. It was no longer present after sludge lancing, nor was it seen at any other location within viewing range. The wire was not found in the sludge when it was inspected, so it must be assumed that the wire is still present in the Steam Generator further in the tube bundle which would be a lower flow region. No wear was detected by ECT in the tube in contact with the wire during the last cycle. Since the wire is now assumed to be in a lower flow region, no wear is expected and it is not a concern. The sludge rock was removed during the post annulus inspection. Two (2) loose parts were identified in RSG 22 cold leg - one sludge rock and one piece of gasket material. The gasket material had been left in the SG after U2R13 and was seen in the same location but one row deeper into the bundle on both the pre and post annulus flush inspection. Neither one of the parts was observed during eddy current examinations. The sludge rock was removed during the post annulus inspection. The gasket material was left in its location. Since the gasket material is now in a lower flow location and since it did not cause any wear while in its previous, higher flow, location, it is not a concern. In accordance with the PVNGS loose part program, the results are documented for future tracking of this location during the U2R15 inspection. All loose part locations were ECT tested for possible wear indications and none was found. No loose parts were identified in either RSG 21 or RSG 22 hot leg. Flow Distribution Plate FOSAR was also conducted using a video cart. No loose parts were identified in either steam generator.

As noted in Table 2 there were 16 possible loose part (PLP) locations identified in Steam Generator 21 and 9 possible loose part (PLP) locations identified in Steam Generator 22. All of these PLP calls had been observed in the previous inspections (U2R12 and/or U2R13), with continued no evidence of wear. PVNGS has historically taken the position if a loose part is detected by ECT or FOSAR, without the presence of wear, it is reasonable to conclude that the required conditions to promote wear do not exist. Per the PVNGS SG Program, trending of these locations will continue in U2R14.

Finally, PVNGS Procedure 81DP-9RC01 requires, per the EPRI *PWR Steam Generator Examination Guidelines*, that a visual inspection of the previously installed steam generator plugs be performed to assess plug integrity. Additionally, the Examination Guidelines Section 6.10.1 states – "Verify the location and presence of existing in-service plugs." The conduct of the plug location and integrity verification was performed in U2R14 per procedure 81CP-9RC40. A review of the inspection results indicated that all plugs were accounted for and no evidence of potential plug leakage was identified.

4.0 Examination Results

A summary of the bobbin and rotating coil (RC) examination results is located in Table 2 of this report. In addition, Appendix A contains a reference drawing of steam generator support locations. The summary data sheets of Appendix B and C list all tubes in each steam generator with indications expressed as a percent wall thickness reduction, or as an analysis code. Appendix D contains summary data sheets for tubes classified as possible loose parts.

5.0 Examination Techniques and Equipment

The eddy current examinations were performed by Westinghouse Electric Company using the Core Star OMNI 200 instrumentation. Westinghouse Anser acquisition software was utilized with both systems. The following frequencies were used for the tube examinations:

Bobbin Coil *	RC
500 KHz	300 KHz
300 KHz	200 KHz
100 KHz	100 KHz
35 KHz	35 KHz

* NOTE: For bobbin coil examinations these frequencies were utilized in both differential and absolute modes.

All tubing was examined with Zetec or Core Star manufactured bobbin coil probes and Zetec RC style probes. Probe diameters were 0.540" to 0.610". Plus Point RC probes were used for the characterization of non-quantifiable or distorted bobbin indications. Data acquisition in both steam generators was facilitated by using Westinghouse Pegasys fixtures configured with a dual guide tube in each of the hot and cold legs.

Fiber optic cable was used from containment to the data acquisition room located at the PVNGS North Annex. Primary and secondary analysis was all performed on site. The Primary and Secondary Resolution Analysts, Independent Review Analysts, and data management were also located at PVNGS in the North Annex. Westinghouse provided the data acquisition and primary data analysis. Anatec International, Inc. provided the secondary data analysis.

Each individual from Westinghouse and Anatec International, Inc. who performed data analysis was required to complete and pass a PVNGS site specific Eddy Current Data Analysis Course as well as an associated performance and written examination. All individuals performing data analysis were also required to have Qualified Data Analyst (QDA) certification.

6.0 Repair Techniques and Equipment

All repairs were performed utilizing the Westinghouse mechanical rolled plug. The plugs were installed in accordance with the PVNGS work control process utilizing the Pegasys fixtures and associated remote plugging equipment.

TABLE 1
EXAMINATION SUMMARY

SCOPE DESCRIPTION		SG 21	SG 22
Exam Description	**Extents**	**Scope**	**Scope**
FULL LENGTH BOBBIN	TEC-TEH	12547	12543
ROW 1 THRU 4 SHORT RADIUS U-BENDS *	08C-08H	278	278
HOT STRAIGHT RC	VARIOUS	48	30
HOT U & SQUARE BEND RC	VARIOUS	148	184
COLD STRAIGHT RC	VARIOUS	105	58
COLD U & SQUARE BEND RC	VARIOUS	75	128

Notes:

1. * RC examinations were performed on Row 1 thru 4 short radius U-Bends in lieu of bobbin examination.

TABLE 2

INDICATION SUMMARY

DAMAGE MECHANISM	STEAM GENERATOR 21	STEAM GENERATOR 22
WEAR		
0% - 20%	142	218
20% - 29%	32	50
30%-39%	11	11
≥ 40%	4	4
PLUGGED	(83)	(90)
Possible Loose Parts (RC)		
PLI	0	0
PLP	16	9
PLUGGED	(0)	(0)
Volumetric Indications		
SVI/MVI	0	1
PLUGGED	(0)	(0)
PREVENTATIVE	(0)	(0)
PLUGGED	**(83)**	**(90)**
TOTAL PLUGGED / %	**(116 / 0.9 %)**	**(127 / 1.0 %)**

NOTES

1. Numbers in (X) are tubes numbers plugged in each category
2. The above represent the numbers of tubes; not indications

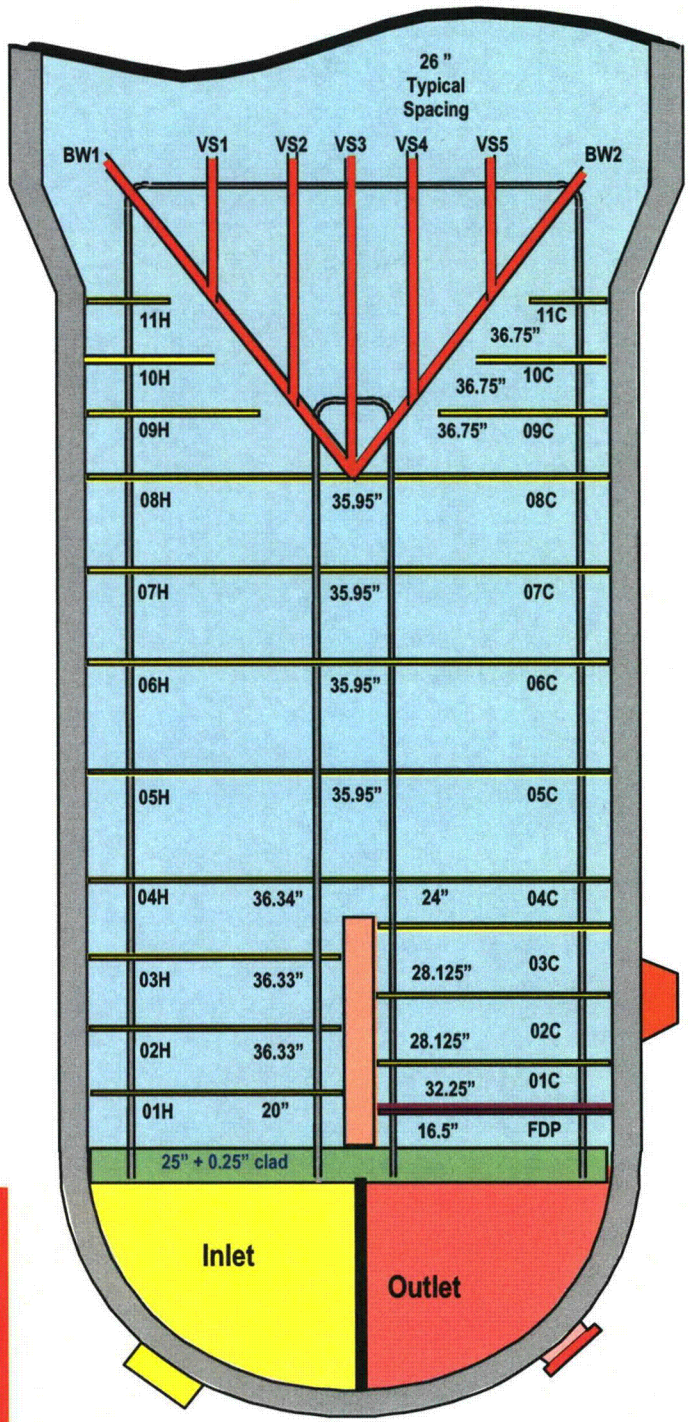
APPENDIX A

TUBE SUPPORT DIAGRAM

LEGEND and ANALYSIS CODES

PVNGS Steam Generator

REPLACEMENTS



Center of 08H to 08C

Row 1 - 17.415
Row 2 - 19.736
Row 3 - 22.056
Row 4 - 24.377
Row 5 - 26.698
Row 6 - 29.019

LEGEND

ROW:	Indicates the row number of a given tube.
COL:	Indicates the column number of a given tube.
VOLTS:	Indicates the peak-to-peak voltage of a given indication response.
DEG:	The measured phase angle of a given indication response.
IND:	Indicates the analysis code or PCT for percent
PER or PCT:	The percent through the tube wall of a given indication
CHN:	Indicates the channel used to make the call
LOCN:	Gives indication location at INCH1 to INCH2 relative to known landmarks such as supports, vertical straps, and batwings. Typical location codes are as follows:

#1 Vertical Strap VS1
#1 Batwing BW1
#1 Support Plate in Hot Leg 01H
#7 Support Plate in Cold Leg 07C
Top Tube Sheet Cold Leg ..... TSC
Tube End Hot Leg ..... TEH
Tube End Cold Leg ..... TEC

CRLEN:	Indicates the flaw length, typically used for cracks only
CRWID:	Indicates the flaw width, typically used for cracks only
CEG:	Indicates the flaw length, typically used for cracks only
BEGT and ENDT:	Indicates the beginning and of the test; together they document the examination extent
PDIA:	Documents the probe diameter
PTYPE:	Documents the probe type
CAL:	Indicates calibration number
L:	Indicates the leg the examination was conducted from
COM:	This comment field is utilized to document comments

Analysis CODES:

Absolute Drift ..... ADI
Apex Anomaly ..... APA
After Pressure Test ..... APT
Bad Data ..... BDA
Bulge ..... BLG
Dented Buff Mark ..... DBM
Deposit ..... DEP
Dent ..... DNT
Distorted Support Signal With Indication ..... DSI
Distorted Top of Tubesheet With Indication ..... DTI
Geometric Indication ..... GEO
ID Chatter ..... IDC
Indication Not Found ..... INF
Indication Not Reportable ..... INR
Multiple Axial Indication ..... MAI
Manufacturer Burnishing Mark ..... MBM

Mixed Mode Indication	MMI
Multiple Circumferential Indication	MCI
Multiple Volumetric Indication	MVI
No Detectable Defect	NDD
No Discontinuity Found	NDF
Non-Quantifiable Indication	NQI
No Tube Sheet Expansion	NTE
Obstructed	OBS
Over Expanded	OXP
Previous Bobbin Call	PBC
Possible Deposit	PDP
Positive Identification	PID
Positive Identification Verified	PIV
Possible Loose Part with Indication	PLI
Possible Loose Part	PLP
Previous RC Call	PRC
Possible Support Anomaly	PSA
Possible Support Indication	PSI
Permeability Variation Noise	PVN
Retest With 3 coil Probe	R3C
Retest Bad Data	RBD
Retest Identification Check	RIC
Retest with Magnetic Bias RC Probe	RMB
Single Axial Indication	SAI
Single Circumferential Indication	SCI
Single Volumetric Indication	SVI
Sludge	SLG
To Be Plugged	TBP
Volumetric Indication	VOL

Util2 CODES:

Batwing Wrapper Bar Wear	BWW
Change	CH
History Review	HR
Inside Diameter	ID
NEW	NEW
No Change	NC
No Loose Part Present	NLP
Manufacturing Induced Groove	MIG
Outside Diameter	OD
Pit like indication	PIT
Senior (Lead) Analysis Review	SR
Stake	SK
Tube to Tube Wear	TTW
Volumetric Inside Diameter	VID

APPENDIX B

STEAM GENERATOR 21

SUMMARY DATA SHEETS

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRNID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
50	5	1.31	0	NTE		2	TEC	23.11						VS3	TEC	.610	ZBAZC	17	C
36	8	36.01	184	NTE		2	TEC	22.65						VS3	TEC	.610	ZBAZC	31	C
38	13	.03	27	NTE		2	TEH	23.23						VS3	TEH	.610	ZBAZC	52	H
46	14	.31	132	PCT	8	P2	BW2	-.91						VS3	TEC	.610	ZBAZC	32	C
46	14	.52	40	PCT	8	P3	BW2	-.89						08C	VS3	.580	ZPUFI	76	C
50	39	.13	32	NTE		2	TEC	22.79						VS3	TEC	.610	ZBAZC	31	C
103	22	.37	108	PCT	11	P2	10C	.78						VS3	TEC	.610	ZBAZC	31	C
103	22	.74	88	PCT	13	P3	10C	.74						10C	10C	.600	ZPAHZ	70	C
36	24	.24	64	PCT	8	P2	BW2	-.97						VS3	TEC	.610	ZBAZC	0	C
36	24	.83	80	PCT	13	P3	BW2	-.73						08C	VS3	.580	ZPUFI	76	C
26	28	.34	103	MBM		6	03H	12.34						VS3	TEH	.610	ZBAZC	51	H
46	35	.30	108	PCT	9	P2	VS3	.92						VS3	TEC	.610	ZBAZC	27	C
46	35	.46	96	PCT	9	P3	VS3	.85						VS3	VS3	.580	ZPUFI	70	H
37	38	.35	105	PCT	10	P2	BW2	-.72						VS3	TEC	.610	ZBAZC	10	C
37	38	.45	60	PCT	7	P3	BW2	-.75						08C	VS3	.580	ZPUFI	76	C
50	55	.40	86	MBM		6	03C	19.13						VS3	TEC	.610	ZBAZC	26	C
44	59	.31	68	MBM		6	06C	30.79						TEH	TEC	.610	ZBAZC	2	C
80	60	.31	43	PCT	10	P2	VS2	.83						VS3	TEH	.610	ZBAZC	37	H
80	60	.53	69	PCT	10	P3	VS2	.09						00H	VS2	.580	ZPUFI	70	H
80	60	1.03	75	PCT	17	P3	VS2	.68						00H	VS2	.580	ZPUFI	70	H
81	64	.31	82	MBM		6	04C	15.36						VS3	TEC	.610	ZBAZC	24	C
81	64	.26	78	MBM		6	07H	28.91						VS3	TEH	.610	ZBAZC	37	H
37	69	.25	137	PCT	3	P2	VS3	1.20						TEH	TEC	.610	ZBAZC	2	C
76	69	.31	83	MBM		6	04C	19.75						VS3	TEC	.610	ZBAZC	23	C
4	67	.02	82	MBM		6	05C	3.63						08C	TEC	.610	ZBAZC	22	C
44	67	.25	83	PCT	7	P2	VS3	.81						TEH	TEC	.610	ZBAZC	2	C
44	67	.65	87	PCT	12	P3	VS3	.73						VS3	VS3	.580	ZPUFI	70	H
58	69	.53	116	PCT	16	P2	BW1	.81						VS3	TEH	.610	ZBAZC	37	H
58	69	.63	82	PCT	11	P3	BW1	.64						00H	VS3	.580	ZPUFI	70	H
4	71	.53	92	PCT	11	P3	BW1	-.80						08H	08C	.640	ZPUPH	67	H
64	71	.59	79	PCT	16	P2	VS3	.24						VS3	TEC	.610	ZBAZC	24	C
64	71	1.12	85	PCT	19	P3	VS3	.23						VS3	VS3	.580	ZPUFI	70	H
38	73	.23	113	PCT	7	P2	BW2	.88						TEH	TEC	.610	ZBAZC	3	C
38	73	.78	88	PCT	12	P3	BW2	.65						08C	VS3	.580	ZPUFI	76	C
26	74	.24	114	PCT	7	P2	BW2	-.91						TEH	TEC	.610	ZBAZC	5	C
26	74	.63	86	PCT	10	P3	BW2	-.77						08C	VS3	.580	ZPUFI	76	C
31	74	.17	99	PCT	5	P2	BW2	-.91						TEH	TEC	.610	ZBAZC	5	C
31	74	.72	84	PCT	11	P3	BW2	-.77						08C	VS3	.580	ZPUFI	76	C
56	75	.33	64	PCT	12	P2	BW1	-1.65						VS3	TEH	.610	ZBAZC	36	H
56	75	.98	94	PCT	17	P3	BW1	-1.64						00H	VS3	.580	ZPUFI	70	H
98	75	.85	10	NTE		2	TEH	23.06						VS3	TEH	.610	ZBAZC	38	H
22	77	.35	77	PCT	11	P2	BW2	-.91						TEH	TEC	.610	ZBAZC	7	C
22	77	.80	87	PCT	12	P3	BW2	-.89						08C	VS3	.580	ZPUFI	76	C
22	77	.85	91	PCT	13	P3	BW2	.71						08C	VS3	.580	ZPUFI	76	C
22	77			TBP										TEC	TEC	.610	ZBAZC	1000	C
33	78	.29	88	PCT	8	P2	BW2	-.91						TEH	TEC	.610	ZBAZC	8	C
33	78	.82	93	PCT	13	P3	BW2	-.75						08C	VS3	.580	ZPUFI	76	C
47	78	.34	153	PCT	10	P2	BW2	.82						TEH	TEC	.610	ZBAZC	5	C
47	78	.88	64	PCT	13	P3	BW2	.74						08C	VS3	.580	ZPUFI	76	C
56	78	.22	103	PCT	7	P2	BW1	1.75						TEH	TEC	.610	ZBAZC	6	C
56	78	.50	99	PCT	9	P3	BW1	1.41						00H	VS3	.580	ZPUFI	70	H

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRNID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
164	79	.33	122	PCT	9	P2	BW2	.82						TEH	TEC	.610	ZBAZC	70	C
164	79	.73	96	PCT	11	P3	BW2	.82						11C	WS6	.580	ZPUFI	76	C
20	80	1.28	78	PCT	27	P2	WS3	-.84						TEH	TEC	.610	ZBAZC	7	C
20	80	1.81	77	PCT	27	P3	WS3	-.92						WS3	WS3	.580	ZPUFI	77	H
20	80			TBP										TEC	TEC	.610	ZBAZC	1090	C
36	80	.48	64	PCT	14	P2	BW2	-.88						TEH	TEC	.610	ZBAZC	6	C
36	80	1.13	82	PCT	17	P3	BW2	-.80						0BC	WS3	.580	ZPUFI	76	C
36	80			TBP										TEC	TEC	.610	ZBAZC	1090	C
37	80	.61	95	PCT	17	P2	BW2	-.97						TEH	TEC	.610	ZBAZC	6	C
37	80	1.44	78	PCT	21	P3	BW2	-.79						0BC	WS3	.580	ZPUFI	76	C
38	80	.28	118	PCT	9	P2	BW2	-.97						TEH	TEC	.610	ZBAZC	6	C
38	80	.77	88	PCT	12	P3	BW2	-.81						0BC	WS3	.580	ZPUFI	76	C
43	80	.38	86	PCT	11	P2	WS3	-.77						TEH	TEC	.610	ZBAZC	6	C
43	80	.91	83	PCT	16	P3	WS3	-.77						WS3	WS3	.580	ZPUFI	78	H
42	81	.31	94	PCT	9	P2	BW2	.93						TEH	TEC	.610	ZBAZC	6	C
42	81	.79	85	PCT	12	P3	BW2	.83						0BC	WS3	.580	ZPUFI	76	C
33	82	2.17	102	PCT	37	P2	BW1	-.89						TEH	TEC	.610	ZBAZC	6	C
33	82	.22	105	PCT	6	P2	BW2	-.95						TEH	TEC	.610	ZBAZC	6	C
33	82	.48	112	PCT	8	P3	BW2	-.93						0BC	WS3	.580	ZPUFI	76	C
33	82	2.26	81	PCT	32	P3	BW1	-.99						0BH	WS3	.580	ZPUFI	77	H
33	82	.61	79	PCT	11	P3	BW1	-.25						0BH	WS3	.580	ZPUFI	77	H
33	82			TBP										TEC	TEC	.610	ZBAZC	1090	C
36	82	1.10	133	PCT	24	P2	BW1	.52						TEH	TEC	.610	ZBAZC	6	C
36	82	.26	80	PCT	8	P2	BW2	.88						TEH	TEC	.610	ZBAZC	6	C
36	82	.78	80	PCT	12	P3	BW2	.65						0BC	WS3	.580	ZPUFI	76	C
36	82	1.17	80	PCT	20	P3	BW1	.85						0BH	WS3	.580	ZPUFI	77	H
36	82			TBP										TEC	TEC	.610	ZBAZC	1090	C
37	82	.18	137	PCT	5	P2	BW1	.88						TEH	TEC	.610	ZBAZC	6	C
37	82	.46	63	PCT	9	P3	BW1	.89						0BH	WS3	.580	ZPUFI	77	H
37	82	.62	89	PCT	11	P3	WS3	.12						0BH	WS3	.580	ZPUFI	77	H
37	82			TBP										TEC	TEC	.610	ZBAZC	1090	C
38	82	.56	94	PCT	15	P2	WS3	-.86						TEH	TEC	.610	ZBAZC	6	C
38	82	.96	75	PCT	17	P3	WS3	-.91						WS3	WS3	.580	ZPUFI	77	H
46	82	.61	43	PCT	14	P2	BW1	-.88						TEH	TEC	.610	ZBAZC	6	C
46	82	.29	119	PCT	8	P2	WS3	-.93						TEH	TEC	.610	ZBAZC	6	C
46	82	.98	90	PCT	17	P3	BW1	-.88						0BH	WS3	.580	ZPUFI	78	H
46	82	.52	90	PCT	10	P3	WS3	-.84						0BH	WS3	.580	ZPUFI	78	H
47	82	.30	128	PCT	9	P2	BW1	-.95						TEH	TEC	.610	ZBAZC	6	C
47	82	.44	115	PCT	8	P3	BW1	-.78						0BH	WS3	.580	ZPUFI	78	H
36	84	1.04	95	PCT	34	P2	BW1	-.94						TEH	TEC	.610	ZBAZC	6	C
36	84	.34	46	PCT	10	P2	BW1	.97						TEH	TEC	.610	ZBAZC	6	C
36	84	2.61	81	PCT	34	P3	BW1	-.94						0BH	WS3	.580	ZPUFI	77	H
36	84	.93	88	PCT	16	P3	BW1	.91						0BH	WS3	.580	ZPUFI	77	H
36	84			TBP										TEC	TEC	.610	ZBAZC	1090	C
37	84	.43	62	PCT	12	P2	BW1	-.83						TEH	TEC	.610	ZBAZC	6	C
37	84	.94	100	PCT	16	P3	BW1	-.97						0BH	WS3	.580	ZPUFI	77	H
37	84			TBP										TEC	TEC	.610	ZBAZC	1090	C
38	84	.28	137	PCT	9	P2	BW1	.79						TEH	TEC	.610	ZBAZC	6	C
38	84	.65	98	PCT	10	P3	BW1	.80						0BH	WS3	.580	ZPUFI	77	H
38	84			TBP										TEC	TEC	.610	ZBAZC	1090	C
47	84	.43	48	PCT	13	P2	BW2	.97						TEH	TEC	.610	ZBAZC	6	C
47	84	.98	82	PCT	16	P3	BW2	.89						0BC	WS3	.580	ZPUFI	76	C
81	84	.35	62	MBH		6	01H	31.75						WS3	TEH	.610	ZBAZC	36	H
107	84	.26	130	PCT	8	P2	BW1	-1.78						WS3	TEH	.610	ZBAZC	43	H
107	84	.66	82	PCT	12	P3	BW1	-1.78						0DH	WS2	.580	ZPUFI	77	H
131	84	.92	103	PCT	21	P2	WS3	-1.66						WS3	TEC	.610	ZBAZC	36	C
131	84	1.67	82	PCT	26	P3	WS3	-1.66						WS3	WS3	.580	ZPUFI	77	H
48	85	.65	88	PCT	17	P2	WS3	.82						TEH	TEC	.610	ZBAZC	6	C
48	85	.99	85	PCT	17	P3	WS3	.91						WS3	WS3	.580	ZPUFI	77	H

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRWID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRNED	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
37	88	.22	94	PCT	7	P2	WS3	.05						TEH	TEC	.610	ZBAZC	6	C
37	88	.67	85	PCT	12	P3	WS3	.89						WS3	WS3	.580	ZPUFZ	77	H
41	88	.77	108	PCT	10	P2	BW1	-.09						TEH	TEC	.610	ZBAZC	6	C
41	88	.96	89	PCT	17	P3	BW1	-1.03						08H	WS3	.580	ZPUFZ	77	H
41	88			TBP										TEC	TEC	.610	ZBAZC	1000	C
45	88	.70	99	PCT	18	P2	WS3	1.09						TEH	TEC	.610	ZBAZC	6	C
45	88	1.40	81	PCT	23	P3	WS3	.79						WS3	WS3	.580	ZPUFZ	77	H
46	87	.83	114	PCT	20	P2	WS3	.79						TEH	TEC	.610	ZBAZC	6	C
46	87	1.01	83	PCT	17	P3	WS3	.73						WS3	WS3	.580	ZPUFZ	77	H
48	87	.34	64	PCT	10	P2	BW2	.73						TEH	TEC	.610	ZBAZC	6	C
48	87	1.28	82	PCT	19	P3	BW2	.88						BW2	WS3	.580	ZPUFZ	76	C
56	87	.27	35	PCT	10	P2	BW1	-1.63						WS3	TEH	.610	ZBAZC	36	H
56	87	.20	122	PCT	8	P2	WS3	.69						WS3	TEH	.610	ZBAZC	36	H
56	87	.00	06	PCT	16	P3	BW1	-1.69						00H	WS3	.580	ZPUFZ	70	H
56	87	.67	86	PCT	10	P3	WS3	.79						00H	WS3	.580	ZPUFZ	70	H
41	88	.43	115	PCT	12	P2	BW2	-1.04						TEH	TEC	.610	ZBAZC	6	C
41	88	.10	30	PCT	6	P2	BW2	.09						TEH	TEC	.610	ZBAZC	6	C
41	88	.81	89	PCT	13	P3	BW2	-.85						0BC	WS3	.580	ZPUFZ	76	C
41	88	.70	86	PCT	11	P3	BW2	.72						0BC	WS3	.580	ZPUFZ	76	C
41	88			TBP										TEC	TEC	.610	ZBAZC	1000	C
43	88	.41	112	PCT	12	P2	BW1	.88						TEH	TEC	.610	ZBAZC	6	C
43	88	.26	137	PCT	8	P2	WS3	-.09						TEH	TEC	.610	ZBAZC	6	C
43	88	.83	89	PCT	15	P3	BW1	.06						08H	WS3	.580	ZPUFZ	77	H
43	88	.77	79	PCT	14	P3	WS3	-.97						08H	WS3	.580	ZPUFZ	77	H
43	88			TBP										TEC	TEC	.610	ZBAZC	1000	C
49	88	.20	74	PCT	6	P2	BW2	-1.09						TEH	TEC	.610	ZBAZC	6	C
49	88	.40	79	PCT	6	P3	BW2	-.93						0DC	WS3	.580	ZPUFZ	76	C
163	88	.27	93	PCT	8	P2	BW2	.88						WS3	TEC	.610	ZBAZC	37	C
163	88	.76	89	PCT	12	P3	BW2	.86						11C	WS5	.580	ZPUFZ	76	C
166	88	.34	126	PCT	10	P2	BW2	.79						WS3	TEC	.610	ZBAZC	37	C
166	88	1.11	77	PCT	17	P3	BW2	.79						11C	WS5	.580	ZPUFZ	76	C
42	89	.19	79	PCT	6	P2	BW2	.72						TEH	TEC	.610	ZBAZC	6	C
42	89	.35	84	PCT	6	P3	BW2	.42						0BC	WS3	.580	ZPUFZ	76	C
42	89			TBP										TEC	TEC	.610	ZBAZC	1000	C
94	89	.25	72	HBM		6	03H	32.47						WS3	TEH	.610	ZBAZC	35	H
41	93	.23	61	PCT	7	P2	WS3	-.77						TEH	TEC	.610	ZBAZC	6	C
41	93	.29	67	PCT	9	P2	BW2	.09						TEH	TEC	.610	ZBAZC	6	C
41	93	.67	89	PCT	9	P3	WS3	-.68						0BC	WS3	.580	ZPUFZ	76	C
41	93	.76	84	PCT	12	P3	BW2	.68						0BC	WS3	.580	ZPUFZ	76	C
41	93			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	91	.32	122	PCT	10	P2	BW1	-.04						TEH	TEC	.610	ZBAZC	6	C
46	91	.88	88	PCT	15	P3	BW1	-.04						08H	WS3	.580	ZPUFZ	77	H
46	91	.67	89	PCT	12	P3	BW1	-.67						08H	WS3	.580	ZPUFZ	77	H
46	91			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	92	4.11	94	PCT	45	P2	BW1	-.04						TEH	TEC	.610	ZBAZC	6	C
46	92	.66	82	PCT	15	P2	BW1	-.21						TEH	TEC	.610	ZBAZC	6	C
46	92	.22	52	PCT	7	P2	BW1	.07						TEH	TEC	.610	ZBAZC	6	C
46	92	3.03	77	PCT	39	P3	BW1	-1.05						08H	WS3	.580	ZPUFZ	77	H
46	92	1.17	87	PCT	20	P3	BW1	-.28						08H	WS3	.580	ZPUFZ	77	H
46	92	.18	34	PCT	4	P3	BW1	.93						08H	WS3	.580	ZPUFZ	77	H
46	92			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	93	.28	113	PCT	8	P2	WS3	.03						TEH	TEC	.610	ZBAZC	6	C
46	93	.33	166	PCT	9	P2	BW2	.70						TEH	TEC	.610	ZBAZC	6	C
46	93	.63	89	PCT	8	P3	WS3	.87						0BC	WS3	.580	ZPUFZ	76	C
46	93	.61	108	PCT	10	P3	BW2	.69						0BC	WS3	.580	ZPUFZ	76	C
46	93	.64	103	PCT	10	P3	BW2	.61						0BC	WS3	.580	ZPUFZ	76	C
46	93			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	94	.60	107	PCT	13	P2	WS3	-.79						TEH	TEC	.610	ZBAZC	6	C
46	94	.88	88	PCT	16	P3	WS3	-.91						WS3	WS3	.580	ZPUFZ	77	H
47	94	.57	99	PCT	16	P2	BW1	-1.03						TEH	TEC	.610	ZBAZC	6	C
47	94	.44	85	PCT	12	P2	WS3	-.93						TEH	TEC	.610	ZBAZC	6	C

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRNED	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

Palo Verde 2 U2R14 PVNSS2 20080401 04/27/2008 22:46:24

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
47	94	.82	99	PCT	16	P3	BW1	-1.01						08H	VS3	.680	ZPUFI	77	H
47	94	1.08	73	PCT	18	P3	VS3	-1.16						08H	VS3	.680	ZPUFI	77	H
47	94			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	94	.55	87	PCT	14	P2	VS3	.84						TEH	TEC	.610	ZBAZC	6	C
48	94	1.10	79	PCT	20	P3	VS3	.80						VS3	VS3	.680	ZPUFI	77	H
48	94			TBP										TEH	TEH	.610	ZBAZC	1000	C
108	95	.29	138	PCT	8	P2	VS3	-.80						VS3	TEH	.610	ZBAZC	44	H
108	95	.61	94	PCT	11	P3	VS3	-.77						VS3	VS3	.680	ZPUFI	77	H
48	96	.75	95	PCT	10	P2	BW1	-.85						TEH	TEC	.610	ZBAZC	6	C
48	96	1.42	85	PCT	23	P3	BW1	-.96						00H	VS3	.680	ZPUFI	77	H
48	96	.72	92	PCT	13	P3	BW1	-.97						00H	VS3	.680	ZPUFI	77	H
48	96			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	97	.26	123	PCT	8	P2	BW1	-1.12						TEH	TEC	.610	ZBAZC	6	C
48	97	.47	92	PCT	9	P3	BW1	-1.07						BW1	VS3	.680	ZPUFI	77	H
48	97			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	98	1.03	96	PCT	36	P2	BW1	1.00						TEH	TEC	.610	ZBAZC	6	C
47	98	.46	81	PCT	12	P2	VS3	1.04						TEH	TEC	.610	ZBAZC	6	C
47	98	2.76	77	PCT	37	P3	BW1	.88						08H	VS3	.680	ZPUFI	77	H
47	98	.91	75	PCT	16	P3	VS3	.60						08H	VS3	.680	ZPUFI	77	H
47	98			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	98	.68	95	PCT	17	P2	BW1	-.92						TEH	TEC	.610	ZBAZC	6	C
48	98	.89	84	PCT	14	P3	00H	1.26						00H	VS3	.680	ZPUFI	77	H
48	98	1.31	82	PCT	21	P3	BW1	-1.18						00H	VS3	.680	ZPUFI	77	H
48	98			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	99	.34	63	PCT	10	P2	BW2	-1.02						TEH	TEC	.610	ZBAZC	6	C
46	99	.42	79	HBH		6	08C	8.08						TEH	TEC	.610	ZBAZC	6	C
46	99	.65	93	PCT	10	P3	BW2	-.92						08C	VS3	.680	ZPUFI	76	C
46	99			TBP										TEC	TEC	.610	ZBAZC	1000	C
50	99	1.16	93	PCT	26	P2	BW1	-.87						TEH	TEC	.610	ZBAZC	6	C
50	99	1.63	81	PCT	24	P3	BW1	-.85						00H	VS3	.680	ZPUFI	77	H
50	99			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	100	1.80	99	PCT	33	P2	BW1	-1.05						TEH	TEC	.610	ZBAZC	6	C
46	100	.43	124	PCT	13	P2	VS3	-.97						TEH	TEC	.610	ZBAZC	6	C
46	100	2.63	80	PCT	36	P3	BW1	-1.05						08H	VS3	.680	ZPUFI	77	H
46	100	1.00	82	PCT	17	P3	VS3	-.97						08H	VS3	.680	ZPUFI	77	H
46	100			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	100	1.47	84	PCT	29	P2	BW1	-.94						TEH	TEC	.610	ZBAZC	6	C
47	100	1.48	88	PCT	24	P3	BW1	-.94						08H	VS3	.680	ZPUFI	77	H
47	100			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	100	.81	98	PCT	20	P2	BW1	.85						TEH	TEC	.610	ZBAZC	6	C
48	100	1.08	82	PCT	18	P3	BW1	.89						00H	VS3	.680	ZPUFI	77	H
48	100			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	101	.35	115	PCT	11	P2	BW1	-.83						TEH	TEC	.610	ZBAZC	6	C
46	101	.81	110	PCT	14	P3	BW1	-.83						08H	VS3	.680	ZPUFI	76	H
46	101	.67	83	PCT	10	P3	BW1	.99						08H	VS3	.680	ZPUFI	76	H
46	101			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	101	.63	76	PCT	17	P2	BW1	-.77						TEH	TEC	.610	ZBAZC	6	C
48	101	.94	102	PCT	16	P3	BW1	-.77						00H	VS3	.680	ZPUFI	76	H
48	101			TBP										TEC	TEC	.610	ZBAZC	1000	C
50	101	.22	88	PCT	7	P2	BW1	-.95						TEH	TEC	.610	ZBAZC	6	C
50	101	.29	65	PCT	9	P2	BW1	.82						TEH	TEC	.610	ZBAZC	6	C
50	101	.74	77	PCT	13	P3	BW1	-.97						00H	VS3	.680	ZPUFI	76	H
50	101	.89	87	PCT	16	P3	BW1	.74						00H	VS3	.680	ZPUFI	76	H
50	101			TBP										TEC	TEC	.610	ZBAZC	1000	C
54	101	.38	105	PCT	11	P2	BW1	-1.42						TEH	TEC	.610	ZBAZC	6	C
54	101	1.07	86	PCT	18	P3	BW1	-1.39						00H	BW1	.680	ZPUFI	79	H
64	101	1.67	112	PCT	31	P2	VS3	-.71						VS3	TEC	.610	ZBAZC	17	C
64	101	1.94	77	PCT	29	P3	VS3	-.84						VS3	VS3	.680	ZPUFI	79	H
64	101	.69	72	PCT	11	P3	VS3	.99						VS3	VS3	.680	ZPUFI	79	H
66	101	.26	134	PCT	8	P2	VS3	-.78						VS3	TEC	.610	ZBAZC	17	C
66	101	.71	82	PCT	13	P3	VS3	-.85						VS3	VS3	.680	ZPUFI	79	H
48	102	.77	126	PCT	10	P2	BW1	-.83						TEH	TEC	.610	ZBAZC	6	C

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRWID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
40	102	.02	91	PCT	16	P3	BW1	-.86						08H	VS3	.680	ZPUFI	76	H
40	102			TBP										TEC	TEC	.610	ZBAZC	1000	C
50	102	.25	122	PCT	8	P2	VS3	-.85						VS3	TEC	.610	ZBAZC	17	C
50	102	.82	86	PCT	21	P2	VS3	.92						VS3	TEC	.610	ZBAZC	17	C
50	102	.64	84	PCT	10	P3	VS3	-.89						VS3	VS3	.680	ZPUFI	70	H
50	102	1.72	83	PCT	26	P3	VS3	.75						VS3	VS3	.680	ZPUFI	70	H
71	102	.29	82	MBM		6	04H	7.09						VS3	TEH	.610	ZBAZC	34	H
101	102	.49	67	PCT	13	P2	VS4	1.06						VS3	TEC	.610	ZBAZC	42	C
101	102	.87	95	PCT	17	P3	VS4	1.07						VS4	VS4	.680	ZPUFI	74	C
46	103	.18	87	PCT	7	P2	BW1	.87						TEC	TEH	.610	ZBAZC	2	H
46	103	.61	91	PCT	11	P3	BW1	.89						08H	VS3	.680	ZPUFI	76	H
46	103			TBP										TEC	TEC	.610	ZBAZC	1000	C
66	103	1.42	113	PCT	32	P2	VS3	-.81						VS3	TEH	.610	ZBAZC	34	H
66	103	1.36	102	PCT	32	P2	VS3	.89						VS3	TEH	.610	ZBAZC	34	H
66	103	1.64	81	PCT	25	P3	VS3	-.75						VS3	VS3	.680	ZPUFI	70	H
66	103	.82	79	PCT	14	P3	VS3	-.62						VS3	VS3	.680	ZPUFI	70	H
66	103	1.87	76	PCT	28	P3	VS3	.93						VS3	VS3	.680	ZPUFI	70	H
46	104	.18	97	PCT	6	P2	BW2	-.96						TEC	TEH	.610	ZBAZC	1	H
46	104	.28	112	PCT	5	P3	BW2	-.96						08C	VS3	.680	ZPUFI	76	C
46	104			TBP										TEC	TEC	.610	ZBAZC	1000	C
51	104	.25	67	PCT	8	P2	BW1	.89						TEC	TEH	.610	ZBAZC	1	H
51	104	.60	81	PCT	11	P3	BW1	.86						08H	VS3	.680	ZPUFI	76	H
51	104			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	105	.77	89	PCT	19	P2	BW1	-1.02						TEC	TEH	.610	ZBAZC	1	H
48	105	1.09	108	PCT	25	P2	VS3	.81						TEC	TEH	.610	ZBAZC	1	H
48	105	1.84	81	PCT	28	P3	BW1	-1.02						BW1	VS3	.680	ZPUFI	76	H
48	105	.94	77	PCT	16	P3	BW1	.82						BW1	VS3	.680	ZPUFI	76	H
48	105	1.19	75	PCT	29	P3	VS3	.81						BW1	VS3	.680	ZPUFI	76	H
48	105			TBP										TEC	TEC	.610	ZBAZC	1000	C
50	105	.29	109	PCT	9	P2	BW1	-1.02						TEC	TEH	.610	ZBAZC	1	H
50	105	.86	88	PCT	15	P3	BW1	-1.02						08H	VS3	.680	ZPUFI	76	H
50	105			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	106	.37	103	PCT	11	P2	BW2	-.91						TEC	TEH	.610	ZBAZC	1	H
46	106	.63	87	PCT	10	P3	BW2	-.83						08C	VS3	.680	ZPUFI	76	C
46	106			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	106	.24	60	PCT	7	P2	BW1	.85						TEC	TEH	.610	ZBAZC	1	H
47	106	.43	47	PCT	8	P3	BW1	.85						08H	VS3	.680	ZPUFI	76	H
47	106			TBP										TEC	TEC	.610	ZBAZC	1000	C
56	106	.67	88	PCT	17	P2	BW1	1.71						TEC	TEH	.610	ZBAZC	1	H
56	106	.67	93	PCT	12	P3	BW1	1.71						09H	VS3	.680	ZPUFI	76	H
50	106	.39	48	PCT	10	P2	BW2	.88						VS3	TEC	.610	ZBAZC	42	C
50	106	.71	92	PCT	14	P3	BW2	.73						09C	VS4	.680	ZPUFI	74	C
48	107	.83	96	PCT	20	P2	VS3	-.89						TEC	TEH	.610	ZBAZC	1	H
48	107	.37	84	PCT	11	P2	BW2	.67						TEC	TEH	.610	ZBAZC	1	H
48	107	1.61	78	PCT	25	P3	VS3	-.69						VS3	VS3	.680	ZPUFI	76	H
48	107	.79	89	PCT	14	P3	VS3	1.34						VS3	VS3	.680	ZPUFI	76	H
48	107	.68	107	PCT	14	P3	BW2	.87						BW2	VS3	.680	ZPUFI	81	C
48	107			TBP										TEH	TEH	.610	ZBAZC	1000	C
50	107	.06	121	PCT	23	P2	BW1	.87						TEC	TEH	.610	ZBAZC	1	H
50	107	1.74	89	PCT	26	P3	BW1	.87						09H	VS3	.680	ZPUFI	76	H
50	107			TBP										TEH	TEH	.610	ZBAZC	1000	C
74	107	.59	91	MBM		6	03H	7.62						VS3	TEH	.610	ZBAZC	34	H
170	107	.42	114	PCT	11	P2	VS3	.89						VS3	TEC	.610	ZBAZC	40	C
170	107	.46	88	PCT	10	P3	VS3	.83						VS3	VS3	.680	ZPUFI	81	C
46	108	.08	96	PCT	23	P2	BW1	-.91						TEC	TEH	.610	ZBAZC	1	H
46	108	.31	101	PCT	9	P2	BW2	-.98						TEC	TEH	.610	ZBAZC	1	H
46	108	.76	89	PCT	12	P3	BW2	-.94						08C	VS3	.680	ZPUFI	76	C
46	108	1.75	81	PCT	26	P3	BW1	-.91						08H	VS3	.680	ZPUFI	76	H
46	108			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	108	.20	68	PCT	6	P2	VS3	-.84						TEC	TEH	.610	ZBAZC	1	H
47	108	.44	67	PCT	8	P3	VS3	-.84						VS3	VS3	.680	ZPUFI	76	H

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
49	108	3.34	104	PCT	44	P2	BW1	-.92						TEC	TEH	.610	ZBAZC	1	H
49	108	.49	122	PCT	14	P2	BW1	.93						TEC	TEH	.610	ZBAZC	1	H
49	108	3.40	74	PCT	41	P3	BW1	-.92						09H	VS3	.380	ZPUFZ	76	H
49	108	1.11	78	PCT	19	P3	BW1	.93						09H	VS3	.380	ZPUFZ	76	H
49	108			TBP										TEC	TEC	.610	ZBAZC	1000	C
50	109	.18	58	PCT	6	P2	BW1	.89						TEC	TEH	.610	ZBAZC	1	H
50	109	.59	59	PCT	11	P3	BW1	.89						09H	VS3	.380	ZPUFZ	76	H
50	109			TBP										TEC	TEC	.610	ZBAZC	1000	C
90	109	.34	150	PCT	10	P2	BW1	-.80						VS3	TEH	.610	ZBAZC	33	H
90	109	.84	77	PCT	15	P3	BW1	-.79						10H	VS2	.380	ZPUFZ	77	H
110	109	.33	120	PCT	10	P2	VS3	1.08						VS3	TEH	.610	ZBAZC	31	H
110	109	.65	75	PCT	12	P3	VS3	1.08						VS3	VS3	.380	ZPUFZ	77	H
45	110	.23	58	PCT	7	P2	BW1	-1.05						TEC	TEH	.610	ZBAZC	1	H
45	110	.54	93	PCT	10	P3	BW1	-1.05						08H	VS3	.380	ZPUFZ	76	H
45	110			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	111	.33	72	PCT	10	P2	BW1	-.88						TEC	TEH	.610	ZBAZC	1	H
48	111	.64	110	PCT	12	P3	BW1	-.88						BW1	VS3	.380	ZPUFZ	76	H
48	111			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	112	2.82	107	PCT	42	P2	BW1	-1.02						TEC	TEH	.610	ZBAZC	1	H
47	112	.25	37	PCT	8	P2	BW1	.98						TEC	TEH	.610	ZBAZC	1	H
47	112	.67	101	PCT	18	P2	VS3	-.75						TEC	TEH	.610	ZBAZC	1	H
47	112	.27	135	PCT	8	P2	BW2	-.89						TEC	TEH	.610	ZBAZC	1	H
47	112	1.64	83	PCT	23	P3	VS3	-.62						08C	VS3	.380	ZPUFZ	75	C
47	112	.61	106	PCT	10	P3	BW2	-.71						08C	VS3	.380	ZPUFZ	75	C
47	112	3.17	73	PCT	40	P3	BW1	-1.02						08H	VS3	.380	ZPUFZ	76	H
47	112	.63	87	PCT	11	P3	BW1	.98						08H	VS3	.380	ZPUFZ	76	H
47	112	1.45	77	PCT	23	P3	VS3	-.75						08H	VS3	.380	ZPUFZ	76	H
47	112	.61	81	PCT	11	P3	VS3	-.26						08H	VS3	.380	ZPUFZ	76	H
47	112			TBP										TEC	TEC	.610	ZBAZC	1000	C
49	112	.50	100	PCT	14	P2	BW1	-1.07						TEC	TEH	.610	ZBAZC	1	H
49	112	.83	86	PCT	14	P3	BW1	-1.07						09H	VS3	.380	ZPUFZ	76	H
49	112			TBP										TEC	TEC	.610	ZBAZC	1000	C
51	112	.22	51	PCT	7	P2	BW1	.92						TEC	TEH	.610	ZBAZC	1	H
51	112	.32	81	PCT	6	P3	BW1	.91						09H	VS3	.380	ZPUFZ	76	H
57	112	.24	118	PCT	8	P2	VS2	1.02						VS3	TEH	.610	ZBAZC	33	H
57	112	.64	98	PCT	12	P3	VS2	1.02						BW1	VS3	.380	ZPUFZ	77	H
59	112	.28	141	PCT	9	P2	BW1	.77						VS3	TEH	.610	ZBAZC	33	H
59	112	.59	92	PCT	11	P3	BW1	.74						09H	VS2	.380	ZPUFZ	77	H
113	112	.34	131	PCT	9	P2	VS4	-.62						VS3	TEC	.610	ZBAZC	42	C
113	112	.65	90	PCT	13	P3	VS4	-.61						VS4	VS4	.380	ZPUFZ	74	C
42	113	1.11	99	PCT	22	P2	VS3	-.80						TEC	TEH	.610	ZBAZC	1	H
42	113	.30	128	PCT	9	P2	BW2	-.93						TEC	TEH	.610	ZBAZC	1	H
42	113	.42	121	PCT	12	P2	BW2	1.00						TEC	TEH	.610	ZBAZC	1	H
42	113	1.88	76	PCT	26	P3	VS3	-.67						08C	VS3	.380	ZPUFZ	75	C
42	113	.44	80	PCT	7	P3	BW2	-.81						08C	VS3	.380	ZPUFZ	75	C
42	113	.98	87	PCT	15	P3	BW2	.86						08C	VS3	.380	ZPUFZ	75	C
42	113			TBP										TEC	TEC	.610	ZBAZC	1000	C
44	113	1.51	122	PCT	30	P2	VS3	-.80						TEC	TEH	.610	ZBAZC	3	H
44	113	.77	109	PCT	19	P2	BW2	-1.02						TEC	TEH	.610	ZBAZC	3	H
44	113	2.08	81	PCT	28	P3	VS3	-.76						08C	VS3	.380	ZPUFZ	75	C
44	113	.82	98	PCT	13	P3	BW2	-.97						08C	VS3	.380	ZPUFZ	75	C
44	113			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	113	.47	103	PCT	13	P2	VS3	-.68						TEC	TEH	.610	ZBAZC	3	H
46	113	.30	90	PCT	9	P2	BW2	.91						TEC	TEH	.610	ZBAZC	3	H
46	113	1.60	78	PCT	23	P3	VS3	-.54						08C	VS3	.380	ZPUFZ	75	C
46	113	.74	93	PCT	12	P3	BW2	.90						08C	VS3	.380	ZPUFZ	75	C
46	113			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	113	1.31	121	PCT	28	P2	BW1	.83						TEC	TEH	.610	ZBAZC	3	H
48	113	.64	120	PCT	17	P2	VS3	-.57						TEC	TEH	.610	ZBAZC	3	H
48	113	2.28	77	PCT	32	P3	BW1	.83						BW1	VS3	.380	ZPUFZ	76	H
48	113	1.37	77	PCT	22	P3	VS3	-.57						BW1	VS3	.380	ZPUFZ	76	H
48	113			TBP										TEC	TEC	.610	ZBAZC	1000	C
50	113	.26	158	PCT	8	P2	BW1	.78						TEC	TEH	.610	ZBAZC	3	H

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
50	113	.68	85	PCT	12	P3	BW1	.91						09H	V83	.580	ZPUFZ	76	H
41	114	.41	96	PCT	12	P2	BW2	.57						TEC	TEH	.610	ZBAZC	3	H
41	114	.68	82	PCT	11	P3	BW2	.81						08C	V83	.580	ZPUFZ	75	C
41	114			TBP										TEC	TEC	.610	ZBAZC	1000	C
43	114	.18	141	PCT	6	P2	BW2	.98						TEC	TEH	.610	ZBAZC	3	H
43	114	.38	93	PCT	6	P3	BW2	.81						08C	V83	.580	ZPUFZ	75	C
43	114			TBP										TEC	TEC	.610	ZBAZC	1000	C
45	114	.52	94	PCT	14	P2	BW2	.95						TEC	TEH	.610	ZBAZC	3	H
45	114	1.12	86	PCT	17	P3	BW2	.80						08C	V83	.580	ZPUFZ	75	C
45	114			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	114	.85	118	PCT	21	P2	BW2	.90						TEC	TEH	.610	ZBAZC	3	H
47	114	1.35	79	PCT	20	P3	BW2	.76						08C	V83	.580	ZPUFZ	75	C
47	114			TBP										TEC	TEC	.610	ZBAZC	1000	C
137	114	.35	64	PCT	9	P2	V84	-1.02						V83	TEC	.610	ZBAZC	40	C
137	114	.54	69	PCT	11	P3	V84	-1.24						V84	V84	.580	ZPUFZ	74	C
40	115	.69	113	PCT	18	P2	BW2	-.99						TEC	TEH	.610	ZBAZC	3	H
40	115	.72	81	PCT	11	P3	BW2	-.83						08C	V83	.580	ZPUFZ	75	C
40	115			TBP										TEC	TEC	.610	ZBAZC	1000	C
42	115	.28	95	PCT	8	P2	V83	-.92						TEC	TEH	.610	ZBAZC	3	H
42	115	.39	143	PCT	11	P2	BW2	-.87						TEC	TEH	.610	ZBAZC	3	H
42	115	.64	83	PCT	10	P3	V83	-.17						08C	V83	.580	ZPUFZ	75	C
42	115	.69	92	PCT	11	P3	BW2	-.76						08C	V83	.580	ZPUFZ	75	C
42	115			TBP										TEC	TEC	.610	ZBAZC	1000	C
44	115	.74	127	PCT	22	P2	V83	.71						TEC	TEH	.610	ZBAZC	4	H
44	115	.23	65	PCT	9	P2	BW2	.90						TEC	TEH	.610	ZBAZC	4	H
44	115	1.76	78	PCT	24	P3	V83	.77						08C	V83	.580	ZPUFZ	75	C
44	115	.91	72	PCT	14	P3	BW2	.89						08C	V83	.580	ZPUFZ	75	C
44	115			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	115	.52	119	PCT	17	P2	V83	1.08						TEC	TEH	.610	ZBAZC	4	H
46	115	.28	126	PCT	10	P2	BW2	-.49						TEC	TEH	.610	ZBAZC	4	H
46	115	1.32	93	PCT	19	P3	V83	.85						08C	V83	.580	ZPUFZ	75	C
46	115	.73	105	PCT	11	P3	BW2	-.95						08C	V83	.580	ZPUFZ	75	C
46	115			TBP										TEC	TEC	.610	ZBAZC	1000	C
58	115	.29	112	PCT	11	P2	V83	-.69						V83	TEH	.610	ZBAZC	34	H
58	115	.92	89	PCT	16	P3	V83	-.69						V83	V83	.580	ZPUFZ	77	H
62	115	.22	90	PCT	8	P2	BW1	.79						V83	TEH	.610	ZBAZC	34	H
62	115	.69	93	PCT	13	P3	BW1	.78						09H	V82	.580	ZPUFZ	77	H
39	116	.42	143	PCT	12	P2	BW1	-.69						TEC	TEH	.610	ZBAZC	3	H
39	116	.44	97	PCT	12	P2	V83	.71						TEC	TEH	.610	ZBAZC	3	H
39	116	1.00	76	PCT	17	P3	08H	.14						08H	V83	.580	ZPUFZ	76	H
39	116	.78	89	PCT	14	P3	BW1	-.69						08H	V83	.580	ZPUFZ	76	H
39	116	.85	74	PCT	15	P3	V83	.83						08H	V83	.580	ZPUFZ	76	H
39	116			TBP										TEC	TEC	.610	ZBAZC	1000	C
41	116	.37	145	PCT	13	P2	BW2	.81						TEC	TEH	.610	ZBAZC	4	H
41	116	.47	91	PCT	8	P3	BW2	.72						08C	V83	.580	ZPUFZ	75	C
41	116			TBP										TEC	TEC	.610	ZBAZC	1000	C
43	116	.68	120	PCT	21	P2	BW2	.85						TEC	TEH	.610	ZBAZC	4	H
43	116	1.12	78	PCT	17	P3	BW2	.72						08C	V83	.580	ZPUFZ	75	C
43	116			TBP										TEC	TEC	.610	ZBAZC	1000	C
45	116	.33	84	PCT	12	P2	BW2	.92						TEC	TEH	.610	ZBAZC	4	H
45	116	.67	85	PCT	11	P3	BW2	.77						08C	V83	.580	ZPUFZ	75	C
45	116			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	116	.33	143	PCT	12	P2	BW1	-.73						TEC	TEH	.610	ZBAZC	4	H
47	116	.74	77	PCT	13	P3	BW1	-.73						08H	V83	.580	ZPUFZ	76	H
49	116	.63	83	PCT	20	P2	BW1	-.82						TEC	TEH	.610	ZBAZC	4	H
49	116	.29	52	PCT	11	P2	BW1	-.20						TEC	TEH	.610	ZBAZC	4	H
49	116	1.07	92	PCT	18	P3	BW1	-.82						09H	V83	.580	ZPUFZ	76	H
49	116	1.02	90	PCT	18	P3	BW1	-.20						09H	V83	.580	ZPUFZ	76	H
48	117	.23	102	PCT	8	P2	V83	-.76						TEC	TEH	.610	ZBAZC	3	H
48	117	.57	93	PCT	11	P3	V83	-.83						V83	V83	.580	ZPUFZ	76	H
37	118	.41	110	PCT	12	P2	BW2	-.83						TEC	TEH	.610	ZBAZC	3	H

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

Palo Verde 2 U2R14 PVNGS2 20080401 04/27/2008 22:46:24

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
37	118	.53	88	PCT	8	P3	BW2	-.92						OBC	VS3	.380	ZPUFZ	75	C
37	118			TBP										TEC	TEC	.610	ZBAZC	1000	C
41	118	.52	127	PCT	14	P2	BW1	.84						TEC	TEH	.610	ZBAZC	3	H
41	118	.33	102	PCT	10	P2	BW2	-.93						TEC	TEH	.610	ZBAZC	3	H
41	118	.64	103	PCT	10	P3	BW2	-.76						OBC	VS3	.380	ZPUFZ	75	C
41	118	.81	97	PCT	14	P3	BW1	.84						OBH	VS3	.380	ZPUFZ	76	H
41	118			TBP										TEC	TEC	.610	ZBAZC	1000	C
43	118	.28	122	PCT	8	P2	BW1	.91						TEC	TEH	.610	ZBAZC	3	H
43	118	.24	112	PCT	7	P2	VS3	.73						TEC	TEH	.610	ZBAZC	3	H
43	118	.55	58	PCT	10	P3	BW1	.91						OBH	VS3	.380	ZPUFZ	76	H
43	118	.87	74	PCT	15	P3	VS3	.91						OBH	VS3	.380	ZPUFZ	76	H
43	118			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	118	1.40	114	PCT	29	P2	BW1	.88						TEC	TEH	.610	ZBAZC	3	H
47	118	1.60	79	PCT	25	P3	BW1	.88						OBH	VS3	.380	ZPUFZ	76	H
49	118	1.53	118	PCT	30	P2	BW1	.73						TEC	TEH	.610	ZBAZC	3	H
49	118	1.79	74	PCT	27	P3	BW1	.73						OBH	VS3	.380	ZPUFZ	76	H
65	118	.23	152	PCT	9	P2	BW1	.81						VS3	TEH	.610	ZBAZC	34	H
65	118	.88	80	PCT	15	P3	BW1	.88						OBH	VS2	.380	ZPUFZ	77	H
67	118	.71	76	MBH		6	OBC	22.10						VS3	TEC	.610	ZBAZC	45	C
36	119	.38	126	PCT	13	P2	OBH	.74						TEC	TEH	.610	ZBAZC	4	H
36	119	2.39	102	PCT	42	P2	VS3	-.88						TEC	TEH	.610	ZBAZC	4	H
36	119	.70	117	PCT	21	P2	BW2	-.85						TEC	TEH	.610	ZBAZC	4	H
36	119	1.19	76	PCT	18	P3	VS3	-.78						OBC	VS3	.380	ZPUFZ	75	C
36	119	3.37	77	PCT	40	P3	VS3	-.77						OBC	VS3	.380	ZPUFZ	75	C
36	119	.80	76	PCT	9	P3	VS3	-.77						OBC	VS3	.380	ZPUFZ	75	C
36	119	1.11	83	PCT	17	P3	BW2	-.71						OBC	VS3	.380	ZPUFZ	75	C
36	119	1.10	80	PCT	18	P3	OBH	.74						OBH	OBH	.380	ZPAHZ	80	H
36	119			TBP										TEH	TEH	.610	ZBAZC	1000	C
38	119	.33	126	PCT	12	P2	BW1	.81						TEC	TEH	.610	ZBAZC	4	H
38	119	.54	107	PCT	18	P2	VS3	-.78						TEC	TEH	.610	ZBAZC	4	H
38	119	.58	68	PCT	11	P3	OBH	.08						OBH	OBH	.380	ZPUFZ	76	H
38	119	.87	91	PCT	12	P3	BW1	.81						OBH	VS3	.380	ZPUFZ	76	H
38	119	1.01	73	PCT	17	P3	VS3	-.78						OBH	VS3	.380	ZPUFZ	76	H
38	119			TBP										TEC	TEC	.610	ZBAZC	1000	C
40	119	.39	141	PCT	14	P2	BW1	.74						TEC	TEH	.610	ZBAZC	4	H
40	119	.93	89	PCT	16	P3	BW1	.74						OBH	VS3	.380	ZPUFZ	76	H
40	119	.51	71	PCT	10	P3	VS3	-1.06						OBH	VS3	.380	ZPUFZ	76	H
40	119			TBP										TEC	TEC	.610	ZBAZC	1000	C
44	119	.33	134	PCT	12	P2	VS3	-.83						TEC	TEH	.610	ZBAZC	4	H
44	119	.87	83	PCT	15	P3	VS3	-.83						VC3	VS3	.380	ZPUFZ	76	H
48	119	.42	109	PCT	14	P2	VS3	-.75						TEC	TEH	.610	ZBAZC	4	H
48	119	.75	71	PCT	13	P3	VS3	-.75						VS3	VS3	.380	ZPUFZ	76	H
35	120	.52	133	PCT	17	P2	VS3	.76						TEC	TEH	.610	ZBAZC	4	H
35	120	.64	99	PCT	20	P2	BW2	-.91						TEC	TEH	.610	ZBAZC	4	H
35	120	1.22	82	PCT	18	P3	VS3	.73						OBC	VS3	.380	ZPUFZ	75	C
35	120	.87	58	PCT	13	P3	BW2	-.85						OBC	VS3	.380	ZPUFZ	75	C
35	120			TBP										TEC	TEC	.610	ZBAZC	1000	C
37	120	.64	122	PCT	20	P2	BW1	-.95						TEC	TEH	.610	ZBAZC	4	H
37	120	.19	106	PCT	7	P2	BW2	-.86						TEC	TEH	.610	ZBAZC	4	H
37	120	.45	103	PCT	7	P3	BW2	-.74						OBC	VS3	.380	ZPUFZ	75	C
37	120	1.19	74	PCT	20	P3	BW1	-.79						OBH	VS3	.380	ZPUFZ	76	H
37	120			TBP										TEC	TEC	.610	ZBAZC	1000	C
41	120	.22	135	PCT	8	P2	VS3	-.85						TEC	TEH	.610	ZBAZC	4	H
41	120	.65	72	PCT	12	P3	VS3	-.85						VS3	VS3	.380	ZPUFZ	76	H
43	120	.60	124	PCT	19	P2	VS3	-.71						TEC	TEH	.610	ZBAZC	4	H
43	120	1.09	73	PCT	18	P3	VS3	-.71						VS3	VS3	.380	ZPUFZ	76	H
45	120	.42	133	PCT	14	P2	BW1	-.90						TEC	TEH	.610	ZBAZC	4	H
45	120	1.09	119	PCT	28	P2	VS3	-.76						TEC	TEH	.610	ZBAZC	4	H
45	120	.91	98	PCT	16	P3	BW1	-.90						OBH	VS3	.380	ZPUFZ	76	H
45	120	1.84	73	PCT	27	P3	VS3	-1.01						OBH	VS3	.380	ZPUFZ	76	H
47	120	1.09	113	PCT	28	P2	VS3	-.87						TEC	TEH	.610	ZBAZC	4	H
47	120	1.88	85	PCT	28	P3	VS3	-.87						VC3	VS3	.380	ZPUFZ	76	H

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRWID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
79	120	.28	98	PCT	10	P2	VS3	-.63						VS3	TEH	.610	ZBAZC	30	H
79	120	.87	98	PCT	15	P3	VS3	-.75						VS3	VS3	.580	ZPUFZ	77	H
38	121	.97	114	PCT	23	P2	VS3	-.75						TEC	TEH	.610	ZBAZC	3	H
38	121	1.35	86	PCT	22	P3	VS3	-.75						VS3	VS3	.580	ZPUFZ	76	H
38	121			TBP										TEC	TEC	.610	ZBAZC	1000	C
40	121	.35	101	PCT	10	P2	VS3	-.91						TEC	TEH	.610	ZBAZC	3	H
40	121	.59	78	PCT	11	P3	VS3	-.91						VS3	VS3	.580	ZPUFZ	76	H
48	121	.32	129	PCT	9	P2	BW2	.63						TEC	TEH	.610	ZBAZC	3	H
48	121	.92	91	PCT	14	P3	BW2	.88						BW2	VS3	.580	ZPUFZ	75	C
80	121	.25	101	PCT	10	P2	BW1	-.79						VS3	TEH	.610	ZBAZC	30	H
80	121	.70	74	PCT	13	P3	BW1	-.83						QBH	VS2	.580	ZPUFZ	77	H
154	121	.31	137	PCT	11	P2	VS2	.63						VS3	TEH	.610	ZBAZC	30	H
154	121	.75	82	PCT	13	P3	VS2	.69						VS2	VS2	.580	ZPUFZ	77	H
43	122	.22	70	PCT	7	P2	BW1	-.87						TEC	TEH	.610	ZBAZC	3	H
43	122	.64	94	PCT	11	P3	BW1	-.87						QBH	VS3	.580	ZPUFZ	76	H
47	122	.20	124	PCT	6	P2	BW2	-.81						TEC	TEH	.610	ZBAZC	3	H
47	122	.47	78	PCT	7	P3	BW2	-.78						QBC	VS3	.580	ZPUFZ	75	C
49	122	.32	150	PCT	10	P2	BW1	-.82						TEC	TEH	.610	ZBAZC	3	H
49	122	.87	68	PCT	13	P3	BW1	-.82						QBH	VS3	.580	ZPUFZ	76	H
36	123	.48	150	PCT	13	P2	BW1	-1.66						VS3	TEH	.610	ZBAZC	31	H
36	123	1.02	86	PCT	17	P3	BW1	-1.66						QBH	VS3	.580	ZPUFZ	76	H
29	124	1.30	115	PCT	31	P2	BW1	.90						TEC	TEH	.610	ZBAZC	4	H
29	124	2.29	81	PCT	32	P3	BW1	.90						QBH	VS3	.580	ZPUFZ	76	H
29	124			TBP										TEC	TEC	.610	ZBAZC	1000	C
45	124	.30	123	PCT	11	P2	BW1	-.83						TEC	TEH	.610	ZBAZC	4	H
45	124	.54	106	PCT	10	P3	BW1	-.83						QBH	VS3	.580	ZPUFZ	76	H
26	125	2.07	118	PCT	35	P2	BW1	.89						TEC	TEH	.610	ZBAZC	5	H
26	125	2.57	80	PCT	35	P3	BW1	.89						QBH	VS3	.580	ZPUFZ	76	H
26	125			TBP										TEC	TEC	.610	ZBAZC	1000	C
28	125	.22	43	PCT	7	P2	BW1	-.98						TEC	TEH	.610	ZBAZC	3	H
28	125	.34	55	PCT	10	P2	BW1	.82						TEC	TEH	.610	ZBAZC	3	H
28	125	.51	79	PCT	9	P3	BW1	-.98						QBH	VS3	.580	ZPUFZ	76	H
28	125	.71	78	PCT	13	P3	BW1	.82						QBH	VS3	.580	ZPUFZ	76	H
28	125			TBP										TEC	TEC	.610	ZBAZC	1000	C
30	125	.20	135	PCT	6	P2	BW1	-.96						TEC	TEH	.610	ZBAZC	3	H
30	125	.28	102	PCT	5	P3	BW1	-.96						QBH	VS3	.580	ZPUFZ	76	H
30	125			TBP										TEC	TEC	.610	ZBAZC	1000	C
32	125	.48	92	PCT	13	P2	BW1	.80						TEC	TEH	.610	ZBAZC	3	H
32	125	.81	90	PCT	14	P3	BW1	.80						QBH	VS3	.580	ZPUFZ	76	H
32	125			TBP										TEC	TEC	.610	ZBAZC	1000	C
166	125	.81	85	PCT	20	P2	BW2	.90						VS3	TEC	.610	ZBAZC	50	C
166	125	1.29	84	PCT	19	P3	BW2	.74						11C	VS5	.580	ZPUFZ	77	C
25	126	.37	97	PCT	10	P2	BW2	-.80						TEC	TEH	.610	ZBAZC	5	H
25	126	.85	92	PCT	13	P3	BW2	-.70						QBC	VS3	.580	ZPUFZ	75	C
25	126			TBP										TEC	TEC	.610	ZBAZC	1000	C
27	126	.26	135	PCT	8	P2	BW1	-1.06						TEC	TEH	.610	ZBAZC	5	H
27	126	.64	84	PCT	11	P3	BW1	-1.06						QBH	VS3	.580	ZPUFZ	76	H
27	126			TBP										TEC	TEC	.610	ZBAZC	1000	C
29	126	.28	118	PCT	8	P2	BW1	-.96						TEC	TEH	.610	ZBAZC	3	H
29	126	.55	91	PCT	10	P3	BW1	-.96						QBH	VS3	.580	ZPUFZ	76	H
29	126			TBP										TEC	TEC	.610	ZBAZC	1000	C
31	126	.00	134	PCT	16	P2	BW1	-.96						TEC	TEH	.610	ZBAZC	3	H
31	126	.25	125	PCT	8	P2	BW1	.87						TEC	TEH	.610	ZBAZC	3	H
31	126	1.01	90	PCT	17	P3	BW1	-.96						QBH	VS3	.580	ZPUFZ	76	H
31	126	.63	77	PCT	11	P3	BW1	.87						QBH	VS3	.580	ZPUFZ	76	H
33	126	.18	137	PCT	6	P2	BW1	-.93						TEC	TEH	.610	ZBAZC	3	H
33	126	.24	137	PCT	7	P2	BW1	.84						TEC	TEH	.610	ZBAZC	3	H
33	126	.34	76	PCT	7	P3	BW1	-.93						QBH	VS3	.580	ZPUFZ	76	H
33	126	.48	96	PCT	9	P3	BW1	.84						QBH	VS3	.580	ZPUFZ	76	H

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
33	126	.70	77	PCT	13	P3	V33	.65						08H	V33	.580	ZPUFZ	76	H
37	126	.47	137	PCT	13	P2	BW1	-1.07						TEC	TEH	.610	ZBAZC	3	H
37	126	.59	85	PCT	11	P3	BW1	-1.07						08H	V33	.580	ZPUFZ	76	H
43	126	.25	66	PCT	8	P2	BW1	-.91						TEC	TEH	.610	ZBAZC	3	H
43	126	.33	98	PCT	6	P3	BW1	-.91						08H	V33	.580	ZPUFZ	76	H
45	126	.23	128	PCT	7	P2	BW2	-.96						TEC	TEH	.610	ZBAZC	3	H
45	126	.52	63	PCT	8	P3	BW2	-.95						08C	V33	.580	ZPUFZ	75	C
55	126	.52	118	PCT	14	P2	BW1	1.27						TEC	TEH	.610	ZBAZC	3	H
55	126	1.03	77	PCT	17	P3	BW1	1.27						08H	V33	.580	ZPUFZ	76	H
22	127	.21	147	PCT	6	P2	BW1	.82						TEC	TEH	.610	ZBAZC	5	H
22	127	.60	97	PCT	10	P2	BW2	-.79						TEC	TEH	.610	ZBAZC	5	H
22	127	1.01	98	PCT	17	P3	BW2	-.54						08C	V33	.580	ZPUFZ	75	C
22	127	.47	52	PCT	9	P3	BW1	.82						08H	V33	.580	ZPUFZ	76	H
22	127			TBP										TEC	TEC	.610	ZBAZC	1000	C
102	127	.33	107	PCT	9	P2	V34	.82						V33	TEC	.610	ZBAZC	46	C
102	127	.75	93	PCT	15	P3	V34	.74						V34	V34	.580	ZPUFZ	74	C
23	128	.37	50	PCT	13	P2	BW1	-.85						TEC	TEH	.610	ZBAZC	6	H
23	128	.22	105	PCT	8	P2	V33	.65						TEC	TEH	.610	ZBAZC	6	H
23	128	.57	104	PCT	10	P3	BW1	-.85						08H	V33	.580	ZPUFZ	76	H
23	128	.48	82	PCT	9	P3	V33	.65						08H	V33	.580	ZPUFZ	76	H
23	128			TBP										TEC	TEC	.610	ZBAZC	1000	C
25	128	.34	131	PCT	12	P2	BW1	-.81						TEC	TEH	.610	ZBAZC	6	H
25	128	.76	81	PCT	13	P3	BW1	-.81						08H	V33	.580	ZPUFZ	76	H
28	129	.43	80	PCT	12	P2	V33	-.79						TEC	TEH	.610	ZBAZC	3	H
28	129	.74	80	PCT	13	P3	V33	-.79						V33	V33	.580	ZPUFZ	76	H
62	129	.51	109	PCT	15	P2	V33	.76						V33	TEC	.610	ZBAZC	45	C
62	129	1.08	70	PCT	18	P3	V33	.76						V33	V33	.580	ZPUFZ	76	H
101	132	.69	115	PCT	18	P2	V31	.64						V33	TEH	.610	ZBAZC	27	H
101	132	.89	86	PCT	21	P2	V34	.97						V33	TEC	.610	ZBAZC	50	C
101	132	1.91	80	PCT	28	P3	V34	.83						V34	V34	.580	ZPUFZ	76	C
101	132	1.58	86	PCT	25	P3	V31	.83						V31	V31	.580	ZPUFZ	77	H
103	132	.32	78	MBN		6	07H	30.88						V33	TEH	.610	ZBAZC	27	H
47	134	.30	112	PCT	9	P2	BW1	.77						TEC	TEH	.610	ZBAZC	5	H
47	134	.83	85	PCT	14	P3	BW1	.77						08H	V33	.580	ZPUFZ	76	H
101	134	.45	114	PCT	13	P2	V31	.84						V33	TEH	.610	ZBAZC	27	H
101	134	.85	95	PCT	20	P2	V35	.79						V33	TEC	.610	ZBAZC	49	C
101	134	.23	121	PCT	7	P2	BW2	.79						V33	TEC	.610	ZBAZC	49	C
101	134	.32	135	PCT	9	P2	11C	.69						V33	TEC	.610	ZBAZC	49	C
101	134	1.34	85	PCT	22	P3	V31	.75						V31	V31	.580	ZPUFZ	77	H
101	134	.84	83	PCT	13	P3	V35	.33						11C	V35	.580	ZPUFZ	77	C
101	134	1.74	84	PCT	24	P3	V35	.88						11C	V35	.580	ZPUFZ	77	C
101	134	.39	103	PCT	6	P3	BW2	.82						11C	V35	.580	ZPUFZ	77	C
101	134	.59	83	PCT	9	P3	11C	.79						11C	V35	.580	ZPUFZ	77	C
112	135	.34	81	PCT	9	P2	V34	.77						V33	TEC	.610	ZBAZC	48	C
112	135	.61	84	PCT	13	P3	V34	.79						V34	V34	.580	ZPUFZ	74	C
143	136	.42	1	HTE		2	TEH	23.05						V33	TEH	.610	ZBAZC	28	H
34	137	.37	83	PCT	11	P2	05H	-.95						TEC	TEH	.610	ZBAZC	5	H
34	137	.64	89	PCT	12	P3	05H	-.95						06H	05H	.600	ZPAMZ	80	H
142	137	.15	359	HTE		2	TEH	23.22						V33	TEH	.610	ZBAZC	26	H
25	138	.23	104	PCT	7	P2	V33	-.87						TEC	TEH	.610	ZBAZC	5	H
25	138	.62	74	PCT	11	P3	V33	-.87						V33	V33	.580	ZPUFZ	76	H
38	141	.37	14	HTE		2	TEC	23.06						TEC	TEH	.610	ZBAZC	5	H
1	142	.03	79	MBN		6	04H	29.03						08H	TEH	.610	ZBAZC	28	H
39	142	.40	170	HTE		2	TEC	23.04						TEC	TEH	.610	ZBAZC	5	H
153	144	.33	64	MBN		6	04H	12.81						V33	TEH	.610	ZBAZC	23	H
143	146	.24	0	HTE		2	TEH	23.02						V33	TEH	.610	ZBAZC	23	H

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRWID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
46	147	.60	0	NTE		2	TEC	23.00						V83	TEC	.610	ZBAZC	58	C
1	148	.24	84	PCT	7	P2	03C	-1.00						08C	TEC	.610	ZBAZC	68	C
1	148	.35	89	PCT	6	P3	03C	-.89						03C	03C	.600	ZPAHZ	79	C
131	150	.30	132	PCT	9	P2	V83	-.71						V83	TEC	.610	ZBAZC	48	C
131	150	.79	78	PCT	14	P3	V83	-.52						V83	V82	.580	ZPUFZ	77	H
39	152	.20	53	PCT	6	P2	V83	.91						V83	TEC	.610	ZBAZC	60	C
39	152	.29	97	PCT	6	P3	V83	.91						V83	V83	.580	ZPUFZ	77	H
38	153	.30	59	PCT	9	P2	V83	1.15						V83	TEC	.610	ZBAZC	60	C
38	153	.50	77	PCT	9	P3	V83	1.15						V83	V83	.580	ZPUFZ	77	H
126	155	.35	353	NTE		2	TEH	23.00						V83	TEH	.610	ZBAZC	21	H
24	159	.38	58	MBN		6	08H	6.69						V83	TEH	.610	ZBAZC	8	H
129	164	.34	67	PCT	12	P2	V83	-.71						V83	TEH	.610	ZBAZC	18	H
129	164	.69	82	PCT	10	P3	V83	-.79						V83	V83	.580	ZPUFZ	77	H
19	166	.37	67	MBN		6	01H	33.39						V83	TEH	.610	ZBAZC	8	H
82	167	1.23	112	MBN		6	03H	18.64						V83	TEH	.610	ZBAZC	17	H
20	171	.37	75	MBN		6	04H	29.75						V83	TEH	.610	ZBAZC	8	H
34	171	.78	2	NTE		2	TEH	22.99						V83	TEH	.610	ZBAZC	8	H
77	172	1.59	106	NTE		2	TEC	23.09						V83	TEC	.610	ZBAZC	56	C
33	178	.29	113	PCT	8	P2	V83	.73						V83	TEC	.610	ZBAZC	62	C
113	178	.30	109	PCT	9	P2	V83	.75						V83	TEC	.610	ZBAZC	55	C
113	178	.72	87	PCT	13	P3	V83	.88						V83	V83	.580	ZPUFZ	77	H
21	180	.13	166	NTE		2	TEH	23.09						V83	TEH	.610	ZBAZC	7	H
81	182	.25	74	MBN		6	08C	18.84						V83	TEC	.610	ZBAZC	55	C
46	185	48.02	185	NTE		2	TEH	22.24						V83	TEH	.610	ZBAZC	16	H
23	186	.68	5	NTE		2	TEH	23.09						V83	TEH	.610	ZBAZC	8	H
93	186	1.03	174	NTE		2	TEC	23.00						V83	TEC	.610	ZBAZC	57	C
21	202	.35	75	MBN		6	08C	10.50						V83	TEC	.610	ZBAZC	61	C

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

APPENDIX C

STEAM GENERATOR 22

SUMMARY DATA SHEETS

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
36	3	.41	123	PCT	10	P2	06H	.79						V83	TEH	.610	ZBAZC	33	H
36	3	.63	116	PCT	8	P3	06H	.79						06H	06H	.600	ZPAMZ	83	H
51	16	.29	51	MBM		6	05H	6.11						V83	TEH	.610	ZBAZC	49	H
10	21	51.66	3	NTE		2	T5H	-.10						V83	TEH	.610	ZBAZC	56	H
84	29	.42	122	PCT	11	P2	V83	.73						V83	TEC	.610	ZBAZC	27	C
84	29	.49	129	PCT	12	P2	V82	1.00						V83	TEH	.610	ZBAZC	47	H
84	29	.66	107	PCT	8	P3	V82	1.00						V82	V82	.580	ZPUFZ	82	H
84	29	.84	87	PCT	14	P3	V83	.79						V83	V83	.580	ZPUFZ	82	C
35	30	.58	100	PCT	9	P3	08C	-.84						08C	08C	.600	ZPAMZ	79	C
84	33	.29	126	PCT	8	P2	BM2	-.81						V83	TEC	.610	ZBAZC	31	C
84	33	.59	102	PCT	10	P3	BM2	-.70						09C	V84	.580	ZPUFZ	77	C
108	33	.29	79	PCT	8	P2	10C	.82						V83	TEC	.610	ZBAZC	36	C
108	33	.47	78	PCT	8	P3	10C	.78						10C	10C	.600	ZPAMZ	79	C
77	38	.32	128	PCT	8	P2	09C	.69						V83	TEC	.610	ZBAZC	32	C
77	38	.58	80	PCT	9	P3	09C	.68						09C	09C	.600	ZPAMZ	79	C
79	38	.26	111	PCT	9	P2	V82	-.94						V83	TEH	.610	ZBAZC	48	H
79	38	.45	80	PCT	6	P3	V82	-.94						V82	V82	.580	ZPUFZ	82	H
89	38	.32	95	PCT	8	P2	BM2	-.69						V83	TEC	.610	ZBAZC	32	C
89	38	.45	81	PCT	7	P3	BM2	-.82						09C	V84	.580	ZPUFZ	77	C
90	41	.30	88	PCT	8	P2	10H	-1.37						V83	TEH	.610	ZBAZC	43	H
90	41	.61	111	PCT	7	P3	10H	-1.37						10H	10H	.600	ZPAMZ	83	H
123	44	.44	130	PCT	12	P2	V83	.68						V83	TEC	.610	ZBAZC	36	C
123	44	.39	140	PCT	10	P2	V85	.83						V83	TEC	.610	ZBAZC	36	C
123	44	.78	91	PCT	12	P3	V85	.59						V85	V85	.580	ZPUFZ	77	C
123	44	1.12	87	PCT	17	P3	V83	.58						V83	V83	.580	ZPUFZ	82	C
4	45	.42	115	PCT	6	P3	BM2	.69						08H	08C	.540	ZPUPH	68	H
137	48	.71	108	SVI		P3	V81	4.53						V81	V82	.580	ZPUFZ	82	H
152	55	.39	137	PCT	11	P2	11C	-1.20						V83	TEC	.610	ZBAZC	36	C
152	55	.58	71	PCT	9	P3	11C	-1.02						11C	11C	.600	ZPAMZ	79	C
152	55	.20	116	PCT	3	P3	11C	-1.01						11C	11C	.600	ZPAMZ	79	C
113	56	.39	88	PCT	11	P2	V83	-.78						V83	TEC	.610	ZBAZC	38	C
113	56	.90	84	PCT	15	P3	V83	-.72						V83	V83	.580	ZPUFZ	82	C
114	57	.35	109	PCT	10	P2	V83	.82						V83	TEC	.610	ZBAZC	38	C
114	57	.72	77	PCT	12	P3	V83	.68						V83	V83	.580	ZPUFZ	82	C
118	57	.41	93	PCT	11	P2	V82	.77						V83	TEH	.610	ZBAZC	42	H
118	57	1.00	90	PCT	13	P3	V82	.77						V82	V82	.580	ZPUFZ	82	H
126	57	.30	131	PCT	9	P2	V83	-.40						V83	TEC	.610	ZBAZC	38	C
126	57	.55	69	PCT	9	P3	V83	-.56						V83	V83	.580	ZPUFZ	82	C
129	60	.59	115	PCT	15	P2	V83	.63						V83	TEC	.610	ZBAZC	38	C
129	60	1.29	80	PCT	20	P3	V83	.57						V83	V83	.580	ZPUFZ	82	C
152	61	.25	112	PCT	7	P2	V83	.83						V83	TEC	.610	ZBAZC	38	C
152	61	.52	93	PCT	9	P3	V83	.67						V83	V83	.580	ZPUFZ	82	C
47	64	.33	138	PCT	8	P2	BM1	-1.01						TEH	TEC	.610	ZBAZC	4	C
47	64	.68	103	PCT	9	P3	BM1	-1.01						08H	V83	.580	ZPUFZ	82	H
24	65	.73	116	PCT	16	P2	V83	.78						TEH	TEC	.610	ZBAZC	4	C
24	65	1.11	88	PCT	16	P3	V83	.94						V83	V83	.580	ZPUFZ	77	H
30	65	.77	149	PCT	17	P2	V83	.82						TEH	TEC	.610	ZBAZC	4	C
30	65	.55	92	PCT	9	P3	V83	.82						V83	V83	.580	ZPUFZ	77	H
153	66	.59	116	PCT	14	P2	BM2	.80						V83	TEC	.610	ZBAZC	39	C
153	66	1.23	90	PCT	19	P3	BM2	.80						11C	V85	.580	ZPUFZ	76	C
159	66	.66	64	PCT	15	P2	BM2	.75						V83	TEC	.610	ZBAZC	39	C
159	66	1.34	92	PCT	20	P3	BM2	.75						11C	V85	.580	ZPUFZ	76	C
18	67	51.07	181	NTE		2	TEC	22.60						TEH	TEC	.610	ZBAZC	3	C

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRWID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
132	67	.27	102	PCT	7	P2	VC5	.73						VC3	TEC	.610	ZBAZC	39	C
132	67	.81	92	PCT	13	P3	VC5	.73						VC5	VC5	.580	ZPUFZ	76	C
158	67	.65	115	PCT	15	P2	BM2	-.75						V23	TEC	.610	ZBAZC	39	C
158	67	1.42	93	PCT	21	P3	BM2	-.75						11C	VC5	.580	ZPUFZ	76	C
160	67	.42	126	PCT	10	P2	BM2	-.60						V23	TEC	.610	ZBAZC	39	C
160	67	.91	86	PCT	14	P3	BM2	-.60						11C	VC5	.580	ZPUFZ	76	C
159	68	.47	60	PCT	13	P2	BM2	.77						V23	TEC	.610	ZBAZC	40	C
159	68	1.06	99	PCT	16	P3	BM2	.77						11C	VC5	.580	ZPUFZ	76	C
161	68	.20	45	PCT	6	P2	BM2	.72						V23	TEC	.610	ZBAZC	40	C
161	68	.59	104	PCT	10	P3	BM2	.72						11C	VC5	.580	ZPUFZ	76	C
156	69	.39	80	PCT	10	P2	VC1	.94						V23	TEH	.610	ZBAZC	39	H
156	69	.87	97	PCT	11	P3	VC1	.61						VC1	VC1	.580	ZPUFZ	82	H
8	71	11.82	197	NTE		6	TEC	23.03						V23	TEC	.610	ZBAZC	24	C
128	71	17.14	182	NTE		2	TEC	22.84						V23	TEC	.610	ZBAZC	41	C
134	71	1.25	178	NTE		2	TEC	21.85						V23	TEC	.610	ZBAZC	41	C
161	72	.47	136	PCT	13	P2	VC3	.60						V23	TEC	.610	ZBAZC	40	C
161	72	1.24	84	PCT	19	P3	VC3	.54						V23	V23	.580	ZPUFZ	82	C
42	73	53.78	179	NTE		2	TSH	.00						TEH	TEC	.610	ZBAZC	6	C
160	73	.30	99	PCT	8	P2	VC1	.82						V23	TEH	.610	ZBAZC	39	H
160	73	.86	84	PCT	11	P3	VC1	.82						VC1	VC1	.580	ZPUFZ	82	H
164	73	.55	29	PCT	13	P2	BM2	.55						V23	TEC	.610	ZBAZC	41	C
164	73	1.33	92	PCT	20	P3	BM2	.55						11C	VC5	.580	ZPUFZ	76	C
163	74	.79	133	PCT	17	P2	BM2	-.70						V23	TEC	.610	ZBAZC	41	C
163	74	1.39	89	PCT	21	P3	BM2	-.70						11C	VC5	.580	ZPUFZ	76	C
14	75	.65	102	PCT	17	P2	BM2	-1.00						V23	TEC	.610	ZBAZC	15	C
14	75	1.22	93	PCT	19	P3	BM2	-.83						08C	V23	.580	ZPUFZ	75	C
14	75			TBP										TEC	TEC	.610	ZBAZC	1000	C
24	75	.37	44	MBM		6	GGH	29.68						TEH	TEC	.610	ZBAZC	5	C
19	76	.33	91	PCT	10	P2	BM2	.87						TEH	TEC	.610	ZBAZC	5	C
19	76	.56	84	PCT	10	P3	BM2	.75						08C	V23	.580	ZPUFZ	75	C
19	76			TBP										TEC	TEC	.610	ZBAZC	1000	C
23	76	.38	113	PCT	10	P2	BM2	.93						TEH	TEC	.610	ZBAZC	6	C
23	76	.64	101	PCT	11	P3	BM2	.83						08C	V23	.580	ZPUFZ	75	C
23	76			TBP										TEC	TEC	.610	ZBAZC	1000	C
161	76	.70	105	PCT	16	P2	VC1	-.87						V23	TEH	.610	ZBAZC	39	H
161	76	.47	103	PCT	11	P2	VC1	.62						V23	TEH	.610	ZBAZC	39	H
161	76	1.55	88	PCT	19	P3	VC1	-.87						VC1	VC1	.580	ZPUFZ	82	H
161	76	.83	92	PCT	11	P3	VC1	.62						VC1	VC1	.580	ZPUFZ	82	H
22	77	1.02	89	PCT	23	P2	BM1	-.90						TEH	TEC	.610	ZBAZC	5	C
22	77	1.38	98	PCT	19	P3	BM1	-.83						08H	V23	.580	ZPUFZ	77	H
22	77			TBP										TEC	TEC	.610	ZBAZC	1000	C
84	77	.35	88	PCT	9	P2	VC2	.77						V23	TEH	.610	ZBAZC	37	H
84	77	.84	87	PCT	13	P3	VC2	.94						VC2	VC2	.580	ZPUFZ	77	H
132	77	.46	103	PCT	12	P2	VC3	.57						V23	TEC	.610	ZBAZC	40	C
132	77	.91	87	PCT	15	P3	VC3	.78						V23	V23	.580	ZPUFZ	82	C
154	77	.26	104	PCT	8	P2	VC4	-.98						V23	TEC	.610	ZBAZC	40	C
154	77	.38	72	PCT	6	P3	VC4	-.98						VC4	VC4	.580	ZPUFZ	76	C
23	78	.45	125	PCT	13	P2	BM2	1.00						TEH	TEC	.610	ZBAZC	5	C
23	78	1.31	91	PCT	20	P3	BM2	.70						08C	V23	.580	ZPUFZ	74	C
23	78			TBP										TEC	TEC	.610	ZBAZC	1000	C
91	78	.45	83	PCT	12	P2	VC3	-.91						V23	TEC	.610	ZBAZC	21	C
91	78	.88	85	PCT	13	P3	VC3	-.90						V23	V23	.580	ZPUFZ	77	H
28	79	.62	113	PCT	16	P2	BM1	1.00						TEH	TEC	.610	ZBAZC	5	C
28	79	.91	98	PCT	14	P3	BM1	.78						08H	V23	.580	ZPUFZ	77	H
28	79	.36	104	PCT	6	P3	VC3	.99						08H	V23	.580	ZPUFZ	77	H

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

ROW	COL	VOLTG	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
28	79			TBP										TEC	TEC	.610	ZBAZC	1000	C
30	79	1.08	101	PCT	24	P2	SM1	.84						TEH	TEC	.610	ZBAZC	5	C
30	79	1.00	98	PCT	15	P3	SM1	.71						OSH	V33	.560	ZPUFZ	77	H
30	79			TBP										TEC	TEC	.610	ZBAZC	1000	C
32	79	.35	74	PCT	10	P2	SM1	.95						TEH	TEC	.610	ZBAZC	5	C
32	79	.58	90	PCT	9	P3	SM1	.65						OSH	V33	.560	ZPUFZ	77	H
32	79			TBP										TEC	TEC	.610	ZBAZC	1000	C
34	79	.34	94	PCT	10	P2	SM1	.88						TEH	TEC	.610	ZBAZC	5	C
34	79	.56	107	PCT	9	P3	SM1	.97						OSH	V33	.560	ZPUFZ	77	H
36	79	.39	122	PCT	11	P2	SM1	.91						TEH	TEC	.610	ZBAZC	5	C
36	79	.84	86	PCT	13	P3	SM1	.83						OSH	V33	.560	ZPUFZ	77	H
52	79	.26	144	PCT	8	P2	SM1	.87						TEH	TEC	.610	ZBAZC	5	C
52	79	.54	90	PCT	8	P3	SM1	.68						OSH	V33	.560	ZPUFZ	77	H
31	80	.54	126	PCT	13	P2	SM1	-.93						TEH	TEC	.610	ZBAZC	6	C
31	80	.77	92	PCT	12	P3	SM1	-.98						OSH	V33	.560	ZPUFZ	77	H
31	80			TBP										TEC	TEC	.610	ZBAZC	1000	C
51	80	.44	130	PCT	11	P2	SM1	-.93						TEH	TEC	.610	ZBAZC	6	C
51	80	.79	100	PCT	12	P3	SM1	-.79						OSH	V33	.560	ZPUFZ	77	H
117	80	.25	67	PCT	7	P2	SM2	-.65						V33	TEC	.610	ZBAZC	40	C
117	80	.45	108	PCT	8	P3	SM2	-.78						10C	V35	.560	ZPUFZ	76	C
165	80	.39	147	PCT	10	P2	SM2	-.88						V33	TEC	.610	ZBAZC	42	C
165	80	1.00	87	PCT	16	P3	SM2	-.88						11C	V35	.560	ZPUFZ	76	C
167	80	.40	84	PCT	10	P2	SM2	.85						V33	TEC	.610	ZBAZC	42	C
167	80	.78	92	PCT	13	P3	SM2	.65						11C	V35	.560	ZPUFZ	76	C
30	81	1.35	100	PCT	26	P2	SM1	-.91						TEH	TEC	.610	ZBAZC	6	C
30	81	1.22	120	PCT	24	P2	SM2	-.58						TEH	TEC	.610	ZBAZC	6	C
30	81	1.79	88	PCT	25	P3	SM2	-.63						OSC	V33	.560	ZPUFZ	74	C
30	81	1.20	98	PCT	17	P3	SM1	-.79						OSH	V33	.560	ZPUFZ	77	H
30	81	.63	83	PCT	10	P3	SM1	.97						OSH	V33	.560	ZPUFZ	77	H
30	81			TBP										TEC	TEC	.610	ZBAZC	1000	C
90	81	.29	76	PCT	8	P2	VS3	-.94						V33	TEC	.610	ZBAZC	21	C
90	81	1.08	88	PCT	16	P3	VS3	-.88						V33	V33	.560	ZPUFZ	77	H
162	81	.34	87	PCT	9	P2	SM2	-.92						V33	TEC	.610	ZBAZC	42	C
162	81	.78	99	PCT	13	P3	SM2	-.92						11C	V35	.560	ZPUFZ	76	C
168	81	1.80	102	PCT	31	P2	SM2	-.87						V33	TEC	.610	ZBAZC	42	C
168	81	2.48	85	PCT	32	P3	SM2	-.65						11C	V35	.560	ZPUFZ	76	C
168	81			TBP										TEH	TEH	.610	ZBAZC	1000	C
53	82	.43	119	PCT	12	P2	SM1	-1.17						TEH	TEC	.610	ZBAZC	5	C
53	82	.78	110	PCT	12	P3	SM1	-.83						OSH	V33	.560	ZPUFZ	77	H
167	82	.53	131	PCT	13	P2	SM2	-.80						V33	TEC	.610	ZBAZC	43	C
167	82	.99	87	PCT	15	P3	SM2	-.80						11C	V35	.560	ZPUFZ	76	C
34	83	.58	89	PCT	15	P2	SM2	.93						TEH	TEC	.610	ZBAZC	5	C
34	83	.61	83	PCT	10	P3	SM2	.78						OSC	V33	.560	ZPUFZ	74	C
34	83			TBP										TEC	TEC	.610	ZBAZC	1000	C
38	83	.60	60	PCT	16	P2	VS3	-.88						TEH	TEC	.610	ZBAZC	5	C
38	83	.71	86	PCT	11	P3	VS3	-.77						V33	V33	.560	ZPUFZ	77	H
38	83	.44	90	PCT	7	P3	VS3	.81						V33	V33	.560	ZPUFZ	77	H
40	83	.26	119	PCT	8	P2	SM2	1.02						TEH	TEC	.610	ZBAZC	5	C
40	83	.66	93	PCT	11	P3	SM2	.93						OSC	V33	.560	ZPUFZ	74	C
168	83	.56	145	PCT	14	P2	SM2	-.93						V33	TEC	.610	ZBAZC	43	C
168	83	1.11	94	PCT	17	P3	SM2	-.93						11C	V35	.560	ZPUFZ	76	C
35	84	.39	84	PCT	11	P2	SM2	-.90						TEH	TEC	.610	ZBAZC	5	C
35	84	.78	66	PCT	13	P3	SM2	-.78						OSC	V33	.560	ZPUFZ	74	C
35	84			TBP										TEC	TEC	.610	ZBAZC	1000	C
37	84	.92	100	PCT	22	P2	SM1	-.92						TEH	TEC	.610	ZBAZC	5	C
37	84	1.17	92	PCT	17	P3	SM1	-.91						OSH	V33	.560	ZPUFZ	77	H
37	84			TBP										TEC	TEC	.610	ZBAZC	1000	C

ROW	COL	VOLTG	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
43	84	.37	147	PCT	10	P2	VS3	.77						TEH	TEC	.610	ZBAZC	6	C
43	84	.55	88	PCT	9	P3	VS3	.85						VS3	VS3	.580	ZPUFZ	77	H
45	84	.30	73	PCT	8	P2	SM1	-.90						TEH	TEC	.610	ZBAZC	6	C
45	84	.70	103	PCT	11	P3	SM1	-.75						08H	VS3	.580	ZPUFZ	77	H
47	84	.30	156	PCT	8	P2	SM1	-.93						TEH	TEC	.610	ZBAZC	6	C
47	84	.51	108	PCT	8	P3	SM1	-.93						08H	VS3	.580	ZPUFZ	80	H
51	84	.45	150	PCT	11	P2	SM2	-.69						TEH	TEC	.610	ZBAZC	6	C
51	84	.59	93	PCT	10	P3	SM2	-.64						09C	VS3	.580	ZPUFZ	74	C
167	84	.29	108	PCT	8	P2	SM2	.90						VS3	TEC	.610	ZBAZC	42	C
167	84	.62	106	PCT	10	P3	SM2	.90						11C	VS5	.580	ZPUFZ	76	C
38	85	.61	120	PCT	15	P2	SM1	-.95						TEH	TEC	.610	ZBAZC	6	C
38	85	.89	123	PCT	19	P2	VS3	.91						TEH	TEC	.610	ZBAZC	6	C
38	85	1.26	104	PCT	24	P2	SM2	-.75						TEH	TEC	.610	ZBAZC	6	C
38	85	1.41	75	PCT	21	P3	VS3	.73						08C	VS3	.580	ZPUFZ	74	C
38	85	1.76	80	PCT	25	P3	SM2	-.70						08C	VS3	.580	ZPUFZ	74	C
38	85	1.21	93	PCT	17	P3	SM1	-.88						08H	VS3	.580	ZPUFZ	77	H
38	85			TBP										TEC	TEC	.610	ZBAZC	1000	C
44	85	.43	85	PCT	11	P2	SM1	-1.09						TEH	TEC	.610	ZBAZC	6	C
44	85	.89	104	PCT	13	P3	SM1	-.95						08H	VS3	.580	ZPUFZ	77	H
47	86	.48	98	PCT	13	P2	SM1	.88						TEH	TEC	.610	ZBAZC	5	C
47	86	.59	118	PCT	16	P2	VS3	-.88						TEH	TEC	.610	ZBAZC	5	C
47	86	.91	89	PCT	12	P3	SM1	.88						08H	VS3	.580	ZPUFZ	81	H
47	86	1.01	88	PCT	13	P3	VS3	-.88						08H	VS3	.580	ZPUFZ	81	H
48	87	.42	153	PCT	12	P2	SM1	.90						TEH	TEC	.610	ZBAZC	5	C
48	87	.95	103	PCT	14	P3	SM1	.82						09H	VS3	.580	ZPUFZ	77	H
43	88	.64	113	PCT	15	P2	SM2	1.02						TEH	TEC	.610	ZBAZC	8	C
43	88	.87	86	PCT	14	P3	SM2	.78						08C	VS3	.580	ZPUFZ	74	C
43	88			TBP										TEC	TEC	.610	ZBAZC	1000	C
45	88	.29	98	PCT	7	P2	SM2	1.09						TEH	TEC	.610	ZBAZC	8	C
45	88	.49	95	PCT	8	P3	SM2	.78						08C	VS3	.580	ZPUFZ	74	C
45	88			TBP										TEC	TEC	.610	ZBAZC	1000	C
163	88	.21	38	PCT	7	P2	SM2	-.97						VS3	TEC	.610	ZBAZC	60	C
163	88	.37	75	PCT	6	P3	SM2	-.97						11C	VS5	.580	ZPUFZ	76	C
169	88	.69	133	PCT	18	P2	SM2	-.97						VS3	TEC	.610	ZBAZC	60	C
169	88	1.22	92	PCT	18	P3	SM2	-.97						11C	VS5	.580	ZPUFZ	76	C
40	89	.36	123	PCT	9	P2	SM2	-.75						TEH	TEC	.610	ZBAZC	8	C
40	89	.52	61	PCT	9	P3	SM2	-.77						08C	VS3	.580	ZPUFZ	74	C
40	89			TBP										TEC	TEC	.610	ZBAZC	1000	C
42	89	1.22	119	PCT	23	P2	SM1	-.88						TEH	TEC	.610	ZBAZC	8	C
42	89	1.75	93	PCT	23	P3	SM1	-.75						08H	VS3	.580	ZPUFZ	77	H
42	89			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	89	1.31	121	PCT	24	P2	SM1	1.11						TEH	TEC	.610	ZBAZC	8	C
46	89	1.90	94	PCT	26	P3	SM1	.92						08H	VS3	.580	ZPUFZ	77	H
46	89			TBP										TEC	TEC	.610	ZBAZC	1000	C
50	89	.69	112	PCT	16	P2	SM1	-.94						TEH	TEC	.610	ZBAZC	8	C
50	89	1.12	104	PCT	16	P3	SM1	-.76						09H	VS3	.580	ZPUFZ	77	H
132	89	.64	113	PCT	14	P2	VS3	-.76						VS3	TEH	.610	ZBAZC	35	H
132	89	.38	75	PCT	10	P2	VS4	-1.08						VS3	TEC	.610	ZBAZC	42	C
132	89	.89	89	PCT	14	P3	VS4	-1.08						VS4	VS4	.580	ZPUFZ	76	C
132	89	1.65	78	PCT	24	P3	VS3	-.72						VS3	VS3	.580	ZPUFZ	82	C
162	89	.27	122	PCT	7	P2	VS2	.82						VS3	TEH	.610	ZBAZC	35	H
162	89	.63	94	PCT	8	P3	VS2	.82						VS2	VS2	.580	ZPUFZ	82	H
168	89	.84	142	PCT	20	P2	SM2	.82						VS3	TEC	.610	ZBAZC	60	C
168	89	1.01	93	PCT	16	P3	SM2	.82						11C	VS5	.580	ZPUFZ	76	C
43	90	1.41	89	PCT	28	P2	SM1	-.99						TEH	TEC	.610	ZBAZC	7	C
43	90	1.77	93	PCT	24	P3	SM1	-.89						08H	VS3	.580	ZPUFZ	77	H
43	90			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	90	1.01	97	PCT	23	P2	SM1	-.97						TEH	TEC	.610	ZBAZC	7	C
47	90	.97	93	PCT	13	P3	SM1	-.97						08H	VS3	.580	ZPUFZ	81	H

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRMID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
47	90			TBP										TEC	TEC	.610	ZBAZC	1000	C
49	90	.64	114	PCT	17	P2	BW1	.82						TEH	TEC	.610	ZBAZC	7	C
49	90	.87	96	PCT	13	P3	BW1	.79						09H	V83	.580	ZPUFZ	77	H
53	90	.36	88	PCT	10	P2	BW2	1.76						TEH	TEC	.610	ZBAZC	7	C
53	90	.78	93	PCT	13	P3	BW2	1.45						09C	V83	.580	ZPUFZ	74	C
169	90	.41	74	PCT	12	P2	BW2	.85						V83	TEC	.610	ZBAZC	60	C
169	90	.82	104	PCT	13	P3	BW2	.85						11C	V85	.580	ZPUFZ	76	C
44	91	1.86	105	PCT	33	P2	BW1	-1.01						TEH	TEC	.610	ZBAZC	7	C
44	91	1.32	96	PCT	27	P2	BW1	1.08						TEH	TEC	.610	ZBAZC	7	C
44	91	2.21	94	PCT	28	P3	BW1	-.87						08H	V83	.580	ZPUFZ	77	H
44	91	1.69	85	PCT	23	P3	BW1	.84						08H	V83	.580	ZPUFZ	77	H
44	91			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	91	1.13	112	PCT	25	P2	BW1	-.99						TEH	TEC	.610	ZBAZC	7	C
46	91	1.61	90	PCT	22	P3	BW1	-1.00						08H	V83	.580	ZPUFZ	77	H
46	91			TBP										TEC	TEC	.610	ZBAZC	1000	C
45	92	2.31	106	PCT	34	P2	BW1	-1.02						TEH	TEC	.610	ZBAZC	8	C
45	92	2.00	96	PCT	27	P3	BW1	-.90						08H	V83	.580	ZPUFZ	77	H
45	92			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	92	1.75	105	PCT	29	P2	BW1	-.93						TEH	TEC	.610	ZBAZC	8	C
47	92	.25	113	PCT	6	P2	BW2	1.02						TEH	TEC	.610	ZBAZC	8	C
47	92	.91	87	PCT	15	P3	BW2	.75						08C	V83	.580	ZPUFZ	74	C
47	92	1.70	90	PCT	21	P3	BW1	-.93						08H	V83	.580	ZPUFZ	81	H
47	92			TBP										TEC	TEC	.610	ZBAZC	1000	C
49	92	.52	100	PCT	12	P2	BW1	.83						TEH	TEC	.610	ZBAZC	8	C
49	92	.38	121	PCT	9	P2	BW2	-.94						TEH	TEC	.610	ZBAZC	8	C
49	92	.86	92	PCT	14	P3	BW2	-.72						09C	V83	.580	ZPUFZ	74	C
49	92	.80	91	PCT	12	P3	BW1	.93						09H	V83	.580	ZPUFZ	77	H
49	92			TBP										TEC	TEC	.610	ZBAZC	1000	C
51	92	.36	145	PCT	9	P2	BW1	.89						TEH	TEC	.610	ZBAZC	8	C
51	92	.73	98	PCT	11	P3	BW1	.95						09H	V83	.580	ZPUFZ	77	H
51	92	.56	88	PCT	9	P3	VS3	.70						09H	V83	.580	ZPUFZ	77	H
73	92	.48	84	PCT	13	P2	VS4	1.00						VS3	TEC	.610	ZBAZC	31	C
73	92	.83	85	PCT	14	P3	VS4	1.03						VS4	VS4	.580	ZPUFZ	75	C
119	92	.66	97	PCT	18	P2	VS3	-.72						VS3	TEH	.610	ZBAZC	34	H
119	92	1.19	95	PCT	18	P3	VS3	-.72						VS3	V83	.580	ZPUFZ	79	H
137	92	.27	80	PCT	9	P2	VS1	-.85						VS3	TEH	.610	ZBAZC	34	H
137	92	.46	81	PCT	6	P3	VS1	-.85						VS1	V81	.580	ZPUFZ	82	H
44	93	5.26	98	PCT	48	P2	BW1	.79						TEH	TEC	.610	ZBAZC	8	C
44	93	5.22	75	PCT	50	P3	BW1	.84						08H	V83	.580	ZPUFZ	77	H
44	93	.49	84	PCT	8	P3	VS3	-.82						08H	V83	.580	ZPUFZ	77	H
44	93			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	93	.37	141	PCT	9	P2	BW1	.93						TEH	TEC	.610	ZBAZC	8	C
46	93	.35	114	PCT	6	P3	BW1	.97						08H	V83	.580	ZPUFZ	77	H
46	93			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	93	.72	98	PCT	16	P2	BW1	-.73						TEH	TEC	.610	ZBAZC	8	C
48	93	.45	108	PCT	11	P2	BW1	1.43						TEH	TEC	.610	ZBAZC	8	C
48	93	1.18	95	PCT	17	P3	BW1	-.88						BW1	V83	.580	ZPUFZ	77	H
48	93	.56	83	PCT	9	P3	BW1	.84						BW1	V83	.580	ZPUFZ	77	H
48	93			TBP										TEC	TEC	.610	ZBAZC	1000	C
50	93	.65	121	PCT	15	P2	BW1	.85						TEH	TEC	.610	ZBAZC	8	C
50	93	.38	140	PCT	9	P2	BW2	-.92						TEH	TEC	.610	ZBAZC	8	C
50	93	.90	97	PCT	14	P3	BW2	-.75						09C	V83	.580	ZPUFZ	74	C
50	93	1.13	93	PCT	16	P3	BW1	.92						09H	V83	.580	ZPUFZ	77	H
50	93			TBP										TEC	TEC	.610	ZBAZC	1000	C
80	93	.88	124	PCT	18	P2	VS4	-.85						VS3	TEC	.610	ZBAZC	32	C
80	93	1.48	89	PCT	22	P3	VS4	-.85						VS4	V84	.580	ZPUFZ	75	C
152	93	.46	83	PCT	13	P2	VS2	.67						VS3	TEH	.610	ZBAZC	32	H
152	93	.79	90	PCT	10	P3	VS2	.67						VS2	V82	.580	ZPUFZ	82	H
45	94	2.00	97	PCT	34	P2	BW1	-1.08						TEH	TEC	.610	ZBAZC	7	C
45	94	2.16	88	PCT	28	P3	BW1	-.97						08H	V83	.580	ZPUFZ	77	H
45	94			TBP										TEC	TEC	.610	ZBAZC	1000	C

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRMID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
47	94	1.29	112	PCT	27	P2	BW1	-.92						TEH	TEC	.610	ZBAZC	7	C
47	94	1.64	93	PCT	20	P3	BW1	-.94						08H	V83	.580	ZPUFZ	81	H
47	94			TBP										TEC	TEC	.610	ZBAZC	1000	C
49	94	1.20	109	PCT	26	P2	BW1	.85						TEH	TEC	.610	ZBAZC	7	C
49	94	.68	109	PCT	10	P3	BW1	.42						09H	V83	.580	ZPUFZ	77	H
49	94	1.41	98	PCT	20	P3	BW1	.93						09H	V83	.580	ZPUFZ	77	H
49	94			TBP										TEC	TEC	.610	ZBAZC	1000	C
79	94	.27	72	PCT	9	P2	V82	.47						V83	TEH	.610	ZBAZC	36	H
79	94	.78	83	PCT	12	P3	V82	.52						V82	V82	.580	ZPUFZ	77	H
169	94	.38	126	PCT	11	P2	BW2	.65						V83	TEC	.610	ZBAZC	60	C
169	94	.71	95	PCT	12	P3	BW2	.85						11C	V85	.580	ZPUFZ	76	C
50	95	.35	99	PCT	10	P2	BW1	.80						TEH	TEC	.610	ZBAZC	7	C
50	95	.74	79	PCT	11	P3	BW1	.85						09H	V83	.580	ZPUFZ	77	H
50	95			TBP										TEC	TEC	.610	ZBAZC	1000	C
85	95	.67	115	PCT	17	P2	V83	.56						V83	TEC	.610	ZBAZC	31	C
85	95	.45	112	PCT	12	P2	V84	-.68						V83	TEC	.610	ZBAZC	31	C
85	95	.97	84	PCT	16	P3	V84	-.87						V84	V84	.580	ZPUFZ	75	C
85	95	.91	88	PCT	14	P3	V83	.63						V83	V83	.580	ZPUFZ	77	H
46	97	.53	112	PCT	13	P2	V83	1.09						TEH	TEC	.610	ZBAZC	8	C
46	97	.86	92	PCT	13	P3	V83	1.13						V83	V83	.580	ZPUFZ	77	H
48	97	.59	88	PCT	14	P2	V83	.82						TEH	TEC	.610	ZBAZC	8	C
48	97	1.18	90	PCT	17	P3	V83	.98						V83	V83	.580	ZPUFZ	77	H
170	97	.31	128	PCT	9	P2	BW2	-.92						V83	TEC	.610	ZBAZC	60	C
170	97	.54	94	PCT	9	P3	BW2	-.85						11C	V85	.580	ZPUFZ	76	C
169	98	.39	147	PCT	11	P2	BW2	.92						V83	TEC	.610	ZBAZC	60	C
169	98	.73	90	PCT	12	P3	BW2	.88						11C	V85	.580	ZPUFZ	76	C
171	98	.25	148	PCT	8	P2	BW2	-.87						V83	TEC	.610	ZBAZC	60	C
171	98	.52	76	PCT	8	P3	BW2	-.77						11C	V85	.580	ZPUFZ	77	C
47	100	.37	127	PCT	9	P2	BW1	-.88						TEH	TEC	.610	ZBAZC	8	C
47	100	.64	115	PCT	10	P3	BW1	-.88						08H	V83	.580	ZPUFZ	79	H
47	100	.61	84	PCT	10	P3	V83	-.81						08H	V83	.580	ZPUFZ	79	H
47	100			TBP										TEC	TEC	.610	ZBAZC	1000	C
49	100	.56	124	PCT	13	P2	BW1	-.84						TEH	TEC	.610	ZBAZC	8	C
49	100	.39	97	PCT	10	P2	BW2	.87						TEH	TEC	.610	ZBAZC	8	C
49	100	.51	80	PCT	9	P3	V83	.18						09C	V83	.580	ZPUFZ	74	C
49	100	.70	94	PCT	12	P3	BW2	.67						09C	V83	.580	ZPUFZ	74	C
49	100	1.20	98	PCT	17	P3	BW1	-.64						09H	V83	.580	ZPUFZ	77	H
49	100	.43	85	PCT	7	P3	BW1	-.07						09H	V83	.580	ZPUFZ	77	H
49	100			TBP										TEC	TEC	.610	ZBAZC	1000	C
51	100	.59	142	PCT	14	P2	BW1	-.82						TEH	TEC	.610	ZBAZC	8	C
51	100	.53	127	PCT	13	P2	BW2	.98						TEH	TEC	.610	ZBAZC	8	C
51	100	.82	89	PCT	13	P3	BW2	.79						09C	V83	.580	ZPUFZ	74	C
51	100	.92	102	PCT	14	P3	BW1	-.73						09H	V83	.580	ZPUFZ	77	H
51	100			TBP										TEC	TEC	.610	ZBAZC	1000	C
169	100	.25	93	PCT	7	P2	BW2	-.93						V83	TEC	.610	ZBAZC	61	C
169	100	.35	107	PCT	6	P3	BW2	-.93						11C	V85	.580	ZPUFZ	76	C
171	100	.54	128	PCT	14	P2	BW2	.92						V83	TEC	.610	ZBAZC	61	C
171	100	1.29	91	PCT	19	P3	BW2	.80						11C	V85	.580	ZPUFZ	76	C
48	101	.62	127	PCT	14	P2	BW1	.68						TEH	TEC	.610	ZBAZC	8	C
48	101	1.75	103	PCT	29	P2	V83	.61						TEH	TEC	.610	ZBAZC	8	C
48	101	1.45	90	PCT	20	P3	BW1	.93						09H	V83	.580	ZPUFZ	77	H
48	101	1.87	89	PCT	25	P3	V83	.73						09H	V83	.580	ZPUFZ	77	H
48	101			TBP										TEC	TEC	.610	ZBAZC	1000	C
168	101	.44	107	PCT	12	P2	BW2	.87						V83	TEC	.610	ZBAZC	60	C
168	101	.91	94	PCT	14	P3	BW2	.87						11C	V85	.580	ZPUFZ	76	C
49	102	.58	97	PCT	15	P2	09H	-1.62						TEH	TEC	.610	ZBAZC	7	C
49	102	2.27	103	PCT	36	P2	BW1	-.85						TEH	TEC	.610	ZBAZC	7	C
49	102	.50	120	PCT	14	P2	V83	-.64						TEH	TEC	.610	ZBAZC	7	C
49	102	.67	101	PCT	17	P2	BW2	-.95						TEH	TEC	.610	ZBAZC	7	C
49	102	1.03	84	PCT	16	P3	V83	-.63						09C	V83	.580	ZPUFZ	74	C
49	102	.72	99	PCT	12	P3	BW2	-.78						09C	V83	.580	ZPUFZ	74	C

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRMID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
49	102	1.04	99	PCT	16	P3	EM2	-.73						09C	V83	.580	ZPUFZ	74	C
49	102	.37	78	PCT	6	P3	09C	-1.18						09C	V83	.580	ZPUFZ	74	C
49	102	1.33	85	PCT	19	P3	09H	-1.45						09H	V83	.580	ZPUFZ	77	H
49	102	2.39	87	PCT	30	P3	EM1	-.81						09H	V83	.580	ZPUFZ	77	H
49	102			TEP										TEC	TEC	.610	ZBAZC	1000	C
46	103	.85	107	PCT	18	P2	EM1	-.92						TEC	TEH	.610	ZBAZC	1	H
46	103	.39	97	PCT	9	P2	EM2	-.85						TEC	TEH	.610	ZBAZC	1	H
46	103	.94	84	PCT	15	P3	V33	-.33						08C	V83	.580	ZPUFZ	74	C
46	103	.87	86	PCT	14	P3	EM2	-.71						08C	V83	.580	ZPUFZ	74	C
46	103	1.28	104	PCT	19	P3	EM1	-.92						08H	V83	.580	ZPUFZ	79	H
46	103			TEP										TEC	TEC	.610	ZBAZC	1000	C
48	103	.58	132	PCT	13	P2	EM1	-.94						TEC	TEH	.610	ZBAZC	1	H
48	103	.79	114	PCT	17	P2	V33	1.07						TEC	TEH	.610	ZBAZC	1	H
48	103	.45	101	PCT	11	P2	EM2	-.98						TEC	TEH	.610	ZBAZC	1	H
48	103	1.68	85	PCT	24	P3	V33	.83						EM2	V83	.580	ZPUFZ	74	C
48	103	1.00	83	PCT	16	P3	EM2	-.76						EM2	V83	.580	ZPUFZ	74	C
48	103	.70	104	PCT	11	P3	EM1	-1.21						EM1	V83	.580	ZPUFZ	79	H
48	103			TEP										TEC	TEC	.610	ZBAZC	1000	C
50	103	.73	98	PCT	16	P2	EM1	-1.05						TEC	TEH	.610	ZBAZC	1	H
50	103	1.01	109	PCT	15	P3	EM1	-.68						09H	V83	.580	ZPUFZ	77	H
50	103			TEP										TEC	TEC	.610	ZBAZC	1000	C
49	104	.25	139	PCT	6	P2	EM1	-.89						TEC	TEH	.610	ZBAZC	1	H
49	104	.48	116	PCT	8	P3	EM1	-.89						09H	V83	.580	ZPUFZ	79	H
49	104			TEP										TEC	TEC	.610	ZBAZC	1000	C
46	105	.60	126	PCT	13	P2	EM2	-.90						TEC	TEH	.610	ZBAZC	1	H
46	105	.68	120	PCT	15	P2	EM2	.93						TEC	TEH	.610	ZBAZC	1	H
46	105	.97	98	PCT	15	P3	EM2	-.75						08C	V83	.580	ZPUFZ	74	C
46	105	1.15	84	PCT	18	P3	EM2	.81						08C	V83	.580	ZPUFZ	74	C
46	105			TEP										TEC	TEC	.610	ZBAZC	1000	C
50	105	.40	33	PCT	12	P2	EM2	.90						TEC	TEH	.610	ZBAZC	2	H
50	105	.96	95	PCT	15	P3	EM2	.81						09C	V83	.580	ZPUFZ	74	C
50	105			TEP										TEC	TEC	.610	ZBAZC	1000	C
45	106	1.41	70	PCT	30	P2	EM1	-.98						TEC	TEH	.610	ZBAZC	2	H
45	106	.69	78	PCT	19	P2	EM1	.71						TEC	TEH	.610	ZBAZC	2	H
45	106	.47	59	PCT	14	P2	EM2	.98						TEC	TEH	.610	ZBAZC	2	H
45	106	.95	87	PCT	15	P3	EM2	.88						08C	V83	.580	ZPUFZ	74	C
45	106	1.35	96	PCT	20	P3	EM1	-.98						08H	V83	.580	ZPUFZ	79	H
45	106	1.05	98	PCT	16	P3	EM1	.71						08H	V83	.580	ZPUFZ	79	H
45	106			TEP										TEC	TEC	.610	ZBAZC	1000	C
49	106	.69	90	PCT	19	P2	EM1	-.93						TEC	TEH	.610	ZBAZC	2	H
49	106	.96	95	PCT	15	P3	EM1	-.93						09H	V83	.580	ZPUFZ	79	H
49	106			TEP										TEC	TEC	.610	ZBAZC	1000	C
51	106	.36	104	PCT	11	P2	EM2	.84						TEC	TEH	.610	ZBAZC	2	H
51	106	.81	95	PCT	13	P3	EM2	.75						09C	V83	.580	ZPUFZ	74	C
51	106			TEP										TEC	TEC	.610	ZBAZC	1000	C
48	107	.24	112	PCT	6	P2	EM1	.98						TEC	TEH	.610	ZBAZC	2	H
48	107	1.36	83	PCT	29	P2	V33	.78						TEC	TEH	.610	ZBAZC	2	H
48	107	.19	81	PCT	6	P2	EM2	-.93						TEC	TEH	.610	ZBAZC	2	H
48	107	2.50	88	PCT	32	P3	V33	.76						EM2	V83	.580	ZPUFZ	74	C
48	107	.46	92	PCT	8	P3	EM2	-.69						EM2	V83	.580	ZPUFZ	74	C
48	107	.42	86	PCT	7	P3	EM1	.99						EM1	V83	.580	ZPUFZ	79	H
48	107			TEP										TEC	TEC	.610	ZBAZC	1000	C
118	107	.76	125	PCT	16	P2	EM1	.94						V83	TEH	.610	ZBAZC	31	H
118	107	1.10	88	PCT	17	P3	EM1	.94						10H	V81	.580	ZPUFZ	79	H
170	107	.42	102	PCT	12	P2	EM2	-.86						V83	TEC	.610	ZBAZC	58	C
170	107	.93	90	PCT	15	P3	EM2	-.68						11C	V85	.580	ZPUFZ	76	C
47	108	3.51	105	PCT	43	P2	EM1	-.96						TEC	TEH	.610	ZBAZC	1	H
47	108	3.64	85	PCT	41	P3	EM1	-.96						08H	V83	.580	ZPUFZ	79	H
47	108			TEP										TEC	TEC	.610	ZBAZC	1000	C
51	108	.60	112	PCT	13	P2	EM1	.81						TEC	TEH	.610	ZBAZC	1	H
51	108	.85	84	PCT	13	P3	EM1	.81						09H	V83	.580	ZPUFZ	79	H
51	108			TEP										TEC	TEC	.610	ZBAZC	1000	C
59	108	.52	67	PCT	12	P2	09H	-1.12						V83	TEH	.610	ZBAZC	33	H
63	108	.37	113	PCT	9	P2	V32	-.94						V83	TEH	.610	ZBAZC	33	H

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRWID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
83	108	.74	89	PCT	12	P3	VS2	-.94						VS2	VS2	.580	ZPUFZ	79	H
111	108	.37	115	PCT	10	P2	VS4	.78						VS3	TEC	.610	ZBAZC	45	C
111	108	.87	94	PCT	14	P3	VS4	.88						VS4	VS4	.580	ZPUFZ	75	C
121	108	.36	63	PCT	11	P2	SW1	-.85						VS3	TEH	.610	ZBAZC	30	H
121	108	.66	120	PCT	10	P3	SW1	-.85						10H	VS1	.580	ZPUFZ	79	H
46	109	.45	134	PCT	11	P2	SW1	-.80						TEC	TEH	.610	ZBAZC	1	H
46	109	.32	54	PCT	8	P2	VS3	.85						TEC	TEH	.610	ZBAZC	1	H
46	109	.28	133	PCT	7	P2	SW2	-.85						TEC	TEH	.610	ZBAZC	1	H
46	109	.90	100	PCT	14	P3	VS3	.90						08C	VS3	.580	ZPUFZ	74	C
46	109	.81	105	PCT	13	P3	SW2	-.75						08C	VS3	.580	ZPUFZ	74	C
46	109	.99	95	PCT	15	P3	SW1	-.80						08H	VS3	.580	ZPUFZ	79	H
46	109			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	109	.37	131	PCT	9	P2	SW1	.77						TEC	TEH	.610	ZBAZC	1	H
48	109	.50	107	PCT	8	P3	SW1	.77						SW1	VS3	.580	ZPUFZ	79	H
48	109			TBP										TEC	TEC	.610	ZBAZC	1000	C
45	110	3.80	82	PCT	47	P2	SW1	-.87						TEC	TEH	.610	ZBAZC	2	H
45	110	2.03	87	PCT	30	P2	SW1	.75						TEC	TEH	.610	ZBAZC	2	H
45	110	2.68	86	PCT	33	P3	SW1	-.87						08H	VS3	.580	ZPUFZ	79	H
45	110	2.73	87	PCT	34	P3	SW1	.75						08H	VS3	.580	ZPUFZ	79	H
45	110			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	110	.31	38	PCT	10	P2	SW1	.82						TEC	TEH	.610	ZBAZC	2	H
47	110	.79	94	PCT	12	P3	SW1	.82						08H	VS3	.580	ZPUFZ	79	H
47	110			TBP										TEC	TEC	.610	ZBAZC	1000	C
49	110	.45	100	PCT	13	P2	SW1	-.97						TEC	TEH	.610	ZBAZC	2	H
49	110	.75	111	PCT	12	P3	SW1	-.97						09H	VS3	.580	ZPUFZ	79	H
49	110			TBP										TEC	TEC	.610	ZBAZC	1000	C
57	110	.27	43	PCT	9	P2	SW1	1.76						VS3	TEH	.610	ZBAZC	34	H
57	110	.68	89	PCT	11	P3	SW1	1.76						09H	VS3	.580	ZPUFZ	79	H
46	111	.35	61	PCT	11	P2	SW1	-.91						TEC	TEH	.610	ZBAZC	2	H
46	111	.26	116	PCT	8	P2	SW2	-.93						TEC	TEH	.610	ZBAZC	2	H
46	111	.53	109	PCT	9	P3	SW2	-.77						08C	VS3	.580	ZPUFZ	74	C
46	111	.61	115	PCT	10	P3	SW1	-.91						08H	VS3	.580	ZPUFZ	79	H
46	111			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	111	.56	101	PCT	16	P2	SW1	-1.05						TEC	TEH	.610	ZBAZC	2	H
48	111	.34	102	PCT	11	P2	SW1	.75						TEC	TEH	.610	ZBAZC	2	H
48	111	.27	38	PCT	9	P2	VS3	1.09						TEC	TEH	.610	ZBAZC	2	H
48	111	1.03	105	PCT	16	P3	SW1	-1.05						SW1	VS3	.580	ZPUFZ	79	H
48	111	.48	98	PCT	8	P3	SW1	.75						SW1	VS3	.580	ZPUFZ	79	H
48	111	.58	89	PCT	9	P3	VS3	1.09						SW1	VS3	.580	ZPUFZ	79	H
48	111			TBP										TEC	TEC	.610	ZBAZC	1000	C
140	111	.51	140	PCT	11	P2	VS2	.80						VS3	TEH	.610	ZBAZC	29	H
140	111	.77	90	PCT	12	P3	VS2	.80						VS2	VS2	.580	ZPUFZ	79	H
43	112	.96	114	PCT	20	P2	SW1	.85						TEC	TEH	.610	ZBAZC	3	H
43	112	1.62	95	PCT	23	P3	SW1	.85						08H	VS3	.580	ZPUFZ	79	H
43	112			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	112	1.52	113	PCT	27	P2	SW1	-.89						TEC	TEH	.610	ZBAZC	3	H
47	112	1.98	92	PCT	27	P3	SW1	-.89						08H	VS3	.580	ZPUFZ	79	H
47	112			TBP										TEC	TEC	.610	ZBAZC	1000	C
49	112	.25	108	PCT	6	P2	09H	-.90						TEC	TEH	.610	ZBAZC	3	H
67	112	.80	115	PCT	17	P2	SW1	.83						VS3	TEH	.610	ZBAZC	33	H
67	112	1.37	95	PCT	20	P3	SW1	.83						09H	VS2	.580	ZPUFZ	79	H
44	113	.48	113	PCT	11	P2	SW2	-.87						TEC	TEH	.610	ZBAZC	3	H
44	113	.81	84	PCT	13	P3	SW2	-.82						08C	VS3	.580	ZPUFZ	74	C
44	113			TBP										TEC	TEC	.610	ZBAZC	1000	C
40	113	.46	140	PCT	11	P2	SW2	-.80						TEC	TEH	.610	ZBAZC	3	H
40	113	.97	97	PCT	15	P3	SW2	-.72						08C	VS3	.580	ZPUFZ	74	C
40	113			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	113	.55	114	PCT	13	P2	SW1	.70						TEC	TEH	.610	ZBAZC	3	H
48	113	.21	125	PCT	5	P2	SW2	-.65						TEC	TEH	.610	ZBAZC	3	H
48	113	.55	108	PCT	9	P3	SW2	-.70						SW2	VS3	.580	ZPUFZ	74	C
48	113	.73	83	PCT	11	P3	SW1	.70						SW1	VS3	.580	ZPUFZ	79	H
48	113			TBP										TEC	TEC	.610	ZBAZC	1000	C

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRWID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
38	113	.43	126	PCT	8	P2	BM1	-1.39						V33	TEH	.610	ZBAZC	27	H
38	113	.54	79	PCT	9	P3	BM1	-1.39						09H	V33	.560	ZPUFZ	79	H
84	113	.44	137	PCT	10	P2	BM1	-.68						V33	TEH	.610	ZBAZC	33	H
84	113	.97	94	PCT	15	P3	BM1	-.68						09H	V32	.560	ZPUFZ	79	H
110	113	.91	111	PCT	21	P2	VG4	-1.25						V33	TEC	.610	ZBAZC	44	C
110	113	1.66	86	PCT	24	P3	VG4	-.84						V34	V34	.560	ZPUFZ	75	C
112	113	.44	74	PCT	12	P2	VG4	.95						V33	TEC	.610	ZBAZC	44	C
112	113	.97	90	PCT	16	P3	VG4	.75						V34	V34	.560	ZPUFZ	75	C
43	114	1.97	91	PCT	36	P2	BM1	.88						TEC	TEH	.610	ZBAZC	4	H
43	114	.58	121	PCT	16	P2	BM2	-.92						TEC	TEH	.610	ZBAZC	4	H
43	114	.95	84	PCT	15	P3	BM2	-.60						08C	V33	.560	ZPUFZ	74	C
43	114	1.98	83	PCT	27	P3	BM1	.77						08H	V33	.560	ZPUFZ	79	H
43	114			TBP										TEC	TEC	.610	ZBAZC	1000	C
45	114	.57	92	PCT	16	P2	BM1	.80						TEC	TEH	.610	ZBAZC	4	H
45	114	.88	72	PCT	22	P2	BM2	-.90						TEC	TEH	.610	ZBAZC	4	H
45	114	1.32	101	PCT	29	P2	BM2	.98						TEC	TEH	.610	ZBAZC	4	H
45	114	1.26	85	PCT	19	P3	BM2	-.78						08C	V33	.560	ZPUFZ	74	C
45	114	1.67	89	PCT	24	P3	BM2	.63						08C	V33	.560	ZPUFZ	74	C
45	114	.76	111	PCT	12	P3	BM1	.80						08H	V33	.560	ZPUFZ	79	H
45	114			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	114	.88	109	PCT	22	P2	BM2	-.95						TEC	TEH	.610	ZBAZC	4	H
47	114	.37	42	PCT	12	P2	BM2	1.00						TEC	TEH	.610	ZBAZC	4	H
47	114	1.31	90	PCT	20	P3	BM2	-.77						08C	V33	.560	ZPUFZ	74	C
47	114	.77	98	PCT	13	P3	BM2	.78						08C	V33	.560	ZPUFZ	74	C
47	114			TBP										TEC	TEC	.610	ZBAZC	1000	C
49	114	.36	63	PCT	11	P2	BM2	-1.02						TEC	TEH	.610	ZBAZC	4	H
49	114	.79	86	PCT	21	P2	BM2	.99						TEC	TEH	.610	ZBAZC	4	H
49	114	.67	100	PCT	11	P3	BM2	-.76						09C	V33	.560	ZPUFZ	74	C
49	114	1.40	94	PCT	21	P3	BM2	.78						09C	V33	.560	ZPUFZ	74	C
51	114	.26	77	PCT	9	P2	BM2	.89						TEC	TEH	.610	ZBAZC	4	H
51	114	.50	100	PCT	9	P3	BM2	.84						09C	V33	.560	ZPUFZ	74	C
113	114	.47	104	PCT	13	P2	VG4	.97						V33	TEC	.610	ZBAZC	44	C
113	114	.92	84	PCT	15	P3	VG4	.84						V34	V34	.560	ZPUFZ	75	C
117	114	.46	129	PCT	13	P2	VG4	-.83						V33	TEC	.610	ZBAZC	44	C
117	114	.92	89	PCT	15	P3	VG4	-.83						V34	V34	.560	ZPUFZ	75	C
42	115	1.01	97	PCT	24	P2	BM2	.87						TEC	TEH	.610	ZBAZC	4	H
42	115	1.41	94	PCT	21	P3	BM2	.82						08C	V33	.560	ZPUFZ	74	C
42	115			TBP										TEC	TEC	.610	ZBAZC	1000	C
44	115	.27	29	PCT	9	P2	BM2	1.00						TEC	TEH	.610	ZBAZC	4	H
44	115	.43	62	PCT	8	P3	BM2	.87						08C	V33	.560	ZPUFZ	74	C
44	115			TBP										TEC	TEC	.610	ZBAZC	1000	C
50	115	.25	85	PCT	8	P2	BM2	.90						TEC	TEH	.610	ZBAZC	4	H
50	115	.71	87	PCT	12	P3	BM2	.76						09C	V33	.560	ZPUFZ	74	C
60	115	.31	72	PCT	10	P2	VG3	-.56						V33	TEH	.610	ZBAZC	28	H
60	115	.61	88	PCT	10	P3	VG3	-.56						V33	V33	.560	ZPUFZ	79	H
66	115	.66	81	PCT	18	P2	VG3	-.64						V33	TEH	.610	ZBAZC	28	H
66	115	.96	89	PCT	15	P3	VG3	-.64						V33	V33	.560	ZPUFZ	79	H
108	115	.31	130	PCT	9	P2	VG5	-.80						V33	TEC	.610	ZBAZC	58	C
39	116	.40	135	PCT	10	P2	BM1	-.93						TEC	TEH	.610	ZBAZC	3	H
39	116	.23	131	PCT	6	P2	VG3	-.87						TEC	TEH	.610	ZBAZC	3	H
39	116	.84	86	PCT	11	P3	BM1	-.93						08H	V33	.560	ZPUFZ	81	H
39	116	.60	86	PCT	8	P3	VG3	-.87						08H	V33	.560	ZPUFZ	81	H
39	116			TBP										TEC	TEC	.610	ZBAZC	1000	C
43	116	.42	100	PCT	10	P2	BM1	-.98						TEC	TEH	.610	ZBAZC	3	H
43	116	.72	119	PCT	10	P3	BM1	-.98						08H	V33	.560	ZPUFZ	81	H
43	116			TBP										TEC	TEC	.610	ZBAZC	1000	C
49	116	.28	96	PCT	7	P2	09H	.90						TEC	TEH	.610	ZBAZC	3	H
40	117	1.02	112	PCT	21	P2	VG3	.84						TEC	TEH	.610	ZBAZC	3	H
40	117	1.36	78	PCT	20	P3	VG3	.80						V33	V33	.560	ZPUFZ	82	C

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRNID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
40	117			TBP										TEC	TEC	.610	ZBAZC	1000	C
42	117	1.29	121	PCT	24	P2	V83	.84						TEC	TEH	.610	ZBAZC	3	H
42	117	.54	147	PCT	12	P2	BM2	.84						TEC	TEH	.610	ZBAZC	3	H
42	117	1.81	90	PCT	25	P3	V83	.75						08C	V83	.580	ZPUFZ	74	C
42	117	.80	98	PCT	13	P3	BM2	.74						08C	V83	.580	ZPUFZ	74	C
42	117			TBP										TEC	TEC	.610	ZBAZC	1000	C
48	117	.35	140	PCT	9	P2	BM1	.89						TEC	TEH	.610	ZBAZC	3	H
48	117	.73	88	PCT	10	P3	BM1	.89						BM1	V83	.580	ZPUFZ	81	H
48	117	.49	70	PCT	7	P3	V83	.24						BM1	V83	.580	ZPUFZ	81	H
48	117	.60	90	PCT	8	P3	V83	.89						BM1	V83	.580	ZPUFZ	81	H
116	117	.55	119	PCT	15	P2	V83	.74						V83	TEC	.610	ZBAZC	44	C
116	117	.71	120	PCT	16	P2	V84	-.89						V83	TEC	.610	ZBAZC	44	C
116	117	1.29	90	PCT	20	P3	V84	-.88						V84	V84	.580	ZPUFZ	75	C
116	117	.95	94	PCT	15	P3	V83	.74						V83	V83	.580	ZPUFZ	79	H
37	118	.84	99	PCT	22	P2	BM1	-.91						TEC	TEH	.610	ZBAZC	4	H
37	118	1.31	102	PCT	16	P3	BM1	-.91						08H	V83	.580	ZPUFZ	82	H
37	118	.38	107	PCT	5	P3	V83	-1.19						08H	V83	.580	ZPUFZ	82	H
37	118			TBP										TEC	TEC	.610	ZBAZC	1000	C
41	118	.95	64	PCT	23	P2	BM1	-.88						TEC	TEH	.610	ZBAZC	4	H
41	118	1.66	84	PCT	21	P3	BM1	-.88						08H	V83	.580	ZPUFZ	81	H
41	118			TBP										TEC	TEC	.610	ZBAZC	1000	C
43	118	.66	83	PCT	18	P2	BM1	-.91						TEC	TEH	.610	ZBAZC	4	H
43	118	.94	108	PCT	12	P3	BM1	-.91						08H	V83	.580	ZPUFZ	81	H
43	118			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	118	.20	68	PCT	7	P2	BM1	.85						TEC	TEH	.610	ZBAZC	4	H
47	118	.23	60	PCT	3	P3	BM1	.86						08H	V83	.580	ZPUFZ	81	H
85	118	.31	98	PCT	10	P2	BM1	-.89						V83	TEH	.610	ZBAZC	34	H
85	118	.74	87	PCT	12	P3	BM1	-.89						09H	V82	.580	ZPUFZ	79	H
87	118	.20	33	PCT	7	P2	BM1	-.81						V83	TEH	.610	ZBAZC	34	H
87	118	.40	98	PCT	6	P3	BM1	-.81						09H	V82	.580	ZPUFZ	79	H
89	118	.46	31	PCT	14	P2	BM1	.83						V83	TEH	.610	ZBAZC	34	H
89	118	1.02	104	PCT	15	P3	BM1	.83						09H	V82	.580	ZPUFZ	79	H
107	118	.45	103	PCT	12	P2	V84	.90						V83	TEC	.610	ZBAZC	44	C
107	118	1.00	88	PCT	16	P3	V84	.89						V84	V24	.580	ZPUFZ	75	C
36	119	1.59	98	PCT	32	P2	BM1	-.91						TEC	TEH	.610	ZBAZC	4	H
36	119	1.65	98	PCT	33	P2	BM1	.85						TEC	TEH	.610	ZBAZC	4	H
36	119	2.65	84	PCT	30	P3	BM1	-.91						08H	V23	.580	ZPUFZ	82	H
36	119	1.90	79	PCT	23	P3	BM1	.86						08H	V23	.580	ZPUFZ	82	H
36	119			TBP										TEC	TEC	.610	ZBAZC	1000	C
38	119	1.42	98	PCT	30	P2	BM1	-.91						TEC	TEH	.610	ZBAZC	4	H
38	119	.37	65	PCT	11	P2	V83	.75						TEC	TEH	.610	ZBAZC	4	H
38	119	.53	63	PCT	15	P2	BM2	.91						TEC	TEH	.610	ZBAZC	4	H
38	119	.70	89	PCT	12	P3	V83	.83						08C	V23	.580	ZPUFZ	74	C
38	119	.75	87	PCT	12	P3	BM2	.80						08C	V23	.580	ZPUFZ	74	C
38	119	1.01	94	PCT	13	P3	BM1	-.91						08H	V23	.580	ZPUFZ	82	H
38	119			TBP										TEC	TEC	.610	ZBAZC	1000	C
40	119	.46	111	PCT	14	P2	BM1	-.98						TEC	TEH	.610	ZBAZC	4	H
40	119	.28	49	PCT	9	P2	BM2	.89						TEC	TEH	.610	ZBAZC	4	H
40	119	.52	71	PCT	9	P3	BM2	.82						08C	V23	.580	ZPUFZ	74	C
40	119	.49	150	PCT	6	P3	BM1	-.98						08H	V23	.580	ZPUFZ	81	H
40	119			TBP										TEC	TEC	.610	ZBAZC	1000	C
42	119	.46	108	PCT	14	P2	BM1	-1.00						TEC	TEH	.610	ZBAZC	4	H
42	119	.69	94	PCT	9	P3	BM1	-1.00						08H	V23	.580	ZPUFZ	81	H
42	119			TBP										TEC	TEC	.610	ZBAZC	1000	C
46	119	.24	123	PCT	8	P2	BM1	.80						TEC	TEH	.610	ZBAZC	4	H
46	119	.32	34	PCT	4	P3	BM1	.80						08H	V23	.580	ZPUFZ	81	H
48	119	.41	139	PCT	13	P2	BM1	.89						TEC	TEH	.610	ZBAZC	4	H
48	119	.50	78	PCT	7	P3	BM1	.89						09H	V23	.580	ZPUFZ	81	H
33	120	.61	108	PCT	14	P2	BM1	-.98						TEC	TEH	.610	ZBAZC	3	H
33	120	.23	65	PCT	6	P2	V83	.93						TEC	TEH	.610	ZBAZC	3	H
33	120	.32	94	PCT	8	P2	BM2	.98						TEC	TEH	.610	ZBAZC	3	H
33	120	.44	103	PCT	8	P3	V83	.93						08C	V23	.580	ZPUFZ	74	C

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRNID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
35	120	.65	103	PCT	11	P3	V03	.90						08C	V03	.580	ZPUFZ	74	C
35	120	.71	107	PCT	12	P3	BW2	.79						08C	V03	.580	ZPUFZ	74	C
35	120	.61	108	PCT	8	P3	BW1	-.98						08H	V03	.580	ZPUFZ	82	H
35	120			TBP										TEC	TEC	.610	ZBAZC	1000	C
43	120	.28	89	PCT	7	P2	BW1	.89						TEC	TEH	.610	ZBAZC	3	H
43	120	.64	80	PCT	8	P3	BW1	.89						08H	V03	.580	ZPUFZ	81	H
45	120	.79	121	PCT	17	P2	BW1	.89						TEC	TEH	.610	ZBAZC	3	H
45	120	.53	116	PCT	12	P2	V03	-.82						TEC	TEH	.610	ZBAZC	3	H
45	120	1.23	102	PCT	16	P3	BW1	1.08						08H	V03	.580	ZPUFZ	81	H
45	120	1.06	88	PCT	14	P3	V03	-.82						08H	V03	.580	ZPUFZ	81	H
67	120	.56	76	PCT	16	P2	BW1	.54						V03	TEH	.610	ZBAZC	28	H
67	120	1.09	97	PCT	14	P3	BW1	.54						09H	V02	.580	ZPUFZ	82	H
69	120	.39	98	PCT	12	P2	BW1	.71						V03	TEH	.610	ZBAZC	28	H
69	120	.66	128	PCT	8	P3	BW1	.71						09H	V02	.580	ZPUFZ	82	H
34	121	2.34	113	PCT	35	P2	BW1	-.82						TEC	TEH	.610	ZBAZC	3	H
34	121	2.51	90	PCT	29	P3	BW1	-.82						08H	V03	.580	ZPUFZ	82	H
34	121			TBP										TEC	TEC	.610	ZBAZC	1000	C
38	121	.36	124	PCT	9	P2	V03	.70						TEC	TEH	.610	ZBAZC	3	H
38	121	.74	80	PCT	12	P3	V03	.80						V03	V03	.580	ZPUFZ	82	C
40	121	.61	123	PCT	14	P2	V03	.70						TEC	TEH	.610	ZBAZC	3	H
40	121	.81	83	PCT	13	P3	V03	.82						V03	V03	.580	ZPUFZ	82	C
108	121	.43	117	PCT	12	P2	V04	-1.23						V03	TEC	.610	ZBAZC	44	C
108	121	1.17	96	PCT	18	P3	V04	-.76						V04	V04	.580	ZPUFZ	75	C
110	121	.38	121	PCT	11	P2	V04	-1.30						V03	TEC	.610	ZBAZC	44	C
110	121	.91	93	PCT	15	P3	V04	-.78						V04	V04	.580	ZPUFZ	75	C
120	121	.52	63	PCT	15	P2	V02	.72						V03	TEH	.610	ZBAZC	28	H
120	121	1.27	90	PCT	19	P3	V02	.72						V02	V02	.580	ZPUFZ	79	H
33	122	9.39	85	PCT	55	P2	BW1	-.93						TEC	TEH	.610	ZBAZC	4	H
33	122	7.41	82	PCT	56	P3	BW1	-.84						08H	V03	.580	ZPUFZ	81	H
33	122			TBP										TEC	TEC	.610	ZBAZC	1000	C
35	122	.41	96	PCT	12	P2	BW1	-1.02						TEC	TEH	.610	ZBAZC	4	H
35	122	.32	37	PCT	10	P2	BW1	.93						TEC	TEH	.610	ZBAZC	4	H
35	122	.81	109	PCT	10	P3	BW1	-1.02						08H	V03	.580	ZPUFZ	82	H
35	122	.59	78	PCT	8	P3	BW1	.93						08H	V03	.580	ZPUFZ	82	H
35	122			TBP										TEC	TEC	.610	ZBAZC	1000	C
47	122	.39	56	PCT	12	P2	BW1	.84						TEC	TEH	.610	ZBAZC	4	H
47	122	.66	100	PCT	9	P3	BW1	.84						08H	V03	.580	ZPUFZ	81	H
165	122	.25	97	PCT	6	P2	BW2	.69						V03	TEC	.610	ZBAZC	59	C
165	122	.85	97	PCT	14	P3	BW2	1.04						11C	V05	.580	ZPUFZ	73	C
167	122	.40	101	PCT	10	P2	BW2	.67						V03	TEC	.610	ZBAZC	59	C
167	122	.99	95	PCT	16	P3	BW2	.98						11C	V05	.580	ZPUFZ	73	C
29	124	.37	136	PCT	9	P2	BW1	-.86						TEC	TEH	.610	ZBAZC	3	H
29	124	1.49	99	PCT	27	P2	BW1	.77						TEC	TEH	.610	ZBAZC	3	H
29	124	.85	100	PCT	11	P3	BW1	-.86						08H	V03	.580	ZPUFZ	82	H
29	124	2.03	84	PCT	24	P3	BW1	.77						08H	V03	.580	ZPUFZ	82	H
29	124			TBP										TEC	TEC	.610	ZBAZC	1000	C
31	124	1.28	114	PCT	24	P2	BW1	-.80						TEC	TEH	.610	ZBAZC	3	H
31	124	1.80	93	PCT	22	P3	BW1	-.80						08H	V03	.580	ZPUFZ	82	H
31	124			TBP										TEC	TEC	.610	ZBAZC	1000	C
159	124	.59	80	PCT	17	P2	V03	.87						V03	TEH	.610	ZBAZC	28	H
159	124	1.16	86	PCT	18	P3	V03	.79						V03	V03	.580	ZPUFZ	82	C
30	125	.37	148	PCT	9	P2	BW1	-.93						TEC	TEH	.610	ZBAZC	3	H
30	125	.98	108	PCT	12	P3	BW1	-.98						08H	V03	.580	ZPUFZ	82	H
30	125			TBP										TEC	TEC	.610	ZBAZC	1000	C
25	126	.44	114	PCT	13	P2	BW1	-.93						TEC	TEH	.610	ZBAZC	4	H
25	126	.72	103	PCT	9	P3	BW1	-.93						08H	V03	.580	ZPUFZ	82	H
25	126			TBP										TEC	TEC	.610	ZBAZC	1000	C
161	126	.32	93	PCT	8	P2	V01	.56						V03	TEH	.610	ZBAZC	27	H
161	126	.65	83	PCT	8	P3	V01	.56						V01	V01	.580	ZPUFZ	82	H

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRMID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
165	126	.53	141	PCT	12	P2	SW2	-.90						V83	TEC	.610	ZBAZC	59	C
165	126	1.30	92	PCT	20	P3	SW2	-.83						11C	V85	.580	ZPUFZ	73	C
165	126	.63	96	PCT	11	P3	SW2	.99						11C	V85	.580	ZPUFZ	73	C
22	127	.20	70	PCT	7	P2	SW1	-.95						TEC	TEH	.610	ZBAZC	4	H
22	127	.46	103	PCT	6	P3	SW1	-.95						08H	V83	.580	ZPUFZ	82	H
22	127			TBP										TEC	TEC	.610	ZBAZC	1000	C
24	127	.35	69	PCT	11	P2	SW1	.79						TEC	TEH	.610	ZBAZC	4	H
24	127	.55	113	PCT	7	P3	SW1	.79						08H	V83	.580	ZPUFZ	82	H
24	127			TBP										TEC	TEC	.610	ZBAZC	1000	C
28	127	.47	98	PCT	14	P2	V83	.98						TEC	TEH	.610	ZBAZC	4	H
28	127	.66	81	PCT	11	P3	V83	.81						V83	V83	.580	ZPUFZ	82	C
164	127	.90	116	PCT	21	P2	SW2	-.78						V83	TEC	.610	ZBAZC	58	C
164	127	1.63	96	PCT	24	P3	SW2	-.94						11C	V85	.580	ZPUFZ	73	C
166	127	.46	132	PCT	13	P2	SW2	-.75						V83	TEC	.610	ZBAZC	58	C
166	127	1.01	95	PCT	16	P3	SW2	-.98						11C	V85	.580	ZPUFZ	73	C
166	127	.87	85	PCT	14	P3	SW2	.88						11C	V85	.580	ZPUFZ	73	C
157	128	.34	82	PCT	11	P2	V83	.68						V83	TEH	.610	ZBAZC	26	H
157	128	.67	95	PCT	11	P3	V83	.11						V83	V83	.580	ZPUFZ	82	C
157	128	1.00	84	PCT	16	P3	V83	.73						V83	V83	.580	ZPUFZ	82	C
164	129	.69	84	PCT	15	P2	SW2	.91						V83	TEC	.610	ZBAZC	59	C
164	129	1.42	93	PCT	21	P3	SW2	.88						11C	V85	.580	ZPUFZ	73	C
111	130	.25	118	PCT	8	P2	V84	-.85						V83	TEC	.610	ZBAZC	46	C
111	130	.70	89	PCT	12	P3	V84	-.75						V84	V84	.580	ZPUFZ	75	C
163	130	.65	75	PCT	15	P2	SW2	.83						V83	TEC	.610	ZBAZC	59	C
163	130	1.48	99	PCT	22	P3	SW2	.90						11C	V85	.580	ZPUFZ	73	C
164	131	.58	108	PCT	16	P2	SW2	.83						V83	TEC	.610	ZBAZC	58	C
164	131	1.14	97	PCT	18	P3	SW2	.88						11C	V85	.580	ZPUFZ	73	C
163	132	.33	74	PCT	10	P2	V85	.78						V83	TEC	.610	ZBAZC	58	C
4	133	.49	95	PCT	11	P3	SW2	-.89						08H	08C	.540	ZPUPH	75	H
118	133	.44	82	PCT	13	P2	V83	.81						V83	TEH	.610	ZBAZC	26	H
118	133	1.03	84	PCT	16	P3	V83	.73						V83	V83	.580	ZPUFZ	82	C
136	133	.44	98	PCT	13	P2	V83	-.89						V83	TEH	.610	ZBAZC	26	H
136	133	.89	82	PCT	14	P3	V83	-.74						V83	V83	.580	ZPUFZ	82	C
158	133	.37	117	PCT	9	P2	SW2	-.88						V83	TEC	.610	ZBAZC	57	C
158	133	1.02	108	PCT	16	P3	SW2	-.84						11C	V85	.580	ZPUFZ	73	C
162	133	.31	155	PCT	8	P2	SW2	.83						V83	TEC	.610	ZBAZC	57	C
162	133	.84	104	PCT	14	P3	SW2	.83						11C	V85	.580	ZPUFZ	73	C
119	134	.29	130	PCT	9	P2	V84	-.97						V83	TEC	.610	ZBAZC	46	C
119	134	1.04	92	PCT	17	P3	V84	-.94						V84	V84	.580	ZPUFZ	73	C
125	134	.32	111	PCT	10	P2	V84	-.91						V83	TEC	.610	ZBAZC	46	C
125	134	.88	94	PCT	14	P3	V84	-.87						V84	V84	.580	ZPUFZ	73	C
161	134	.76	83	PCT	16	P2	SW2	.84						V83	TEC	.610	ZBAZC	57	C
161	134	.44	102	PCT	8	P3	SW2	-.93						11C	V85	.580	ZPUFZ	73	C
161	134	1.53	93	PCT	23	P3	SW2	.92						11C	V85	.580	ZPUFZ	73	C
150	135	.37	134	PCT	10	P2	SW2	-.77						V83	TEC	.610	ZBAZC	56	C
150	135	.70	100	PCT	12	P3	SW2	-.80						11C	V85	.580	ZPUFZ	73	C
156	135	.81	125	PCT	19	P2	SW2	-.67						V83	TEC	.610	ZBAZC	56	C
156	135	1.36	101	PCT	21	P3	SW2	-.86						11C	V85	.580	ZPUFZ	73	C
158	135	.29	101	PCT	8	P2	SW2	-.77						V83	TEC	.610	ZBAZC	56	C
158	135	.49	101	PCT	9	P3	SW2	-.88						11C	V85	.580	ZPUFZ	73	C
160	135	1.14	102	PCT	24	P2	SW2	-.68						V83	TEC	.610	ZBAZC	56	C
160	135	1.85	93	PCT	26	P3	SW2	-.91						11C	V85	.580	ZPUFZ	73	C
162	135	1.01	115	PCT	22	P2	SW2	-.77						V83	TEC	.610	ZBAZC	56	C
162	135	1.48	94	PCT	22	P3	SW2	-.88						11C	V85	.580	ZPUFZ	73	C

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRMID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
37	136	.19	113	PCT	6	P2	V03	-.85						TEC	TEH	.610	ZBAZC	6	H
139	136	.67	99	PCT	17	P2	BM2	.00						V83	TEC	.610	ZBAZC	56	C
139	136	1.53	92	PCT	23	P3	BM2	-.61						11C	V85	.560	ZPUFZ	73	C
101	136	.45	86	PCT	12	P2	BM2	.85						V83	TEC	.610	ZBAZC	56	C
101	136	1.15	88	PCT	18	P3	BM2	.93						11C	V85	.560	ZPUFZ	73	C
122	137	.22	130	PCT	7	P2	V04	-.88						V83	TEC	.610	ZBAZC	46	C
122	137	.81	95	PCT	14	P3	V04	-.84						V84	V84	.560	ZPUFZ	73	C
138	137	.45	112	PCT	11	P2	BM2	-.87						V83	TEC	.610	ZBAZC	57	C
138	137	1.27	92	PCT	20	P3	BM2	-.88						11C	V85	.560	ZPUFZ	73	C
160	137	.29	88	PCT	7	P2	BM2	.85						V83	TEC	.610	ZBAZC	57	C
160	137	.73	84	PCT	12	P3	BM2	.95						11C	V85	.560	ZPUFZ	73	C
98	139	.34	107	PCT	8	P2	V02	.64						V83	TEH	.610	ZBAZC	25	H
98	139	.72	80	PCT	9	P3	V02	.64						V82	V82	.560	ZPUFZ	82	H
100	139	.27	83	PCT	7	P2	V02	.70						V83	TEH	.610	ZBAZC	25	H
100	139	.53	93	PCT	7	P3	V02	.70						V82	V82	.560	ZPUFZ	82	H
117	140	.34	130	PCT	9	P2	V03	-.68						V83	TEC	.610	ZBAZC	49	C
117	140	.98	83	PCT	16	P3	V03	-.69						V83	V83	.560	ZPUFZ	82	C
83	142	.42	99	PCT	10	P2	V03	-.60						V83	TEH	.610	ZBAZC	23	H
83	142	.92	85	PCT	15	P3	V03	-.76						V83	V83	.560	ZPUFZ	82	C
101	142	.30	112	PCT	7	P2	BM1	.91						V83	TEH	.610	ZBAZC	25	H
101	142	.47	81	PCT	6	P3	BM1	.91						10H	V82	.560	ZPUFZ	82	H
102	143	.33	114	PCT	8	P2	V02	.73						V83	TEH	.610	ZBAZC	23	H
102	143	.82	88	PCT	10	P3	V02	.68						V82	V82	.560	ZPUFZ	82	H
120	143	.70	95	PCT	16	P2	V02	.67						V83	TEH	.610	ZBAZC	23	H
120	143	.98	91	PCT	12	P3	V02	.67						V82	V82	.560	ZPUFZ	82	H
120	143	.75	96	PCT	9	P3	V02	.74						V82	V82	.560	ZPUFZ	82	H
113	146	.53	103	PCT	12	P2	V02	-.68						V83	TEH	.610	ZBAZC	23	H
113	146	1.34	94	PCT	17	P3	V02	-.68						V82	V82	.560	ZPUFZ	82	H
63	148	.25	41	PCT	8	P2	V03	-.50						V83	TEH	.610	ZBAZC	24	H
63	148	.79	59	PCT	13	P3	V03	-.76						V83	V83	.560	ZPUFZ	82	C
109	148	.23	51	PCT	8	P2	V03	-.98						V83	TEH	.610	ZBAZC	24	H
109	148	.75	84	PCT	12	P3	V03	-.60						V83	V83	.560	ZPUFZ	82	C
112	149	.32	116	PCT	10	P2	V03	1.03						V83	TEH	.610	ZBAZC	22	H
112	149	1.14	87	PCT	18	P3	V03	.79						V83	V23	.560	ZPUFZ	82	C
118	149	.30	92	PCT	10	P2	BM1	-1.34						V83	TEH	.610	ZBAZC	22	H
118	149	.52	99	PCT	7	P3	BM1	-1.34						10H	V81	.560	ZPUFZ	82	H
120	149	.28	86	PCT	9	P2	BM1	-.94						V83	TEH	.610	ZBAZC	22	H
120	149	.64	91	PCT	8	P3	BM1	-.94						10H	V81	.560	ZPUFZ	82	H
115	150	.79	114	PCT	17	P2	BM1	-.73						V83	TEH	.610	ZBAZC	23	H
115	150	1.15	89	PCT	14	P3	BM1	-.73						10H	V81	.560	ZPUFZ	82	H
80	151	.28	57	PCT	7	P2	V02	-.69						V83	TEH	.610	ZBAZC	21	H
80	151	.67	93	PCT	9	P3	V02	-.69						V82	V22	.560	ZPUFZ	82	H
49	154	.29	61	PCT	9	P2	V03	.75						V83	TEC	.610	ZBAZC	50	C
50	157	.25	97	PCT	7	P2	BM2	-1.80						V83	TEC	.610	ZBAZC	50	C
50	157	.60	82	PCT	10	P3	BM2	-1.56						09C	V83	.560	ZPUFZ	77	C
120	157	.29	56	PCT	9	P2	V03	-.90						V83	TEC	.610	ZBAZC	50	C
120	157	.50	72	PCT	8	P3	V03	-.71						V83	V23	.560	ZPUFZ	82	C
49	158	.25	95	PCT	8	P2	V03	.97						V83	TEC	.610	ZBAZC	50	C
113	158	.16	92	PCT	5	P2	V05	.90						V83	TEC	.610	ZBAZC	50	C
61	164	.35	89	PCT	9	P2	BM2	.80						V83	TEC	.610	ZBAZC	53	C
61	164	.76	58	PCT	12	P3	BM2	.81						09C	V24	.560	ZPUFZ	77	C
4	165	.52	122	PCT	11	P3	BM2	.54						08H	08C	.540	ZPUPH	73	H

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRMID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
104	165	.21	47	PCT	7	P2	BW2	.90						V83	TEC	.610	ZBAZC	50	C
104	165	.60	95	PCT	10	P3	BW2	.92						10C	V84	.580	ZPUFZ	73	C
112	165	.30	110	PCT	10	P2	BW1	-.73						V83	TEH	.610	ZBAZC	20	H
112	165	.07	108	PCT	9	P3	BW1	-.73						10H	V82	.580	ZPUFZ	82	H
99	166	.23	138	PCT	7	P2	BW2	.80						V83	TEC	.610	ZBAZC	50	C
99	166	.39	93	PCT	7	P3	BW2	1.01						10C	V84	.580	ZPUFZ	73	C
96	169	.23	67	PCT	7	P2	BW2	-.82						V83	TEC	.610	ZBAZC	52	C
96	169	.36	94	PCT	7	P3	BW2	-.88						10C	V84	.580	ZPUFZ	73	C
87	170	.22	142	PCT	7	P2	BW2	.83						V83	TEC	.610	ZBAZC	52	C
87	170	.31	108	PCT	6	P3	BW2	.94						09C	V84	.580	ZPUFZ	73	C
101	170	.27	148	PCT	8	P2	BW2	.79						V83	TEC	.610	ZBAZC	52	C
101	170	.33	81	PCT	6	P3	BW2	.88						10C	V84	.580	ZPUFZ	73	C
44	173	.21	87	PCT	7	P2	V83	-.67						V83	TEC	.610	ZBAZC	52	C
4	175	.45	113	PCT	10	P3	BW1	-.82						08H	08C	.540	ZPUPH	75	H
109	180	.31	81	PCT	7	P2	V83	-.72						V83	TEH	.610	ZBAZC	17	H
109	180	.93	83	PCT	15	P3	V83	-.80						V83	V83	.580	ZPUFZ	82	C
108	181	.53	127	PCT	15	P2	V83	-.90						V83	TEH	.610	ZBAZC	18	H
105	181	1.34	80	PCT	20	P3	V83	-.92						V83	V83	.580	ZPUFZ	82	C
ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

APPENDIX D

PLI & PLP

DATA SHEETS

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
86	15	1.02	84	PLP		8	01C	1.11						01C	01C	.600	ZPAMZ	79	C
86	15	1.13	88	PLP		8	01C	1.34						01C	01C	.600	ZPAMZ	79	C
87	16	1.34	83	PLP		8	01C	1.28						01C	01C	.600	ZPAMZ	79	C
38	79	1.94	88	PLP		8	TCH	6.09						TEH	01H	.600	ZPAMZ	80	H
39	80	1.29	82	PLP		8	TCH	6.01						TEH	01H	.600	ZPAMZ	80	H
157	142	.83	67	PLP		8	07H	27.83						07H	08H	.600	ZPAMZ	80	H
143	150	.27	69	PLP		8	02C	18.45						02C	03C	.600	ZPAMZ	79	C
143	150	.21	71	PLP		8	02C	18.91						02C	03C	.600	ZPAMZ	79	C
142	151	.21	241	PLP		8	02C	18.63						02C	03C	.600	ZPAMZ	79	C
144	151	.15	70	PLP		8	02C	18.50						02C	03C	.600	ZPAMZ	79	C
143	152	.31	68	PLP		8	02C	19.09						02C	03C	.600	ZPAMZ	79	C
145	152	.34	73	PLP		8	02C	18.83						02C	03C	.600	ZPAMZ	79	C
144	153	.86	65	PLP		8	02C	18.64						02C	03C	.600	ZPAMZ	79	C
146	153	.60	65	PLP		8	02C	18.77						02C	03C	.600	ZPAMZ	79	C
145	154	.71	70	PLP		8	02C	18.62						02C	03C	.600	ZPAMZ	79	C
144	155	.20	63	PLP		8	02C	9.56						02C	03C	.600	ZPAMZ	79	C
144	155	.55	130	PLP		5	08C	24.27						08C	09C	.600	ZPAMZ	83	C
143	156	.11	78	PLP		8	02C	20.40						02C	03C	.600	ZPAMZ	79	C
145	156	.06	57	PLP		8	02C	16.95						02C	03C	.600	ZPAMZ	79	C
145	156	.07	62	PLP		8	02C	17.12						02C	03C	.600	ZPAMZ	79	C
ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRMID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L

ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	INCH2	I	CRLEN	CRWID	CEG	BEGT	ENDT	PDIA	PTYPE	CAL	L
17	62	1.25	83	PLP		B	TSH	2.08						TSH	TSH	.600	ZPAMZ	83	H
19	62	.91	81	PLP		B	TSH	1.97						TSH	TSH	.600	ZPAMZ	84	H
53	104	1.91	87	PLP		B	FDP	.56						FDP	FDP	.600	ZPAMZ	80	C
52	105	1.47	85	PLP		B	FDP	.67						FDP	FDP	.600	ZPAMZ	78	C
34	125	1.85	88	PLP		B	FDP	.51						FDP	FDP	.600	ZPAMZ	78	C
36	125	2.01	88	PLP		B	FDP	.53						FDP	FDP	.600	ZPAMZ	78	C
35	126	.66	87	PLP		B	FDP	.55						FDP	FDP	.600	ZPAMZ	78	C
8	199	2.05	87	PLP		B	O2C	.24						O2C	O2C	.600	ZPAMZ	79	C
7	200	2.01	83	PLP		B	O2C	.22						O2C	O2C	.600	ZPAMZ	79	C

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | I | CRLEN | CRWID | CEG | BEGT | ENDT | PDIA | PTYPE | CAL | L |

APPENDIX E

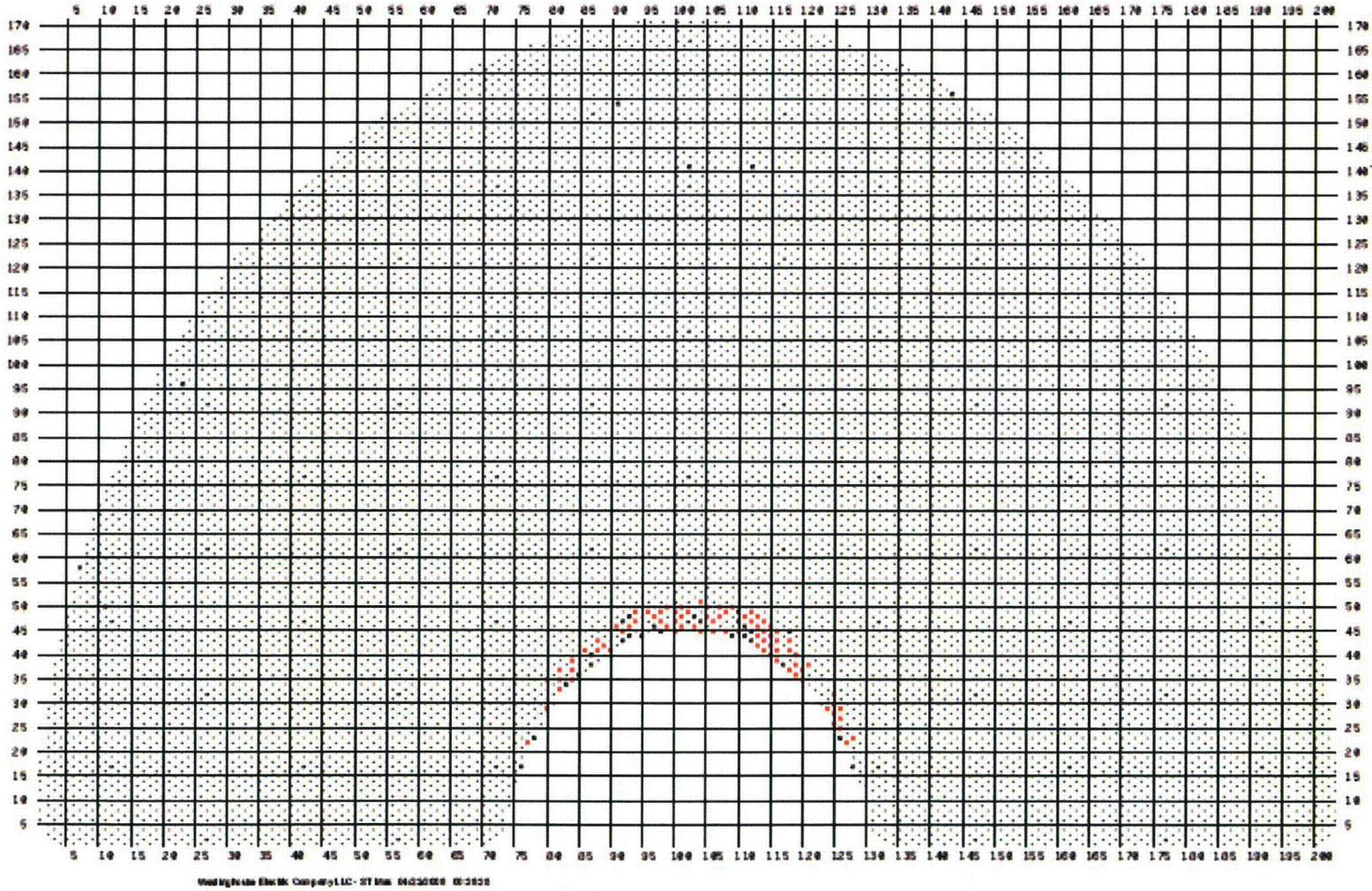
PLUG History
and
Maps

PLUG HISTORY

	STEAM GENERATOR 21		STEAM GENERATOR 22	
OUTAGE/YEAR	**NUMBER OF PLUGS**	**% BOBBIN EXAMINED**	**NUMBER OF PLUGS**	**% BOBBIN EXAMINED**
FACTORY 2002	0	NA	1	NA
BASELINE 2-03	10	100	12	100
U2M12	1	<1%	0	0
U2R12	8	100	7	100
U2R13	14	100	17	100
U2R14	83	100	90	100
TOTAL	**116**		**127**	

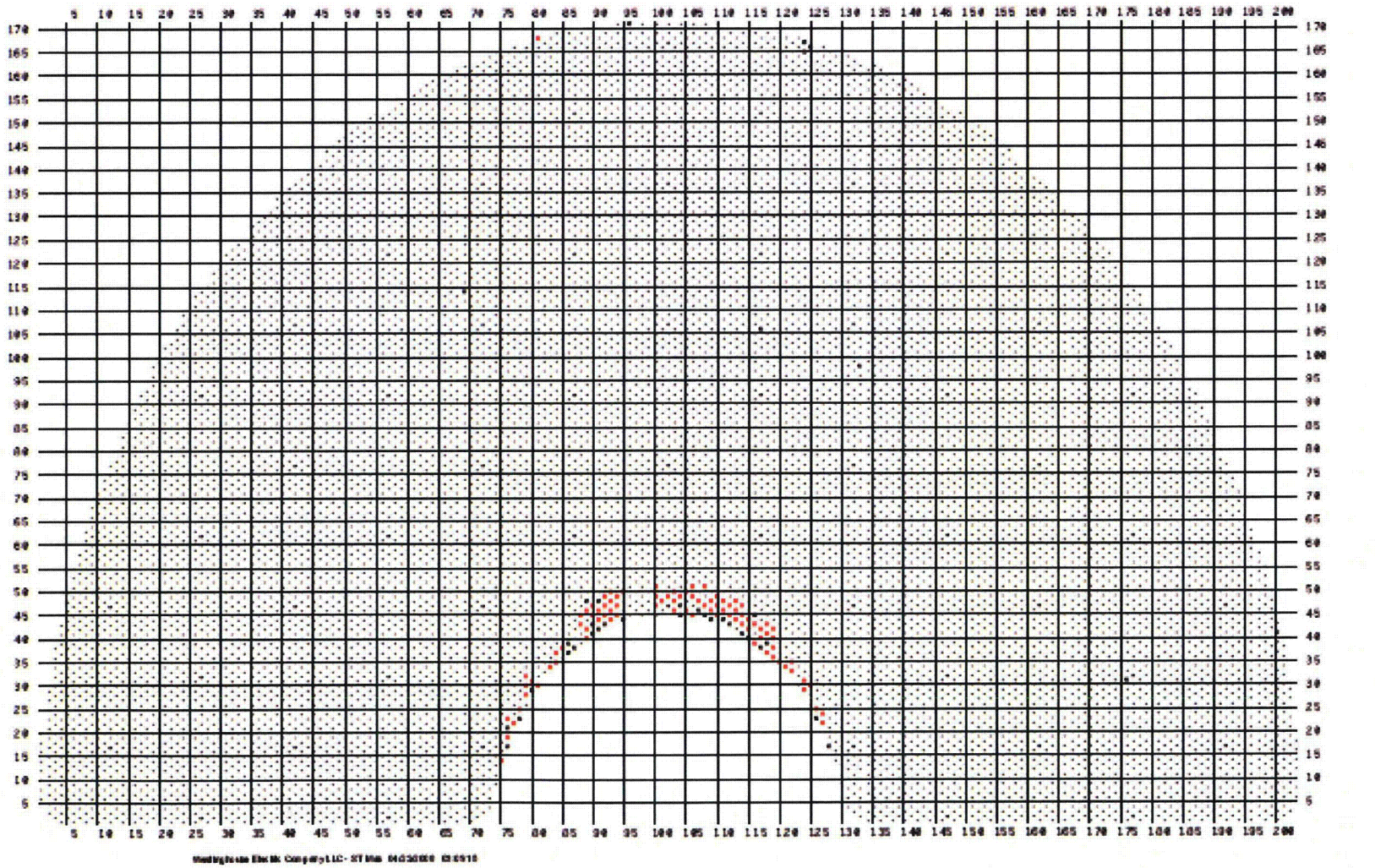
SG - 21 Tubes Plugged in U2R14

Palo Verde U2R14 PVNGS2 2RSG



SG - 22 Tubes Plugged in U2R14

Palo Verde U2R14 PVNGS2 2RSG



APPENDIX F

FORM NIS-1

APS	NIS – 1 FORM OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS
1. OWNER	**ARIZONA PUBLIC SERVICE COMPANY, et al**
1a. ADDRESS	P. O. BOX 52034; PHOENIX, ARIZONA 85072
2. PLANT	PALO VERDE NUCLEAR GENERATING STATION
2a. ADDRESS	5801 SOUTH WINTERSBURG ROAD, TONOPAH, ARIZONA 85354
3. UNIT NUMBER	2
4. OWNERS CERTIFICATE OF AUTHORIZATION	NONE
5. COMMERCIAL SERVICE DATE	9-19-86
6. COMPONENTS INSPECTED:	

COMPONENT OR APPURTENANCE	MANUFACTURER OR INSTALLER	SERIAL NUMBER	STATE OR PROVINCE	NATIONAL BOARD NO
2MRCEE01A STEAM GENERATOR 21	Ansaldo	212	NA	161
2MRCEE01B STEAM GENERATOR 22	Ansaldo	211	NA	160

APS	NIS – 1 BACK OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

7. EXAM DATES	**April 2008**
8. INSPECTION INTERVAL	**3-18-07 to 3-17-17**

9. ABSTRACT OF EXAMINATIONS. INCLUDE A LIST OF EXAMINATIONS AND A STATEMENT CONCERNING STATUS OF WORK REQUIRED FOR CURRENT INTERVAL.

Table 1 in the report summary section documents the number and type of each examination performed.

No degraded or defective tubes were observed during these examinations. A summary of the tubes with indications of degradation is listed in Appendix B and C of this report for SG 21 and 22 respectively. The tubes identified on the following pages were plugged as a result of this examination.

The number of tubes plugged are as follows: SG 21 = 83 tubes

SG 22 = 90 tubes

WE CERTIFY THAT THE STATEMENTS MADE IN THIS REPORT ARE CORRECT AND THE EXAMINATIONS AND CORRECTIVE MEASURES TAKEN CONFORM TO THE RULES OF THE ASME CODE, SECTION XI.

DATE 6-4-08 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY _____

CERTIFICATE OF INSERVICE INSPECTION

I, THE UNDERSIGNED, HOLDING A VALID COMMISSION ISSUED BY THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS AND THE STATE OF PROVINCE OF ARIZONA EMPLOYED BY HSB CT OF HARTFORD, CONNECTICUT HAVE INSPECTED THE COMPONENTS DESCRIBED IN THIS OWNERS REPORT DURING THE PERIOD 4-12-08 TO 6-30-08, AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE OWNER HAS PERFORMED EXAMINATIONS AND TAKEN CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT IN ACCORDANCE WITH THE REQUIREMENTS OF THE ASME CODE, SECTION XI. BY SIGNING THIS CERTIFICATE NEITHER THE INSPECTOR NOR HIS EMPLOYER MAKES ANY WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE EXAMINATIONS AND CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT. FURTHERMORE, NEITHER THE INSPECTOR NOR HIS EMPLOYER SHALL BE LIABLE IN ANY MANNER FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE OR A LOSS OF ANY KIND ARISING FROM OR CONNECTED WITH THIS INSPECTION.

INSPECTOR _____ COMMISSIONS NB 9085 "A.N.I.C" Az 264
NATL' BOARD, STATE, PROVINCE

DATE 6-30-08

APS

NIS – 1 FORM

OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

1. OWNER	**ARIZONA PUBLIC SERVICE COMPANY, et al**
1a. ADDRESS	P. O. BOX 52034; PHOENIX, ARIZONA 85072
2. PLANT	PALO VERDE NUCLEAR GENERATING STATION
2a. ADDRESS	5801 SOUTH WINTERSBURG ROAD, TONOPAH, ARIZONA 85354
3. UNIT NUMBER	2
4. OWNERS CERTIFICATE OF AUTHORIZATION	NONE
5. COMMERCIAL SERVICE DATE	9-19-86

SG 21 Tubes Plugged

ROW	COL
22	77
29	80
35	80
33	82
35	82
37	82
35	84
37	84
39	84
41	86
41	88
43	88
42	89
41	90
46	91
45	92
46	93
47	94
49	94
49	96
48	97
47	98
49	98
46	99
50	99
45	100
47	100
49	100
46	101
48	101
50	101
49	102
46	103
45	104
51	104
48	105
50	105
45	106
47	106
48	107
50	107
43	108
49	108
50	109
45	110
48	111
47	112
49	112
42	113
44	113
46	113
48	113
41	114
43	114
45	114
47	114
40	115
42	115
44	115
46	115
39	116
41	116
43	116
45	116
37	118
41	118
43	118
36	119
38	119
40	119
35	120
37	120
38	121
29	124
26	125
28	125
30	125
32	125
25	126
27	126
29	126
22	127
23	128

SG 22 Tubes Plugged

ROW	COL
14	75
19	76
23	76
22	77
25	78
28	79
30	79
32	79
31	80
30	81
168	81
34	83
35	84
37	84
38	85
43	88
45	88
40	89
42	89
46	89
45	90
47	90
44	91
46	91
45	92
47	92
49	92
44	93
46	93
48	93
50	93
45	94
47	94
49	94
50	95
47	100
49	100
51	100
48	101
49	102
46	103
48	103
50	103
49	104
46	105
50	105
45	106
49	106
51	106
48	107
47	108
51	108
46	109
48	109
45	110
47	110
49	110
46	111
48	111
45	112
47	112
44	113
46	113
48	113
43	114
45	114
47	114
42	115
44	115
39	116
43	116
40	117
42	117
37	118
41	118
43	118
36	119
38	119
40	119
42	119
35	120
34	121
33	122
35	122
29	124
31	124
30	125
25	126
22	127
24	127