

# AFIP-2 Irradiation Summary Report

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May 2011



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**May 2011**

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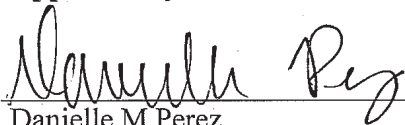
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# AFIP-2 Irradiation Summary Report

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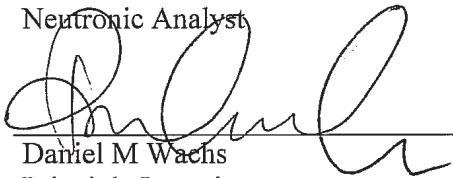
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5/19/2011

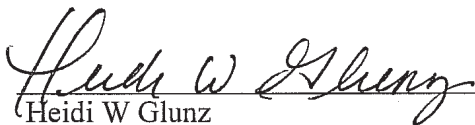
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## SUMMARY

The Advanced Test Reactor (ATR) Full size plate In center flux trap Position (AFIP) experiment AFIP-2 was designed to evaluate the performance of monolithic fuels at a prototypic scale of 2.25 inches x 21.5 inches x 0.050 inches (5.75 cm x 54.6 cm x 0.13cm). The AFIP-2 experiment was fabricated by friction bond (FB) and consists of two plates, one with a zirconium (Zr) diffusion barrier and one with a silicon (Si) enhanced fuel/clad interface<sup>1,2</sup>.

The following report summarizes the life of the AFIP-2 experiment through end of irradiation, including a brief description of the safety analysis, as-run neutronic analysis results, hydraulic testing results, and thermal analysis results. The safety analyses performed for AFIP-2 are summarized in Table 5 of the following report.

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## ACRONYMS

Al	Aluminum
ATR	Advanced Test Reactor
AFIP	<u>A</u> TR <u>F</u> ull-size plate <u>I</u> n center flux trap <u>P</u> osition
CFT	Center Flux Trap
DAS	Data Acquisition System
DNBR	Departure from Nucleate Boiling Ratio
ECAR	Engineering Calculations and Analysis Report
EFPD	Effective Full Power Days
FB	Friction Bond
FD	Fuel Development
FIR	Flow Instability Ratio
GTRI	Global Threat Reduction Initiative
MCNP	Monte Carlo N-Particle
Mo	Molybdenum
RERTR	Reduced Enrichment Research and Test Reactor
Si	Silicon
U	Uranium
U-Mo	Uranium-Molybdenum
Zr	Zirconium

# AFIP-2 Irradiation Summary Report

## 1. EXPERIMENT GOALS

In support of the Global Threat Reduction Initiative (GTRI) Fuel Development (FD) program (historically known as Reduced Enrichment for Research and Test Reactors (RERTR)), the Advanced Test Reactor (ATR) Full size plate In center flux trap Position (AFIP) experiment AFIP-2 was designed to evaluate the performance of monolithic fuels at a prototypic scale of 2.25 inches x 21.5 inches x 0.050 inches (5.75 cm x 54.6 cm x 0.13cm). The AFIP-2 experiment was fabricated by friction bond (FB) and consists of two plates, one with a zirconium (Zr) diffusion barrier and one with a silicon (Si) enhanced fuel/clad interface<sup>1,2</sup>.

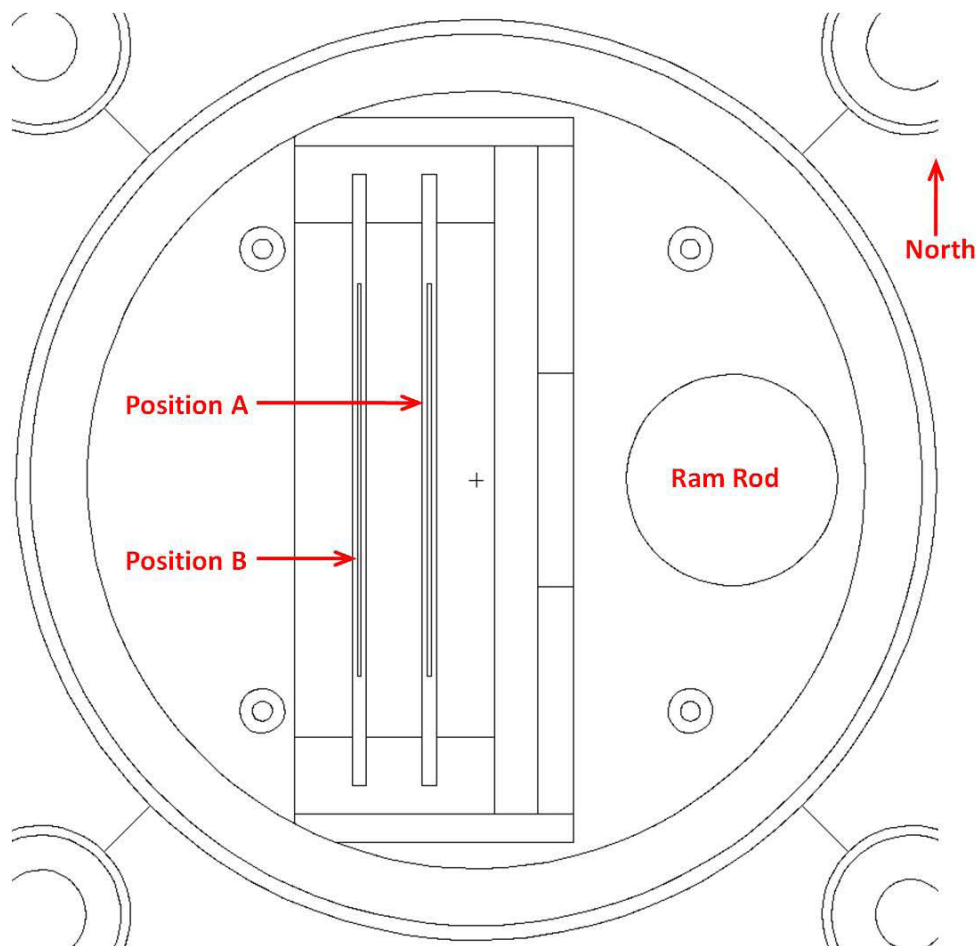


Figure 1. MCNP model X-Y view of the AFIP-2 test assembly<sup>3</sup>.

The AFIP-2 test assembly holds two full length (48 inch) frames, designated as A and B, a ramrod and four flux monitor wires. Frame A is located closest to the ramrod and frame B is on the outer (west) location in the assembly (see Figure 1). Each fuel plate is nominally 22.5 inches in length, 2.205 inches in width and 0.050 inches in thickness. The nominal fuel meat zone is 20.625 inches in length and 1.450 inches in width. The AFIP-2 experiment consisted of two fuel plates that were located in the A position of the test assembly with a plate on the top half of the frame and a plate on the bottom half. The experiment matrix is shown in Table 1.

Table 1. AFIP-2 experiment matrix loading diagram<sup>4</sup>.

<b>Assembly Position</b>	<b>A-Position</b>	<b>B-Position</b>
Top	U-10 Mo Thermal Spray Si Friction Bond <b>2TT</b>	Blank Al-6061  <b>BT-Dum</b>
Bottom	U-10 Mo Zirconium Friction Bond <b>2BZ</b>	Blank Al-6061  <b>BB-Dum</b>

## 2. CONSTITUENT MASSES AND DENSITIES

The constituent masses and densities for plate 2TT and 2BZ were obtained from the as-built data package<sup>4</sup> plate summary sheets. Table 2 summarizes the constituent masses for both plates and Table 3 summarizes the constituent densities for both plates.

Table 2. AFIP-2 constituent masses<sup>4</sup>.

Fuel Plate Location	Fuel Plate ID	Total-U (g)	U-238 (g)	U-235 (g)	Zr (g)	Mo (g)
Top	2TT	97.955	78.481	19.474	--	11.231
Bottom	2BZ	89.580	71.771	17.809	8.860	10.271

Table 3. AFIP-2 constituent densities.

Fuel Plate Location	Fuel Plate ID	Fuel Meat Volume (cc)	Total-U (g/cc)	U-238 (g/cc)	U-235 (G/cc)	Zr (g/cc)	Mo (g/cc)
Top	2TT	6.445	15.198	12.176	3.021	--	1.742
Bottom	2BZ	6.783	13.898	11.135	2.763	1.375	1.594

### 3. EXPERIMENT HARDWARE

The experiment hardware list for AFIP-2 is that used for all of the four-plate AFIP experiments. The drawing numbers and titles are in Table 4.

Table 4. AFIP-2 Irradiation Hardware Drawing List.

Drawing Number	Drawing Title
635791	ATR Full Size Plate in Center Flux Trap Position (AFIP) Flux Monitor Wire Holder Assembly Details
635792	ATR Full Size Plate in Center Flux Trap Position (AFIP) Plate Holder Tube Assembly and Details
635793	ATR Full Size Plate in Center Flux Trap Position (AFIP) Test Train Assembly
635790	ATR Full Size Plate in Center Flux Trap Position (AFIP) Ramrod and Ram Details
636544	ATR Full Size Plate in Center Flux Trap Position (AFIP) Holder Retriever Assembly and Details
635789	RERTR ATR Full Size Plate in Center Flux Trap Position Fuel Plate Frame Assembly and Details
635788	RERTR ATR Full Size Plate in Center Flux Trap Position Fuel Plate

The AFIP test train assembly as shown in Figure 2 shows the main components of the test assembly, which includes the flux monitor wire holders, the ram and ramrod, the frame assembly and the fuel plates. Figure 3 shows the test train assembly with the retriever attached to the top. The retriever is used to get the test train assembly out of the reactor. The flux monitor wire holders house the flux monitor wires. The ram is used to clamp onto the rails of the fuel plate frame assemblies to minimize vibrations and hold the fuel plate frame assemblies in place. The ramrod is the last component to be inserted; it is used to push the ram against the fuel plate frame assembly. The frame assembly holds the fuel plates into place and is shown in Figure 4. Figure 5 has the specific fuel plate dimensions and nominal fuel foil dimensions. Figure 6 is a radial cross section of the test train assembly and shows the locations of all the components.

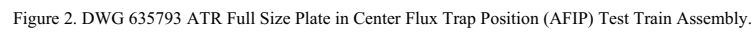
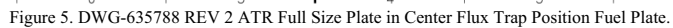




Figure 3. Isometric view of the AFIP-2 Test Train Assembly.

Figure 4. DWG-635789 REV 4 AFIP-2 Frame Assembly.





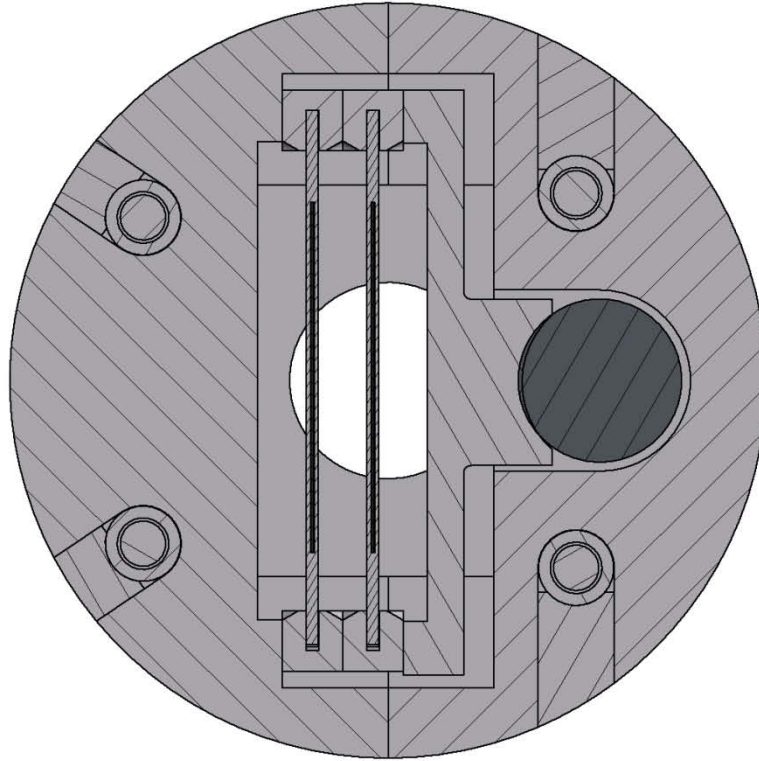


Figure 6. Radial Cross Section of the AFIP Test Train Assembly.

## 4. SAFETY ANALYSIS

The safety analysis that was performed on the AFIP-2 experiment includes thermal/hydraulic analysis, physics analysis, and structural analysis. The following table (Table 5) summarizes the safety analyses performed on the AFIP-2 experiment.

Table 5. Summary table of the safety analyses done for the AFIP-2 experiment.

ECAR Number	Description
ECAR-60	Physics Analysis of the AFIP Experiments in the Center Flux Trap
ECAR-59, Rev. 2	Temperature Reactivity Coefficients for the AFIP Experiment in the Center Flux Trap of ATR
ECAR-119, Rev. 3	Thermal Analysis of AFIP-2 Experiment
EDF-8209	AFIP Plate Frame, Test Train, and Backup Analysis (Structural)
ECAR-121	Total Flow Evaluations for AFIP and Backups
ECAR-126	RELAP Analysis for AFIP-2 Flow Restrictor

## 5. IRRADIATION HISTORY

The AFIP-2 test assembly was irradiated during cycles 141A, 142A and 142B in the ATR Center Flux Trap (CFT). Cycle 141A ran for 32.4 effective full power days (EFPDs) with a center lobe power of 23.4 MW (total core power of 105.4 MW). Cycle 142A ran for 48 EFPDs at a center lobe power of 24.7 MW (total core power of 113.5 MW). Cycle 142B ran for 52 EFPDs at a center lobe power of 25.4 MW (total core power of 116.8 MW).

There was one mid-cycle SCRAM during cycle 141A with a duration of 1 day from dates 2/7/2008 – 2/7/2008. There was one mid cycle SCRAM during cycle 142A with a duration of 2 days, from dates 6/3/2008 – 6/5/2008. There were two mid-cycle SCRAMs during cycle 142B with duration of 3 days and 2 days, from dates 7/6/2008 – 7/9/2008 and 8/5/2008 – 8/7/2008, respectively. This information is summarized in Table 6.

Table 6. Irradiation history for AFIP-2.

ATR CYCLE	AFIP Test ID	AFIP-2 Frames Irradiated	Dates Irradiated	Cycle EFPDs	Mid-Cycle Scram Decay Days	Post-Cycle Decay Days	Center Flux Trap Power (MW)	Total Core Power (MW)
141A	AFIP-2	A	2/5/2008 – 3/8/2008	32.4	1	55	23.4	105.4
142A	AFIP-2	A	5/2/2008 – 6/21/2008	48.0	2	13	24.7	113.5
142B	AFIP2/1	A,B	7/14/2008 – 8/30/2008	52.0	5	25	25.4	116.8

The power history for each cycle is obtained as an ATR Surveillance Report from the ATR Data Acquisition System (DAS). The plots of each lobe power on an hourly basis are shown in Figure 7, Figure 8 and Figure 9 for cycle 141A, 142A and 142B, respectively.

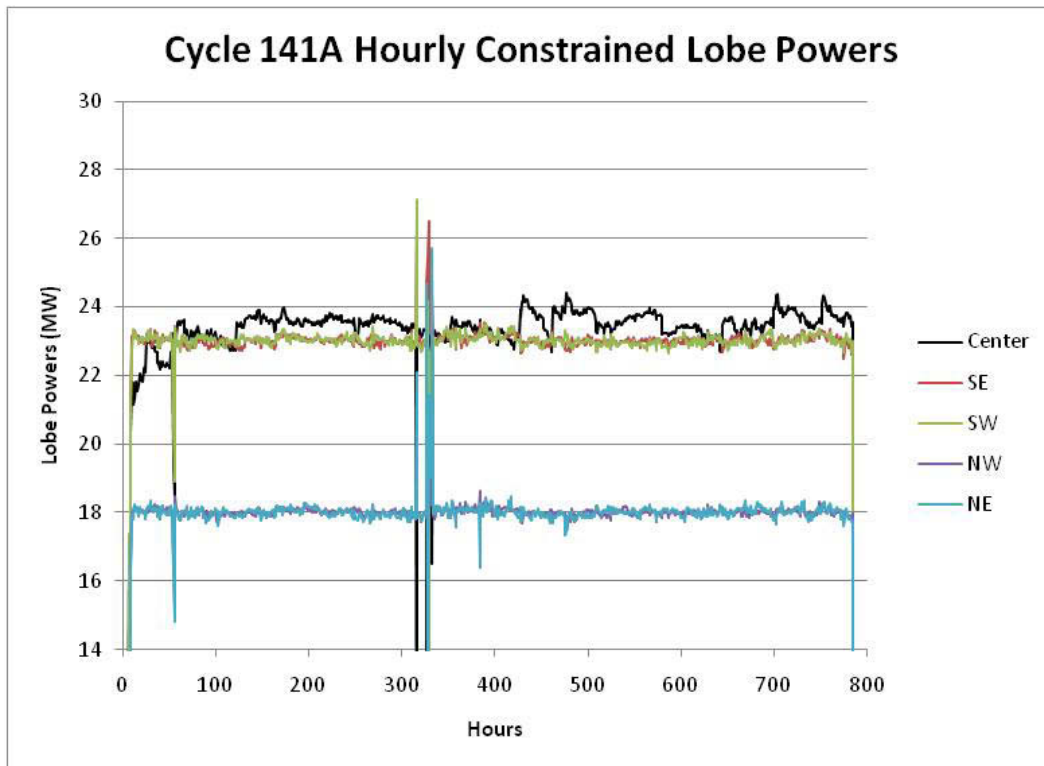


Figure 7. Hourly lobe power history for ATR Cycle 141A.

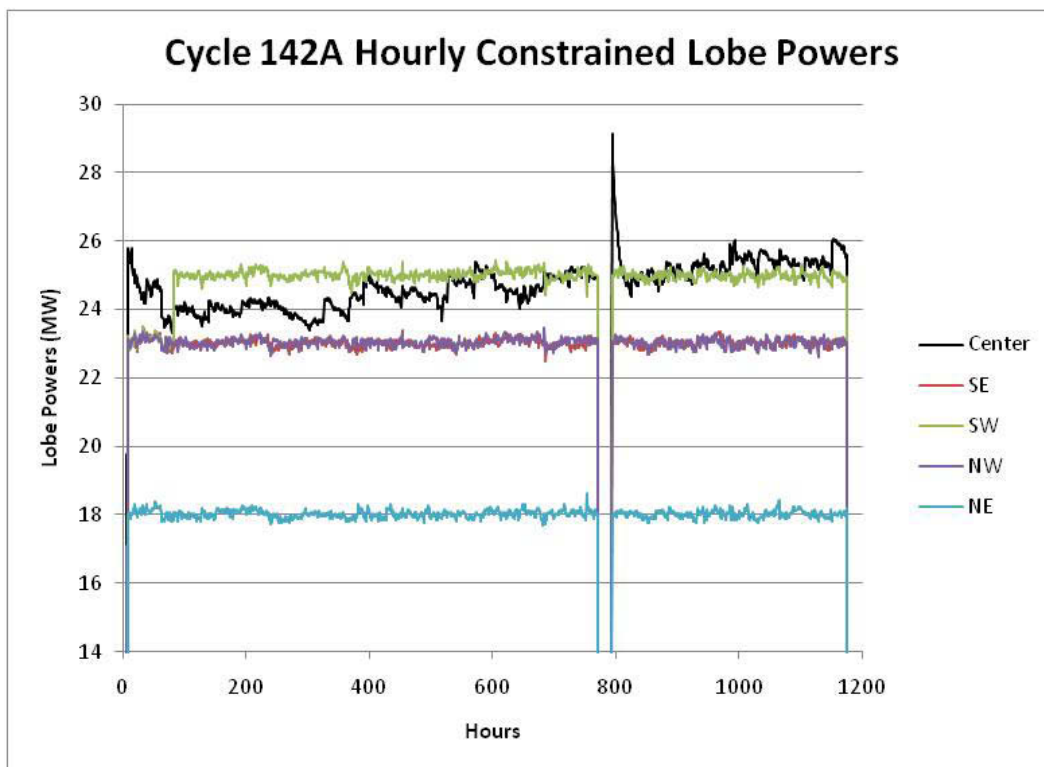


Figure 8. Hourly lobe power history for ATR Cycle 142A.

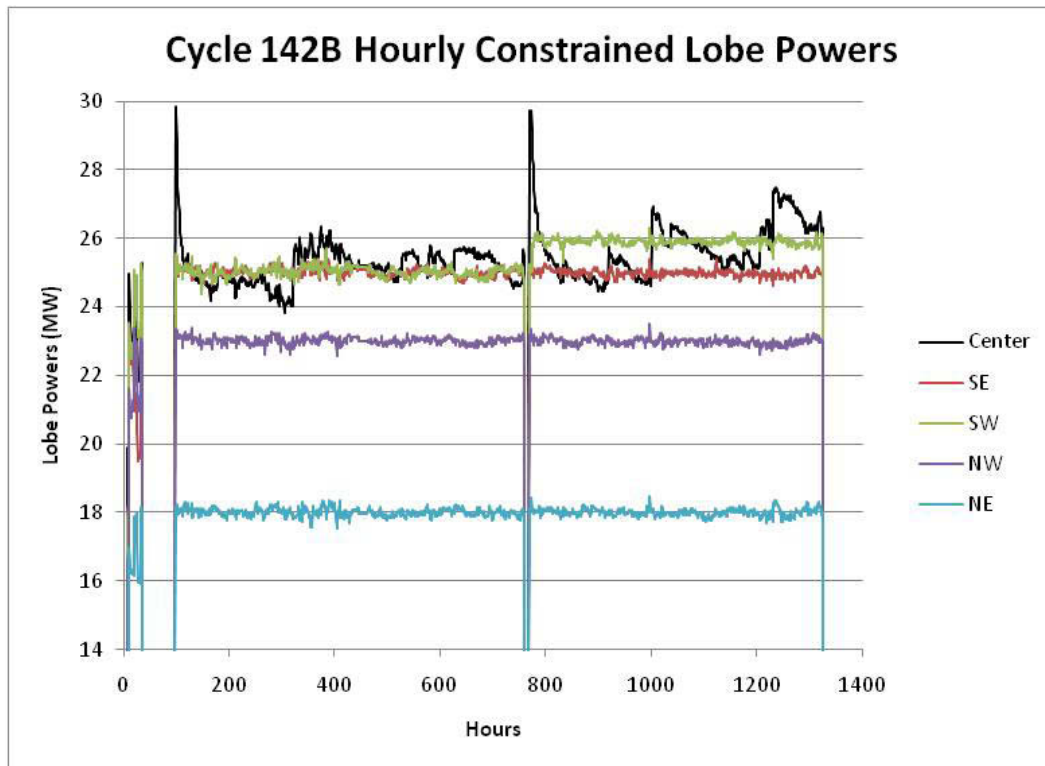


Figure 9. Hourly lobe power history for ATR Cycle 142B.

## 6. AS-RUN NUCLEAR ANALYSIS

### 6.1 Neutronics

The as-run calculations were performed using the irradiation history in Table 6, the Monte Carlo N-Particle (MCNP) code, ORIGEN2.2 and MCWO<sup>3</sup>. The calculated as-run fission heat rates, fission densities, and as-run U-235 burnup results for the fueled plates reported have an uncertainty band ( $1\sigma$ ) of 2.5%<sup>3</sup>. The time intervals used to calculate the average plate power and burnup is shown in Table 7.

Table 7. Cycle breakdown.

Time Interval	141A (days)	142A (days)	142B (days)
BOC	0.0	0.0	0.0
MOC 1	15.0	16.0	16.0
MOC 2	10.0	16.0	13.7
EOC	7.4	16.0	22.3
Total EFPDs	32.4	48.0	52.0
Cumulative	32.4	80.4	132.4

The MCNP-calculated neutronic results reported<sup>3</sup> were calculated using the fuel foil thickness measurements reported in the as-built data package<sup>4</sup> as an “in-process” or approximate measurement of the thickness which includes the Zr barrier thickness for plate 2BZ. The actual fuel foil thickness measurements (without the Zr barrier) were calculated using density measurements and radiography<sup>5</sup>. To correct for the thickness change the fission density (fissions/cc) and the fission power density (W/cc) were scaled to the thickness measurement ratio shown in Table 8.

Table 8. Fuel plate thickness measurements.

Plate ID	“In-Process” Average Fuel Foil Thickness (in)	Measured Average Fuel Foil Thickness (in)	Thickness Measurement Ratio
2TT	0.0130	0.0140	0.929
2BZ	0.0157	0.0120	1.308

The MCNP-calculated end of cycle average plate power and burnup for cycles 141A, 142A and 142B are shown in Table 9. The average plate power and burnup for the time intervals for each cycle are shown in Table 10 through Table 21. The scaled fission power density (W/cc) and fission density (fissions/cc) are shown in Table 22 through

Table 24. The heat flux ( $\text{w/cm}^2$ ) was not scaled since the surface area of the fuel foil (length and width) was represented correctly in the MCNP model. The plots of the power and fission density as a function of the ATR Cycle time interval are in Appendix A.

Table 9. End of cycle fission power density, surface heat flux, U-235 depletion and fission density for AFIP-2 experiment.

Plate ID	MCNP Cell Elevation <sup>(a)</sup> (inches)	EOC 141A				EOC 142A				EOC 142B			
		Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	% Depletion U-235 (%)	Fission Density (fission/cc)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	% Depletion U-235 (%)	Fission Density (fission/cc)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	% Depletion U-235 (%)	Fission Density (fission/cc)
2TT	20.82	8271.31	136.56	12.36%	8.23E+20	8299.14	137.02	29.11%	1.98E+21	6861.53	113.28	43.44%	3.01E+21
	18.76	10482.66	173.07	15.86%	1.06E+21	9975.38	164.69	36.22%	2.50E+21	7844.20	129.51	52.70%	3.73E+21
	16.70	12522.01	206.74	18.81%	1.27E+21	11322.63	186.94	42.46%	2.97E+21	8604.32	142.06	60.51%	4.37E+21
	14.64	14075.90	232.39	21.31%	1.45E+21	12167.86	200.89	47.42%	3.36E+21	8934.20	147.50	66.14%	4.85E+21
	12.58	15494.80	255.82	23.79%	1.63E+21	12805.42	211.42	51.68%	3.70E+21	9124.25	150.64	70.73%	5.26E+21
	10.52	16376.17	270.37	25.19%	1.74E+21	13055.87	215.55	54.39%	3.93E+21	9226.58	152.33	73.71%	5.54E+21
	8.46	17233.90	284.53	26.58%	1.84E+21	13203.21	217.98	56.34%	4.09E+21	9137.28	150.86	75.63%	5.73E+21
	6.40	17606.55	290.68	27.30%	1.90E+21	13302.62	219.63	58.14%	4.25E+21	9126.46	150.68	77.43%	5.90E+21
	4.34	18005.05	297.26	27.89%	1.94E+21	13551.17	223.73	59.13%	4.33E+21	9073.70	149.81	78.25%	5.98E+21
	2.28	18494.33	305.34	28.58%	2.00E+21	13259.86	218.92	59.92%	4.40E+21	9044.86	149.33	79.30%	6.09E+21
2BZ	-2.28	14344.12	286.01	29.76%	1.58E+21	10336.11	206.09	61.62%	3.45E+21	6733.26	134.25	80.57%	4.72E+21
	-4.34	13978.36	278.71	28.90%	1.53E+21	10156.39	202.51	60.36%	3.37E+21	6916.62	137.91	79.46%	4.65E+21
	-6.40	13924.06	277.63	28.55%	1.51E+21	10035.89	200.11	59.60%	3.32E+21	6974.93	139.07	78.85%	4.59E+21
	-8.46	13744.72	274.06	28.07%	1.48E+21	10073.53	200.86	58.81%	3.27E+21	6974.34	139.06	78.04%	4.54E+21
	-10.52	13293.57	265.06	27.12%	1.43E+21	9906.56	197.53	57.21%	3.16E+21	6872.93	137.04	76.27%	4.39E+21
	-12.58	12521.51	249.67	25.52%	1.34E+21	9715.02	193.71	54.74%	3.00E+21	6907.16	137.72	73.99%	4.22E+21
	-14.64	11771.63	234.71	23.81%	1.24E+21	9557.31	190.56	51.69%	2.81E+21	6875.24	137.09	70.72%	3.99E+21
	-16.70	10733.32	214.01	21.48%	1.11E+21	9027.19	179.99	47.40%	2.55E+21	6745.72	134.50	66.09%	3.68E+21
	-18.76	9389.84	187.22	18.67%	9.60E+20	8402.09	167.53	42.05%	2.23E+21	6423.32	128.07	59.90%	3.28E+21
	-20.82	7726.90	154.07	15.28%	7.80E+20	7389.82	147.35	35.36%	1.85E+21	5915.91	117.96	51.92%	2.78E+21
MAX	NA	18494.33	305.34	29.76%	2.00E+21	13551.17	223.73	61.62%	4.40E+21	9226.58	152.33	80.57%	6.09E+21
MIN	NA	7726.90	136.56	12.36%	7.80E+20	7389.82	137.02	29.11%	1.85E+21	5915.91	113.28	43.44%	2.78E+21
AVG	NA	13499.54	243.70	23.74%	1.43E+21	10777.15	194.15	51.18%	3.23E+21	7715.84	138.93	69.68%	4.56E+21

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 10. Cycle 141A, MCNP-Calculated heat generation rate and neutron flux for AFIP-2 fuel foils  
0 EFPD (BOC) Center Lobe Power at 23.4 MW.<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)
2TT	A-1	20.82	8650.68	142.82	4.54E+14
	A-2	18.76	11274.41	186.14	5.93E+14
	A-3	16.70	13421.49	221.59	7.18E+14
	A-4	14.64	15490.94	255.76	8.27E+14
	A-5	12.58	17708.26	292.36	9.17E+14
	A-6	10.52	18862.51	311.42	9.81E+14
	A-7	8.46	20009.14	330.35	1.02E+15
	A-8	6.40	20728.52	342.23	1.06E+15
	A-9	4.34	21171.41	349.54	1.07E+15
	A-10	2.28	21752.64	359.14	1.09E+15
2BZ	A-11	-2.28	17461.74	348.17	1.08E+15
	A-12	-4.34	16921.82	337.40	1.08E+15
	A-13	-6.40	16446.54	327.93	1.06E+15
	A-14	-8.46	16166.49	322.34	1.04E+15
	A-15	-10.52	15599.23	311.03	1.01E+15
	A-16	-12.58	14519.96	289.51	9.60E+14
	A-17	-14.64	13436.02	267.90	8.96E+14
	A-18	-16.70	11901.37	237.30	8.02E+14
	A-19	-18.76	10183.67	203.05	6.84E+14
	A-20	-20.82	8251.69	164.53	5.50E+14
	MAX	NA	21752.64	359.14	1.09E+15
	MIN	NA	8251.69	142.82	4.54E+14
	AVG	NA	15497.93	280.03	8.94E+14

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 11. Cycle 141A, MCNP-Calculated HGR, Neutron Flux, Depletion, and Fission Density for AFIP-2 Fuel Foils, 15.0 EFPD (MOC1), Center Lobe Power @ 23.4 MW (15.0 EFPD Cumulative).<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)	% Depletion U-235 (%)	Fission Density (fissions/cc)
2TT	A-1	20.82	8554.12	141.23	4.62E+14	5.82%	3.85E+20
	A-2	18.76	11026.45	182.05	6.05E+14	7.46%	5.02E+20
	A-3	16.70	13296.62	219.53	7.48E+14	8.86%	5.98E+20
	A-4	14.64	15087.08	249.09	8.50E+14	10.10%	6.90E+20
	A-5	12.58	16703.63	275.78	9.38E+14	11.51%	7.89E+20
	A-6	10.52	17791.34	293.73	9.91E+14	12.20%	8.40E+20
	A-7	8.46	18880.73	311.72	1.04E+15	12.82%	8.91E+20
	A-8	6.40	19330.54	319.15	1.06E+15	13.29%	9.23E+20
	A-9	4.34	19838.67	327.54	1.08E+15	13.52%	9.43E+20
	A-10	2.28	20369.03	336.29	1.08E+15	13.83%	9.69E+20
2BZ	A-11	-2.28	16022.62	319.47	1.08E+15	14.61%	7.78E+20
	A-12	-4.34	15464.81	308.35	1.08E+15	14.21%	7.54E+20
	A-13	-6.40	15477.60	308.61	1.07E+15	13.85%	7.33E+20
	A-14	-8.46	15159.28	302.26	1.06E+15	13.63%	7.20E+20
	A-15	-10.52	14606.63	291.24	1.02E+15	13.17%	6.95E+20
	A-16	-12.58	13700.43	273.17	9.62E+14	12.33%	6.47E+20
	A-17	-14.64	12751.70	254.26	9.02E+14	11.46%	5.99E+20
	A-18	-16.70	11528.00	229.86	8.18E+14	10.22%	5.30E+20
	A-19	-18.76	9962.31	198.64	6.92E+14	8.82%	4.54E+20
	A-20	-20.82	8085.92	161.23	5.63E+14	7.20%	3.68E+20
	MAX	NA	20369.03	336.29	1.08E+15	14.61%	9.69E+20
	MIN	NA	8085.92	141.23	4.62E+14	5.82%	3.68E+20
	AVG	NA	14681.88	265.16	9.05E+14	11.45%	6.90E+20

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.



Table 12. Cycle 141A, MCNP-Calculated HGR, Neutron Flux, Depletion, and Fission Density for AFIP-2 Fuel Foils, 25.0 EFPD (MOC2), Center Lobe Power @ 23.4 MW (25.0 EFPD Cumulative).<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)	% Depletion U-235 (%)	Fission Density (fissions/cc)
2TT	A-1	20.82	8399.21	138.67	4.61E+14	9.63%	6.39E+20
	A-2	18.76	10709.90	176.82	6.04E+14	12.36%	8.29E+20
	A-3	16.70	12851.64	212.18	7.47E+14	14.62%	9.92E+20
	A-4	14.64	14493.54	239.29	8.48E+14	16.63%	1.14E+21
	A-5	12.58	16013.19	264.38	9.36E+14	18.74%	1.28E+21
	A-6	10.52	17006.26	280.77	9.91E+14	19.82%	1.37E+21
	A-7	8.46	17922.78	295.91	1.04E+15	20.91%	1.45E+21
	A-8	6.40	18327.58	302.59	1.06E+15	21.54%	1.50E+21
	A-9	4.34	18795.26	310.31	1.08E+15	22.00%	1.53E+21
	A-10	2.28	19319.77	318.97	1.08E+15	22.53%	1.57E+21
2BZ	A-11	-2.28	15044.85	299.98	1.08E+15	23.57%	1.25E+21
	A-12	-4.34	14624.88	291.61	1.08E+15	22.88%	1.21E+21
	A-13	-6.40	14583.07	290.77	1.07E+15	22.53%	1.19E+21
	A-14	-8.46	14389.00	286.90	1.05E+15	22.13%	1.17E+21
	A-15	-10.52	13861.76	276.39	1.02E+15	21.39%	1.13E+21
	A-16	-12.58	13041.83	260.04	9.61E+14	20.10%	1.05E+21
	A-17	-14.64	12193.19	243.12	9.01E+14	18.70%	9.77E+20
	A-18	-16.70	11061.23	220.55	8.17E+14	16.83%	8.72E+20
	A-19	-18.76	9636.46	192.14	6.92E+14	14.58%	7.49E+20
	A-20	-20.82	7873.45	156.99	5.64E+14	11.91%	6.07E+20
	MAX	NA	19319.77	318.97	1.08E+15	23.57%	1.57E+21
	MIN	NA	7873.45	138.67	4.61E+14	9.63%	6.07E+20
	AVG	NA	14007.44	252.92	9.04E+14	18.67%	1.13E+21

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 13. Cycle 141A, MCNP-Calculated HGR, Neutron Flux, Depletion, and Fission Density for AFIP-2 Fuel Foils, 32.4 EFPD (EOC), Center Lobe Power @ 23.4 MW (32.4 EFPD Cumulative).<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)	% Depletion U-235 (%)	Fission Density (fissions/cc)
2TT	A-1	20.82	8271.31	136.56	4.61E+14	12.36%	8.23E+20
	A-2	18.76	10482.66	173.07	6.03E+14	15.86%	1.06E+21
	A-3	16.70	12522.01	206.74	7.46E+14	18.81%	1.27E+21
	A-4	14.64	14075.90	232.39	8.45E+14	21.31%	1.45E+21
	A-5	12.58	15494.80	255.82	9.35E+14	23.79%	1.63E+21
	A-6	10.52	16376.17	270.37	9.90E+14	25.19%	1.74E+21
	A-7	8.46	17233.90	284.53	1.04E+15	26.58%	1.84E+21
	A-8	6.40	17606.55	290.68	1.06E+15	27.30%	1.90E+21
	A-9	4.34	18005.05	297.26	1.08E+15	27.89%	1.94E+21
	A-10	2.28	18494.33	305.34	1.08E+15	28.58%	2.00E+21
2BZ	A-11	-2.28	14344.12	286.01	1.08E+15	29.76%	1.58E+21
	A-12	-4.34	13978.36	278.71	1.08E+15	28.90%	1.53E+21
	A-13	-6.40	13924.06	277.63	1.07E+15	28.55%	1.51E+21
	A-14	-8.46	13744.72	274.06	1.05E+15	28.07%	1.48E+21
	A-15	-10.52	13293.57	265.06	1.02E+15	27.12%	1.43E+21
	A-16	-12.58	12521.51	249.67	9.58E+14	25.52%	1.34E+21
	A-17	-14.64	11771.63	234.71	9.01E+14	23.81%	1.24E+21
	A-18	-16.70	10733.32	214.01	8.18E+14	21.48%	1.11E+21
	A-19	-18.76	9389.84	187.22	6.92E+14	18.67%	9.60E+20
	A-20	-20.82	7726.90	154.07	5.63E+14	15.28%	7.80E+20
	MAX	NA	18494.33	305.34	1.08E+15	29.76%	2.00E+21
	MIN	NA	7726.90	136.56	4.61E+14	12.36%	7.80E+20
	AVG	NA	13499.54	243.70	9.03E+14	23.74%	1.43E+21

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 14. Cycle 142A, MCNP-Calculated HGR and Neutron Flux for AFIP-2 Fuel Foils, 0 EFPD (BOC), Center Lobe Power @ 24.7 MW.<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)
2TT	A-1	20.82	7615.61	125.73	4.39E+14
	A-2	18.76	9571.95	158.03	5.79E+14
	A-3	16.70	11469.26	189.36	7.15E+14
	A-4	14.64	13162.43	217.31	8.27E+14
	A-5	12.58	14321.50	236.45	9.21E+14
	A-6	10.52	15497.25	255.86	9.87E+14
	A-7	8.46	16210.20	267.63	1.03E+15
	A-8	6.40	17008.99	280.82	1.07E+15
	A-9	4.34	17281.40	285.32	1.09E+15
	A-10	2.28	17679.46	291.89	1.10E+15
2BZ	A-11	-2.28	13738.58	273.93	1.10E+15
	A-12	-4.34	13517.28	269.52	1.11E+15
	A-13	-6.40	13287.57	264.94	1.09E+15
	A-14	-8.46	13090.26	261.01	1.07E+15
	A-15	-10.52	12577.18	250.78	1.03E+15
	A-16	-12.58	11991.25	239.09	9.76E+14
	A-17	-14.64	11171.02	222.74	9.02E+14
	A-18	-16.70	10095.81	201.30	8.11E+14
	A-19	-18.76	8784.70	175.16	6.85E+14
	A-20	-20.82	7268.14	144.92	5.45E+14
	MAX	NA	17679.46	291.89	1.11E+15
	MIN	NA	7268.14	125.73	4.39E+14
	AVG	NA	12766.99	230.59	9.04E+14

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 15. Cycle 142A, MCNP-Calculated HGR, Neutron Flux, Depletion, and Fission Density for AFIP-2 Fuel Foils, 16.0 EFPD (MOC1), Center Lobe Power @ 24.7 MW (48.4 EFPD Cumulative).<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)	% Depletion U-235 (%)	Fission Density (fissions/cc)
2TT	A-1	20.82	8342.38	137.73	4.82E+14	17.56%	1.18E+21
	A-2	18.76	10301.69	170.08	6.30E+14	22.34%	1.51E+21
	A-3	16.70	12153.75	200.66	7.72E+14	26.47%	1.81E+21
	A-4	14.64	13568.46	224.02	8.76E+14	30.00%	2.07E+21
	A-5	12.58	14727.72	243.15	9.71E+14	33.16%	2.31E+21
	A-6	10.52	15407.44	254.38	1.03E+15	35.24%	2.47E+21
	A-7	8.46	15896.68	262.45	1.07E+15	36.98%	2.60E+21
	A-8	6.40	16512.70	272.62	1.10E+15	38.17%	2.70E+21
	A-9	4.34	16838.93	278.01	1.12E+15	38.93%	2.75E+21
	A-10	2.28	16905.73	279.11	1.13E+15	39.81%	2.82E+21
2BZ	A-11	-2.28	13237.11	263.93	1.13E+15	41.19%	2.23E+21
	A-12	-4.34	12986.98	258.95	1.13E+15	40.18%	2.17E+21
	A-13	-6.40	12740.93	254.04	1.11E+15	39.70%	2.13E+21
	A-14	-8.46	12624.60	251.72	1.09E+15	39.06%	2.10E+21
	A-15	-10.52	12215.94	243.57	1.05E+15	37.74%	2.02E+21
	A-16	-12.58	11781.86	234.92	9.98E+14	35.73%	1.90E+21
	A-17	-14.64	11091.39	221.15	9.34E+14	33.44%	1.77E+21
	A-18	-16.70	10048.72	200.36	8.35E+14	30.27%	1.59E+21
	A-19	-18.76	8874.52	176.95	7.17E+14	26.42%	1.37E+21
	A-20	-20.82	7522.33	149.99	5.83E+14	21.77%	1.12E+21
	MAX	NA	16905.73	279.11	1.13E+15	41.19%	2.82E+21
	MIN	NA	7522.33	137.73	4.82E+14	17.56%	1.12E+21
	AVG	NA	12688.99	228.89	9.38E+14	33.21%	2.03E+21

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 16. Cycle 142A, MCNP-Calculated HGR, Neutron Flux, Depletion, and Fission Density for AFIP-2 Fuel Foils, 32.0 EFPD (MOC2), Center Lobe Power @ 24.7 MW (64.4 EFPD Cumulative).<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)	% Depletion U-235 (%)	Fission Density (fissions/cc)
2TT	A-1	20.82	8485.38	140.09	5.01E+14	23.32%	1.58E+21
	A-2	18.76	10455.90	172.63	6.51E+14	29.27%	2.00E+21
	A-3	16.70	12269.34	202.57	7.98E+14	34.50%	2.39E+21
	A-4	14.64	13577.00	224.16	9.13E+14	38.80%	2.72E+21
	A-5	12.58	14617.73	241.34	1.00E+15	42.59%	3.00E+21
	A-6	10.52	15319.63	252.93	1.06E+15	44.99%	3.20E+21
	A-7	8.46	15440.82	254.93	1.10E+15	46.97%	3.36E+21
	A-8	6.40	16097.98	265.78	1.14E+15	48.45%	3.48E+21
	A-9	4.34	16297.21	269.07	1.16E+15	49.38%	3.55E+21
	A-10	2.28	16204.14	267.53	1.15E+15	50.26%	3.63E+21
2BZ	A-11	-2.28	12553.82	250.31	1.16E+15	51.87%	2.85E+21
	A-12	-4.34	12341.70	246.08	1.15E+15	50.71%	2.78E+21
	A-13	-6.40	12110.50	241.47	1.13E+15	50.08%	2.74E+21
	A-14	-8.46	12005.11	239.37	1.11E+15	49.34%	2.70E+21
	A-15	-10.52	11750.89	234.30	1.08E+15	47.83%	2.60E+21
	A-16	-12.58	11388.48	227.07	1.03E+15	45.53%	2.46E+21
	A-17	-14.64	10875.75	216.85	9.56E+14	42.77%	2.29E+21
	A-18	-16.70	10228.90	203.95	8.78E+14	38.87%	2.06E+21
	A-19	-18.76	9242.57	184.29	7.56E+14	34.15%	1.79E+21
	A-20	-20.82	7867.16	156.86	6.12E+14	28.46%	1.48E+21
	MAX	NA	16297.21	269.07	1.16E+15	51.87%	3.63E+21
	MIN	NA	7867.16	140.09	5.01E+14	23.32%	1.48E+21
	AVG	NA	12456.50	224.58	9.66E+14	42.41%	2.63E+21

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 17 Cycle 142A, MCNP-Calculated HGR, Neutron Flux, Depletion, and Fission Density for AFIP-2 Fuel Foils, 48.0 EFPD (EOC), Center Lobe Power @ 24.7 MW (80.4 EFPD Cumulative).<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)	% Depletion U-235 (%)	Fission Density (fissions/cc)
2TT	A-1	20.82	8299.14	137.02	5.15E+14	29.11%	1.98E+21
	A-2	18.76	9975.38	164.69	6.72E+14	36.22%	2.50E+21
	A-3	16.70	11322.63	186.94	8.19E+14	42.46%	2.97E+21
	A-4	14.64	12167.86	200.89	9.28E+14	47.42%	3.36E+21
	A-5	12.58	12805.42	211.42	1.02E+15	51.68%	3.70E+21
	A-6	10.52	13055.87	215.55	1.08E+15	54.39%	3.93E+21
	A-7	8.46	13203.21	217.98	1.12E+15	56.34%	4.09E+21
	A-8	6.40	13302.62	219.63	1.15E+15	58.14%	4.25E+21
	A-9	4.34	13551.17	223.73	1.17E+15	59.13%	4.33E+21
	A-10	2.28	13259.86	218.92	1.17E+15	59.92%	4.40E+21
2BZ	A-11	-2.28	10336.11	206.09	1.18E+15	61.62%	3.45E+21
	A-12	-4.34	10156.39	202.51	1.16E+15	60.36%	3.37E+21
	A-13	-6.40	10035.89	200.11	1.15E+15	59.60%	3.32E+21
	A-14	-8.46	10073.53	200.86	1.13E+15	58.81%	3.27E+21
	A-15	-10.52	9906.56	197.53	1.10E+15	57.21%	3.16E+21
	A-16	-12.58	9715.02	193.71	1.05E+15	54.74%	3.00E+21
	A-17	-14.64	9557.31	190.56	9.80E+14	51.69%	2.81E+21
	A-18	-16.70	9027.19	179.99	8.89E+14	47.40%	2.55E+21
	A-19	-18.76	8402.09	167.53	7.72E+14	42.05%	2.23E+21
	A-20	-20.82	7389.82	147.35	6.29E+14	35.36%	1.85E+21
	MAX	NA	13551.17	223.73	1.18E+15	61.62%	4.40E+21
	MIN	NA	7389.82	137.02	5.15E+14	29.11%	1.85E+21
	AVG	NA	10777.15	194.15	9.83E+14	51.18%	3.23E+21

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 18 Cycle 142B, MCNP-Calculated HGR and Neutron Flux for AFIP-2 Fuel Foils, 0 EFPD (BOC), Center Lobe Power @ 25.4 MW.<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)
2TT	A-1	20.82	6110.72	100.89	4.63E+14
	A-2	18.76	7483.53	123.55	6.04E+14
	A-3	16.70	8538.67	140.97	7.46E+14
	A-4	14.64	9241.78	152.58	8.51E+14
	A-5	12.58	9781.69	161.50	9.52E+14
	A-6	10.52	10348.65	170.86	1.02E+15
	A-7	8.46	10741.84	177.35	1.08E+15
	A-8	6.40	10877.46	179.59	1.12E+15
	A-9	4.34	11065.64	182.69	1.14E+15
	A-10	2.28	11427.68	188.67	1.15E+15
2BZ	A-11	-2.28	8613.55	171.75	1.15E+15
	A-12	-4.34	8560.25	170.68	1.16E+15
	A-13	-6.40	8484.73	169.18	1.14E+15
	A-14	-8.46	8398.94	167.47	1.12E+15
	A-15	-10.52	8173.23	162.97	1.07E+15
	A-16	-12.58	7955.37	158.62	1.02E+15
	A-17	-14.64	7667.93	152.89	9.36E+14
	A-18	-16.70	7157.07	142.70	8.40E+14
	A-19	-18.76	6560.23	130.80	7.18E+14
	A-20	-20.82	5708.32	113.82	5.76E+14
	MAX	NA	11427.68	188.67	1.16E+15
	MIN	NA	5708.32	100.89	4.63E+14
	AVG	NA	8644.86	155.98	9.42E+14

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 19 Cycle 142B, MCNP-Calculated HGR, Neutron Flux, Depletion, and Fission Density for AFIP-2 Fuel Foils, 16.0 EFPD (MOC1), Center Lobe Power @ 25.4 MW (96.4 EFPD Cumulative).<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)	% Depletion U-235 (%)	Fission Density (fissions/cc)
2TT	A-1	20.82	6233.29	102.91	4.77E+14	33.20%	2.27E+21
	A-2	18.76	7411.87	122.37	6.24E+14	41.10%	2.85E+21
	A-3	16.70	8548.85	141.14	7.71E+14	47.88%	3.38E+21
	A-4	14.64	9154.90	151.15	8.76E+14	53.16%	3.80E+21
	A-5	12.58	9542.21	157.54	9.65E+14	57.64%	4.16E+21
	A-6	10.52	9896.56	163.39	1.03E+15	60.59%	4.41E+21
	A-7	8.46	10054.42	166.00	1.07E+15	62.68%	4.60E+21
	A-8	6.40	10246.83	169.18	1.11E+15	64.49%	4.76E+21
	A-9	4.34	10062.98	166.14	1.11E+15	65.56%	4.85E+21
	A-10	2.28	10302.96	170.10	1.12E+15	66.50%	4.94E+21
2BZ	A-11	-2.28	7735.25	154.23	1.12E+15	68.10%	3.86E+21
	A-12	-4.34	7758.16	154.69	1.12E+15	66.82%	3.77E+21
	A-13	-6.40	7782.47	155.17	1.12E+15	66.04%	3.71E+21
	A-14	-8.46	7757.07	154.67	1.10E+15	65.20%	3.66E+21
	A-15	-10.52	7510.72	149.76	1.05E+15	63.53%	3.54E+21
	A-16	-12.58	7448.88	148.52	1.01E+15	60.99%	3.38E+21
	A-17	-14.64	7128.65	142.14	9.28E+14	57.81%	3.17E+21
	A-18	-16.70	6898.40	137.55	8.46E+14	53.23%	2.89E+21
	A-19	-18.76	6268.65	124.99	7.23E+14	47.56%	2.54E+21
	A-20	-20.82	5696.32	113.58	5.84E+14	40.28%	2.12E+21
	MAX	NA	10302.96	170.10	1.12E+15	68.10%	4.94E+21
	MIN	NA	5696.32	102.91	4.77E+14	33.20%	2.12E+21
	AVG	NA	8171.97	147.26	9.38E+14	57.12%	3.63E+21

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 20 Cycle 142B, MCNP-Calculated HGR, Neutron Flux, Depletion, and Fission Density for AFIP-2 Fuel Foils, 29.7 EFPD (MOC2), Center Lobe Power @ 25.4 MW (110.1 EFPD Cumulative).<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)	% Depletion U-235 (%)	Fission Density (fissions/cc)
2TT	A-1	20.82	7305.96	120.62	5.31E+14	36.76%	2.52E+21
	A-2	18.76	8537.82	140.96	6.92E+14	45.21%	3.15E+21
	A-3	16.70	9599.57	158.49	8.41E+14	52.47%	3.72E+21
	A-4	14.64	10162.74	167.79	9.62E+14	57.95%	4.17E+21
	A-5	12.58	10557.48	174.30	1.05E+15	62.50%	4.55E+21
	A-6	10.52	10817.34	178.59	1.13E+15	65.52%	4.81E+21
	A-7	8.46	10819.88	178.64	1.16E+15	67.61%	5.00E+21
	A-8	6.40	10945.45	180.71	1.20E+15	69.46%	5.17E+21
	A-9	4.34	10844.16	179.04	1.21E+15	70.43%	5.25E+21
	A-10	2.28	10990.90	181.46	1.22E+15	71.45%	5.35E+21
2BZ	A-11	-2.28	8235.38	164.21	1.22E+15	72.93%	4.17E+21
	A-12	-4.34	8382.14	167.13	1.21E+15	71.67%	4.08E+21
	A-13	-6.40	8414.53	167.78	1.21E+15	70.94%	4.03E+21
	A-14	-8.46	8417.02	167.83	1.19E+15	70.12%	3.98E+21
	A-15	-10.52	8159.42	162.69	1.14E+15	68.37%	3.85E+21
	A-16	-12.58	8137.74	162.26	1.09E+15	65.88%	3.68E+21
	A-17	-14.64	7958.84	158.69	1.02E+15	62.58%	3.46E+21
	A-18	-16.70	7663.93	152.81	9.23E+14	57.96%	3.17E+21
	A-19	-18.76	7134.39	142.25	7.95E+14	52.00%	2.80E+21
	A-20	-20.82	6428.10	128.17	6.45E+14	44.46%	2.35E+21
	MAX	NA	10990.90	181.46	1.22E+15	72.93%	5.35E+21
	MIN	NA	6428.10	120.62	5.31E+14	36.76%	2.35E+21
	AVG	NA	8975.64	161.72	1.02E+15	61.81%	3.96E+21

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches.

Table 21 Cycle 142B, MCNP-Calculated HGR, Neutron Flux, Depletion, and Fission Density for AFIP-2 Fuel Foils, 52.0 EFPD (EOC), Center Lobe Power @ 25.4 MW (132.4 EFPD Cumulative).<sup>3</sup>

Plate ID	Cell	MCNP Cell Elevation <sup>(a)</sup> (inches)	Fission Power Density (W/cc)	Surface Heat Flux (W/cm <sup>2</sup> )	Neutron Flux (n/cm <sup>2</sup> sec)	% Depletion U-235 (%)	Fission Density (fissions/cc)
2TT	A-1	20.82	6861.53	113.28	5.29E+14	43.44%	3.01E+21
	A-2	18.76	7844.20	129.51	6.88E+14	52.70%	3.73E+21
	A-3	16.70	8604.32	142.06	8.38E+14	60.51%	4.37E+21
	A-4	14.64	8934.20	147.50	9.54E+14	66.14%	4.85E+21
	A-5	12.58	9124.25	150.64	1.04E+15	70.73%	5.26E+21
	A-6	10.52	9226.58	152.33	1.12E+15	73.71%	5.54E+21
	A-7	8.46	9137.28	150.86	1.15E+15	75.63%	5.73E+21
	A-8	6.40	9126.46	150.68	1.18E+15	77.43%	5.90E+21
	A-9	4.34	9073.70	149.81	1.20E+15	78.25%	5.98E+21
	A-10	2.28	9044.86	149.33	1.21E+15	79.30%	6.09E+21
2BZ	A-11	-2.28	6733.26	134.25	1.21E+15	80.57%	4.72E+21
	A-12	-4.34	6916.62	137.91	1.21E+15	79.46%	4.65E+21
	A-13	-6.40	6974.93	139.07	1.20E+15	78.85%	4.59E+21
	A-14	-8.46	6974.34	139.06	1.17E+15	78.04%	4.54E+21
	A-15	-10.52	6872.93	137.04	1.13E+15	76.27%	4.39E+21
	A-16	-12.58	6907.16	137.72	1.09E+15	73.99%	4.22E+21
	A-17	-14.64	6875.24	137.09	1.01E+15	70.72%	3.99E+21
	A-18	-16.70	6745.72	134.50	9.17E+14	66.09%	3.68E+21
	A-19	-18.76	6423.32	128.07	7.91E+14	59.90%	3.28E+21
	A-20	-20.82	5915.91	117.96	6.42E+14	51.92%	2.78E+21
	MAX	NA	9226.58	152.33	1.21E+15	80.57%	6.09E+21
	MIN	NA	5915.91	113.28	5.29E+14	43.44%	2.78E+21
	AVG	NA	7715.84	138.93	1.01E+15	69.68%	4.56E+21

(a) Elevations for MCNP cells are reported at cell centroids relative to the modeled core axial midplane at 24.0 inches

Table 22. Corrected fission power density (W/cc) and fission density (fissions/cc) for ATR Cycle 141A.

Plate ID	Cell	BOC 141A	MOC1 141A		MOC2 141A		EOC 141A	
		Fission Power Density (W/cc)	Fission Power Density (W/cc)	Fission Density (fissions/cc)	Fission Power Density (W/cc)	Fission Density (fissions/cc)	Fission Power Density (W/cc)	Fission Density (fissions/cc)
2TT	A-1	8032.77	7943.11	3.575E+20	7799.27	5.934E+20	7680.50	7.642E+20
	A-2	10469.10	10238.85	4.661E+20	9944.91	7.698E+20	9733.90	9.843E+20
	A-3	12462.81	12346.86	5.553E+20	11933.67	9.211E+20	11627.58	1.179E+21
	A-4	14384.44	14009.43	6.407E+20	13458.29	1.059E+21	13070.48	1.346E+21
	A-5	16443.38	15510.51	7.326E+20	14869.39	1.189E+21	14388.03	1.514E+21
	A-6	17515.19	16520.53	7.800E+20	15791.53	1.272E+21	15206.44	1.616E+21
	A-7	18579.92	17532.11	8.274E+20	16642.58	1.346E+21	16002.91	1.709E+21
	A-8	19247.91	17949.79	8.571E+20	17018.47	1.393E+21	16348.94	1.764E+21
	A-9	19659.17	18421.62	8.756E+20	17452.74	1.421E+21	16718.98	1.801E+21
	A-10	20198.88	18914.10	8.998E+20	17939.79	1.458E+21	17173.31	1.857E+21
2BZ	A-11	22845.78	20962.93	1.018E+21	19683.68	1.635E+21	18766.89	2.067E+21
	A-12	22139.38	20233.13	9.865E+20	19134.22	1.583E+21	18288.35	2.002E+21
	A-13	21517.56	20249.86	9.590E+20	19079.52	1.557E+21	18217.31	1.976E+21
	A-14	21151.16	19833.39	9.420E+20	18825.61	1.531E+21	17982.68	1.936E+21
	A-15	20408.99	19110.34	9.093E+20	18135.80	1.478E+21	17392.42	1.871E+21
	A-16	18996.95	17924.73	8.465E+20	17063.06	1.374E+21	16382.31	1.753E+21
	A-17	17578.79	16683.47	7.837E+20	15952.76	1.278E+21	15401.22	1.622E+21
	A-18	15570.96	15082.47	6.934E+20	14471.78	1.141E+21	14042.76	1.452E+21
	A-19	13323.63	13034.02	5.940E+20	12607.70	9.799E+20	12285.04	1.256E+21
	A-20	10795.96	10579.08	4.815E+20	10301.10	7.942E+20	10109.36	1.021E+21

Table 23. Corrected fission power density (W/cc) and fission density (fissions/cc) for ATR Cycle 142A.

Plate ID	Cell	BOC 142A	MOC1 142A		MOC2 142A		EOC 142A	
		Fission Power Density (W/cc)	Fission Power Density (W/cc)	Fission Density (fissions/cc)	Fission Power Density (W/cc)	Fission Density (fissions/cc)	Fission Power Density (W/cc)	Fission Density (fissions/cc)
2TT	A-1	7071.64	7746.50	1.096E+21	7879.28	1.467E+21	7706.34	1.839E+21
	A-2	8888.24	9565.86	1.402E+21	9709.05	1.857E+21	9262.85	2.321E+21
	A-3	10650.03	11285.63	1.681E+21	11392.96	2.219E+21	10513.87	2.758E+21
	A-4	12222.26	12599.28	1.922E+21	12607.21	2.526E+21	11298.73	3.120E+21
	A-5	13298.54	13675.74	2.145E+21	13573.61	2.786E+21	11890.75	3.436E+21
	A-6	14390.30	14306.91	2.294E+21	14225.37	2.971E+21	12123.31	3.649E+21
	A-7	15052.33	14761.20	2.414E+21	14337.90	3.120E+21	12260.12	3.798E+21
	A-8	15794.06	15333.22	2.507E+21	14948.12	3.231E+21	12352.43	3.946E+21
	A-9	16047.01	15636.15	2.554E+21	15133.12	3.296E+21	12583.23	4.021E+21
	A-10	16416.64	15698.18	2.619E+21	15046.70	3.371E+21	12312.73	4.086E+21
2BZ	A-11	17974.64	17318.55	2.918E+21	16424.58	3.729E+21	13523.08	4.514E+21
	A-12	17685.11	16991.30	2.839E+21	16147.06	3.637E+21	13287.94	4.409E+21
	A-13	17384.57	16669.38	2.787E+21	15844.57	3.585E+21	13130.29	4.344E+21
	A-14	17126.42	16517.19	2.748E+21	15706.69	3.533E+21	13179.54	4.278E+21
	A-15	16455.14	15982.52	2.643E+21	15374.08	3.402E+21	12961.08	4.134E+21
	A-16	15688.55	15414.60	2.486E+21	14899.93	3.219E+21	12710.48	3.925E+21
	A-17	14615.42	14511.24	2.316E+21	14229.11	2.996E+21	12504.15	3.676E+21
	A-18	13208.68	13147.08	2.080E+21	13382.81	2.695E+21	11810.57	3.336E+21
	A-19	11493.32	11610.83	1.792E+21	12092.36	2.342E+21	10992.73	2.918E+21
	A-20	9509.15	9841.72	1.465E+21	10292.87	1.936E+21	9668.35	2.420E+21

Table 24. Corrected fission power density (W/cc) and fission density (fissions/cc) for ATR Cycle 142B.

Plate ID	Cell	BOC 142B	MOC1 142B		MOC2 142B		EOC 142B	
		Fission Power Density (W/cc)	Fission Power Density (W/cc)	Fission Density (fissions/cc)	Fission Power Density (W/cc)	Fission Density (fissions/cc)	Fission Power Density (W/cc)	Fission Density (fissions/cc)
2TT	A-1	5674.24	5788.06	2.108E+21	6784.11	2.340E+21	6371.42	2.795E+21
	A-2	6948.99	6882.45	2.646E+21	7927.98	2.925E+21	7283.90	3.464E+21
	A-3	7928.77	7938.22	3.139E+21	8913.89	3.454E+21	7989.73	4.058E+21
	A-4	8581.65	8500.98	3.529E+21	9436.83	3.872E+21	8296.04	4.504E+21
	A-5	9083.00	8860.62	3.863E+21	9803.37	4.225E+21	8472.52	4.884E+21
	A-6	9609.46	9189.66	4.095E+21	10044.67	4.466E+21	8567.54	5.144E+21
	A-7	9974.57	9336.25	4.271E+21	10047.03	4.643E+21	8484.62	5.321E+21
	A-8	10100.50	9514.91	4.420E+21	10163.63	4.801E+21	8474.57	5.479E+21
	A-9	10275.24	9344.20	4.504E+21	10069.58	4.875E+21	8425.58	5.553E+21
	A-10	10611.42	9567.03	4.587E+21	10205.84	4.968E+21	8398.80	5.655E+21
2BZ	A-11	11269.39	10120.29	5.050E+21	10774.62	5.456E+21	8809.35	6.175E+21
	A-12	11199.66	10150.26	4.932E+21	10966.63	5.338E+21	9049.24	6.084E+21
	A-13	11100.86	10182.06	4.854E+21	11009.01	5.273E+21	9125.53	6.005E+21
	A-14	10988.61	10148.83	4.789E+21	11012.27	5.207E+21	9124.76	5.940E+21
	A-15	10693.31	9826.53	4.632E+21	10675.24	5.037E+21	8992.08	5.744E+21
	A-16	10408.28	9745.62	4.422E+21	10646.88	4.815E+21	9036.87	5.521E+21
	A-17	10032.21	9326.65	4.147E+21	10412.82	4.527E+21	8995.11	5.220E+21
	A-18	9363.83	9025.41	3.781E+21	10026.98	4.147E+21	8825.65	4.815E+21
	A-19	8582.97	8201.48	3.323E+21	9334.16	3.663E+21	8403.84	4.291E+21
	A-20	7468.39	7452.69	2.774E+21	8410.10	3.075E+21	7739.98	3.637E+21



## 6.2 Axial Gradient

The axial gradient is represented by the neutron flux profile and the corrected fission density profile as shown in Figure 10 and Figure 11, respectively. Since the AFIP-2 experiment was irradiated in the CFT, the transverse (radial) profile is relatively flat across the plates and was not reported.

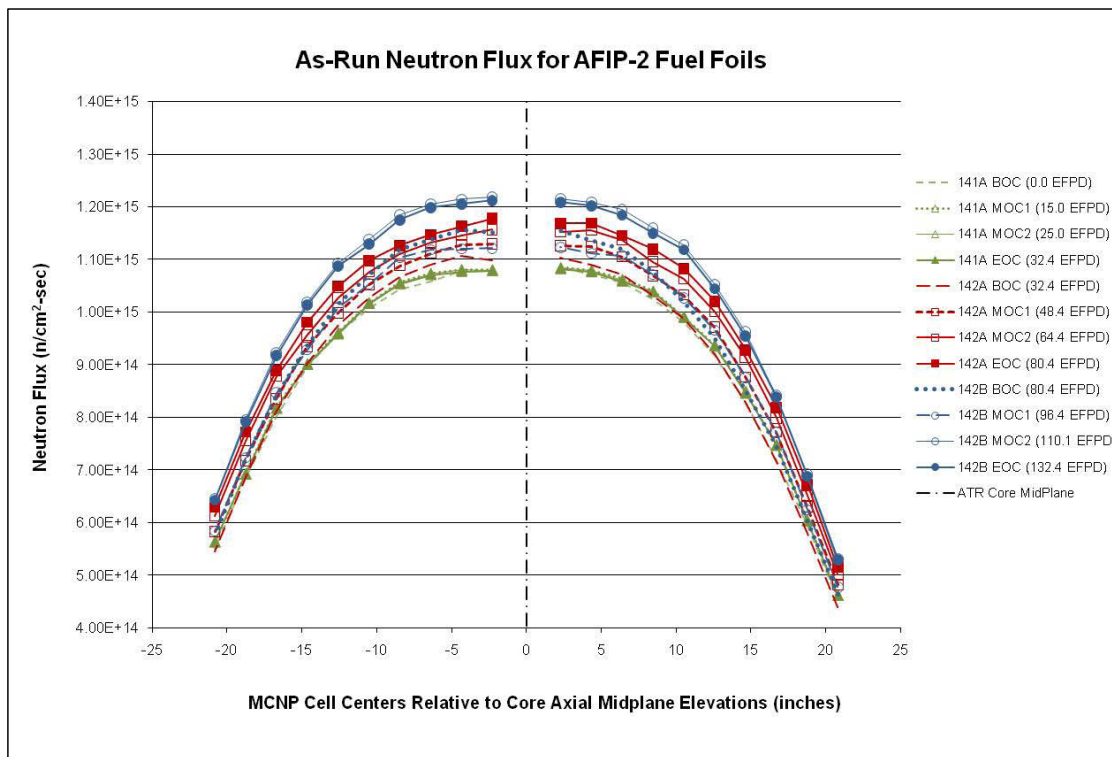


Figure 10. AFIP-2 axial neutron flux profile.<sup>3</sup>

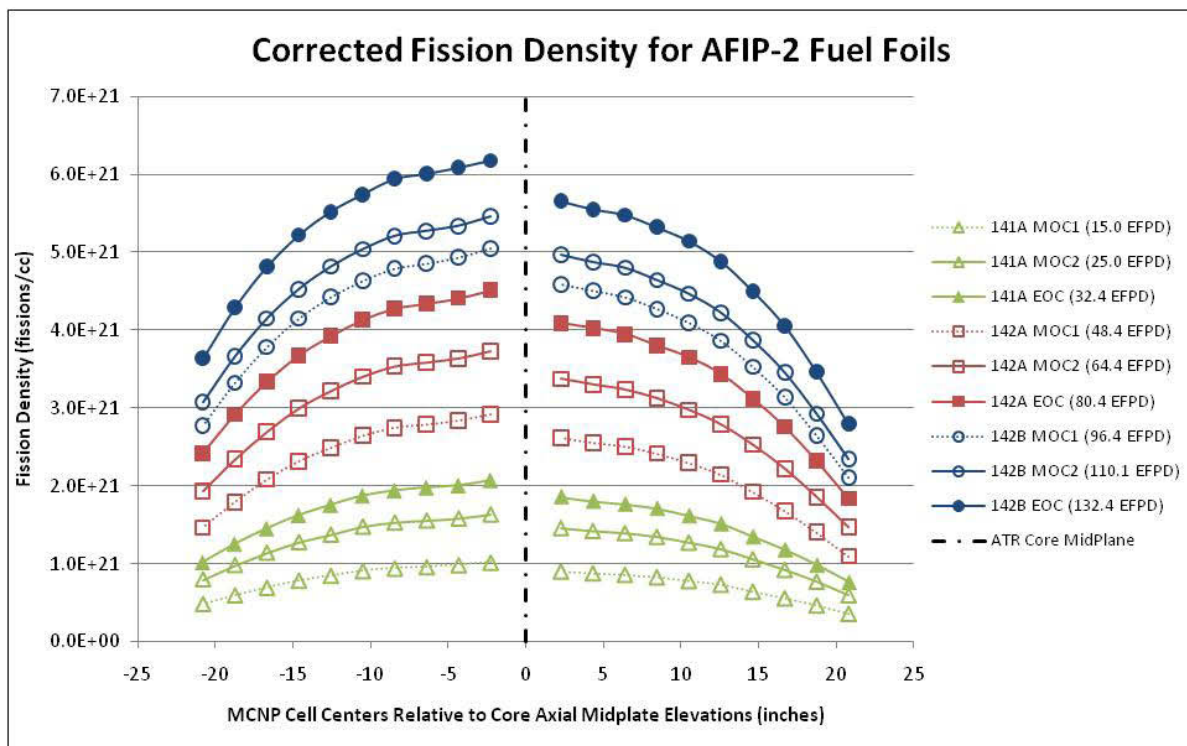


Figure 11. AFIP-2 corrected fission density axial profile.

## 7. HYDRAULIC TESTING

Flow tests were performed to characterize the test assembly designed to irradiate full-size plates for the RERTR program in the ATR. The holder assembly design was used for several plate tests that were conducted in the CFT position<sup>6</sup>.

The test apparatus was designed and constructed to simulate the ATR CFT position geometry. The holder was fabricated such that the orifice plate on the bottom of the test train could be screwed on (rather than welded) to allow variation of the orifice diameter. The results of the flow tests were used to generate estimates of the coolant velocity and flow rate and are reported in Table 25<sup>6</sup>.

Table 25. AFIP irradiation vehicle flow conditions for each orifice configuration.<sup>6</sup>

Configuration	Total Internal Loss Coefficient	Total Holder Internal Flow (gpm)	Channel Coolant Flow (gpm)	Channel Coolant Velocity (m/s)
6 mm orifice	0.1709	20.8	6.6	1.7
7 mm orifice	0.1203	24.8	7.9	2.0
8 mm orifice	0.0869	29.2	9.3	2.4
8.1 mm orifice	0.0861	29.3	9.3	2.4
9 mm orifice	0.0680	33.0	10.5	2.7
10 mm orifice	0.0568	36.1	11.5	3.0
Open (no orifice)	0.00164	212.5	67.5	17.4

Based on the results from the hydraulic testing, the orifice was sized to 0.8125 inches (20.64 mm) to provide a coolant channel velocity of approximately 10.36 m/s for two pump operation<sup>7</sup>.

## 8. AS-RUN THERMAL ANALYSIS

The thermal as-run analysis was performed using the as-built geometry, MCNP-calculated surface heat flux ( $\text{W}/\text{cm}^2$ ) and nominal coolant channel flow rate. ABAQUS<sup>8</sup> was used to calculate the coolant channel temperatures and plate surface temperatures.

### 8.1 Coolant Channel Temperature

The coolant temperature<sup>9</sup> was analyzed at the three flow channels in the test assembly. The left coolant channel is west of plate position B, the center coolant channel is in between plate positions A and B, and the right coolant channel is in between plate position A and the Ram Rod (refer to Figure 1). For each cycle interval, the coolant temperature was plotted as a function of location along the test assembly with 0.0 inches being at the top of the assembly. These plots are shown in Figure 12 through Figure 23.

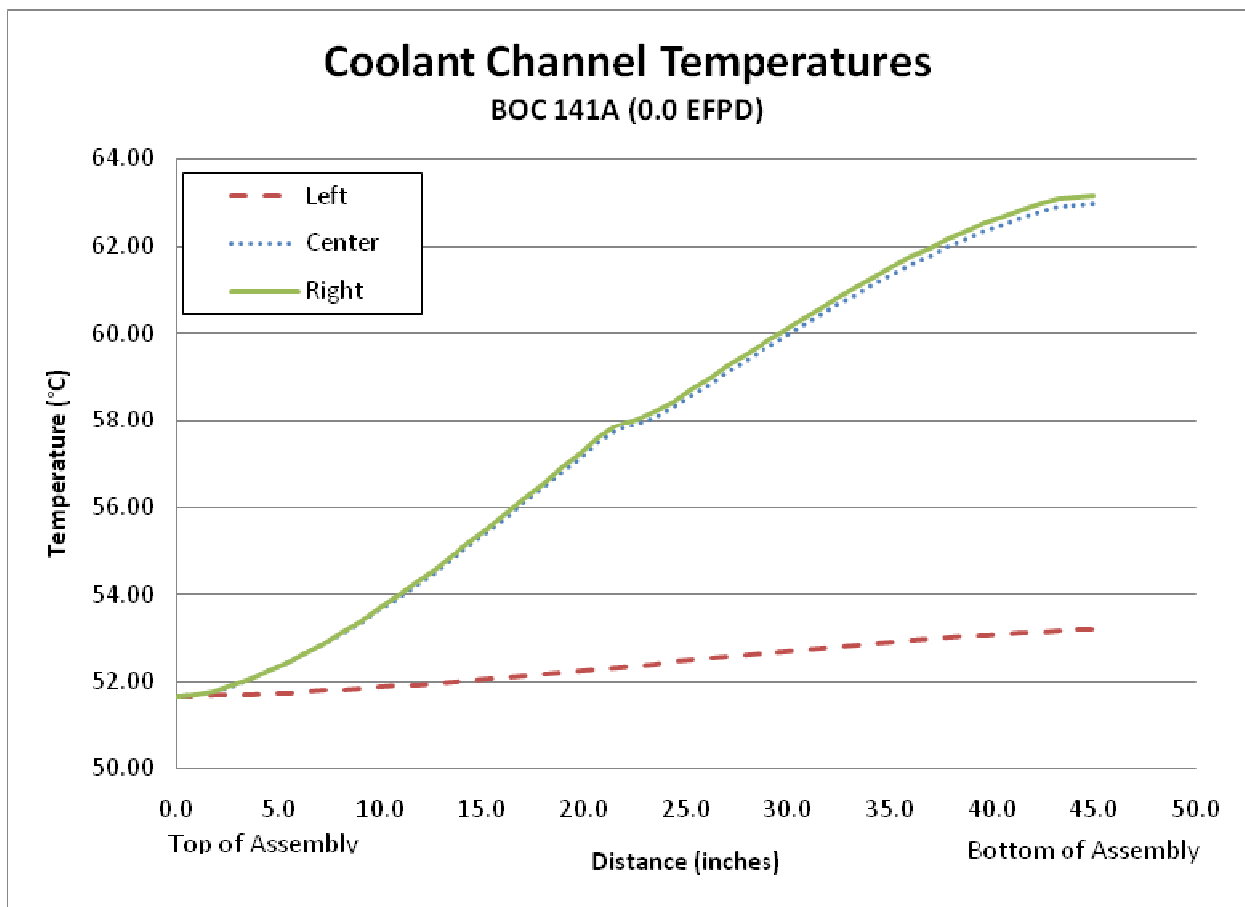


Figure 12. Coolant channel temperatures as a function of location along the test assembly at BOC 141A (0.0 EFPD).

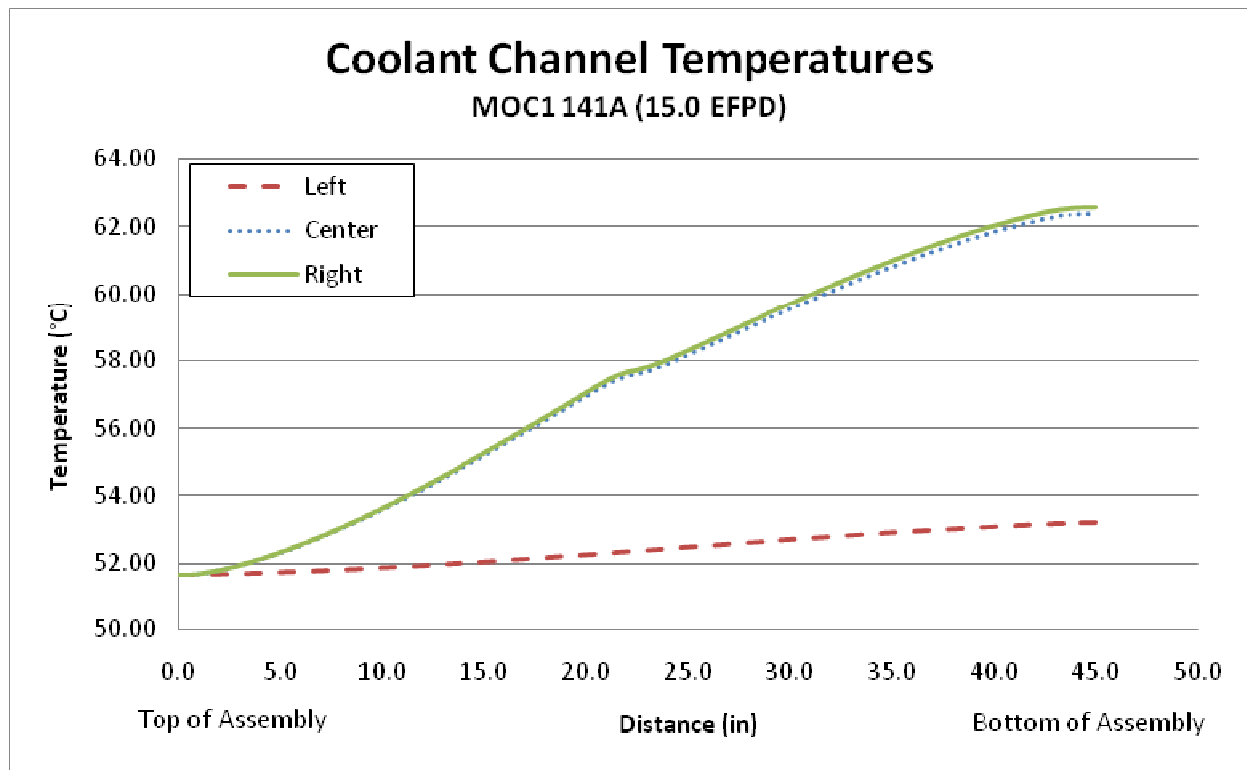


Figure 13. Coolant channel temperatures as a function of location along the test assembly at MOC 141A (15.0 EFPD).

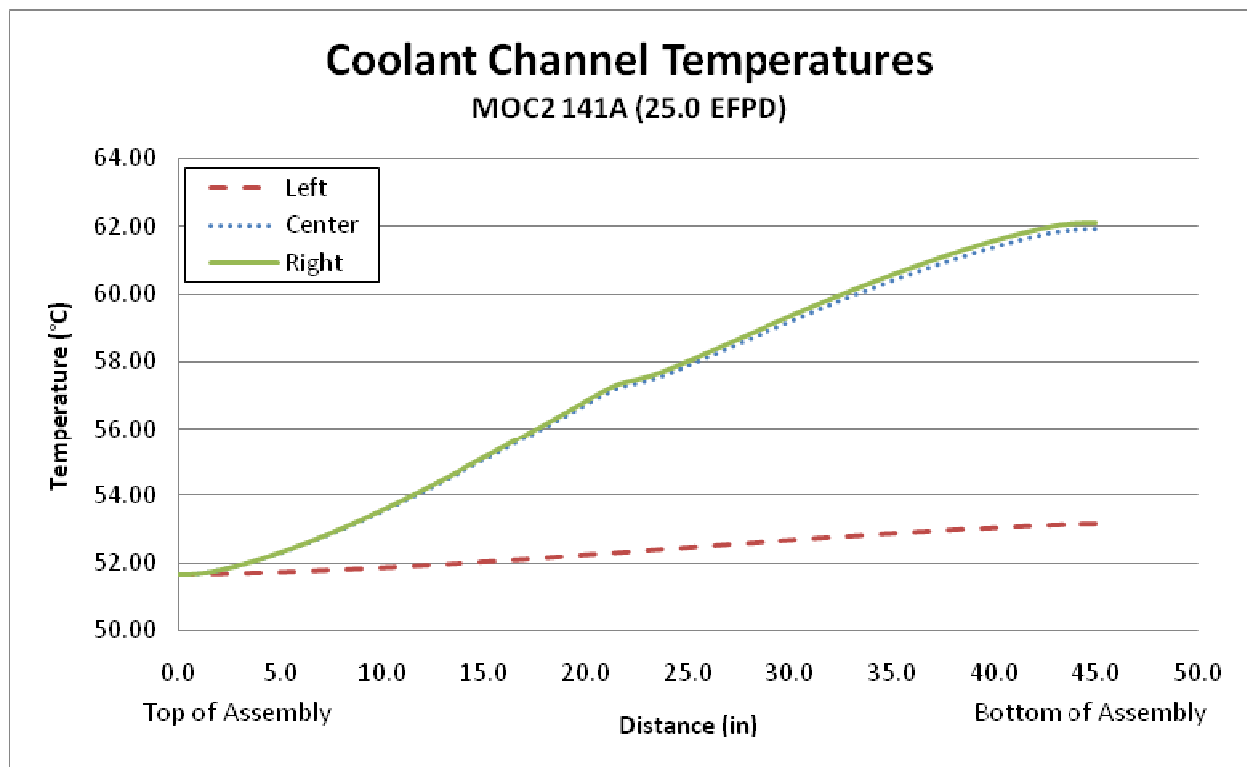


Figure 14. Coolant channel temperatures as a function of location along the test assembly at MOC 141A (25.0 EFPD).

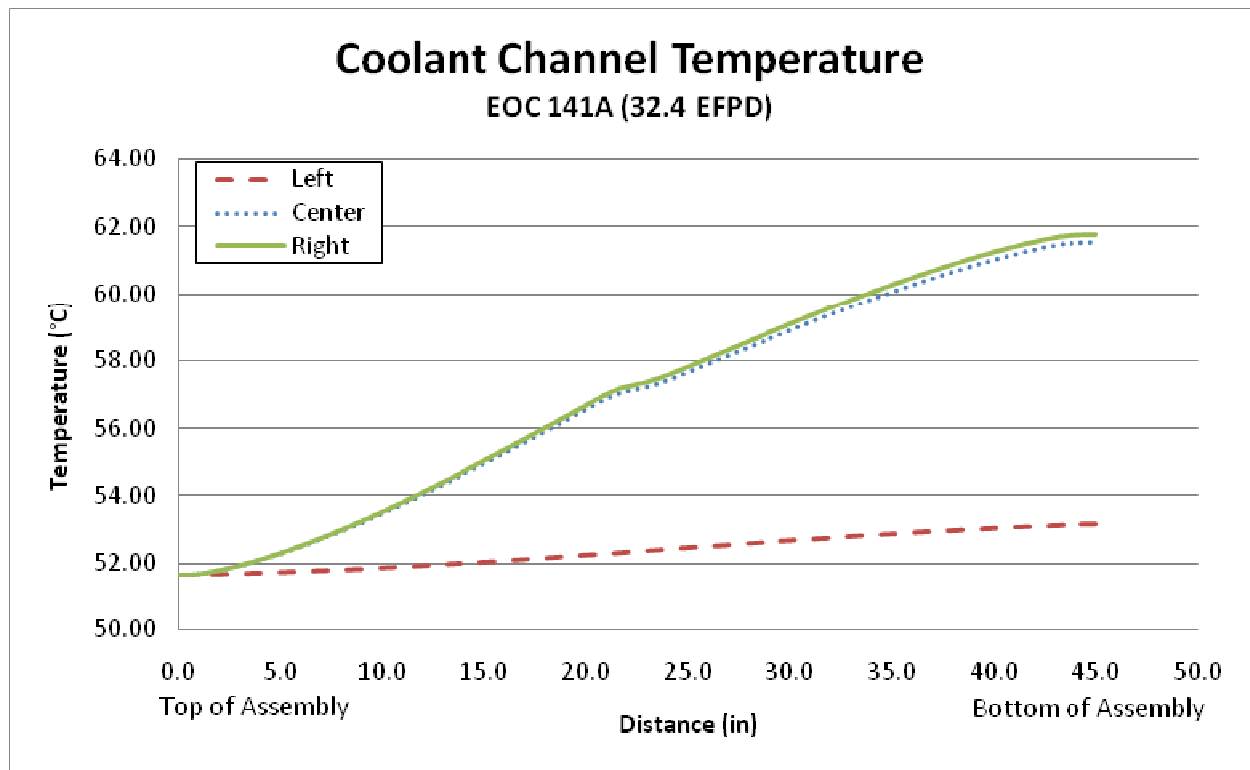


Figure 15. Coolant channel temperatures as a function of location along the test assembly at EOC 141A (32.4 EFPD).

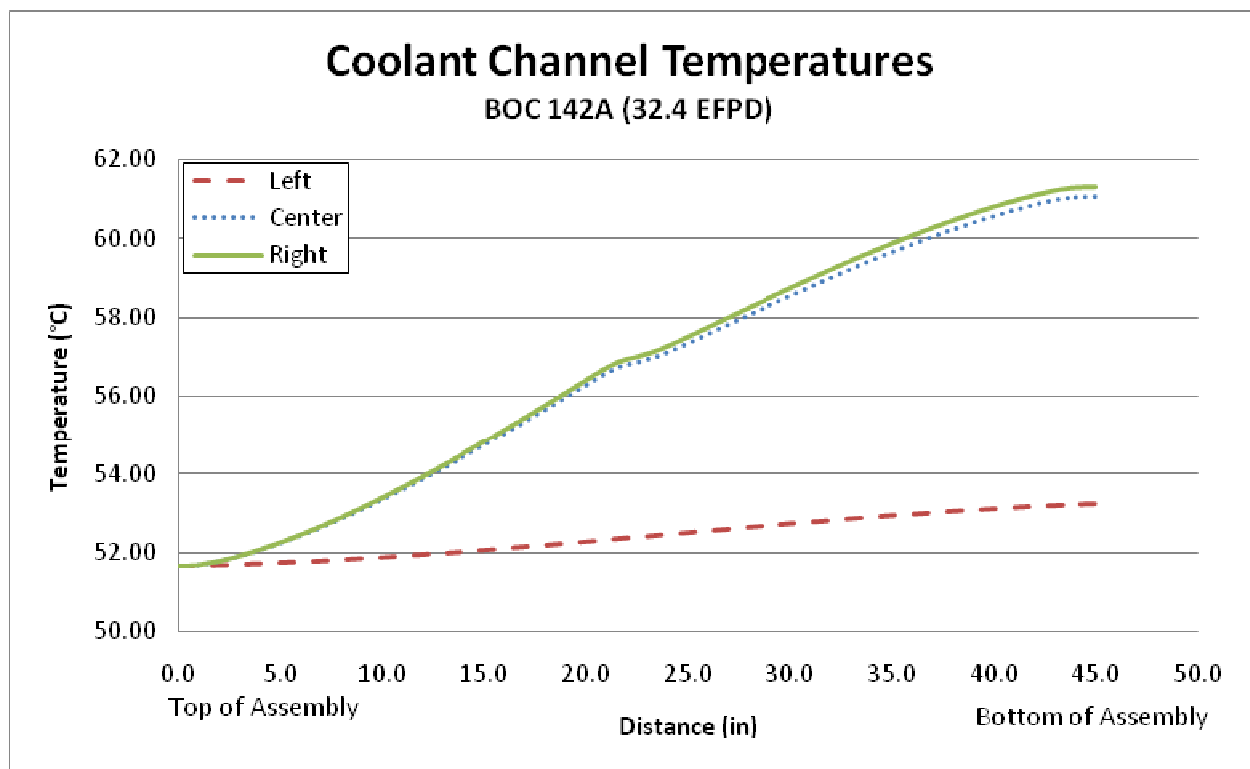


Figure 16. Coolant channel temperatures as a function of location along the test assembly at BOC 142A (32.4 EFPD).

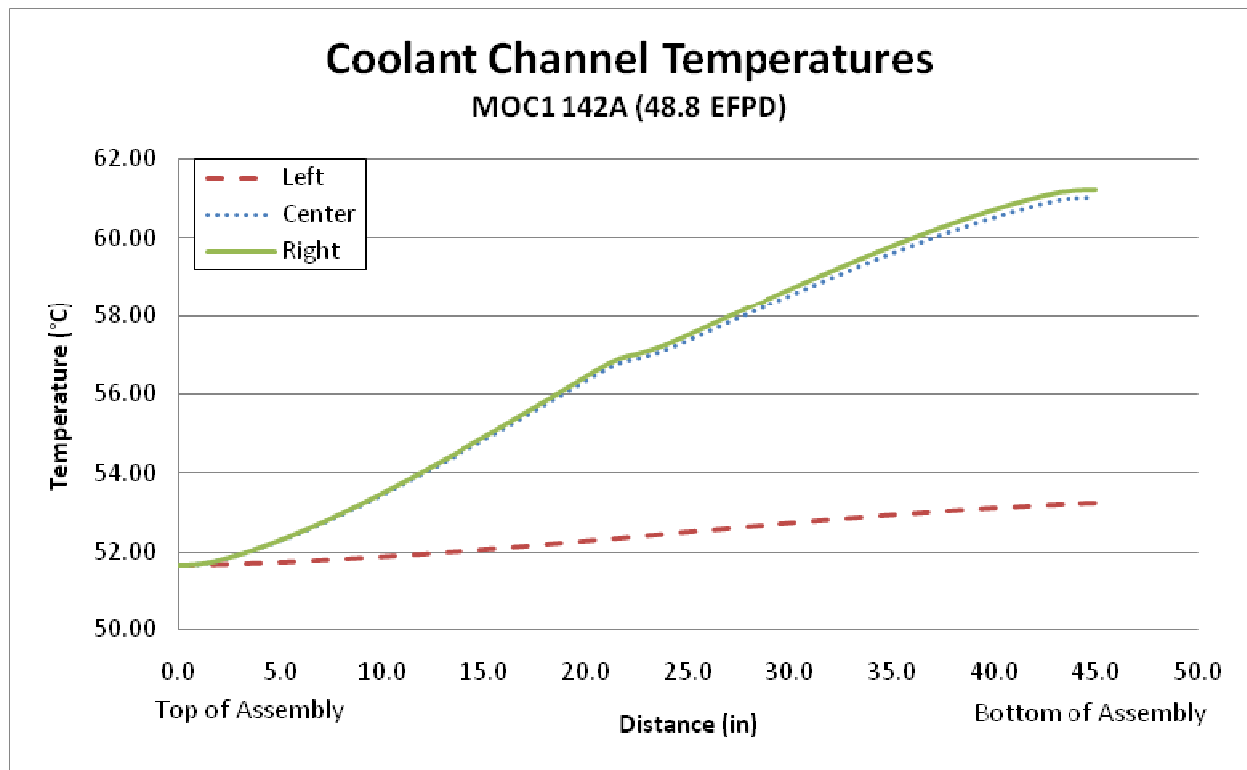


Figure 17. Coolant channel temperatures as a function of location along the test assembly at MOC 142A (48.4 EFPD).

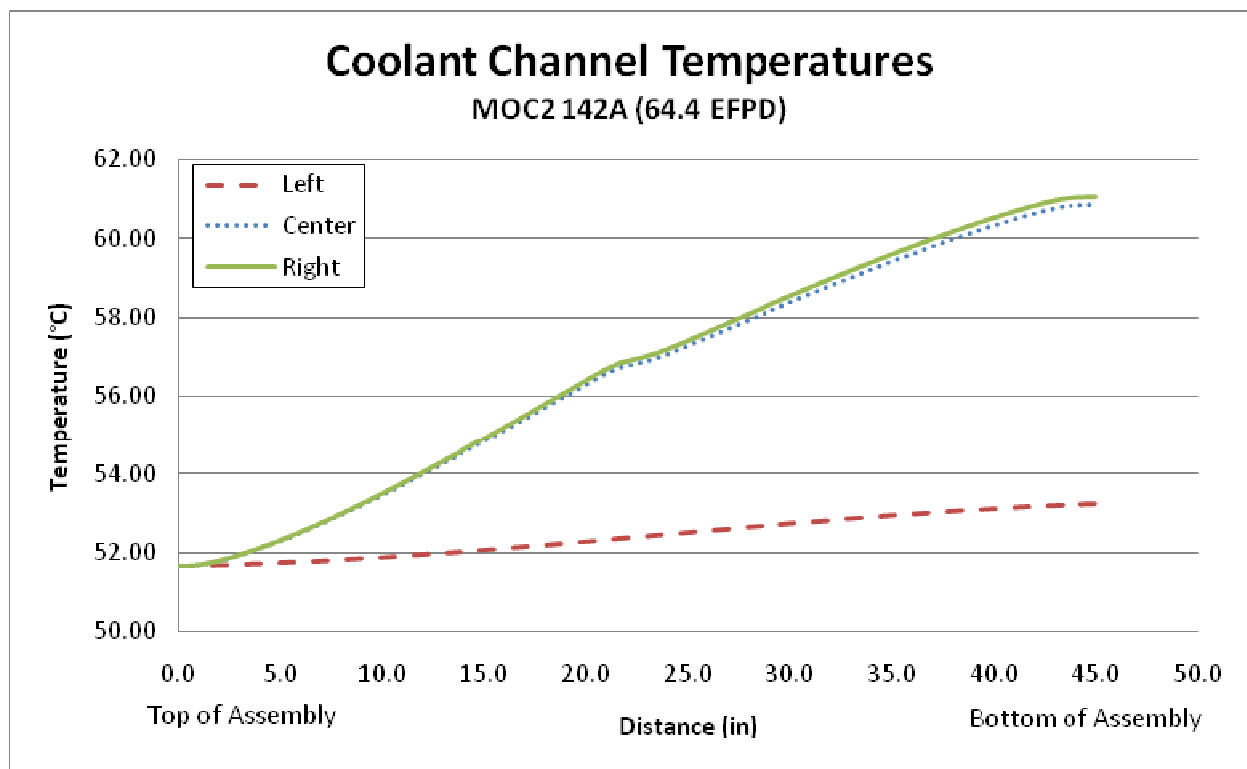


Figure 18. Coolant channel temperatures as a function of location along the test assembly at MOC 142A (64.4 EFPD).

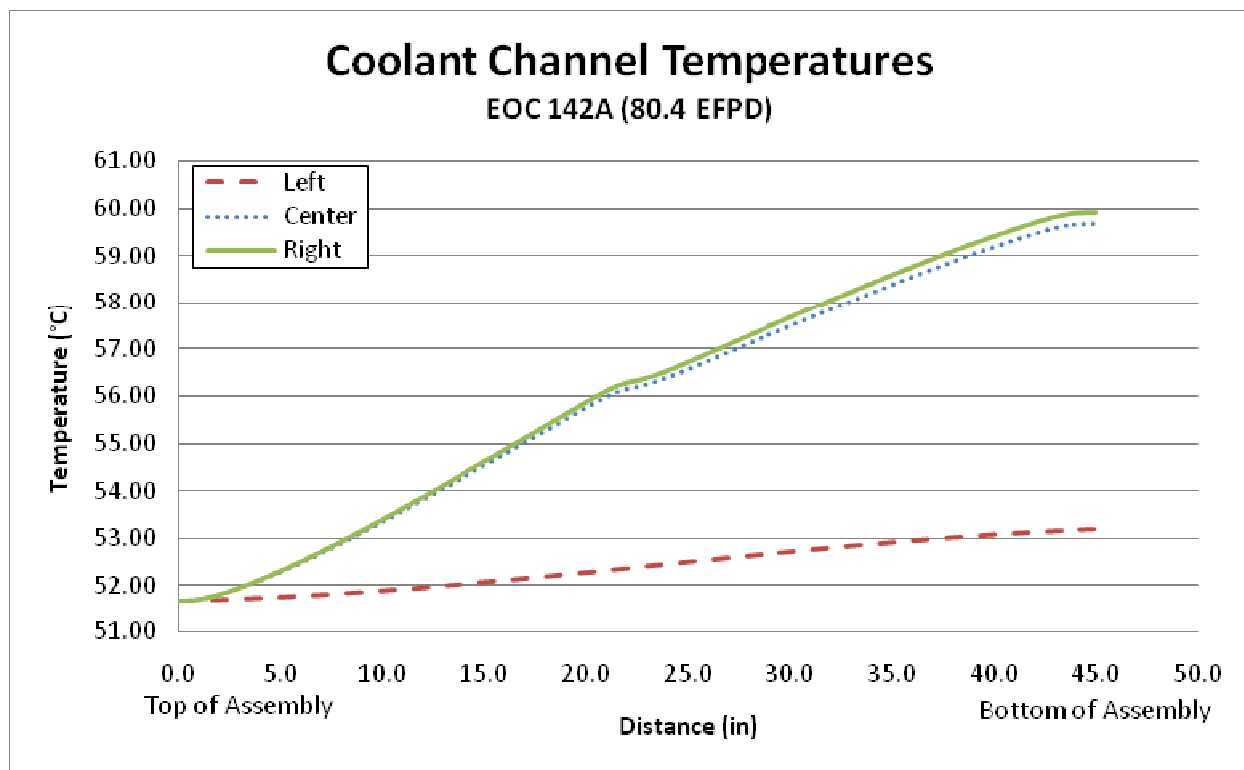


Figure 19. Coolant channel temperatures as a function of location along the test assembly at EOC 142A (80.4 EFPD).

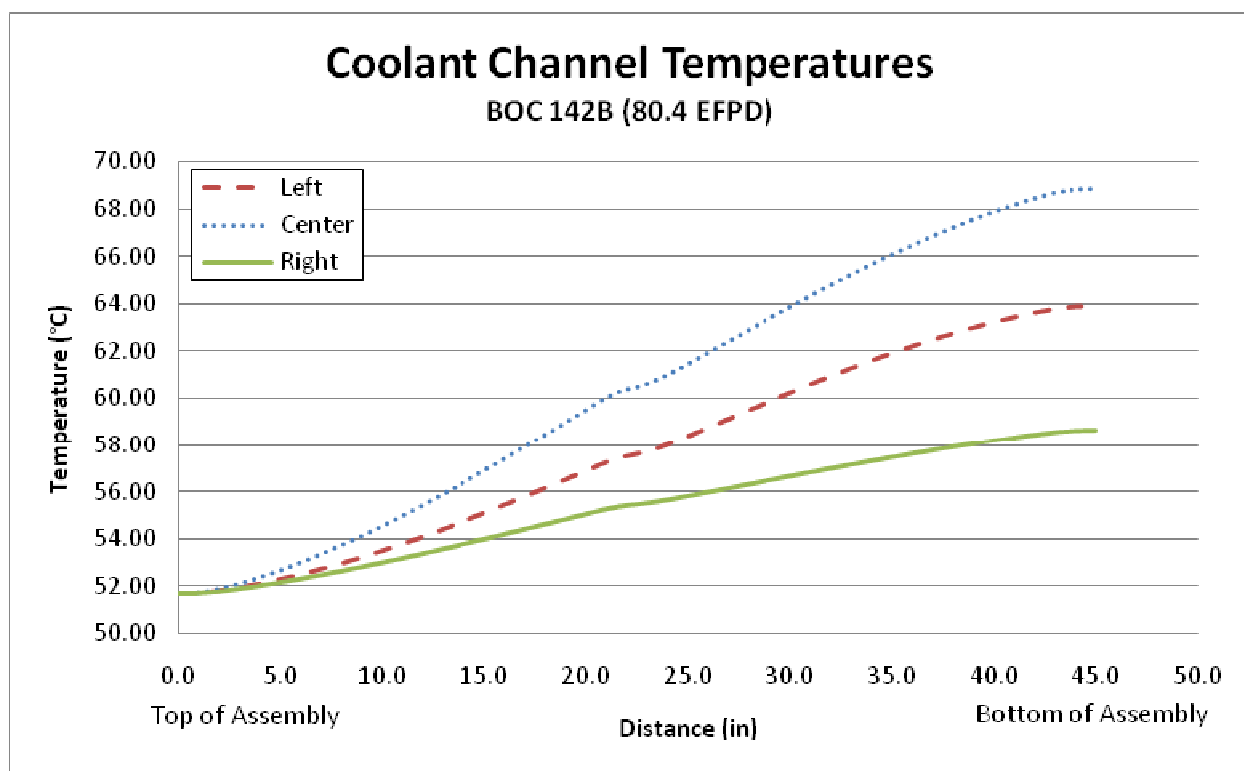


Figure 20. Coolant channel temperatures as a function of location along the test assembly at BOC 142B (80.4 EFPD). NOTE: AFIP-1 was inserted into plate position B and BOC 142B.



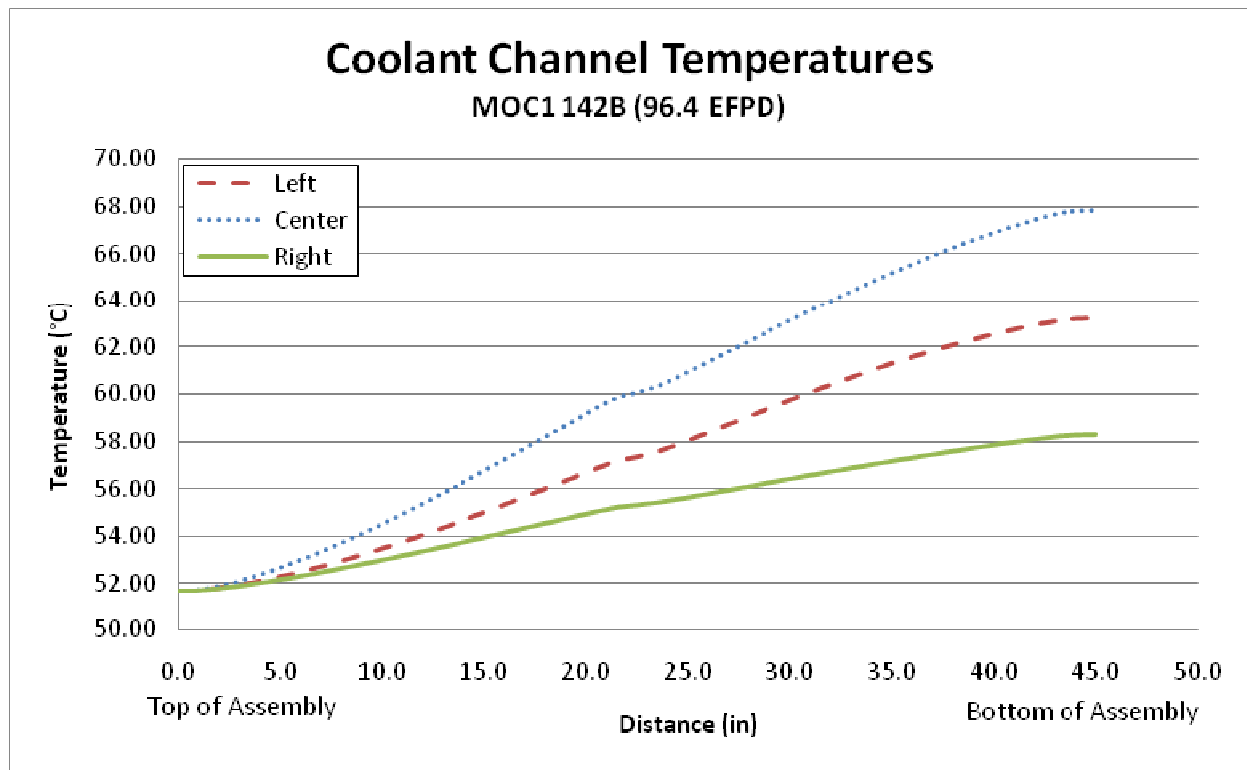


Figure 21. Coolant channel temperatures as a function of location along the test assembly at MOC 142B (96.4 EFPD).

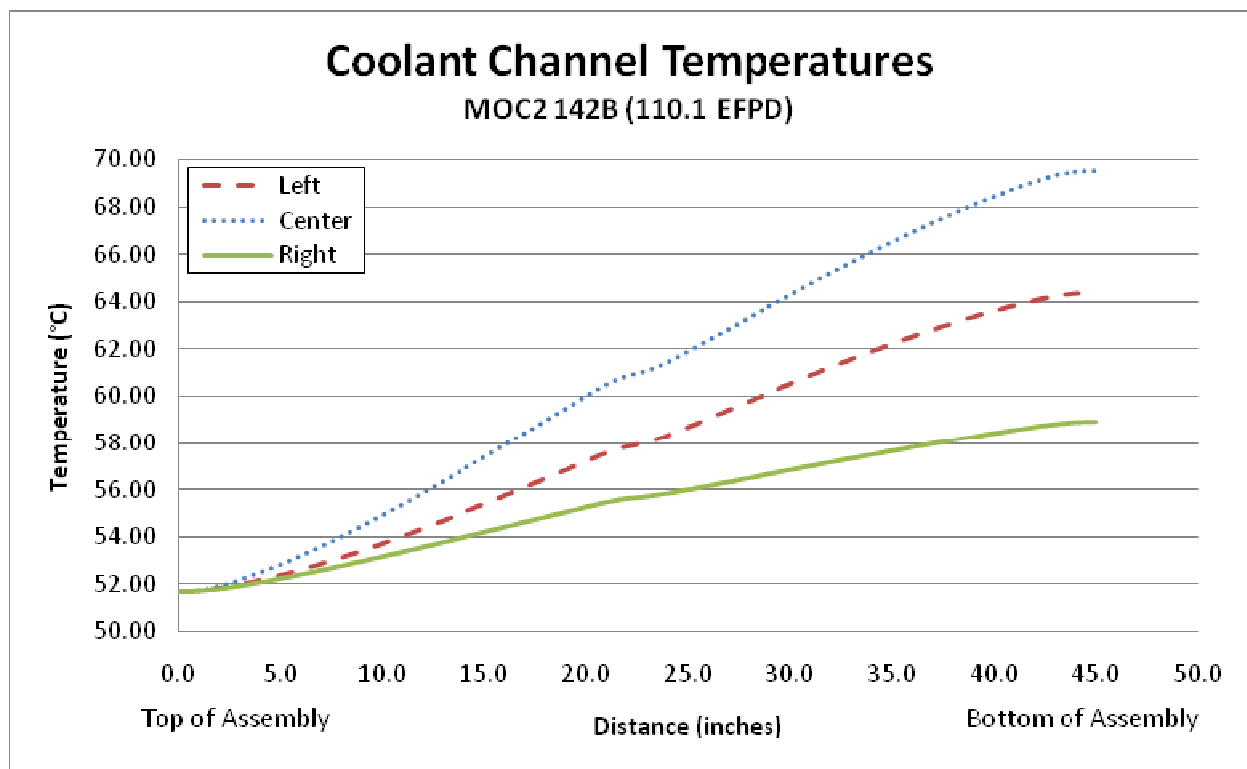


Figure 22. Coolant channel temperatures as a function of location along the test assembly at MOC 142B (110.1 EFPD).

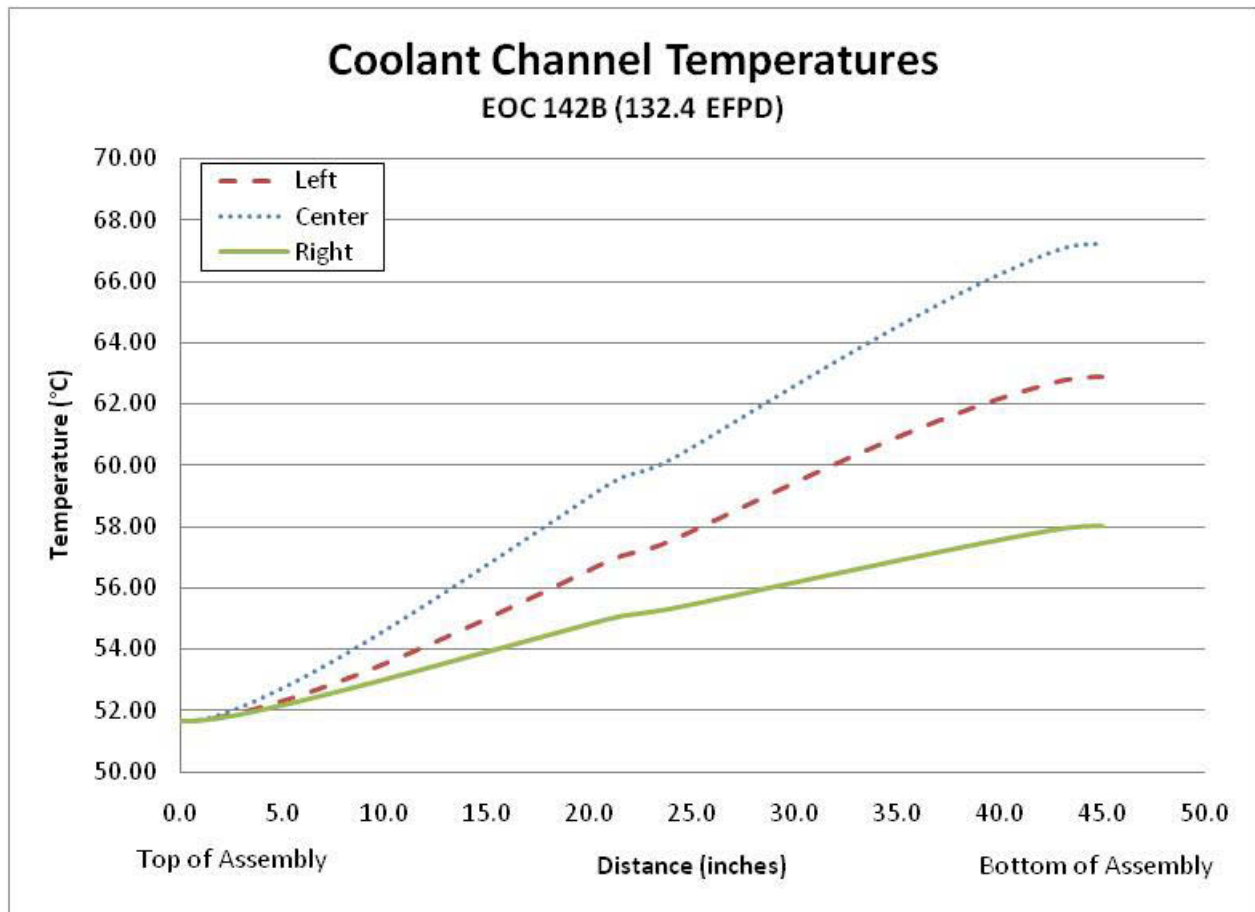


Figure 23. Coolant channel temperatures as a function of location along the test assembly at EOC 142B (132.4 EFPD).

## 8.2 Plate Surface Temperature

The plate surface temperatures<sup>9</sup> were analyzed at each time step for each side of the plate, with the east side of the plate facing the ram rod and west side of the plate facing plate position B. Table 26 through Table 37 tabulate the 2D map of the temperatures for each side of the plate at EOC for each cycle. The plate surface temperatures for each time step are tabulated in Appendix B.

Table 26. Temperature (°C) map of the east side of plate 2TT at EOC 141A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.92	51.77	51.76	51.76	51.76	51.76	51.76	51.77	51.80	51.93
1.00	52.87	52.43	52.60	52.62	52.62	52.62	52.62	52.55	52.37	52.77
2.00	56.41	79.62	82.51	82.58	82.59	82.59	82.58	82.31	69.86	55.06
3.00	56.76	79.89	82.81	82.89	82.89	82.89	82.88	82.59	70.14	55.38
4.00	57.84	86.33	89.78	89.87	89.87	89.87	89.86	89.54	74.55	56.15
5.00	58.11	86.52	89.97	90.06	90.07	90.07	90.05	89.73	74.76	56.40
6.00	59.16	92.24	96.14	96.24	96.25	96.25	96.23	95.87	78.74	57.13
7.00	59.41	92.42	96.32	96.43	96.44	96.44	96.41	96.05	78.94	57.36
8.00	60.32	96.70	101.01	101.13	101.14	101.14	101.11	100.69	81.98	58.02
9.00	60.57	96.88	101.23	101.35	101.37	101.37	101.33	100.90	82.20	58.32
10.00	61.39	100.79	105.65	105.79	105.81	105.81	105.77	105.30	84.94	58.91
11.00	61.64	101.01	105.88	106.03	106.05	106.05	106.00	105.52	85.15	59.12
12.00	62.28	103.62	108.70	108.86	108.89	108.88	108.83	108.33	86.94	59.62
13.00	62.53	103.85	108.94	109.10	109.13	109.13	109.07	108.56	87.17	59.87
14.00	63.11	106.34	111.63	111.80	111.83	111.83	111.76	111.24	88.87	60.32
15.00	63.37	106.58	111.87	112.05	112.08	112.08	112.01	111.48	89.09	60.55
16.00	63.78	107.81	113.19	113.38	113.41	113.41	113.33	112.79	89.97	60.87
17.00	64.03	108.04	113.43	113.62	113.66	113.66	113.57	113.02	90.21	61.16
18.00	64.40	109.30	114.78	114.98	115.02	115.02	114.93	114.37	91.10	61.49
19.00	64.65	109.54	115.03	115.23	115.27	115.27	115.18	114.61	91.33	61.71
20.00	65.08	111.06	116.65	116.86	116.91	116.91	116.81	116.23	92.39	62.02
21.00	65.30	111.28	116.87	117.09	117.14	117.14	117.03	116.44	92.60	62.22
22.00	59.44	64.17	65.82	66.00	66.06	66.06	65.93	65.45	61.75	58.63
22.50	57.56	57.52	57.80	57.93	58.00	57.99	57.87	57.65	57.41	57.29

Table 27. Temperature (°C) map of the west side of plate 2TT at EOC 141A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.96	51.77	51.76	51.76	51.76	51.76	51.76	51.77	51.79	51.95
1.00	52.99	52.43	52.60	52.62	52.62	52.62	52.62	52.55	52.37	52.84
2.00	56.72	79.62	82.51	82.58	82.59	82.59	82.58	82.31	69.85	55.15
3.00	57.10	79.89	82.81	82.88	82.89	82.89	82.88	82.59	70.13	55.48
4.00	58.23	86.34	89.78	89.86	89.87	89.87	89.85	89.54	74.54	56.26
5.00	58.52	86.52	89.97	90.06	90.06	90.06	90.05	89.72	74.75	56.52
6.00	59.62	92.24	96.14	96.23	96.24	96.24	96.22	95.87	78.73	57.26
7.00	59.88	92.42	96.32	96.42	96.43	96.43	96.40	96.05	78.93	57.48
8.00	60.83	96.70	101.00	101.12	101.13	101.13	101.10	100.69	81.98	58.15
9.00	61.09	96.89	101.22	101.34	101.36	101.36	101.32	100.90	82.20	58.50
10.00	61.95	100.80	105.64	105.78	105.79	105.79	105.76	105.30	84.94	59.09
11.00	62.22	101.02	105.87	106.01	106.03	106.03	105.99	105.52	85.15	59.28
12.00	62.88	103.64	108.69	108.84	108.86	108.86	108.82	108.33	86.94	59.78
13.00	63.14	103.87	108.93	109.08	109.10	109.10	109.05	108.56	87.17	60.04
14.00	63.74	106.36	111.62	111.78	111.80	111.80	111.75	111.24	88.87	60.50
15.00	64.00	106.60	111.86	112.02	112.05	112.05	111.99	111.48	89.10	60.71
16.00	64.43	107.83	113.18	113.35	113.38	113.38	113.31	112.79	89.98	61.02
17.00	64.68	108.06	113.41	113.59	113.62	113.62	113.55	113.02	90.21	61.37
18.00	65.06	109.33	114.77	114.95	114.98	114.98	114.91	114.37	91.11	61.71
19.00	65.32	109.57	115.01	115.20	115.23	115.23	115.15	114.61	91.34	61.92
20.00	65.75	111.09	116.64	116.83	116.87	116.86	116.78	116.23	92.41	62.20
21.00	65.98	111.31	116.86	117.05	117.09	117.09	117.00	116.44	92.61	62.40
22.00	59.82	64.20	65.81	65.97	66.02	66.01	65.91	65.45	61.79	58.76
22.50	57.90	57.55	57.78	57.90	57.95	57.95	57.84	57.65	57.45	57.48

Table 28. Temperature (°C) map of the east side of plate 2BZ at EOC 141A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.69	57.56	57.85	57.99	58.05	58.05	57.92	57.70	57.45	57.41
23.00	59.12	62.76	64.11	64.28	64.34	64.34	64.21	63.79	60.84	58.42
24.00	64.00	100.57	105.18	105.40	105.46	105.45	105.33	104.81	85.70	61.51
25.00	64.17	100.75	105.35	105.57	105.63	105.63	105.51	104.97	85.89	61.67
26.00	64.21	100.05	104.59	104.81	104.88	104.87	104.74	104.21	85.50	61.78
27.00	64.36	100.24	104.78	105.01	105.07	105.07	104.94	104.40	85.68	61.94
28.00	64.49	100.28	104.81	105.04	105.11	105.11	104.97	104.43	85.76	62.04
29.00	64.63	100.48	105.01	105.25	105.32	105.31	105.17	104.63	85.94	62.15
30.00	64.70	100.18	104.67	104.91	104.98	104.98	104.83	104.28	85.80	62.23
31.00	64.81	100.35	104.84	105.08	105.16	105.15	105.01	104.46	85.96	62.35
32.00	64.75	99.31	103.69	103.93	104.00	104.00	103.85	103.30	85.32	62.35
33.00	64.86	99.47	103.85	104.10	104.17	104.17	104.02	103.47	85.47	62.43
34.00	64.65	97.54	101.74	101.98	102.06	102.06	101.90	101.36	84.27	62.32
35.00	64.73	97.69	101.89	102.14	102.22	102.21	102.06	101.51	84.41	62.42
36.00	64.50	95.78	99.79	100.04	100.12	100.12	99.95	99.42	83.21	62.30
37.00	64.56	95.92	99.93	100.18	100.26	100.26	100.09	99.56	83.33	62.35
38.00	64.21	93.19	96.93	97.18	97.27	97.26	97.09	96.58	81.58	62.11
39.00	64.24	93.31	97.05	97.30	97.39	97.38	97.21	96.70	81.69	62.13
40.00	63.75	89.76	93.04	93.29	93.38	93.37	93.20	92.71	79.35	61.83
41.00	63.74	89.84	93.13	93.38	93.46	93.46	93.29	92.80	79.43	61.82
42.00	63.07	85.34	88.17	88.40	88.48	88.47	88.31	87.88	76.43	61.39
43.00	63.03	85.39	88.22	88.44	88.52	88.52	88.36	87.93	76.48	61.34
44.00	60.05	61.77	62.30	62.51	62.61	62.60	62.41	62.10	61.32	59.46
45.00	59.52	61.26	61.62	61.82	61.91	61.91	61.72	61.47	60.91	59.03

Table 29. Temperature (°C) map of the west side of plate 2BZ at EOC 141A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.98	57.59	57.83	57.95	58.01	58.00	57.90	57.70	57.49	57.55
23.00	59.48	62.79	64.09	64.25	64.30	64.29	64.19	63.79	60.88	58.54
24.00	64.59	100.60	105.17	105.35	105.40	105.39	105.30	104.81	85.73	61.66
25.00	64.75	100.78	105.34	105.53	105.57	105.57	105.47	104.97	85.91	61.83
26.00	64.78	100.09	104.57	104.76	104.81	104.81	104.71	104.21	85.53	61.97
27.00	64.93	100.28	104.76	104.96	105.01	105.00	104.90	104.40	85.71	62.13
28.00	65.05	100.32	104.79	104.99	105.04	105.03	104.93	104.43	85.78	62.22
29.00	65.18	100.52	104.99	105.19	105.24	105.24	105.13	104.63	85.97	62.30
30.00	65.24	100.22	104.65	104.85	104.91	104.90	104.79	104.28	85.82	62.36
31.00	65.34	100.39	104.82	105.03	105.08	105.08	104.96	104.45	85.98	62.49
32.00	65.26	99.34	103.67	103.87	103.93	103.92	103.81	103.30	85.35	62.47
33.00	65.35	99.50	103.83	104.04	104.09	104.09	103.97	103.46	85.50	62.54
34.00	65.12	97.58	101.72	101.92	101.98	101.97	101.86	101.36	84.29	62.43
35.00	65.18	97.73	101.87	102.07	102.13	102.13	102.01	101.51	84.44	62.54
36.00	64.93	95.82	99.77	99.97	100.03	100.03	99.90	99.42	83.23	62.43
37.00	64.97	95.96	99.91	100.11	100.18	100.17	100.05	99.56	83.36	62.45
38.00	64.58	93.23	96.91	97.11	97.18	97.17	97.04	96.57	81.61	62.18
39.00	64.60	93.34	97.03	97.23	97.30	97.29	97.16	96.69	81.72	62.18
40.00	64.06	89.79	93.02	93.22	93.28	93.28	93.15	92.70	79.38	61.88
41.00	64.03	89.87	93.10	93.31	93.37	93.36	93.23	92.79	79.46	61.86
42.00	63.32	85.37	88.15	88.33	88.39	88.38	88.26	87.87	76.46	61.40
43.00	63.26	85.42	88.20	88.38	88.44	88.43	88.31	87.92	76.51	61.35
44.00	60.10	61.80	62.28	62.46	62.53	62.52	62.37	62.09	61.36	59.45
45.00	59.55	61.28	61.60	61.76	61.84	61.83	61.68	61.46	60.95	59.02

Table 30. Temperature (°C) map of the east side of plate 2TT at EOC 142A (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.93	51.93	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.80
1.00	52.94	52.90	52.44	52.61	52.63	52.63	52.63	52.63	52.55	52.38
2.00	56.72	56.47	79.71	82.61	82.68	82.68	82.68	82.67	82.40	69.93
3.00	57.06	56.80	79.96	82.88	82.96	82.96	82.96	82.95	82.66	70.19
4.00	57.98	57.67	84.91	88.23	88.31	88.32	88.32	88.30	87.99	73.59
5.00	58.24	57.92	85.08	88.41	88.49	88.50	88.50	88.48	88.16	73.77
6.00	59.06	58.70	88.96	92.60	92.70	92.71	92.71	92.69	92.35	76.49
7.00	59.34	58.93	89.13	92.77	92.87	92.88	92.88	92.85	92.51	76.67
8.00	59.94	59.54	91.59	95.42	95.52	95.54	95.54	95.51	95.15	78.44
9.00	60.18	59.77	91.75	95.58	95.69	95.71	95.70	95.67	95.31	78.63
10.00	60.69	60.26	93.61	97.57	97.69	97.70	97.70	97.67	97.29	79.98
11.00	60.96	60.49	93.77	97.74	97.85	97.87	97.87	97.83	97.45	80.16
12.00	61.30	60.85	94.61	98.63	98.75	98.77	98.77	98.72	98.34	80.82
13.00	61.53	61.07	94.78	98.80	98.94	98.97	98.96	98.91	98.50	81.00
14.00	61.81	61.34	95.33	99.43	99.58	99.61	99.60	99.54	99.11	81.45
15.00	62.04	61.56	95.49	99.62	99.77	99.80	99.80	99.74	99.29	81.63
16.00	62.32	61.83	95.93	100.13	100.29	100.32	100.32	100.25	99.80	82.01
17.00	62.54	62.04	96.10	100.32	100.48	100.52	100.51	100.44	99.98	82.20
18.00	62.84	62.33	96.90	101.25	101.41	101.45	101.45	101.37	100.90	82.83
19.00	63.06	62.54	97.07	101.44	101.62	101.66	101.66	101.57	101.09	83.01
20.00	63.17	62.65	96.51	100.79	100.97	101.01	101.01	100.92	100.44	82.69
21.00	63.32	62.79	96.64	100.94	101.12	101.16	101.16	101.07	100.59	82.83
22.00	58.77	58.51	61.50	62.71	62.86	62.91	62.91	62.80	62.43	59.77
22.50	57.31	57.14	56.59	56.77	56.88	56.93	56.93	56.82	56.66	56.58

Table 31. Temperature (°C) map of the west side of plate 2TT at EOC 142A (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.97	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.80	51.97
1.00	53.03	52.44	52.61	52.63	52.63	52.63	52.63	52.55	52.38	52.88
2.00	56.78	79.71	82.60	82.68	82.68	82.68	82.67	82.40	69.92	55.20
3.00	57.14	79.96	82.88	82.95	82.96	82.96	82.95	82.66	70.18	55.52
4.00	58.06	84.91	88.23	88.31	88.32	88.32	88.30	87.99	73.57	56.17
5.00	58.33	85.08	88.40	88.49	88.50	88.49	88.48	88.16	73.76	56.41
6.00	59.14	88.97	92.60	92.69	92.70	92.70	92.68	92.35	76.48	56.97
7.00	59.39	89.13	92.76	92.86	92.87	92.87	92.85	92.51	76.66	57.18
8.00	60.03	91.60	95.41	95.51	95.52	95.52	95.50	95.15	78.43	57.65
9.00	60.27	91.76	95.58	95.68	95.69	95.69	95.66	95.31	78.63	57.99
10.00	60.79	93.62	97.57	97.67	97.69	97.68	97.66	97.29	79.98	58.36
11.00	61.03	93.78	97.73	97.84	97.85	97.85	97.82	97.45	80.16	58.54
12.00	61.40	94.63	98.62	98.73	98.74	98.74	98.71	98.34	80.82	58.84
13.00	61.63	94.79	98.79	98.92	98.94	98.94	98.89	98.50	81.01	59.09
14.00	61.91	95.34	99.42	99.55	99.58	99.57	99.53	99.11	81.45	59.34
15.00	62.14	95.50	99.61	99.75	99.77	99.77	99.72	99.29	81.63	59.52
16.00	62.42	95.95	100.12	100.26	100.29	100.28	100.23	99.79	82.01	59.73
17.00	62.63	96.11	100.30	100.45	100.48	100.47	100.42	99.98	82.21	60.05
18.00	62.93	96.92	101.23	101.38	101.41	101.41	101.35	100.90	82.84	60.33
19.00	63.14	97.09	101.43	101.58	101.61	101.61	101.54	101.09	83.02	60.51
20.00	63.25	96.52	100.77	100.93	100.96	100.96	100.89	100.44	82.70	60.58
21.00	63.40	96.65	100.92	101.08	101.11	101.11	101.04	100.58	82.85	60.71
22.00	58.88	61.51	62.70	62.83	62.87	62.86	62.78	62.43	59.79	58.06
22.50	57.49	56.61	56.75	56.84	56.88	56.88	56.80	56.66	56.61	57.16



Table 32. Temperature (°C) map of the east side of plate 2BZ at EOC 142A (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.23	56.62	56.80	56.92	56.97	56.97	56.86	56.70	56.61	57.05
23.00	58.29	60.47	61.46	61.60	61.66	61.65	61.55	61.22	59.12	57.79
24.00	61.90	89.02	92.41	92.56	92.61	92.60	92.52	92.13	77.71	60.08
25.00	62.05	89.16	92.54	92.70	92.75	92.75	92.65	92.26	77.87	60.23
26.00	62.12	88.85	92.20	92.37	92.41	92.41	92.32	91.92	77.73	60.35
27.00	62.23	88.98	92.33	92.50	92.55	92.54	92.45	92.05	77.87	60.47
28.00	62.30	88.78	92.10	92.27	92.32	92.32	92.22	91.82	77.78	60.54
29.00	62.42	88.93	92.25	92.42	92.47	92.47	92.36	91.97	77.92	60.62
30.00	62.53	89.16	92.48	92.66	92.71	92.71	92.60	92.20	78.12	60.72
31.00	62.62	89.28	92.61	92.78	92.83	92.83	92.72	92.32	78.25	60.82
32.00	62.64	88.94	92.23	92.41	92.47	92.46	92.35	91.95	78.07	60.86
33.00	62.71	89.06	92.35	92.53	92.59	92.58	92.47	92.07	78.18	60.92
34.00	62.70	88.65	91.90	92.08	92.14	92.14	92.02	91.62	77.95	60.93
35.00	62.76	88.78	92.03	92.21	92.27	92.27	92.15	91.75	78.08	61.02
36.00	62.75	88.46	91.68	91.86	91.92	91.92	91.80	91.40	77.90	61.03
37.00	62.80	88.57	91.79	91.97	92.03	92.03	91.91	91.51	78.01	61.06
38.00	62.62	87.23	90.32	90.51	90.57	90.57	90.44	90.04	77.13	60.93
39.00	62.64	87.33	90.42	90.61	90.67	90.67	90.54	90.14	77.22	60.95
40.00	62.41	85.68	88.63	88.82	88.88	88.88	88.75	88.35	76.15	60.81
41.00	62.41	85.77	88.71	88.90	88.96	88.96	88.84	88.44	76.23	60.81
42.00	61.99	82.99	85.69	85.88	85.94	85.94	85.81	85.42	74.40	60.53
43.00	61.95	83.05	85.75	85.94	86.00	86.00	85.87	85.49	74.45	60.48
44.00	59.05	60.06	60.49	60.66	60.73	60.73	60.58	60.32	59.73	58.65
45.00	58.53	59.55	59.82	59.97	60.05	60.04	59.90	59.70	59.33	58.22

Table 33. Temperature (°C) map of the west side of plate 2BZ at EOC 142A (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.55	56.64	56.79	56.88	56.92	56.92	56.84	56.69	56.64	57.21
23.00	58.66	60.49	61.45	61.57	61.61	61.60	61.52	61.22	59.14	57.93
24.00	62.44	89.04	92.38	92.52	92.55	92.55	92.48	92.12	77.72	60.24
25.00	62.59	89.17	92.52	92.66	92.69	92.69	92.62	92.25	77.88	60.39
26.00	62.65	88.87	92.18	92.32	92.35	92.35	92.28	91.91	77.74	60.54
27.00	62.75	89.00	92.31	92.45	92.48	92.48	92.41	92.04	77.88	60.67
28.00	62.81	88.80	92.08	92.22	92.26	92.25	92.18	91.81	77.79	60.72
29.00	62.92	88.94	92.22	92.36	92.40	92.40	92.32	91.95	77.93	60.77
30.00	63.03	89.17	92.46	92.60	92.64	92.63	92.56	92.19	78.13	60.86
31.00	63.11	89.29	92.58	92.72	92.76	92.75	92.68	92.31	78.26	60.97
32.00	63.11	88.96	92.20	92.35	92.39	92.38	92.30	91.94	78.07	60.99
33.00	63.18	89.07	92.32	92.47	92.51	92.50	92.42	92.05	78.19	61.04
34.00	63.15	88.68	91.88	92.03	92.07	92.07	91.98	91.62	77.97	61.06
35.00	63.20	88.79	92.00	92.15	92.19	92.18	92.10	91.73	78.09	61.15
36.00	63.17	88.47	91.64	91.79	91.83	91.83	91.74	91.37	77.91	61.17
37.00	63.20	88.58	91.75	91.90	91.94	91.94	91.85	91.48	78.01	61.18
38.00	62.99	87.24	90.28	90.43	90.48	90.47	90.38	90.02	77.14	61.02
39.00	63.00	87.33	90.38	90.53	90.57	90.57	90.48	90.12	77.23	61.02
40.00	62.74	85.69	88.59	88.74	88.78	88.78	88.69	88.33	76.16	60.88
41.00	62.71	85.77	88.67	88.82	88.87	88.86	88.77	88.41	76.23	60.87
42.00	62.25	83.00	85.65	85.80	85.84	85.84	85.74	85.40	74.40	60.56
43.00	62.19	83.06	85.71	85.86	85.90	85.90	85.80	85.46	74.46	60.52
44.00	59.12	60.07	60.45	60.59	60.65	60.64	60.52	60.30	59.75	58.66
45.00	58.58	59.56	59.78	59.91	59.96	59.95	59.84	59.68	59.34	58.23

Table 34. Temperature (°C) map of the east side of plate 2TT at EOC 142B (132.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.94	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.81	51.95
1.00	52.95	52.36	52.48	52.50	52.50	52.50	52.50	52.44	52.35	52.88
2.00	56.34	75.42	77.88	77.94	77.95	77.95	77.94	77.70	67.20	55.28
3.00	56.69	75.64	78.12	78.19	78.19	78.19	78.18	77.93	67.45	55.61
4.00	57.40	78.73	81.46	81.54	81.54	81.54	81.53	81.26	69.60	56.20
5.00	57.67	78.90	81.63	81.71	81.72	81.71	81.70	81.42	69.79	56.47
6.00	58.31	81.29	84.21	84.29	84.30	84.30	84.28	83.99	71.48	56.99
7.00	58.57	81.45	84.37	84.46	84.47	84.47	84.44	84.15	71.66	57.22
8.00	59.06	82.58	85.58	85.67	85.69	85.69	85.66	85.35	72.53	57.66
9.00	59.32	82.75	85.74	85.84	85.85	85.85	85.82	85.51	72.74	58.01
10.00	59.70	83.46	86.50	86.59	86.61	86.61	86.57	86.26	73.31	58.34
11.00	59.95	83.62	86.66	86.76	86.78	86.78	86.74	86.42	73.48	58.54
12.00	60.31	84.10	87.16	87.26	87.28	87.28	87.24	86.92	73.91	58.88
13.00	60.55	84.27	87.32	87.43	87.45	87.45	87.41	87.08	74.11	59.15
14.00	60.78	84.18	87.21	87.32	87.35	87.35	87.30	86.97	74.14	59.40
15.00	61.02	84.35	87.37	87.49	87.51	87.51	87.46	87.13	74.32	59.60
16.00	61.28	84.51	87.52	87.64	87.67	87.67	87.61	87.28	74.51	59.83
17.00	61.51	84.67	87.68	87.81	87.84	87.84	87.78	87.44	74.72	60.15
18.00	61.72	84.69	87.69	87.82	87.85	87.85	87.78	87.44	74.82	60.41
19.00	61.94	84.86	87.85	87.98	88.01	88.01	87.94	87.60	75.00	60.60
20.00	62.18	84.97	87.95	88.08	88.12	88.11	88.04	87.70	75.15	60.78
21.00	62.36	85.11	88.09	88.23	88.27	88.26	88.19	87.84	75.32	60.96
22.00	58.87	60.18	61.00	61.14	61.19	61.18	61.08	60.80	59.08	58.55
22.50	57.68	56.80	56.92	57.03	57.08	57.07	56.97	56.84	56.83	57.62

Table 35. Temperature (°C) map of the west side of plate 2TT at EOC 142B (132.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.98	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.81	51.98
1.00	53.23	52.37	52.49	52.51	52.51	52.51	52.50	52.44	52.35	53.04
2.00	57.42	75.45	77.91	77.97	77.97	77.97	77.96	77.72	67.21	55.84
3.00	57.84	75.72	78.19	78.26	78.26	78.26	78.25	78.00	67.50	56.20
4.00	58.75	78.86	81.58	81.66	81.67	81.67	81.65	81.38	69.69	56.92
5.00	59.08	79.08	81.81	81.89	81.90	81.90	81.88	81.60	69.93	57.21
6.00	59.93	81.53	84.45	84.54	84.56	84.55	84.53	84.23	71.68	57.83
7.00	60.25	81.77	84.69	84.78	84.80	84.80	84.77	84.46	71.92	58.08
8.00	60.92	82.99	85.99	86.09	86.11	86.11	86.07	85.76	72.87	58.61
9.00	61.22	83.24	86.24	86.35	86.37	86.37	86.32	86.00	73.15	59.08
10.00	61.76	84.04	87.08	87.20	87.22	87.22	87.17	86.84	73.80	59.46
11.00	62.07	84.30	87.34	87.46	87.48	87.48	87.43	87.10	74.06	59.65
12.00	62.54	84.89	87.95	88.08	88.11	88.10	88.04	87.70	74.58	60.04
13.00	62.84	85.16	88.22	88.35	88.38	88.38	88.31	87.97	74.87	60.35
14.00	63.16	85.18	88.22	88.35	88.38	88.38	88.31	87.96	74.99	60.66
15.00	63.46	85.45	88.48	88.63	88.66	88.66	88.58	88.23	75.27	60.86
16.00	63.80	85.73	88.76	88.91	88.95	88.94	88.86	88.50	75.56	61.11
17.00	64.08	86.00	89.03	89.19	89.23	89.23	89.14	88.77	75.87	61.54
18.00	64.37	86.14	89.15	89.31	89.36	89.35	89.26	88.89	76.07	61.88
19.00	64.65	86.41	89.43	89.59	89.64	89.64	89.54	89.16	76.35	62.06
20.00	64.96	86.65	89.66	89.82	89.88	89.87	89.77	89.38	76.61	62.22
21.00	65.19	86.90	89.91	90.08	90.14	90.13	90.02	89.64	76.88	62.41
22.00	60.62	61.79	62.64	62.81	62.87	62.86	62.73	62.41	60.63	59.42
22.50	59.02	58.47	58.62	58.76	58.83	58.82	58.69	58.52	58.43	58.33

Table 36. Temperature (°C) map of the east side of plate 2BZ at EOC 142B (132.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.79	56.83	56.95	57.06	57.11	57.11	57.01	56.87	56.86	57.72
23.00	58.74	59.41	60.05	60.18	60.23	60.22	60.12	59.88	58.61	58.49
24.00	61.77	78.68	81.03	81.17	81.21	81.20	81.12	80.82	71.16	60.72
25.00	61.98	78.91	81.27	81.41	81.46	81.45	81.37	81.06	71.40	60.93
26.00	62.19	79.56	81.96	82.10	82.14	82.14	82.05	81.74	71.90	61.18
27.00	62.35	79.71	82.11	82.25	82.30	82.29	82.20	81.89	72.07	61.37
28.00	62.52	80.02	82.44	82.58	82.63	82.63	82.53	82.22	72.33	61.49
29.00	62.67	80.19	82.60	82.75	82.80	82.79	82.70	82.38	72.49	61.59
30.00	62.79	80.33	82.74	82.89	82.94	82.94	82.84	82.52	72.64	61.71
31.00	62.91	80.47	82.88	83.04	83.09	83.08	82.98	82.66	72.80	61.86
32.00	62.96	80.31	82.70	82.85	82.91	82.90	82.80	82.48	72.75	61.92
33.00	63.06	80.45	82.84	82.99	83.05	83.04	82.94	82.62	72.88	61.99
34.00	63.16	80.70	83.10	83.26	83.31	83.31	83.20	82.88	73.10	62.07
35.00	63.25	80.84	83.24	83.40	83.45	83.44	83.34	83.01	73.25	62.22
36.00	63.28	80.87	83.27	83.43	83.48	83.48	83.37	83.05	73.32	62.29
37.00	63.36	81.00	83.40	83.56	83.62	83.61	83.50	83.18	73.44	62.32
38.00	63.33	80.76	83.13	83.30	83.35	83.35	83.24	82.91	73.31	62.25
39.00	63.38	80.88	83.26	83.42	83.48	83.47	83.36	83.03	73.43	62.29
40.00	63.23	80.06	82.35	82.52	82.58	82.57	82.46	82.13	72.92	62.21
41.00	63.25	80.17	82.46	82.63	82.69	82.68	82.57	82.24	73.02	62.23
42.00	63.00	78.79	80.96	81.13	81.18	81.18	81.06	80.74	72.13	62.00
43.00	62.98	78.88	81.05	81.21	81.27	81.27	81.15	80.83	72.21	61.98
44.00	60.29	60.89	61.25	61.42	61.49	61.48	61.34	61.11	60.59	60.12
45.00	59.75	60.51	60.75	60.91	60.98	60.97	60.83	60.65	60.26	59.68

Table 37. Temperature (°C) map of the west side of plate 2BZ at EOC 142B (132.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	59.13	58.51	58.66	58.80	58.87	58.86	58.73	58.55	58.47	58.41
23.00	60.50	61.08	61.76	61.91	61.98	61.97	61.84	61.56	60.22	59.37
24.00	64.65	80.79	83.18	83.35	83.41	83.41	83.29	82.94	72.98	62.21
25.00	64.92	81.13	83.53	83.71	83.77	83.77	83.64	83.28	73.31	62.45
26.00	65.16	81.87	84.32	84.50	84.56	84.56	84.43	84.07	73.90	62.79
27.00	65.36	82.14	84.58	84.77	84.83	84.83	84.69	84.33	74.17	63.03
28.00	65.58	82.57	85.03	85.22	85.29	85.28	85.14	84.77	74.53	63.13
29.00	65.78	82.86	85.33	85.52	85.59	85.58	85.44	85.07	74.81	63.20
30.00	65.93	83.12	85.59	85.78	85.86	85.85	85.70	85.33	75.06	63.32
31.00	66.08	83.38	85.85	86.05	86.12	86.12	85.97	85.58	75.32	63.51
32.00	66.12	83.34	85.79	85.99	86.07	86.06	85.91	85.52	75.37	63.55
33.00	66.27	83.59	86.04	86.25	86.33	86.32	86.16	85.78	75.61	63.62
34.00	66.36	83.97	86.43	86.64	86.72	86.72	86.55	86.16	75.93	63.70
35.00	66.48	84.21	86.68	86.89	86.97	86.97	86.80	86.41	76.18	63.92
36.00	66.49	84.36	86.83	87.04	87.12	87.12	86.95	86.55	76.35	64.01
37.00	66.59	84.59	87.06	87.28	87.36	87.36	87.19	86.79	76.57	64.02
38.00	66.51	84.47	86.92	87.14	87.23	87.22	87.05	86.65	76.54	63.85
39.00	66.58	84.69	87.14	87.37	87.46	87.45	87.27	86.87	76.75	63.89
40.00	66.34	83.98	86.36	86.58	86.67	86.66	86.49	86.08	76.33	63.77
41.00	66.37	84.18	86.56	86.79	86.88	86.87	86.69	86.28	76.51	63.81
42.00	66.00	82.93	85.19	85.42	85.50	85.50	85.31	84.91	75.72	63.48
43.00	65.98	83.09	85.35	85.58	85.67	85.66	85.48	85.07	75.86	63.47
44.00	62.51	64.41	64.86	65.08	65.17	65.17	64.96	64.66	63.99	61.22
45.00	61.82	64.04	64.38	64.58	64.68	64.67	64.47	64.22	63.68	60.73

## 9. REFERENCES

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6. D.M. Wachs, "Hydraulic Testing of the AFIP Irradiation Vehicle for the ATR Center Flux Trap Position," ECAR-99. October 2007.
7. R. G. Ambrosek, "RELAP Analysis for AFIP-2 Flow Resistor," ECAR-126, January 2008.
8. P. E. Murray, "Validation of ABAQUS Standard 6.7-3 Heat Transfer", ECAR-131, January 2008.
9. G. A. Roth, "AFIP-2 Thermal As-Run Analysis Results," GAR-01-11, Revision 1, May 2011.

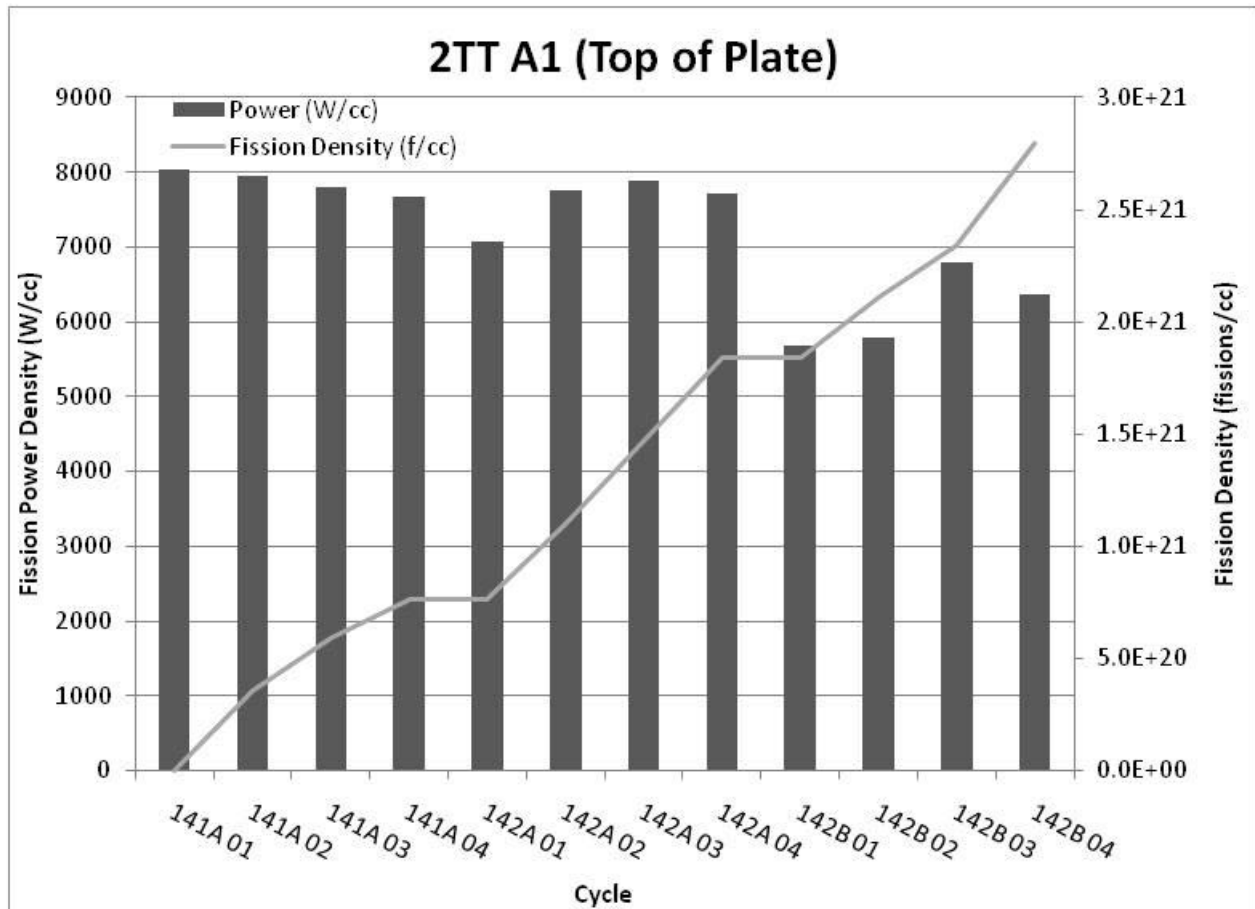
## **Appendix A**

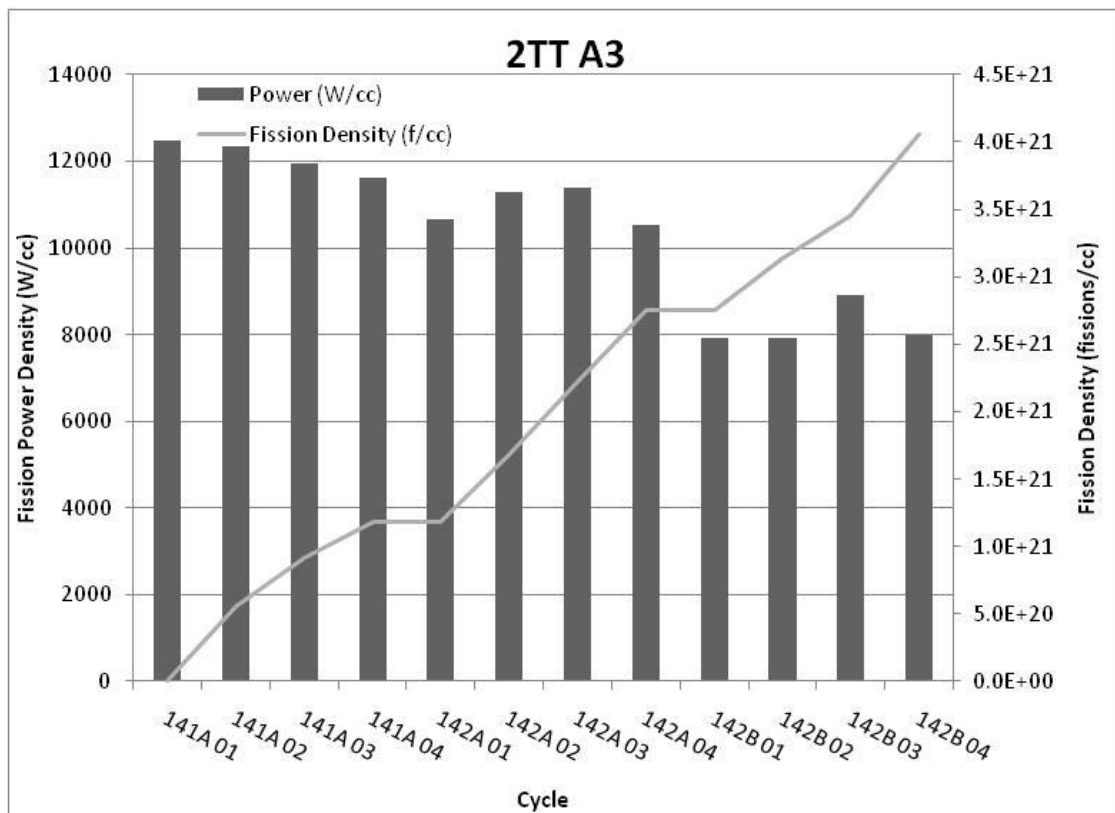
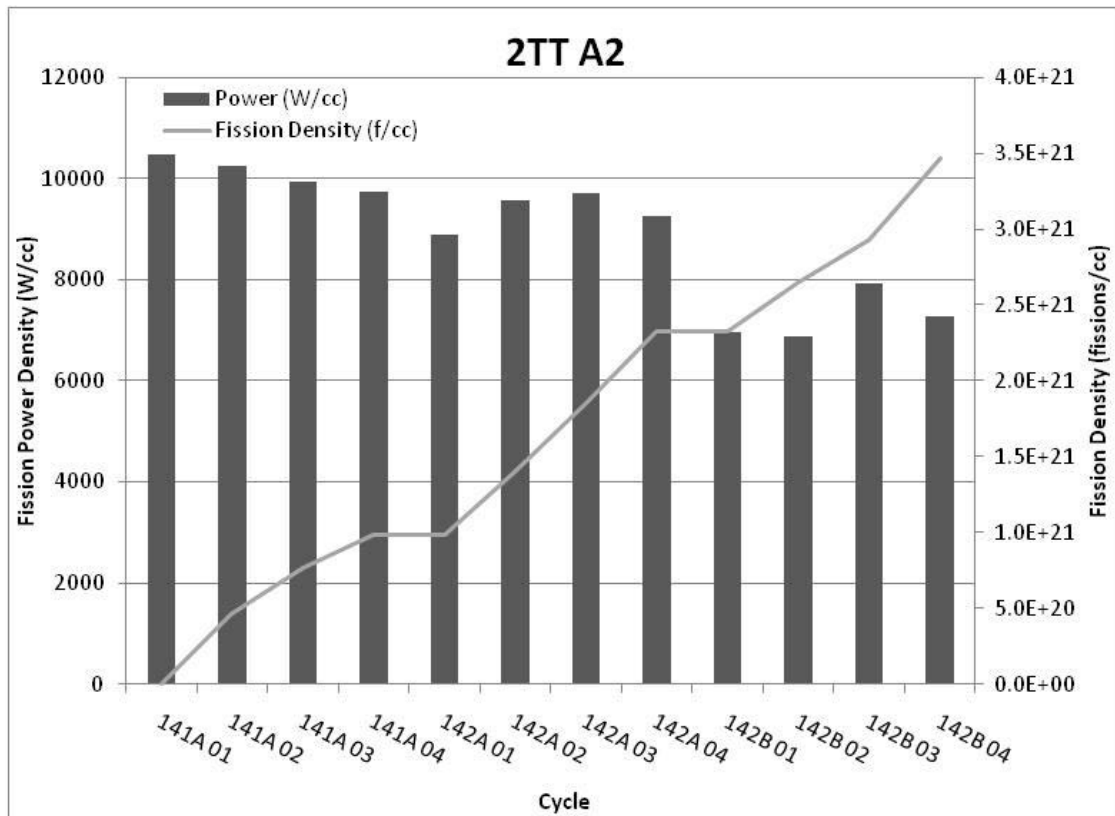
### **Individual Plate Power and Fission Density Plots**

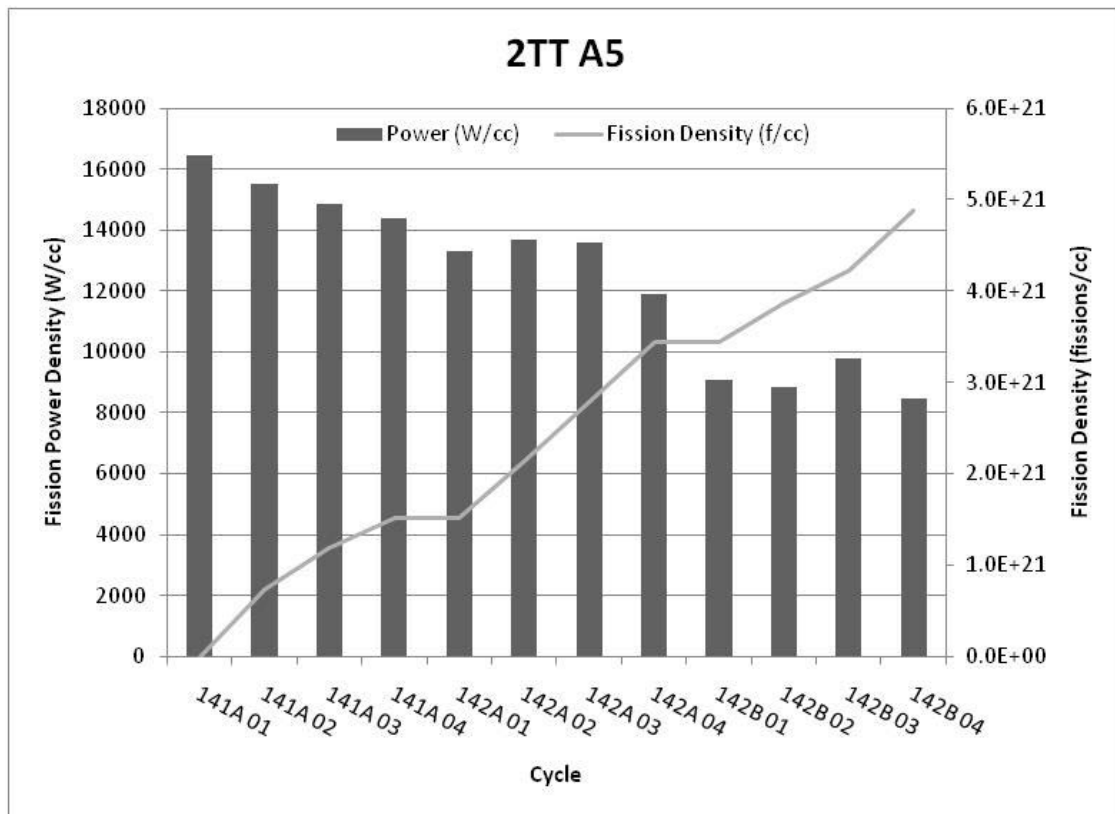
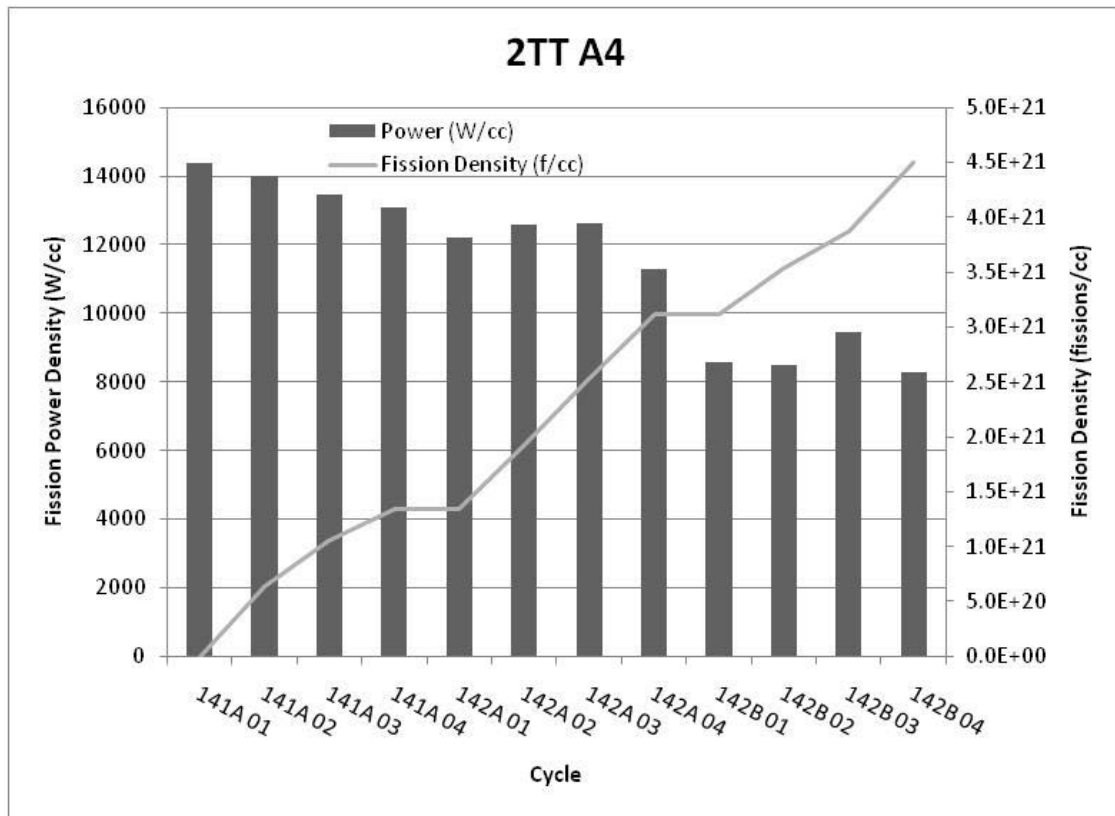


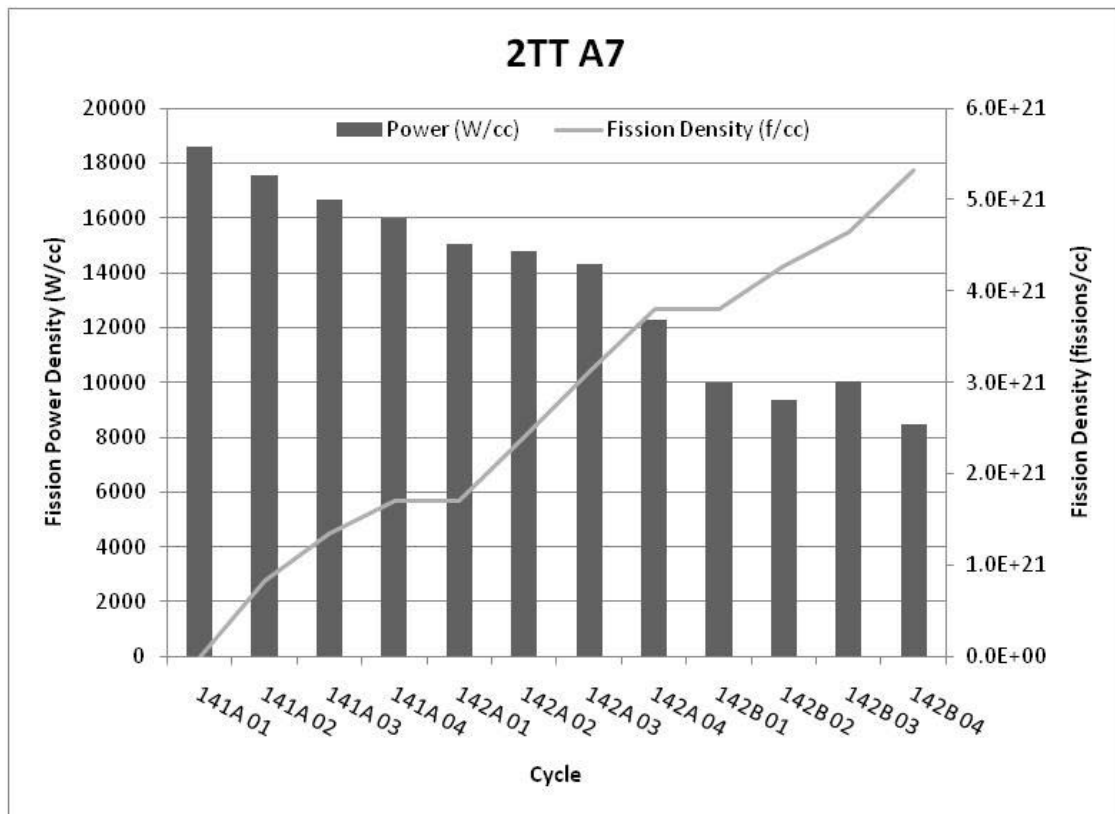
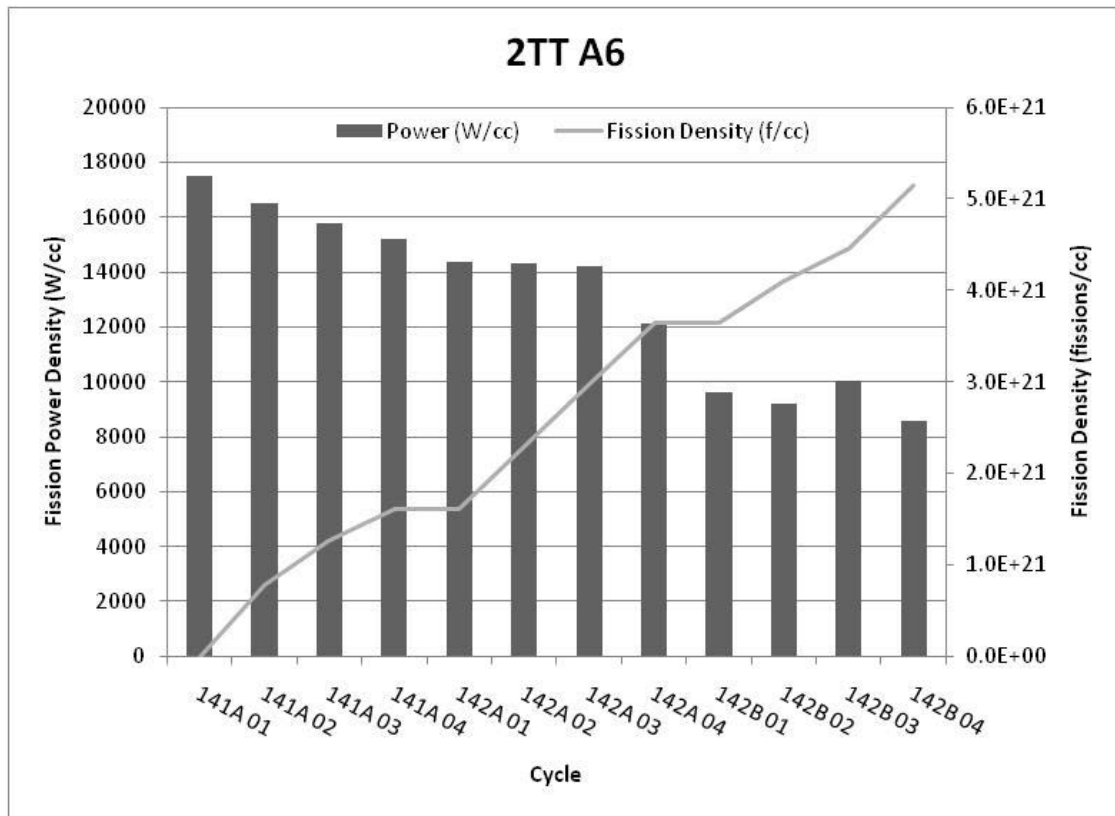
# Appendix A Power and Fission Density Plots

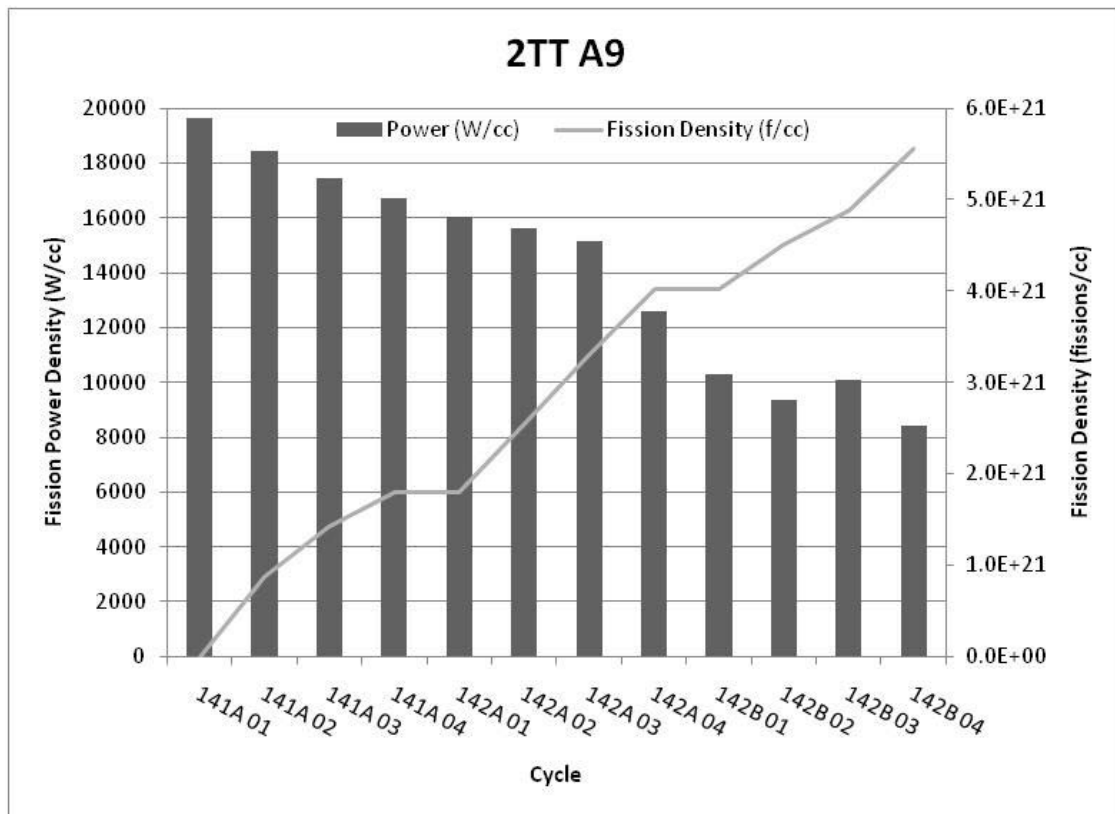
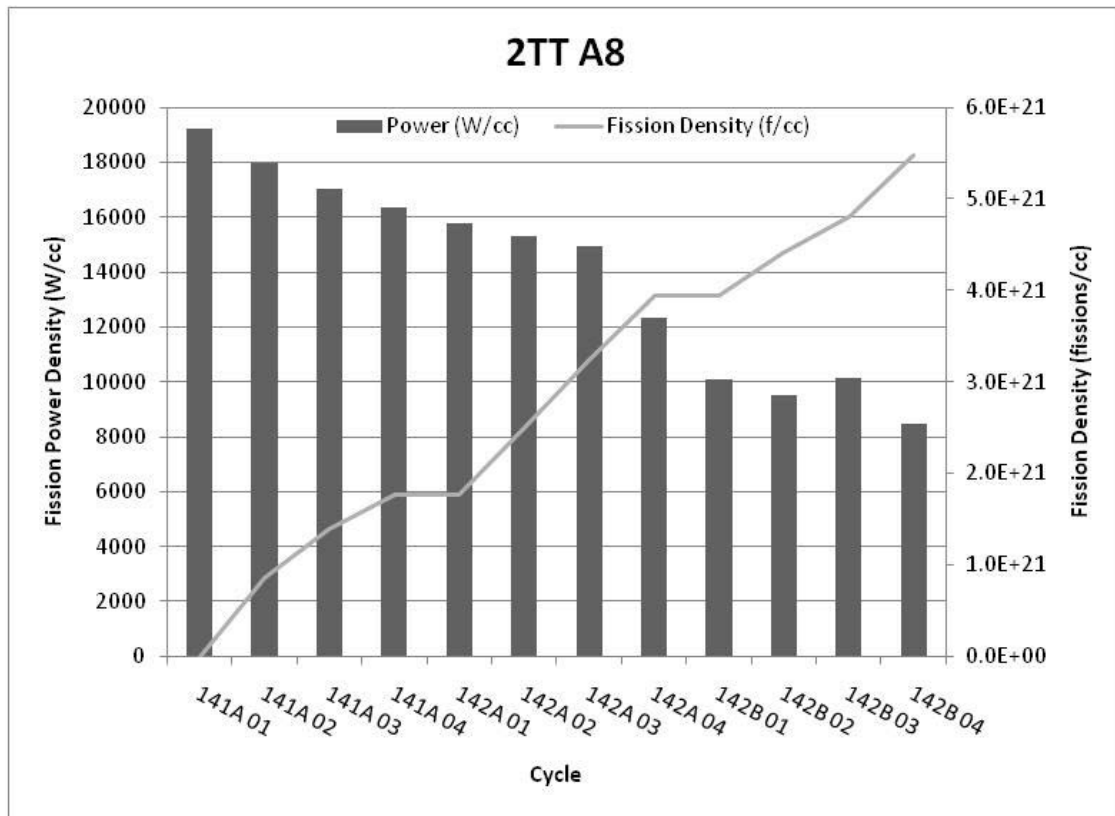
## A-1. Plate 2TT

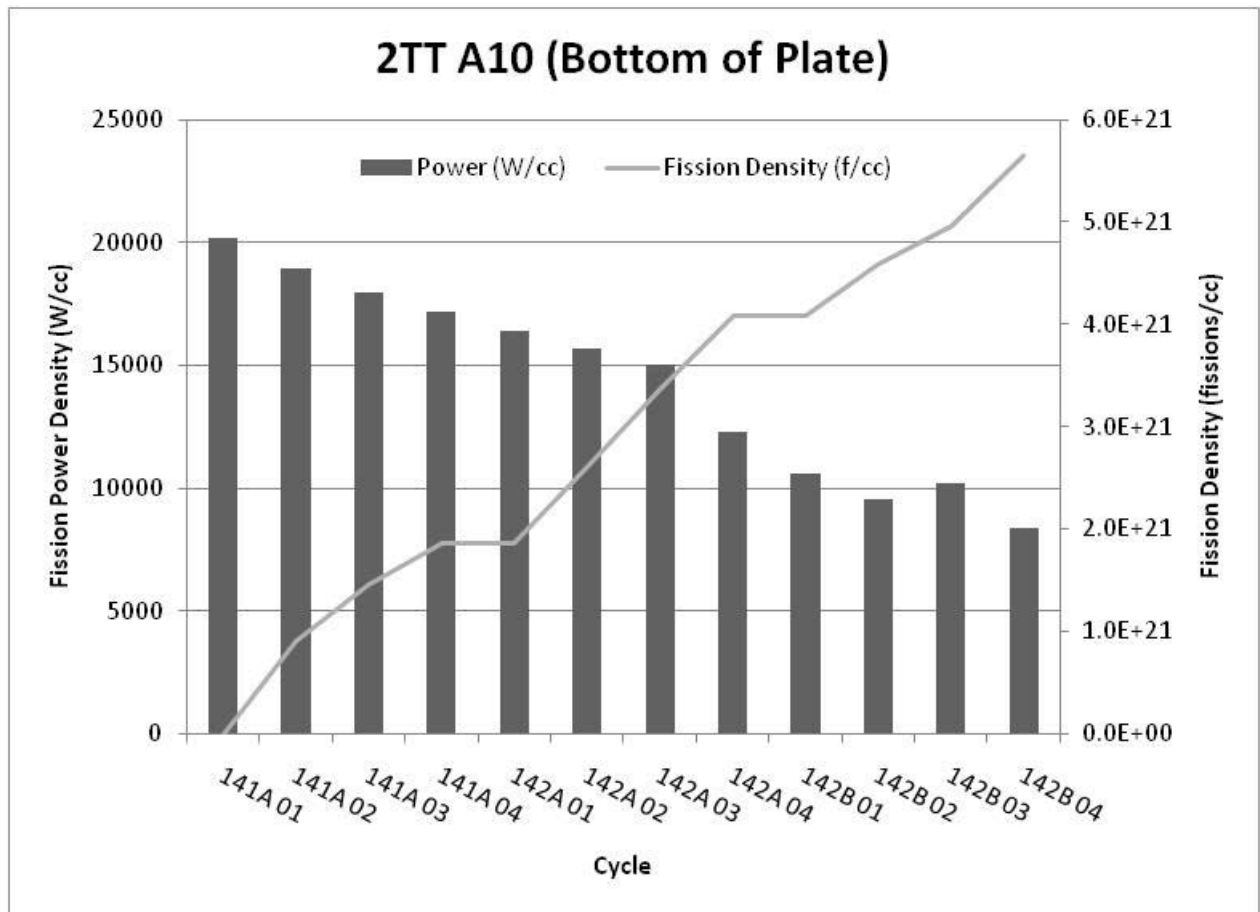




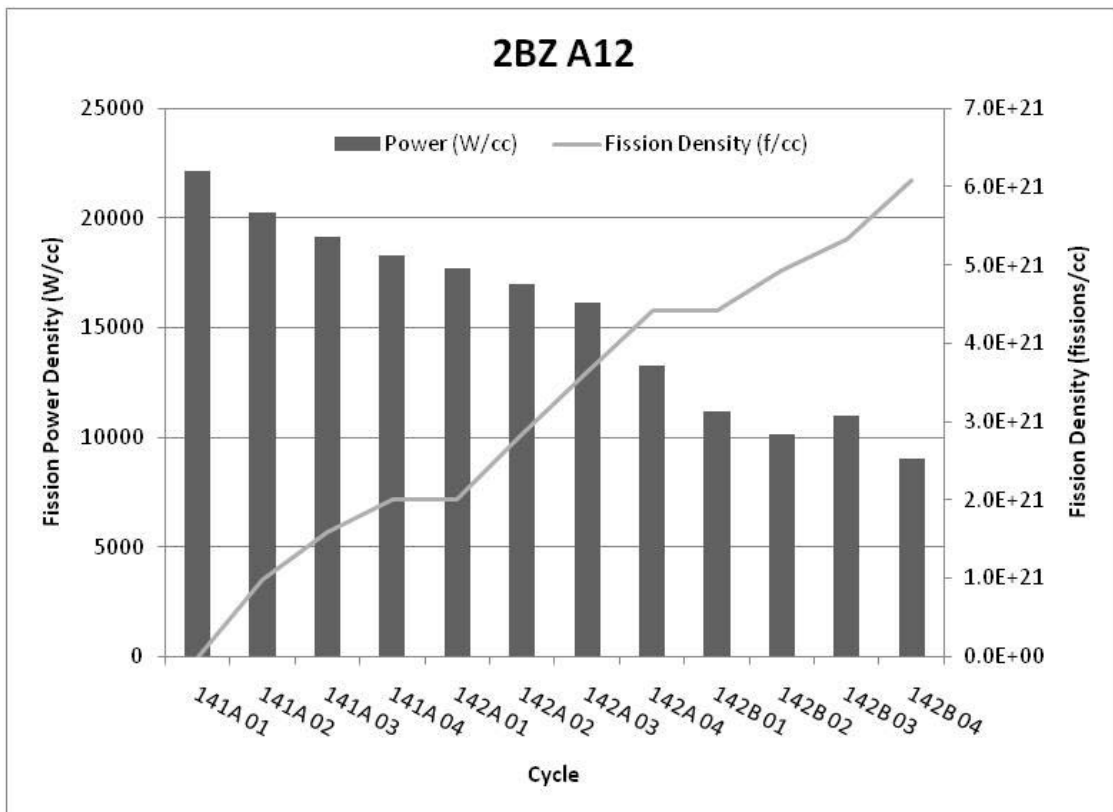
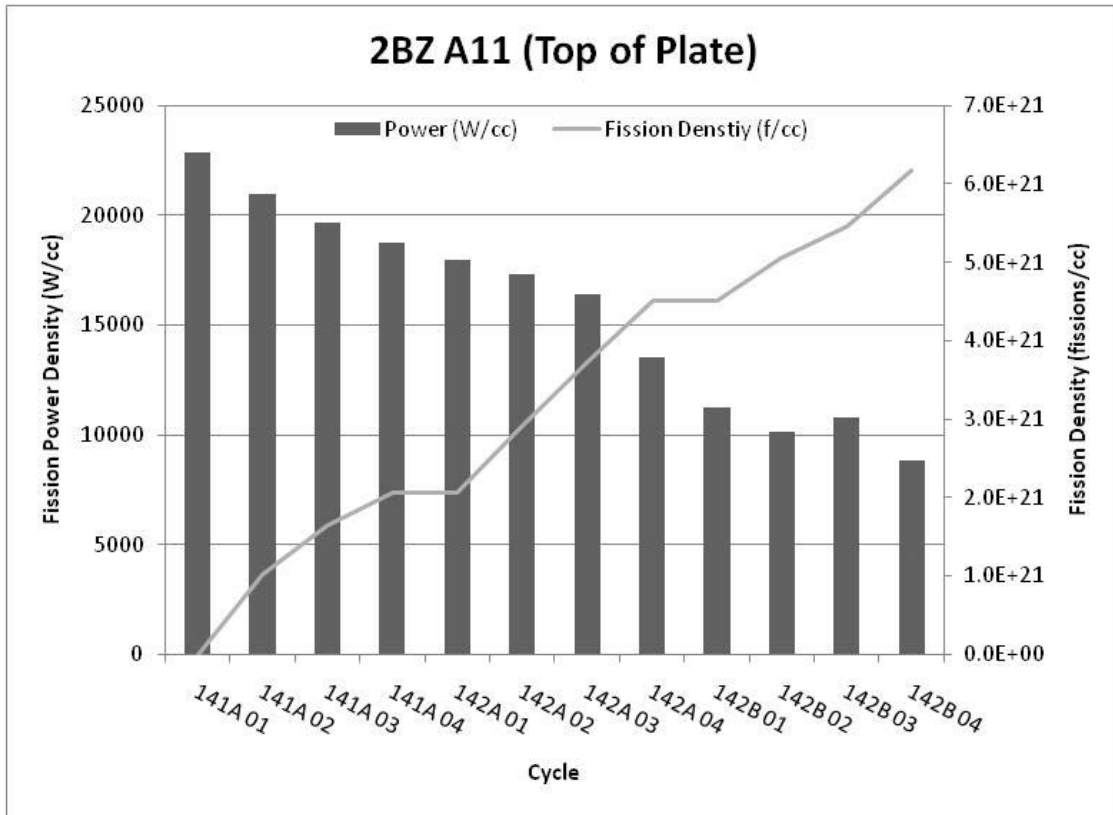


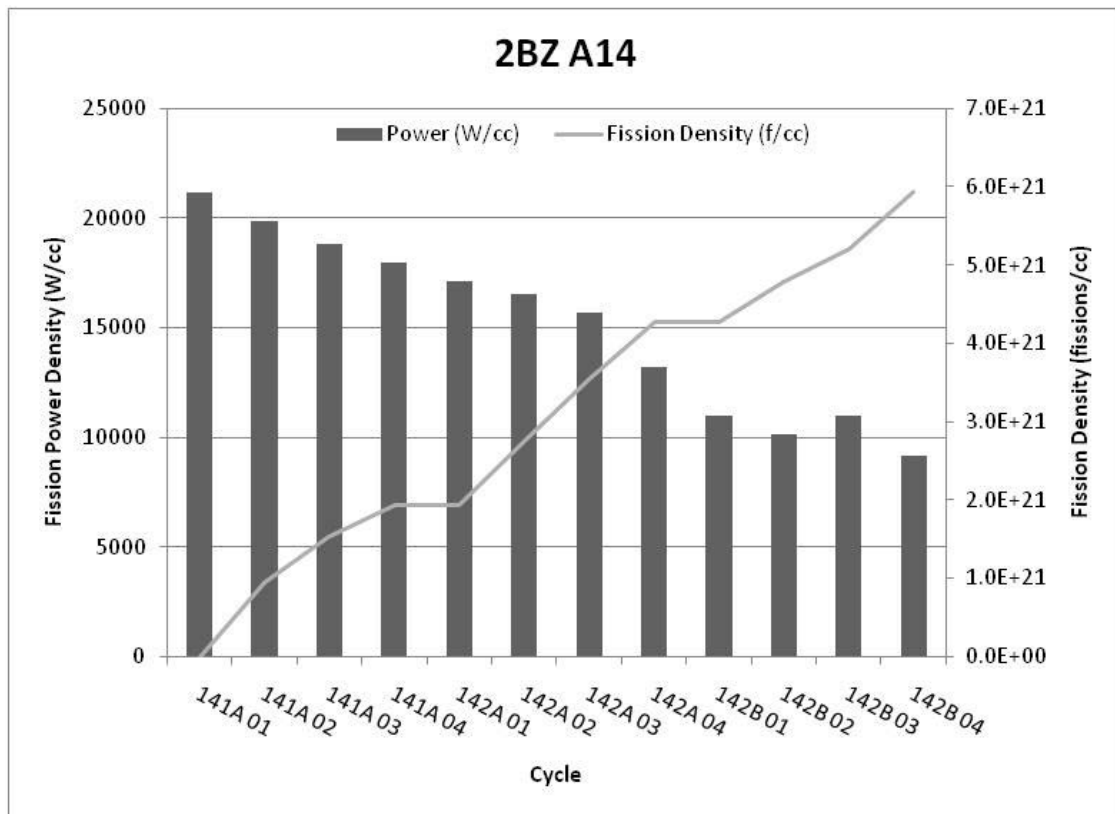
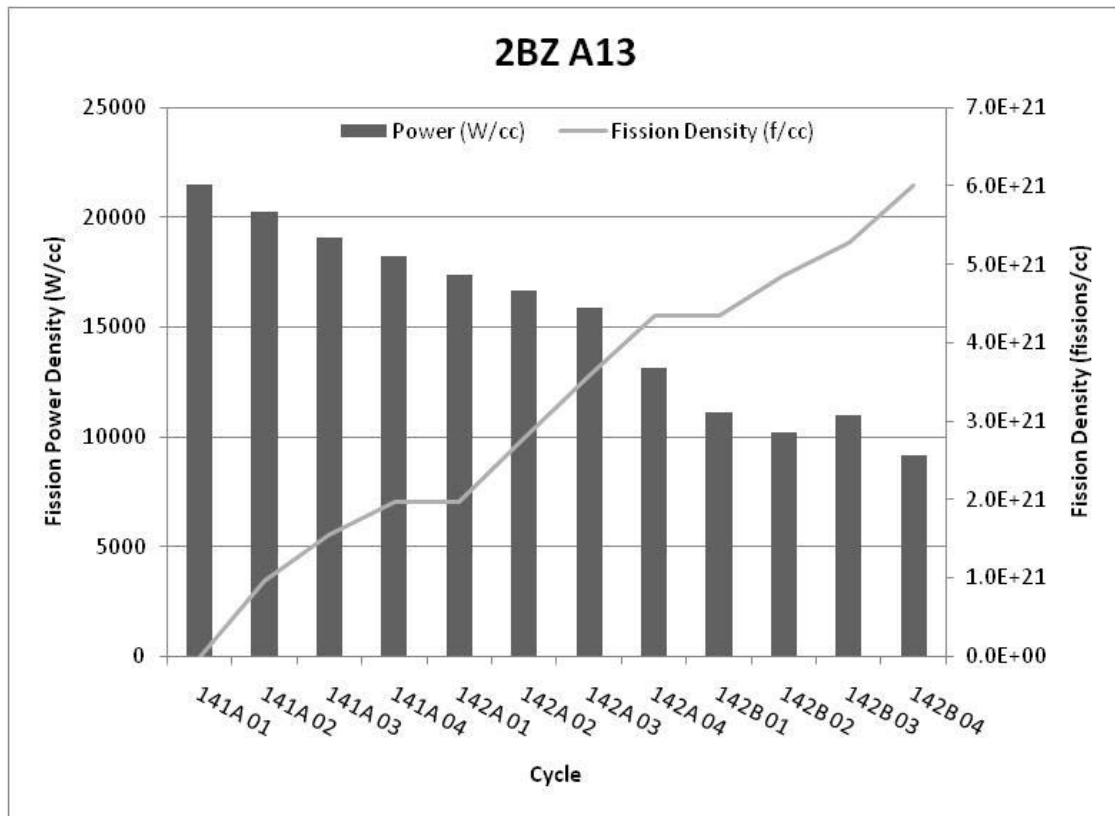




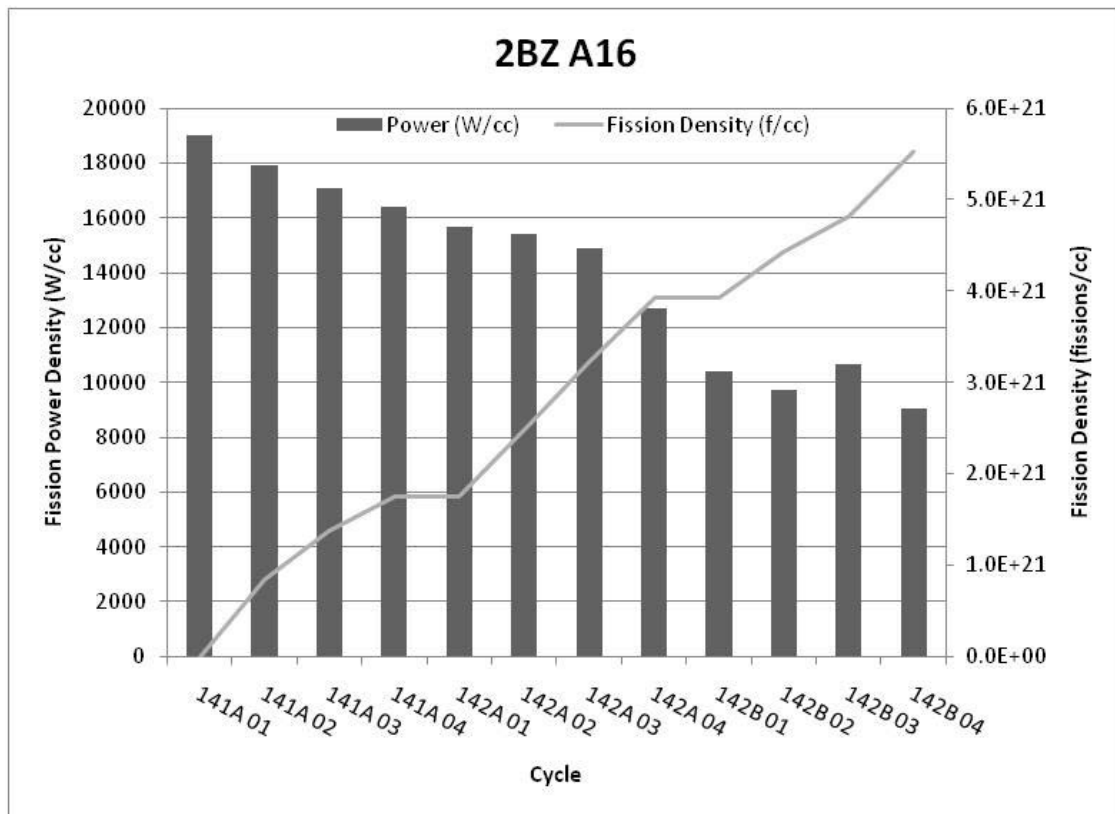
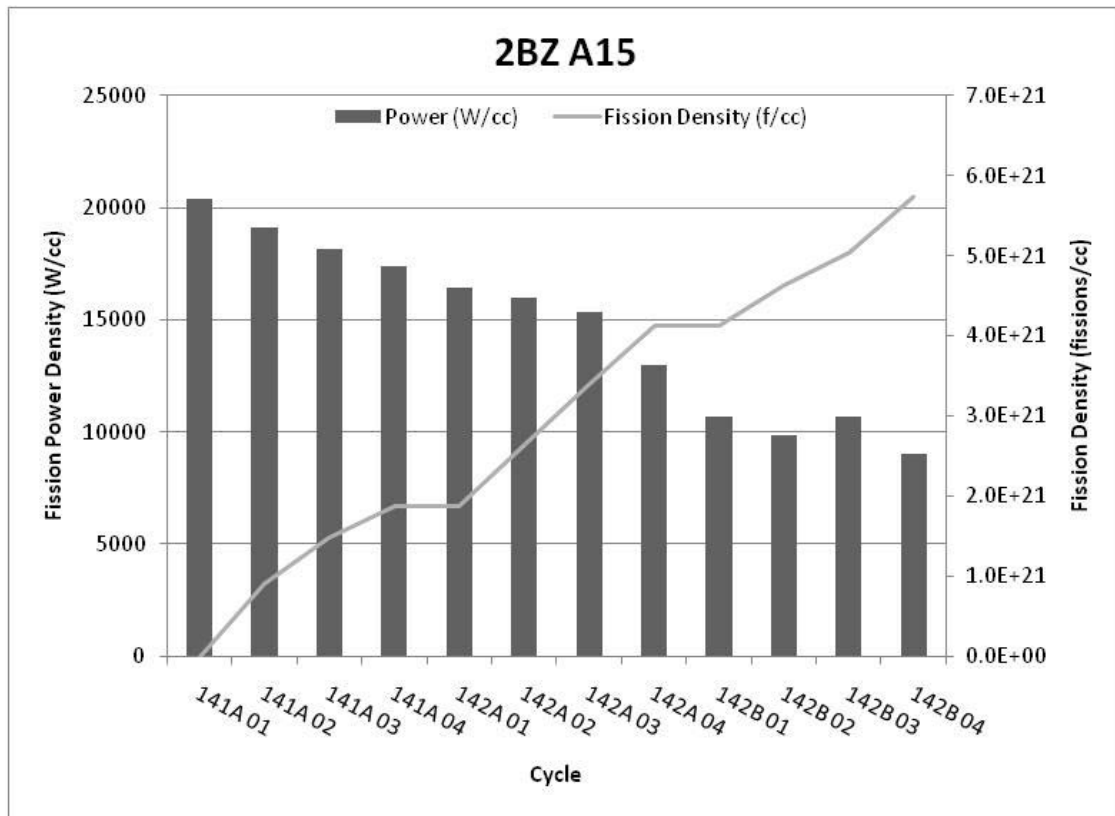


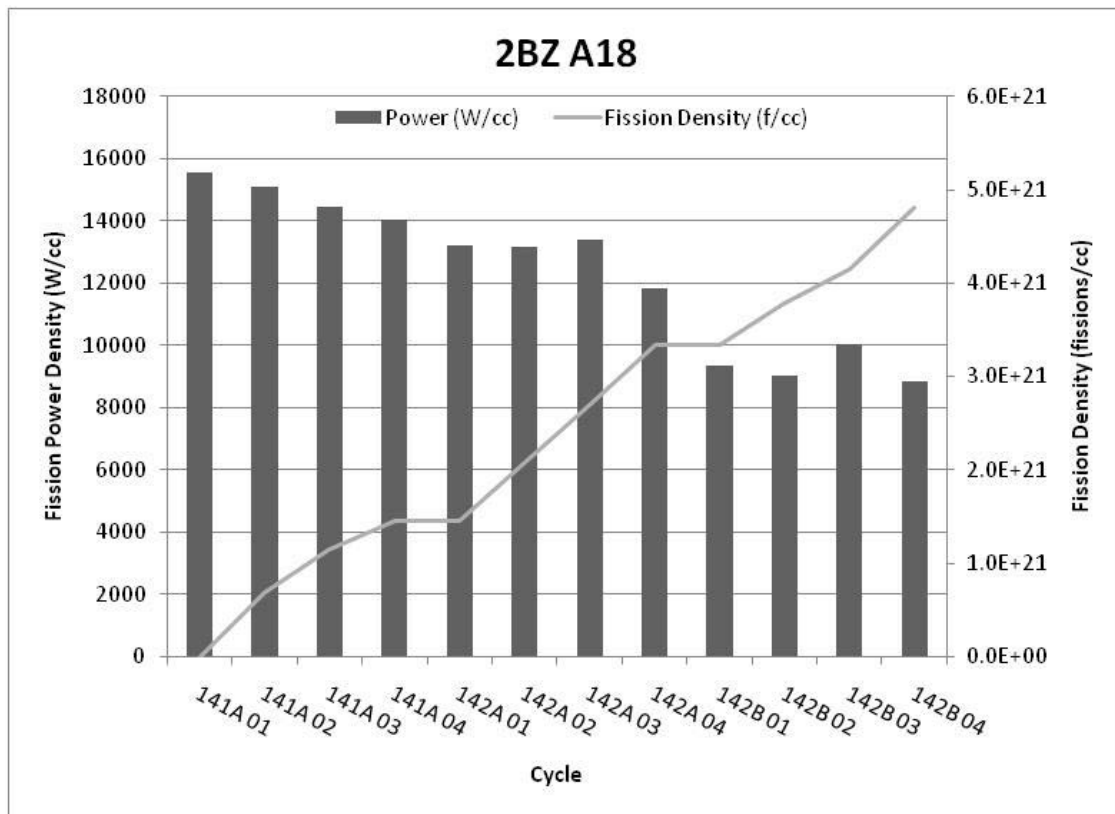
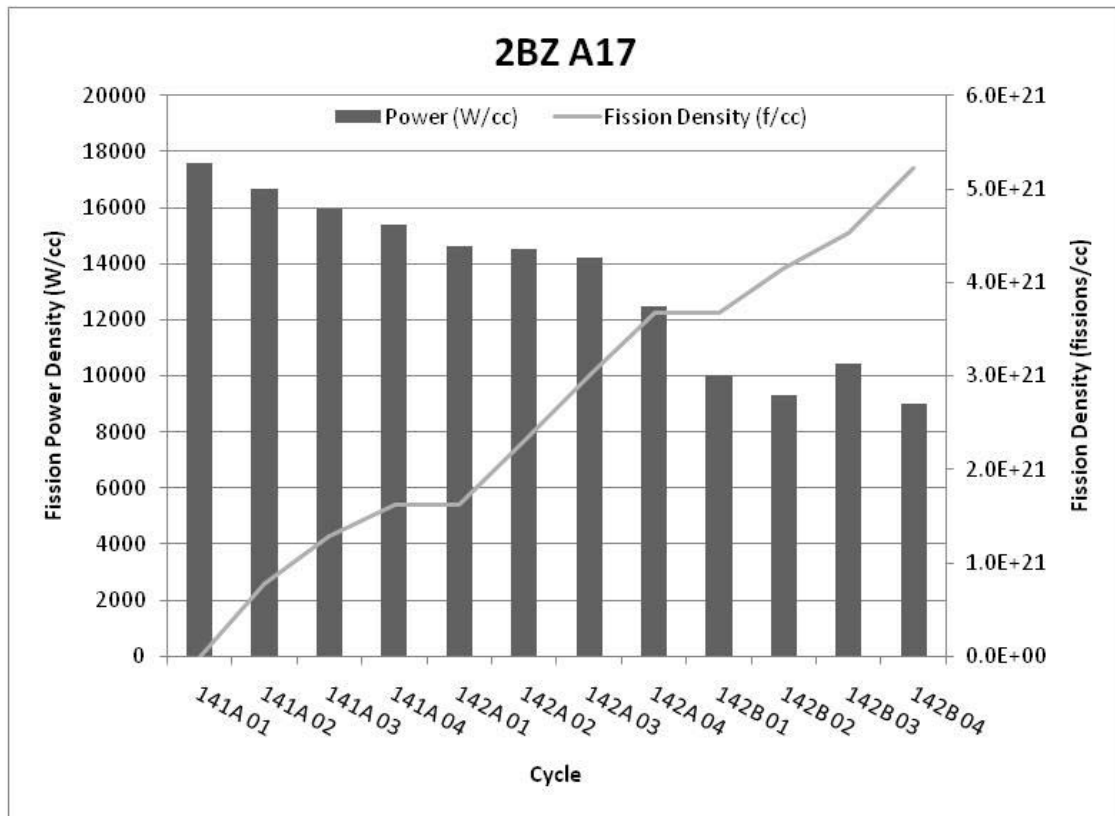
## A-2. Plate 2BZ

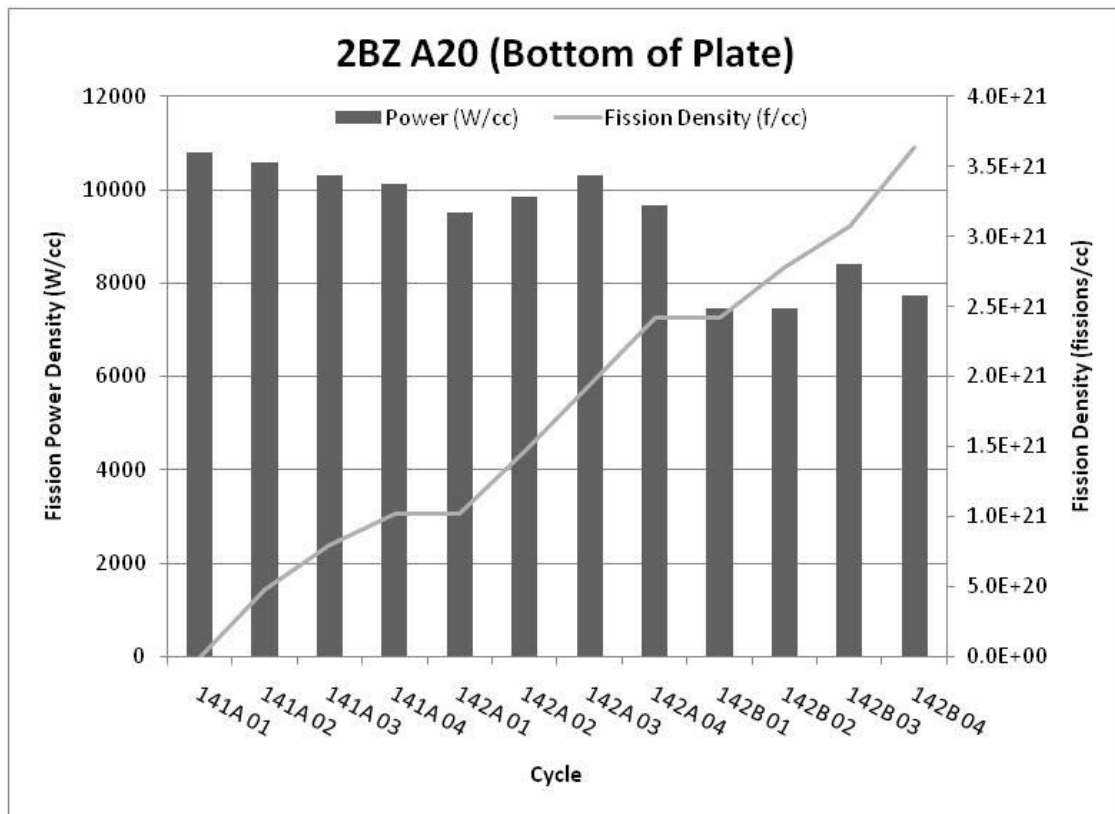
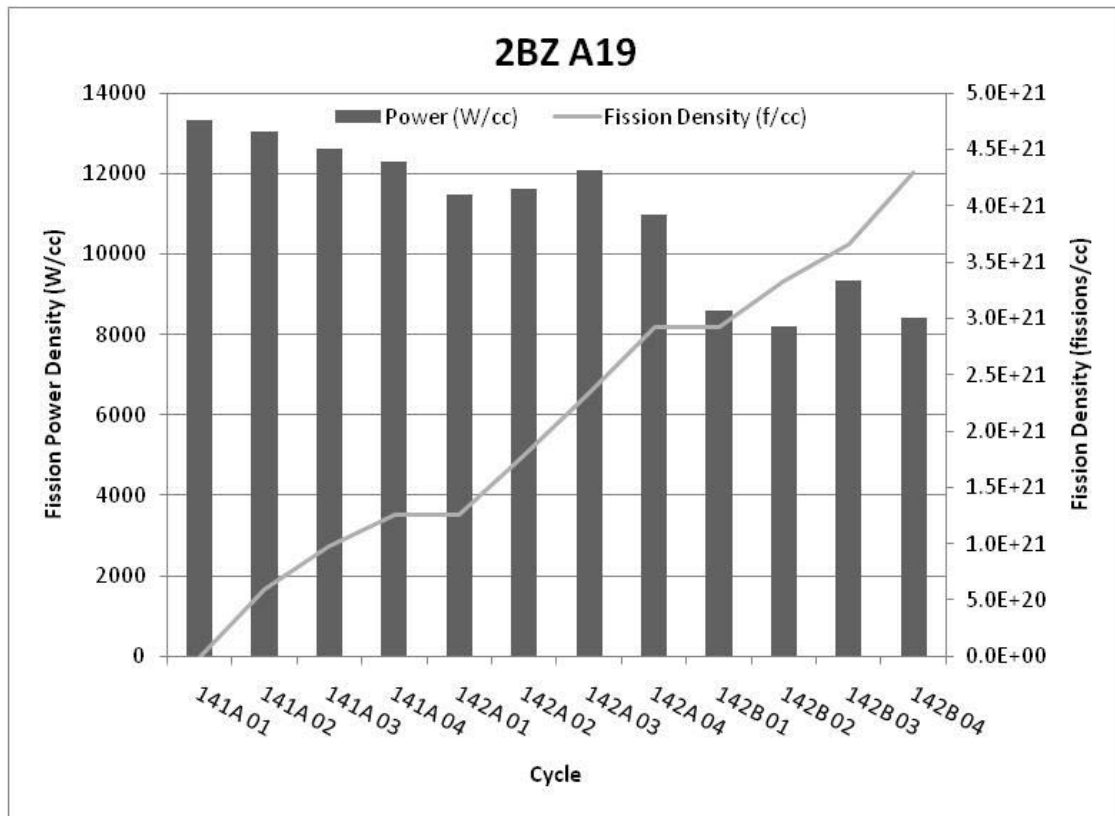












## **Appendix B**

### **Plate Surface Temperatures**

## Appendix B

Table B - 1. Temperature (°C) map of the east side of plate 2TT at BOC 141A (0 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.92	51.77	51.76	51.76	51.76	51.76	51.76	51.77	51.80	51.93
1.00	52.89	52.46	52.64	52.66	52.66	52.66	52.65	52.58	52.39	52.79
2.00	56.59	80.75	83.73	83.80	83.81	83.81	83.80	83.52	70.62	55.18
3.00	56.96	81.03	84.05	84.13	84.14	84.14	84.12	83.83	70.92	55.52
4.00	58.20	88.55	92.18	92.27	92.28	92.28	92.26	91.93	76.08	56.39
5.00	58.48	88.75	92.38	92.48	92.48	92.48	92.46	92.13	76.29	56.65
6.00	59.58	94.66	98.75	98.85	98.86	98.86	98.84	98.48	80.44	57.41
7.00	59.84	94.85	98.95	99.05	99.06	99.06	99.04	98.67	80.64	57.65
8.00	60.97	100.44	105.30	105.43	105.45	105.45	105.41	104.96	84.60	58.46
9.00	61.23	100.68	105.54	105.68	105.70	105.70	105.65	105.19	84.83	58.77
10.00	62.39	106.82	112.20	112.35	112.37	112.37	112.32	111.82	88.94	59.58
11.00	62.67	107.07	112.46	112.61	112.64	112.64	112.59	112.07	89.17	59.82
12.00	63.44	110.35	116.00	116.17	116.20	116.20	116.14	115.60	91.41	60.40
13.00	63.71	110.60	116.26	116.44	116.47	116.47	116.40	115.85	91.66	60.67
14.00	64.41	113.79	119.70	119.88	119.92	119.91	119.85	119.28	93.82	61.21
15.00	64.70	114.05	119.97	120.16	120.20	120.20	120.12	119.54	94.07	61.46
16.00	65.27	116.16	122.24	122.44	122.48	122.48	122.39	121.80	95.53	61.89
17.00	65.54	116.42	122.51	122.71	122.76	122.75	122.67	122.06	95.79	62.20
18.00	65.96	117.79	123.97	124.18	124.23	124.22	124.13	123.51	96.77	62.56
19.00	66.24	118.06	124.24	124.46	124.51	124.51	124.41	123.78	97.06	62.81
20.00	66.73	119.80	126.10	126.32	126.38	126.38	126.27	125.63	98.35	63.17
21.00	66.98	120.04	126.34	126.58	126.63	126.63	126.51	125.87	98.60	63.39
22.00	60.17	65.92	67.81	68.02	68.09	68.08	67.94	67.39	63.09	59.21
22.50	57.99	58.23	58.57	58.73	58.80	58.80	58.66	58.40	58.06	57.65

Table B - 2. Temperature (°C) map of the west side of plate 2TT at BOC 141A (0 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.96	51.77	51.76	51.76	51.76	51.76	51.76	51.77	51.79	51.95
1.00	53.02	52.46	52.64	52.66	52.66	52.66	52.65	52.58	52.39	52.86
2.00	56.91	80.75	83.73	83.80	83.81	83.81	83.80	83.52	70.61	55.27
3.00	57.30	81.04	84.05	84.13	84.13	84.13	84.12	83.83	70.91	55.62
4.00	58.61	88.56	92.18	92.27	92.27	92.27	92.26	91.93	76.07	56.50
5.00	58.90	88.75	92.38	92.47	92.48	92.48	92.46	92.13	76.28	56.77
6.00	60.05	94.67	98.75	98.85	98.86	98.86	98.84	98.48	80.43	57.54
7.00	60.33	94.86	98.94	99.04	99.06	99.05	99.03	98.67	80.64	57.78
8.00	61.50	100.45	105.29	105.42	105.43	105.43	105.40	104.96	84.59	58.58
9.00	61.78	100.69	105.53	105.67	105.68	105.68	105.65	105.19	84.83	58.96
10.00	62.99	106.83	112.19	112.33	112.35	112.35	112.31	111.82	88.93	59.77
11.00	63.28	107.08	112.45	112.60	112.62	112.62	112.57	112.07	89.17	59.98
12.00	64.08	110.36	115.99	116.15	116.17	116.17	116.12	115.60	91.41	60.57
13.00	64.36	110.62	116.25	116.42	116.44	116.44	116.39	115.86	91.66	60.85
14.00	65.09	113.81	119.69	119.86	119.89	119.89	119.83	119.28	93.82	61.39
15.00	65.38	114.08	119.96	120.14	120.17	120.17	120.10	119.54	94.07	61.63
16.00	65.97	116.19	122.23	122.41	122.44	122.44	122.37	121.80	95.54	62.05
17.00	66.25	116.45	122.50	122.68	122.72	122.72	122.64	122.06	95.80	62.42
18.00	66.67	117.82	123.95	124.15	124.19	124.18	124.11	123.52	96.79	62.79
19.00	66.96	118.09	124.23	124.43	124.47	124.47	124.38	123.79	97.08	63.03
20.00	67.46	119.83	126.08	126.29	126.33	126.33	126.24	125.63	98.37	63.35
21.00	67.71	120.07	126.33	126.54	126.58	126.58	126.49	125.88	98.63	63.57
22.00	60.55	65.95	67.80	67.99	68.04	68.04	67.92	67.39	63.14	59.34
22.50	58.33	58.26	58.56	58.70	58.76	58.75	58.63	58.41	58.11	57.84

Table B - 3. Temperature (°C) map of the east side of plate 2BZ at BOC 141A (0 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	58.14	58.28	58.63	58.80	58.87	58.86	58.72	58.46	58.11	57.80
23.00	59.86	64.49	66.10	66.29	66.36	66.36	66.21	65.72	62.18	59.01
24.00	65.69	109.42	114.79	115.02	115.09	115.08	114.95	114.36	91.65	62.70
25.00	65.88	109.61	114.96	115.20	115.27	115.27	115.13	114.53	91.85	62.88
26.00	65.89	108.57	113.82	114.07	114.14	114.14	114.00	113.39	91.24	62.98
27.00	66.05	108.78	114.03	114.28	114.36	114.35	114.21	113.60	91.44	63.14
28.00	66.05	107.75	112.91	113.17	113.24	113.24	113.08	112.48	90.84	63.17
29.00	66.21	107.98	113.13	113.39	113.47	113.47	113.31	112.70	91.04	63.29
30.00	66.26	107.45	112.55	112.81	112.89	112.89	112.73	112.12	90.76	63.37
31.00	66.40	107.65	112.74	113.01	113.09	113.09	112.92	112.31	90.94	63.51
32.00	66.32	106.36	111.33	111.60	111.68	111.68	111.51	110.90	90.16	63.49
33.00	66.44	106.54	111.51	111.78	111.87	111.87	111.69	111.08	90.33	63.59
34.00	66.13	103.89	108.61	108.89	108.97	108.97	108.79	108.19	88.66	63.42
35.00	66.23	104.06	108.78	109.06	109.15	109.14	108.96	108.36	88.82	63.53
36.00	65.89	101.32	105.79	106.07	106.16	106.15	105.97	105.37	87.09	63.35
37.00	65.97	101.48	105.94	106.22	106.31	106.31	106.12	105.53	87.23	63.41
38.00	65.43	97.48	101.56	101.84	101.94	101.93	101.74	101.17	84.67	63.05
39.00	65.47	97.60	101.69	101.97	102.06	102.06	101.87	101.29	84.78	63.08
40.00	64.85	92.99	96.63	96.91	97.01	97.01	96.81	96.26	81.83	62.70
41.00	64.84	93.08	96.72	97.00	97.10	97.09	96.89	96.35	81.91	62.69
42.00	64.08	87.85	90.85	91.13	91.23	91.22	91.02	90.51	78.47	62.20
43.00	64.04	87.90	90.91	91.18	91.28	91.28	91.07	90.57	78.52	62.15
44.00	60.89	63.08	63.68	63.93	64.04	64.03	63.81	63.45	62.55	60.17
45.00	60.35	62.54	62.97	63.20	63.31	63.30	63.09	62.80	62.13	59.72

Table B - 4. Temperature (°C) map of the west side of plate 2BZ at BOC 141A (0 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	58.43	58.32	58.62	58.76	58.82	58.82	58.70	58.47	58.16	57.93
23.00	60.22	64.53	66.08	66.26	66.32	66.31	66.19	65.73	62.22	59.13
24.00	66.33	109.46	114.77	114.98	115.03	115.02	114.92	114.37	91.67	62.85
25.00	66.51	109.65	114.94	115.16	115.21	115.20	115.10	114.54	91.88	63.04
26.00	66.52	108.61	113.81	114.02	114.08	114.07	113.96	113.40	91.27	63.17
27.00	66.66	108.82	114.02	114.24	114.29	114.29	114.17	113.61	91.47	63.33
28.00	66.65	107.80	112.89	113.11	113.17	113.17	113.05	112.48	90.87	63.35
29.00	66.80	108.02	113.12	113.34	113.40	113.39	113.27	112.71	91.07	63.44
30.00	66.84	107.50	112.53	112.76	112.82	112.81	112.69	112.12	90.79	63.50
31.00	66.96	107.69	112.73	112.96	113.02	113.01	112.89	112.32	90.98	63.64
32.00	66.86	106.40	111.31	111.54	111.60	111.60	111.47	110.90	90.20	63.61
33.00	66.97	106.59	111.50	111.73	111.79	111.78	111.65	111.09	90.36	63.69
34.00	66.63	103.94	108.59	108.83	108.89	108.89	108.75	108.19	88.70	63.52
35.00	66.71	104.10	108.76	109.00	109.06	109.06	108.92	108.36	88.86	63.65
36.00	66.34	101.37	105.77	106.00	106.07	106.07	105.93	105.38	87.13	63.47
37.00	66.40	101.53	105.93	106.16	106.23	106.22	106.08	105.54	87.27	63.50
38.00	65.82	97.53	101.55	101.78	101.85	101.84	101.70	101.17	84.71	63.11
39.00	65.84	97.65	101.67	101.90	101.98	101.97	101.82	101.30	84.83	63.12
40.00	65.16	93.04	96.62	96.85	96.92	96.91	96.76	96.27	81.87	62.74
41.00	65.14	93.13	96.70	96.93	97.01	97.00	96.85	96.36	81.95	62.72
42.00	64.32	87.89	90.84	91.06	91.14	91.13	90.98	90.52	78.52	62.20
43.00	64.26	87.95	90.89	91.11	91.19	91.18	91.03	90.58	78.57	62.15
44.00	60.93	63.12	63.67	63.88	63.97	63.96	63.78	63.46	62.61	60.14
45.00	60.36	62.58	62.96	63.15	63.24	63.23	63.06	62.80	62.18	59.70



Table B - 5. Temperature (°C) map of the east side of plate 2TT at MOC 141A (15 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.92	51.77	51.76	51.76	51.76	51.76	51.76	51.77	51.80	51.93
1.00	52.89	52.45	52.63	52.65	52.65	52.65	52.64	52.57	52.38	52.78
2.00	56.54	80.46	83.42	83.49	83.50	83.50	83.49	83.21	70.43	55.15
3.00	56.91	80.74	83.74	83.81	83.82	83.82	83.81	83.51	70.72	55.48
4.00	58.09	87.86	91.43	91.52	91.53	91.53	91.51	91.19	75.60	56.31
5.00	58.37	88.06	91.64	91.73	91.74	91.74	91.72	91.38	75.82	56.57
6.00	59.52	94.32	98.39	98.49	98.50	98.50	98.48	98.12	80.20	57.37
7.00	59.78	94.51	98.58	98.68	98.70	98.70	98.67	98.30	80.40	57.61
8.00	60.78	99.36	104.08	104.22	104.23	104.23	104.20	103.75	83.86	58.34
9.00	61.04	99.55	104.32	104.45	104.47	104.47	104.43	103.97	84.09	58.64
10.00	61.95	104.12	109.27	109.42	109.44	109.44	109.39	108.90	87.16	59.29
11.00	62.22	104.35	109.51	109.67	109.69	109.69	109.64	109.14	87.38	59.52
12.00	62.95	107.48	112.90	113.06	113.09	113.09	113.03	112.51	89.51	60.08
13.00	63.21	107.73	113.15	113.32	113.35	113.35	113.28	112.75	89.75	60.34
14.00	63.89	110.79	116.46	116.63	116.67	116.67	116.60	116.05	91.83	60.85
15.00	64.17	111.05	116.72	116.90	116.94	116.94	116.86	116.30	92.07	61.09
16.00	64.62	112.48	118.25	118.44	118.48	118.48	118.40	117.82	93.08	61.45
17.00	64.88	112.72	118.50	118.70	118.74	118.74	118.66	118.07	93.33	61.75
18.00	65.31	114.26	120.15	120.35	120.40	120.40	120.30	119.71	94.41	62.11
19.00	65.58	114.52	120.41	120.63	120.67	120.67	120.57	119.97	94.66	62.35
20.00	66.04	116.13	122.14	122.36	122.41	122.41	122.31	121.69	95.78	62.69
21.00	66.27	116.36	122.37	122.60	122.65	122.65	122.54	121.92	96.01	62.90
22.00	59.87	65.19	66.99	67.18	67.25	67.24	67.11	66.58	62.54	58.97
22.50	57.82	57.94	58.26	58.41	58.48	58.47	58.34	58.10	57.80	57.50

Table B - 6. Temperature (°C) map of the west side of plate 2TT at MOC 141A (15 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.96	51.77	51.76	51.76	51.76	51.76	51.76	51.77	51.79	51.95
1.00	53.01	52.45	52.63	52.65	52.65	52.65	52.64	52.57	52.38	52.85
2.00	56.86	80.46	83.42	83.49	83.50	83.50	83.49	83.21	70.42	55.24
3.00	57.25	80.74	83.73	83.81	83.82	83.82	83.80	83.51	70.71	55.58
4.00	58.49	87.86	91.43	91.52	91.52	91.52	91.51	91.19	75.59	56.43
5.00	58.79	88.06	91.63	91.72	91.73	91.73	91.71	91.38	75.81	56.69
6.00	59.99	94.33	98.38	98.48	98.49	98.49	98.47	98.11	80.19	57.50
7.00	60.26	94.52	98.58	98.68	98.69	98.69	98.66	98.30	80.39	57.73
8.00	61.31	99.36	104.08	104.21	104.22	104.22	104.19	103.75	83.85	58.46
9.00	61.58	99.56	104.31	104.44	104.46	104.46	104.42	103.97	84.08	58.82
10.00	62.54	104.13	109.26	109.40	109.42	109.42	109.38	108.90	87.15	59.47
11.00	62.81	104.37	109.51	109.65	109.67	109.67	109.63	109.14	87.37	59.68
12.00	63.57	107.50	112.89	113.04	113.06	113.06	113.02	112.51	89.51	60.24
13.00	63.85	107.75	113.14	113.30	113.32	113.32	113.27	112.75	89.75	60.51
14.00	64.55	110.81	116.45	116.61	116.64	116.64	116.58	116.05	91.83	61.03
15.00	64.83	111.07	116.71	116.88	116.91	116.90	116.84	116.30	92.08	61.26
16.00	65.30	112.50	118.24	118.42	118.45	118.45	118.38	117.83	93.09	61.61
17.00	65.56	112.75	118.49	118.67	118.71	118.70	118.63	118.07	93.34	61.96
18.00	66.00	114.29	120.13	120.32	120.36	120.36	120.28	119.71	94.42	62.34
19.00	66.28	114.55	120.40	120.59	120.63	120.63	120.55	119.97	94.67	62.57
20.00	66.74	116.16	122.13	122.33	122.37	122.36	122.28	121.69	95.80	62.87
21.00	66.98	116.40	122.36	122.56	122.61	122.60	122.52	121.92	96.04	63.08
22.00	60.25	65.22	66.98	67.15	67.21	67.20	67.09	66.59	62.58	59.10
22.50	58.16	57.98	58.25	58.38	58.44	58.43	58.32	58.11	57.84	57.69

Table B - 7. Temperature (°C) map of the east side of plate 2BZ at MOC 141A (15 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.96	57.99	58.32	58.47	58.54	58.53	58.40	58.15	57.84	57.64
23.00	59.54	63.74	65.22	65.41	65.48	65.47	65.34	64.87	61.60	58.76
24.00	64.94	105.41	110.43	110.66	110.72	110.72	110.59	110.03	88.96	62.17
25.00	65.11	105.56	110.58	110.81	110.87	110.87	110.74	110.17	89.14	62.34
26.00	65.10	104.44	109.35	109.59	109.66	109.65	109.52	108.94	88.48	62.42
27.00	65.27	104.65	109.56	109.80	109.87	109.87	109.73	109.15	88.67	62.59
28.00	65.43	104.88	109.80	110.05	110.12	110.11	109.97	109.39	88.88	62.73
29.00	65.59	105.10	110.02	110.26	110.34	110.34	110.19	109.60	89.08	62.84
30.00	65.62	104.45	109.30	109.56	109.63	109.63	109.47	108.89	88.71	62.90
31.00	65.74	104.64	109.49	109.74	109.82	109.82	109.66	109.07	88.89	63.03
32.00	65.66	103.36	108.08	108.34	108.42	108.41	108.25	107.67	88.11	63.01
33.00	65.77	103.53	108.26	108.52	108.60	108.59	108.43	107.84	88.27	63.10
34.00	65.52	101.30	105.81	106.07	106.16	106.15	105.98	105.40	86.87	62.97
35.00	65.61	101.46	105.97	106.24	106.32	106.32	106.15	105.57	87.02	63.07
36.00	65.32	99.05	103.33	103.60	103.69	103.68	103.51	102.94	85.50	62.92
37.00	65.39	99.20	103.48	103.75	103.84	103.84	103.66	103.09	85.63	62.97
38.00	64.97	96.02	99.99	100.26	100.35	100.34	100.16	99.61	83.60	62.69
39.00	65.01	96.14	100.11	100.38	100.47	100.47	100.29	99.73	83.71	62.72
40.00	64.44	91.92	95.49	95.75	95.85	95.84	95.65	95.13	81.00	62.37
41.00	64.43	92.01	95.57	95.84	95.94	95.93	95.74	95.22	81.08	62.36
42.00	63.69	86.96	89.90	90.14	90.22	90.22	90.04	89.59	77.73	61.88
43.00	63.65	87.02	89.94	90.18	90.27	90.27	90.09	89.64	77.78	61.83
44.00	60.55	62.55	63.12	63.36	63.46	63.45	63.25	62.90	62.05	59.88
45.00	60.01	62.02	62.42	62.64	62.74	62.73	62.53	62.25	61.63	59.44

Table B - 8. Temperature (°C) map of the west side of plate 2BZ at MOC 141A (15 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	58.25	58.02	58.30	58.44	58.49	58.49	58.37	58.16	57.89	57.78
23.00	59.90	63.77	65.21	65.38	65.44	65.43	65.32	64.88	61.64	58.88
24.00	65.56	105.45	110.42	110.62	110.66	110.66	110.56	110.03	88.99	62.32
25.00	65.72	105.60	110.56	110.76	110.81	110.81	110.71	110.17	89.17	62.49
26.00	65.70	104.48	109.33	109.54	109.59	109.59	109.48	108.95	88.50	62.61
27.00	65.86	104.69	109.54	109.75	109.81	109.80	109.69	109.15	88.70	62.79
28.00	66.02	104.92	109.78	109.99	110.05	110.04	109.93	109.39	88.91	62.90
29.00	66.16	105.14	110.00	110.21	110.27	110.26	110.15	109.60	89.11	62.98
30.00	66.18	104.49	109.29	109.50	109.56	109.55	109.44	108.89	88.74	63.03
31.00	66.29	104.68	109.47	109.69	109.75	109.74	109.62	109.08	88.92	63.16
32.00	66.19	103.40	108.06	108.28	108.34	108.33	108.21	107.67	88.14	63.13
33.00	66.29	103.57	108.24	108.46	108.52	108.51	108.39	107.85	88.30	63.20
34.00	66.01	101.34	105.79	106.01	106.07	106.07	105.94	105.41	86.90	63.07
35.00	66.08	101.50	105.95	106.17	106.24	106.23	106.10	105.57	87.05	63.19
36.00	65.76	99.10	103.32	103.54	103.60	103.60	103.46	102.94	85.54	63.04
37.00	65.81	99.25	103.46	103.69	103.75	103.75	103.61	103.09	85.67	63.07
38.00	65.35	96.06	99.97	100.19	100.26	100.25	100.11	99.61	83.63	62.76
39.00	65.37	96.18	100.09	100.32	100.38	100.38	100.24	99.73	83.75	62.77
40.00	64.76	91.96	95.47	95.69	95.76	95.75	95.61	95.13	81.04	62.41
41.00	64.73	92.06	95.56	95.77	95.85	95.84	95.69	95.22	81.12	62.40
42.00	63.93	87.00	89.88	90.07	90.14	90.13	90.00	89.59	77.77	61.89
43.00	63.87	87.06	89.93	90.12	90.19	90.18	90.05	89.64	77.82	61.84
44.00	60.59	62.58	63.11	63.30	63.39	63.38	63.21	62.90	62.10	59.86
45.00	60.03	62.05	62.40	62.59	62.67	62.66	62.49	62.26	61.68	59.42

Table B - 9. Temperature (°C) map of the east side of plate 2TT at MOC 141A (25 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.92	51.77	51.76	51.76	51.76	51.76	51.76	51.77	51.80	51.93
1.00	52.88	52.44	52.61	52.63	52.64	52.64	52.63	52.56	52.37	52.77
2.00	56.47	80.00	82.92	83.00	83.00	83.00	82.99	82.72	70.12	55.10
3.00	56.83	80.28	83.23	83.31	83.31	83.31	83.30	83.01	70.41	55.43
4.00	57.95	86.98	90.47	90.56	90.57	90.57	90.55	90.23	74.99	56.22
5.00	58.22	87.16	90.67	90.76	90.77	90.77	90.75	90.42	75.20	56.47
6.00	59.31	93.13	97.10	97.20	97.21	97.21	97.19	96.83	79.36	57.23
7.00	59.57	93.31	97.29	97.39	97.40	97.40	97.37	97.01	79.56	57.47
8.00	60.51	97.80	102.28	102.41	102.42	102.42	102.39	101.96	82.76	58.15
9.00	60.76	97.99	102.51	102.64	102.66	102.66	102.62	102.18	82.98	58.45
10.00	61.63	102.22	107.21	107.35	107.37	107.37	107.33	106.85	85.89	59.07
11.00	61.89	102.45	107.44	107.59	107.62	107.61	107.56	107.08	86.11	59.29
12.00	62.58	105.34	110.57	110.73	110.76	110.76	110.70	110.19	88.09	59.82
13.00	62.83	105.58	110.82	110.98	111.01	111.01	110.95	110.43	88.32	60.08
14.00	63.44	108.21	113.66	113.83	113.86	113.86	113.79	113.26	90.11	60.54
15.00	63.70	108.45	113.91	114.09	114.12	114.12	114.05	113.50	90.34	60.78
16.00	64.14	109.77	115.32	115.51	115.54	115.54	115.46	114.90	91.28	61.12
17.00	64.39	110.01	115.56	115.75	115.79	115.79	115.71	115.14	91.52	61.41
18.00	64.79	111.44	117.10	117.30	117.34	117.34	117.25	116.67	92.53	61.76
19.00	65.05	111.69	117.36	117.56	117.61	117.61	117.51	116.92	92.77	61.99
20.00	65.50	113.30	119.07	119.29	119.34	119.34	119.23	118.64	93.89	62.31
21.00	65.73	113.52	119.30	119.52	119.57	119.57	119.46	118.86	94.10	62.52
22.00	59.63	64.62	66.33	66.52	66.58	66.58	66.45	65.94	62.10	58.78
22.50	57.67	57.70	58.00	58.14	58.20	58.20	58.07	57.84	57.58	57.38

Table B - 10. Temperature (°C) map of the west side of plate 2TT at MOC 141A (25 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.96	51.77	51.76	51.76	51.76	51.76	51.76	51.77	51.79	51.95
1.00	53.00	52.44	52.61	52.63	52.64	52.64	52.63	52.56	52.37	52.84
2.00	56.79	80.00	82.92	82.99	83.00	83.00	82.99	82.72	70.11	55.19
3.00	57.16	80.28	83.23	83.30	83.31	83.31	83.30	83.01	70.40	55.52
4.00	58.34	86.98	90.47	90.56	90.56	90.56	90.55	90.23	74.98	56.33
5.00	58.63	87.17	90.67	90.76	90.76	90.76	90.74	90.42	75.19	56.59
6.00	59.78	93.13	97.09	97.19	97.20	97.20	97.18	96.83	79.35	57.36
7.00	60.05	93.31	97.28	97.38	97.39	97.39	97.37	97.01	79.55	57.59
8.00	61.03	97.80	102.28	102.40	102.41	102.41	102.38	101.96	82.75	58.28
9.00	61.30	97.99	102.50	102.63	102.64	102.64	102.61	102.18	82.98	58.63
10.00	62.20	102.23	107.20	107.34	107.35	107.35	107.31	106.85	85.89	59.25
11.00	62.47	102.46	107.43	107.58	107.60	107.59	107.55	107.08	86.11	59.45
12.00	63.19	105.36	110.56	110.71	110.74	110.73	110.69	110.19	88.09	59.98
13.00	63.45	105.60	110.80	110.96	110.98	110.98	110.93	110.43	88.32	60.25
14.00	64.08	108.23	113.65	113.81	113.83	113.83	113.78	113.26	90.12	60.72
15.00	64.35	108.47	113.90	114.06	114.09	114.09	114.03	113.50	90.35	60.94
16.00	64.80	109.79	115.31	115.48	115.51	115.51	115.44	114.91	91.29	61.27
17.00	65.05	110.03	115.55	115.72	115.76	115.75	115.69	115.14	91.53	61.62
18.00	65.47	111.47	117.09	117.27	117.30	117.30	117.23	116.68	92.54	61.98
19.00	65.73	111.72	117.34	117.53	117.57	117.56	117.49	116.93	92.78	62.20
20.00	66.19	113.33	119.06	119.25	119.29	119.29	119.21	118.64	93.90	62.50
21.00	66.42	113.55	119.29	119.48	119.52	119.52	119.44	118.86	94.12	62.69
22.00	60.00	64.65	66.32	66.49	66.54	66.53	66.42	65.95	62.14	58.91
22.50	58.01	57.73	57.98	58.11	58.16	58.15	58.05	57.85	57.62	57.57

Table B - 11. Temperature (°C) map of the east side of plate 2BZ at MOC 141A (25 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.81	57.75	58.05	58.19	58.26	58.25	58.12	57.89	57.62	57.51
23.00	59.30	63.17	64.58	64.76	64.82	64.82	64.69	64.25	61.16	58.57
24.00	64.39	102.60	107.39	107.61	107.67	107.66	107.54	107.00	87.07	61.79
25.00	64.56	102.78	107.55	107.78	107.84	107.84	107.71	107.16	87.26	61.95
26.00	64.60	101.97	106.66	106.89	106.96	106.95	106.82	106.27	86.80	62.06
27.00	64.75	102.16	106.86	107.10	107.16	107.16	107.03	106.47	86.99	62.22
28.00	64.89	102.24	106.94	107.17	107.24	107.24	107.10	106.54	87.09	62.34
29.00	65.04	102.45	107.15	107.39	107.46	107.45	107.31	106.75	87.28	62.45
30.00	65.11	102.12	106.77	107.02	107.09	107.09	106.94	106.37	87.12	62.53
31.00	65.23	102.30	106.95	107.20	107.27	107.27	107.12	106.55	87.29	62.65
32.00	65.14	101.06	105.59	105.84	105.92	105.92	105.76	105.20	86.53	62.63
33.00	65.25	101.23	105.76	106.01	106.09	106.09	105.93	105.37	86.68	62.72
34.00	65.03	99.20	103.53	103.79	103.87	103.86	103.70	103.14	85.41	62.60
35.00	65.11	99.36	103.69	103.95	104.03	104.02	103.86	103.30	85.56	62.70
36.00	64.85	97.19	101.32	101.58	101.66	101.65	101.49	100.94	84.20	62.57
37.00	64.92	97.34	101.46	101.72	101.81	101.80	101.63	101.08	84.32	62.61
38.00	64.53	94.37	98.21	98.47	98.55	98.55	98.37	97.84	82.43	62.35
39.00	64.56	94.49	98.33	98.59	98.68	98.67	98.50	97.96	82.54	62.38
40.00	64.04	90.69	94.10	94.35	94.44	94.44	94.26	93.75	80.06	62.06
41.00	64.04	90.77	94.18	94.44	94.53	94.53	94.35	93.84	80.14	62.05
42.00	63.34	86.02	88.89	89.12	89.21	89.20	89.03	88.59	76.98	61.60
43.00	63.30	86.07	88.94	89.17	89.25	89.25	89.08	88.64	77.02	61.55
44.00	60.26	62.11	62.65	62.88	62.97	62.97	62.77	62.44	61.64	59.64
45.00	59.73	61.58	61.96	62.17	62.27	62.26	62.07	61.80	61.22	59.21

Table B - 12. Temperature (°C) map of the west side of plate 2BZ at MOC 141A (25 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	58.10	57.78	58.04	58.16	58.22	58.21	58.10	57.90	57.66	57.65
23.00	59.66	63.20	64.57	64.73	64.78	64.77	64.66	64.25	61.20	58.69
24.00	65.00	102.64	107.37	107.56	107.61	107.60	107.51	107.00	87.10	61.94
25.00	65.16	102.81	107.54	107.73	107.78	107.78	107.68	107.16	87.28	62.11
26.00	65.18	102.00	106.65	106.84	106.89	106.89	106.79	106.27	86.82	62.25
27.00	65.33	102.20	106.85	107.05	107.10	107.09	106.99	106.47	87.01	62.41
28.00	65.46	102.28	106.92	107.12	107.17	107.17	107.06	106.54	87.12	62.51
29.00	65.60	102.49	107.13	107.33	107.39	107.38	107.27	106.75	87.31	62.59
30.00	65.66	102.16	106.75	106.96	107.02	107.01	106.90	106.38	87.14	62.66
31.00	65.77	102.33	106.93	107.14	107.20	107.19	107.08	106.55	87.31	62.79
32.00	65.66	101.10	105.57	105.78	105.84	105.84	105.72	105.20	86.56	62.76
33.00	65.76	101.27	105.74	105.95	106.01	106.01	105.89	105.36	86.71	62.82
34.00	65.51	99.24	103.51	103.73	103.79	103.78	103.66	103.14	85.44	62.71
35.00	65.58	99.39	103.67	103.88	103.94	103.94	103.81	103.30	85.59	62.83
36.00	65.29	97.23	101.30	101.51	101.57	101.57	101.44	100.94	84.23	62.69
37.00	65.34	97.37	101.44	101.66	101.72	101.71	101.58	101.08	84.35	62.72
38.00	65.34	97.39	101.46	101.67	101.73	101.73	101.60	101.10	84.37	62.72
39.00	64.91	94.41	98.19	98.40	98.46	98.46	98.33	97.84	82.46	62.42
40.00	64.92	94.53	98.31	98.52	98.59	98.58	98.45	97.96	82.57	62.43
41.00	64.36	90.72	94.07	94.28	94.35	94.34	94.21	93.75	80.10	62.11
42.00	64.33	90.80	94.16	94.37	94.44	94.43	94.29	93.84	80.18	62.09
43.00	63.58	86.05	88.87	89.06	89.12	89.11	88.99	88.59	77.01	61.61
44.00	63.52	86.10	88.92	89.10	89.17	89.16	89.03	88.64	77.06	61.56
45.00	60.31	62.14	62.63	62.82	62.90	62.89	62.73	62.44	61.68	59.62



Table B - 13. Temperature (°C) map of the east side of plate 2TT at EOC 141A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.92	51.77	51.76	51.76	51.76	51.76	51.76	51.77	51.80	51.93
1.00	52.87	52.43	52.60	52.62	52.62	52.62	52.62	52.55	52.37	52.77
2.00	56.41	79.62	82.51	82.58	82.59	82.59	82.58	82.31	69.86	55.06
3.00	56.76	79.89	82.81	82.89	82.89	82.89	82.88	82.59	70.14	55.38
4.00	57.84	86.33	89.78	89.87	89.87	89.87	89.86	89.54	74.55	56.15
5.00	58.11	86.52	89.97	90.06	90.07	90.07	90.05	89.73	74.76	56.40
6.00	59.16	92.24	96.14	96.24	96.25	96.25	96.23	95.87	78.74	57.13
7.00	59.41	92.42	96.32	96.43	96.44	96.44	96.41	96.05	78.94	57.36
8.00	60.32	96.70	101.01	101.13	101.14	101.14	101.11	100.69	81.98	58.02
9.00	60.57	96.88	101.23	101.35	101.37	101.37	101.33	100.90	82.20	58.32
10.00	61.39	100.79	105.65	105.79	105.81	105.81	105.77	105.30	84.94	58.91
11.00	61.64	101.01	105.88	106.03	106.05	106.05	106.00	105.52	85.15	59.12
12.00	62.28	103.62	108.70	108.86	108.89	108.88	108.83	108.33	86.94	59.62
13.00	62.53	103.85	108.94	109.10	109.13	109.13	109.07	108.56	87.17	59.87
14.00	63.11	106.34	111.63	111.80	111.83	111.83	111.76	111.24	88.87	60.32
15.00	63.37	106.58	111.87	112.05	112.08	112.08	112.01	111.48	89.09	60.55
16.00	63.78	107.81	113.19	113.38	113.41	113.41	113.33	112.79	89.97	60.87
17.00	64.03	108.04	113.43	113.62	113.66	113.66	113.57	113.02	90.21	61.16
18.00	64.40	109.30	114.78	114.98	115.02	115.02	114.93	114.37	91.10	61.49
19.00	64.65	109.54	115.03	115.23	115.27	115.27	115.18	114.61	91.33	61.71
20.00	65.08	111.06	116.65	116.86	116.91	116.91	116.81	116.23	92.39	62.02
21.00	65.30	111.28	116.87	117.09	117.14	117.14	117.03	116.44	92.60	62.22
22.00	59.44	64.17	65.82	66.00	66.06	66.06	65.93	65.45	61.75	58.63
22.50	57.56	57.52	57.80	57.93	58.00	57.99	57.87	57.65	57.41	57.29

Table B - 14. Temperature (°C) map of the west side of plate 2TT at EOC 141A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.96	51.77	51.76	51.76	51.76	51.76	51.76	51.77	51.79	51.95
1.00	52.99	52.43	52.60	52.62	52.62	52.62	52.62	52.55	52.37	52.84
2.00	56.72	79.62	82.51	82.58	82.59	82.59	82.58	82.31	69.85	55.15
3.00	57.10	79.89	82.81	82.88	82.89	82.89	82.88	82.59	70.13	55.48
4.00	58.23	86.34	89.78	89.86	89.87	89.87	89.85	89.54	74.54	56.26
5.00	58.52	86.52	89.97	90.06	90.06	90.06	90.05	89.72	74.75	56.52
6.00	59.62	92.24	96.14	96.23	96.24	96.24	96.22	95.87	78.73	57.26
7.00	59.88	92.42	96.32	96.42	96.43	96.43	96.40	96.05	78.93	57.48
8.00	60.83	96.70	101.00	101.12	101.13	101.13	101.10	100.69	81.98	58.15
9.00	61.09	96.89	101.22	101.34	101.36	101.36	101.32	100.90	82.20	58.50
10.00	61.95	100.80	105.64	105.78	105.79	105.79	105.76	105.30	84.94	59.09
11.00	62.22	101.02	105.87	106.01	106.03	106.03	105.99	105.52	85.15	59.28
12.00	62.88	103.64	108.69	108.84	108.86	108.86	108.82	108.33	86.94	59.78
13.00	63.14	103.87	108.93	109.08	109.10	109.10	109.05	108.56	87.17	60.04
14.00	63.74	106.36	111.62	111.78	111.80	111.80	111.75	111.24	88.87	60.50
15.00	64.00	106.60	111.86	112.02	112.05	112.05	111.99	111.48	89.10	60.71
16.00	64.43	107.83	113.18	113.35	113.38	113.38	113.31	112.79	89.98	61.02
17.00	64.68	108.06	113.41	113.59	113.62	113.62	113.55	113.02	90.21	61.37
18.00	65.06	109.33	114.77	114.95	114.98	114.98	114.91	114.37	91.11	61.71
19.00	65.32	109.57	115.01	115.20	115.23	115.23	115.15	114.61	91.34	61.92
20.00	65.75	111.09	116.64	116.83	116.87	116.86	116.78	116.23	92.41	62.20
21.00	65.98	111.31	116.86	117.05	117.09	117.09	117.00	116.44	92.61	62.40
22.00	59.82	64.20	65.81	65.97	66.02	66.01	65.91	65.45	61.79	58.76
22.50	57.90	57.55	57.78	57.90	57.95	57.95	57.84	57.65	57.45	57.48

Table B - 15. Temperature (°C) map of the east side of plate 2BZ at EOC 141A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.69	57.56	57.85	57.99	58.05	58.05	57.92	57.70	57.45	57.41
23.00	59.12	62.76	64.11	64.28	64.34	64.34	64.21	63.79	60.84	58.42
24.00	64.00	100.57	105.18	105.40	105.46	105.45	105.33	104.81	85.70	61.51
25.00	64.17	100.75	105.35	105.57	105.63	105.63	105.51	104.97	85.89	61.67
26.00	64.21	100.05	104.59	104.81	104.88	104.87	104.74	104.21	85.50	61.78
27.00	64.36	100.24	104.78	105.01	105.07	105.07	104.94	104.40	85.68	61.94
28.00	64.49	100.28	104.81	105.04	105.11	105.11	104.97	104.43	85.76	62.04
29.00	64.63	100.48	105.01	105.25	105.32	105.31	105.17	104.63	85.94	62.15
30.00	64.70	100.18	104.67	104.91	104.98	104.98	104.83	104.28	85.80	62.23
31.00	64.81	100.35	104.84	105.08	105.16	105.15	105.01	104.46	85.96	62.35
32.00	64.75	99.31	103.69	103.93	104.00	104.00	103.85	103.30	85.32	62.35
33.00	64.86	99.47	103.85	104.10	104.17	104.17	104.02	103.47	85.47	62.43
34.00	64.65	97.54	101.74	101.98	102.06	102.06	101.90	101.36	84.27	62.32
35.00	64.73	97.69	101.89	102.14	102.22	102.21	102.06	101.51	84.41	62.42
36.00	64.50	95.78	99.79	100.04	100.12	100.12	99.95	99.42	83.21	62.30
37.00	64.56	95.92	99.93	100.18	100.26	100.26	100.09	99.56	83.33	62.35
38.00	64.21	93.19	96.93	97.18	97.27	97.26	97.09	96.58	81.58	62.11
39.00	64.24	93.31	97.05	97.30	97.39	97.38	97.21	96.70	81.69	62.13
40.00	63.75	89.76	93.04	93.29	93.38	93.37	93.20	92.71	79.35	61.83
41.00	63.74	89.84	93.13	93.38	93.46	93.46	93.29	92.80	79.43	61.82
42.00	63.07	85.34	88.17	88.40	88.48	88.47	88.31	87.88	76.43	61.39
43.00	63.03	85.39	88.22	88.44	88.52	88.52	88.36	87.93	76.48	61.34
44.00	60.05	61.77	62.30	62.51	62.61	62.60	62.41	62.10	61.32	59.46
45.00	59.52	61.26	61.62	61.82	61.91	61.91	61.72	61.47	60.91	59.03

Table B - 16. Temperature (°C) map of the west side of plate 2BZ at EOC 141A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.98	57.59	57.83	57.95	58.01	58.00	57.90	57.70	57.49	57.55
23.00	59.48	62.79	64.09	64.25	64.30	64.29	64.19	63.79	60.88	58.54
24.00	64.59	100.60	105.17	105.35	105.40	105.39	105.30	104.81	85.73	61.66
25.00	64.75	100.78	105.34	105.53	105.57	105.57	105.47	104.97	85.91	61.83
26.00	64.78	100.09	104.57	104.76	104.81	104.81	104.71	104.21	85.53	61.97
27.00	64.93	100.28	104.76	104.96	105.01	105.00	104.90	104.40	85.71	62.13
28.00	65.05	100.32	104.79	104.99	105.04	105.03	104.93	104.43	85.78	62.22
29.00	65.18	100.52	104.99	105.19	105.24	105.24	105.13	104.63	85.97	62.30
30.00	65.24	100.22	104.65	104.85	104.91	104.90	104.79	104.28	85.82	62.36
31.00	65.34	100.39	104.82	105.03	105.08	105.08	104.96	104.45	85.98	62.49
32.00	65.26	99.34	103.67	103.87	103.93	103.92	103.81	103.30	85.35	62.47
33.00	65.35	99.50	103.83	104.04	104.09	104.09	103.97	103.46	85.50	62.54
34.00	65.12	97.58	101.72	101.92	101.98	101.97	101.86	101.36	84.29	62.43
35.00	65.18	97.73	101.87	102.07	102.13	102.13	102.01	101.51	84.44	62.54
36.00	64.93	95.82	99.77	99.97	100.03	100.03	99.90	99.42	83.23	62.43
37.00	64.97	95.96	99.91	100.11	100.18	100.17	100.05	99.56	83.36	62.45
38.00	64.58	93.23	96.91	97.11	97.18	97.17	97.04	96.57	81.61	62.18
39.00	64.60	93.34	97.03	97.23	97.30	97.29	97.16	96.69	81.72	62.18
40.00	64.06	89.79	93.02	93.22	93.28	93.28	93.15	92.70	79.38	61.88
41.00	64.03	89.87	93.10	93.31	93.37	93.36	93.23	92.79	79.46	61.86
42.00	63.32	85.37	88.15	88.33	88.39	88.38	88.26	87.87	76.46	61.40
43.00	63.26	85.42	88.20	88.38	88.44	88.43	88.31	87.92	76.51	61.35
44.00	60.10	61.80	62.28	62.46	62.53	62.52	62.37	62.09	61.36	59.45
45.00	59.55	61.28	61.60	61.76	61.84	61.83	61.68	61.46	60.95	59.02

Table B - 17. Temperature (°C) map of the east side of plate 2TT at BOC 142A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.93	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.80	51.94
1.00	52.86	52.40	52.55	52.57	52.57	52.57	52.56	52.49	52.34	52.77
2.00	56.15	77.67	80.38	80.44	80.45	80.45	80.44	80.18	68.55	54.90
3.00	56.49	77.92	80.66	80.73	80.73	80.73	80.72	80.45	68.82	55.21
4.00	57.48	83.73	86.95	87.04	87.04	87.04	87.03	86.72	72.78	55.92
5.00	57.74	83.90	87.14	87.22	87.23	87.23	87.21	86.90	72.97	56.17
6.00	58.74	89.34	93.01	93.10	93.11	93.11	93.09	92.75	76.74	56.87
7.00	58.99	89.51	93.18	93.28	93.29	93.29	93.27	92.92	76.92	57.10
8.00	59.95	94.23	98.27	98.37	98.38	98.38	98.36	97.99	80.26	57.80
9.00	60.20	94.41	98.44	98.55	98.57	98.57	98.54	98.16	80.47	58.09
10.00	60.91	97.61	102.05	102.19	102.21	102.21	102.16	101.73	82.76	58.61
11.00	61.16	97.79	102.27	102.41	102.43	102.43	102.38	101.94	82.96	58.82
12.00	61.92	101.13	105.99	106.14	106.16	106.16	106.11	105.63	85.29	59.40
13.00	62.17	101.35	106.22	106.37	106.40	106.40	106.34	105.86	85.51	59.65
14.00	62.69	103.47	108.51	108.67	108.70	108.70	108.64	108.14	86.97	60.07
15.00	62.94	103.70	108.74	108.91	108.95	108.94	108.88	108.37	87.18	60.29
16.00	63.52	106.06	111.29	111.47	111.51	111.51	111.43	110.90	88.80	60.72
17.00	63.77	106.30	111.53	111.72	111.75	111.75	111.67	111.14	89.04	61.02
18.00	64.10	107.23	112.53	112.72	112.76	112.76	112.68	112.13	89.72	61.32
19.00	64.35	107.46	112.77	112.96	113.01	113.01	112.92	112.36	89.94	61.53
20.00	64.74	108.75	114.15	114.35	114.40	114.39	114.30	113.73	90.85	61.82
21.00	64.95	108.96	114.36	114.56	114.61	114.61	114.51	113.94	91.05	62.02
22.00	59.34	63.66	65.23	65.40	65.46	65.46	65.34	64.87	61.37	58.58
22.50	57.53	57.27	57.51	57.64	57.70	57.70	57.58	57.38	57.20	57.30

Table B - 18. Temperature (°C) map of the west side of plate 2TT at BOC 142A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.97	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.80	51.97
1.00	52.99	52.40	52.55	52.56	52.57	52.57	52.56	52.49	52.34	52.84
2.00	56.46	77.66	80.37	80.44	80.45	80.45	80.44	80.18	68.54	54.99
3.00	56.82	77.92	80.65	80.73	80.73	80.73	80.72	80.45	68.81	55.31
4.00	57.85	83.73	86.95	87.03	87.04	87.04	87.02	86.72	72.77	56.03
5.00	58.13	83.91	87.13	87.22	87.22	87.22	87.21	86.90	72.96	56.29
6.00	59.18	89.34	93.00	93.09	93.10	93.10	93.08	92.75	76.73	56.99
7.00	59.45	89.51	93.18	93.27	93.28	93.28	93.26	92.92	76.91	57.22
8.00	60.46	94.24	98.26	98.36	98.37	98.37	98.35	97.99	80.25	57.92
9.00	60.72	94.41	98.44	98.54	98.55	98.55	98.53	98.16	80.46	58.28
10.00	61.47	97.61	102.05	102.17	102.19	102.19	102.15	101.73	82.76	58.80
11.00	61.73	97.80	102.26	102.39	102.41	102.41	102.37	101.94	82.96	58.99
12.00	62.52	101.14	105.98	106.12	106.14	106.14	106.10	105.63	85.28	59.56
13.00	62.77	101.37	106.21	106.35	106.37	106.37	106.33	105.86	85.51	59.83
14.00	63.31	103.49	108.50	108.65	108.67	108.67	108.62	108.14	86.97	60.25
15.00	63.58	103.72	108.73	108.89	108.91	108.91	108.86	108.37	87.18	60.46
16.00	64.18	106.08	111.28	111.44	111.47	111.47	111.41	110.90	88.81	60.88
17.00	64.43	106.32	111.52	111.68	111.71	111.71	111.65	111.14	89.04	61.23
18.00	64.77	107.25	112.52	112.69	112.72	112.72	112.65	112.13	89.73	61.55
19.00	65.02	107.49	112.75	112.93	112.96	112.96	112.89	112.36	89.95	61.76
20.00	65.42	108.78	114.13	114.31	114.35	114.34	114.27	113.73	90.86	62.01
21.00	65.63	108.98	114.34	114.52	114.56	114.56	114.48	113.94	91.06	62.20
22.00	59.73	63.68	65.21	65.37	65.42	65.41	65.31	64.87	61.40	58.71
22.50	57.89	57.29	57.50	57.61	57.66	57.65	57.55	57.38	57.23	57.50

Table B - 19. Temperature (°C) map of the east side of plate 2BZ at BOC 142A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.66	57.31	57.56	57.69	57.75	57.75	57.63	57.43	57.23	57.41
23.00	59.04	62.31	63.59	63.76	63.82	63.81	63.69	63.29	60.50	58.39
24.00	63.72	98.71	103.15	103.36	103.41	103.41	103.30	102.79	84.45	61.35
25.00	63.90	98.91	103.36	103.57	103.63	103.62	103.50	102.99	84.65	61.53
26.00	63.99	98.57	102.97	103.18	103.24	103.24	103.12	102.60	84.49	61.67
27.00	64.13	98.75	103.15	103.37	103.43	103.43	103.30	102.78	84.66	61.81
28.00	64.18	98.30	102.66	102.88	102.94	102.94	102.81	102.29	84.42	61.88
29.00	64.32	98.50	102.85	103.07	103.14	103.14	103.00	102.48	84.60	61.98
30.00	64.38	98.14	102.44	102.67	102.74	102.74	102.60	102.07	84.41	62.05
31.00	64.48	98.30	102.61	102.84	102.91	102.91	102.77	102.24	84.56	62.16
32.00	64.39	97.07	101.25	101.48	101.55	101.55	101.41	100.88	83.81	62.13
33.00	64.49	97.22	101.41	101.64	101.71	101.71	101.56	101.04	83.95	62.21
34.00	64.35	95.78	99.82	100.06	100.13	100.13	99.98	99.46	83.05	62.14
35.00	64.42	95.93	99.97	100.21	100.29	100.28	100.13	99.61	83.19	62.24
36.00	64.16	93.80	97.63	97.87	97.95	97.95	97.79	97.28	81.85	62.10
37.00	64.21	93.93	97.77	98.01	98.09	98.08	97.93	97.41	81.96	62.13
38.00	63.83	91.15	94.62	94.86	94.94	94.93	94.77	94.28	80.13	61.87
39.00	63.85	91.25	94.73	94.97	95.05	95.05	94.88	94.39	80.23	61.89
40.00	63.36	87.78	90.85	91.06	91.14	91.13	90.98	90.55	77.92	61.59
41.00	63.34	87.85	90.92	91.13	91.21	91.20	91.06	90.62	77.99	61.57
42.00	62.73	83.69	86.39	86.60	86.68	86.68	86.52	86.11	75.23	61.16
43.00	62.68	83.74	86.43	86.65	86.73	86.72	86.57	86.16	75.27	61.11
44.00	59.85	61.32	61.81	62.01	62.10	62.09	61.92	61.62	60.92	59.32
45.00	59.34	60.83	61.16	61.35	61.44	61.43	61.26	61.02	60.53	58.91

Table B - 20. Temperature (°C) map of the west side of plate 2BZ at BOC 142A (32.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.97	57.33	57.55	57.66	57.71	57.70	57.60	57.43	57.27	57.57
23.00	59.41	62.34	63.58	63.72	63.77	63.77	63.67	63.29	60.53	58.52
24.00	64.32	98.74	103.13	103.31	103.35	103.35	103.26	102.79	84.46	61.52
25.00	64.50	98.94	103.33	103.52	103.56	103.56	103.47	102.99	84.67	61.69
26.00	64.58	98.59	102.94	103.13	103.17	103.17	103.08	102.59	84.51	61.87
27.00	64.71	98.77	103.13	103.31	103.36	103.36	103.26	102.78	84.68	62.02
28.00	64.75	98.33	102.63	102.82	102.87	102.86	102.76	102.28	84.44	62.06
29.00	64.88	98.52	102.82	103.01	103.06	103.06	102.96	102.47	84.61	62.13
30.00	64.92	98.16	102.42	102.61	102.66	102.65	102.55	102.06	84.43	62.19
31.00	65.02	98.33	102.58	102.78	102.83	102.82	102.72	102.23	84.58	62.30
32.00	64.91	97.09	101.22	101.41	101.47	101.46	101.35	100.87	83.83	62.27
33.00	64.99	97.25	101.38	101.57	101.63	101.62	101.51	101.03	83.97	62.33
34.00	64.82	95.81	99.79	99.99	100.04	100.04	99.93	99.45	83.08	62.26
35.00	64.88	95.96	99.94	100.14	100.19	100.19	100.08	99.60	83.21	62.37
36.00	64.59	93.83	97.60	97.80	97.86	97.85	97.73	97.27	81.87	62.23
37.00	64.63	93.96	97.74	97.93	97.99	97.98	97.87	97.40	81.98	62.25
38.00	64.21	91.17	94.59	94.78	94.84	94.83	94.71	94.27	80.15	61.95
39.00	64.21	91.27	94.70	94.89	94.95	94.94	94.82	94.38	80.25	61.95
40.00	63.68	87.80	90.82	90.99	91.04	91.04	90.93	90.54	77.94	61.64
41.00	63.64	87.87	90.89	91.06	91.11	91.11	91.00	90.61	78.01	61.62
42.00	62.97	83.71	86.36	86.53	86.59	86.58	86.46	86.09	75.25	61.19
43.00	62.91	83.76	86.40	86.57	86.63	86.62	86.51	86.14	75.29	61.13
44.00	59.91	61.34	61.78	61.95	62.02	62.01	61.87	61.61	60.95	59.32
45.00	59.38	60.85	61.13	61.28	61.36	61.35	61.21	61.01	60.56	58.91



Table B - 21. Temperature (°C) map of the east side of plate 2TT at MOC 142A (48.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.93	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.80	51.94
1.00	52.91	52.45	52.62	52.63	52.64	52.64	52.63	52.56	52.38	52.81
2.00	56.49	79.84	82.75	82.82	82.82	82.82	82.81	82.54	70.02	55.13
3.00	56.83	80.10	83.03	83.11	83.12	83.12	83.10	82.82	70.29	55.44
4.00	57.82	85.83	89.23	89.32	89.33	89.33	89.31	88.99	74.22	56.15
5.00	58.09	86.01	89.42	89.51	89.52	89.52	89.50	89.18	74.42	56.40
6.00	59.07	91.25	95.07	95.16	95.17	95.17	95.15	94.80	78.07	57.09
7.00	59.32	91.42	95.25	95.35	95.36	95.36	95.33	94.98	78.26	57.32
8.00	60.17	95.36	99.48	99.58	99.60	99.60	99.57	99.20	81.06	57.95
9.00	60.42	95.54	99.67	99.79	99.81	99.81	99.77	99.37	81.27	58.25
10.00	61.13	98.72	103.35	103.48	103.50	103.50	103.46	103.01	83.56	58.77
11.00	61.38	98.90	103.56	103.71	103.73	103.73	103.68	103.22	83.76	58.98
12.00	61.94	100.97	105.81	105.96	105.99	105.99	105.93	105.45	85.20	59.43
13.00	62.18	101.18	106.03	106.19	106.22	106.22	106.16	105.67	85.41	59.67
14.00	62.61	102.71	107.67	107.84	107.87	107.87	107.80	107.30	86.48	60.03
15.00	62.86	102.93	107.90	108.07	108.10	108.10	108.03	107.52	86.69	60.24
16.00	63.37	104.81	109.93	110.10	110.14	110.14	110.06	109.54	87.99	60.63
17.00	63.61	105.03	110.15	110.34	110.38	110.37	110.29	109.76	88.22	60.92
18.00	63.95	106.11	111.31	111.50	111.54	111.54	111.45	110.91	89.00	61.22
19.00	64.20	106.34	111.54	111.74	111.78	111.78	111.69	111.14	89.21	61.44
20.00	64.47	106.76	111.98	112.18	112.23	112.23	112.13	111.58	89.56	61.65
21.00	64.66	106.95	112.17	112.38	112.43	112.43	112.32	111.77	89.74	61.83
22.00	59.27	63.41	64.93	65.10	65.16	65.15	65.03	64.58	61.21	58.53
22.50	57.55	57.28	57.52	57.66	57.72	57.71	57.59	57.39	57.21	57.31

Table B - 22. Temperature (°C) map of the west side of plate 2TT at MOC 142A (48.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.97	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.80	51.97
1.00	53.04	52.45	52.62	52.63	52.64	52.64	52.63	52.56	52.38	52.88
2.00	56.81	79.84	82.74	82.81	82.82	82.82	82.81	82.54	70.00	55.22
3.00	57.17	80.10	83.03	83.11	83.11	83.11	83.10	82.81	70.28	55.54
4.00	58.21	85.83	89.23	89.31	89.32	89.32	89.31	88.99	74.21	56.27
5.00	58.50	86.02	89.42	89.51	89.51	89.51	89.50	89.17	74.41	56.52
6.00	59.53	91.25	95.06	95.16	95.17	95.17	95.15	94.80	78.06	57.22
7.00	59.79	91.43	95.24	95.34	95.35	95.35	95.33	94.98	78.25	57.45
8.00	60.68	95.36	99.47	99.57	99.59	99.58	99.56	99.19	81.05	58.08
9.00	60.94	95.54	99.66	99.78	99.80	99.80	99.76	99.37	81.27	58.43
10.00	61.69	98.73	103.34	103.47	103.48	103.48	103.45	103.01	83.55	58.95
11.00	61.96	98.91	103.56	103.69	103.71	103.71	103.67	103.22	83.76	59.14
12.00	62.53	100.98	105.80	105.94	105.96	105.96	105.92	105.45	85.20	59.59
13.00	62.79	101.20	106.02	106.17	106.19	106.19	106.14	105.67	85.41	59.85
14.00	63.23	102.72	107.66	107.81	107.84	107.84	107.79	107.30	86.48	60.21
15.00	63.49	102.94	107.89	108.04	108.07	108.07	108.01	107.52	86.69	60.41
16.00	64.01	104.83	109.91	110.08	110.10	110.10	110.04	109.54	88.00	60.78
17.00	64.26	105.05	110.14	110.31	110.34	110.34	110.27	109.76	88.23	61.13
18.00	64.61	106.13	111.29	111.46	111.50	111.49	111.43	110.91	89.00	61.46
19.00	64.86	106.36	111.53	111.70	111.74	111.73	111.66	111.14	89.22	61.66
20.00	65.13	106.79	111.97	112.15	112.18	112.18	112.10	111.58	89.57	61.84
21.00	65.32	106.98	112.16	112.34	112.38	112.37	112.30	111.76	89.75	62.01
22.00	59.66	63.43	64.91	65.06	65.11	65.11	65.01	64.58	61.24	58.67
22.50	57.90	57.31	57.51	57.62	57.67	57.66	57.57	57.39	57.25	57.51

Table B - 23. Temperature (°C) map of the east side of plate 2BZ at MOC 142A (48.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.67	57.32	57.57	57.70	57.76	57.76	57.64	57.44	57.25	57.42
23.00	59.00	62.15	63.40	63.56	63.62	63.61	63.49	63.10	60.40	58.36
24.00	63.53	97.34	101.66	101.87	101.92	101.92	101.81	101.31	83.56	61.22
25.00	63.70	97.54	101.85	102.06	102.12	102.12	102.00	101.49	83.75	61.39
26.00	63.77	97.11	101.37	101.59	101.65	101.64	101.52	101.01	83.53	61.52
27.00	63.90	97.28	101.55	101.77	101.83	101.83	101.70	101.19	83.70	61.66
28.00	63.95	96.78	101.00	101.21	101.28	101.28	101.14	100.63	83.42	61.72
29.00	64.08	96.97	101.18	101.41	101.47	101.47	101.34	100.82	83.59	61.82
30.00	64.16	96.82	101.01	101.24	101.30	101.30	101.16	100.65	83.54	61.91
31.00	64.27	96.99	101.17	101.40	101.47	101.47	101.33	100.81	83.70	62.02
32.00	64.21	96.03	100.11	100.34	100.41	100.41	100.27	99.75	83.12	62.01
33.00	64.31	96.18	100.27	100.50	100.57	100.57	100.42	99.91	83.26	62.09
34.00	64.23	95.15	99.13	99.37	99.44	99.44	99.29	98.78	82.63	62.06
35.00	64.30	95.30	99.28	99.52	99.59	99.59	99.44	98.92	82.77	62.15
36.00	64.09	93.53	97.33	97.57	97.65	97.64	97.49	96.98	81.65	62.05
37.00	64.14	93.66	97.47	97.71	97.78	97.78	97.62	97.12	81.77	62.08
38.00	63.77	90.97	94.41	94.65	94.73	94.73	94.57	94.08	79.99	61.83
39.00	63.80	91.07	94.53	94.76	94.84	94.84	94.68	94.19	80.09	61.84
40.00	63.36	87.98	91.06	91.28	91.35	91.35	91.20	90.77	78.03	61.58
41.00	63.35	88.05	91.14	91.35	91.43	91.42	91.28	90.84	78.11	61.57
42.00	62.80	84.37	87.13	87.34	87.42	87.42	87.26	86.85	75.67	61.20
43.00	62.76	84.43	87.18	87.40	87.47	87.47	87.32	86.90	75.71	61.16
44.00	59.83	61.29	61.78	61.98	62.07	62.06	61.89	61.59	60.88	59.31
45.00	59.31	60.78	61.11	61.29	61.38	61.38	61.20	60.97	60.48	58.89

Table B - 24. Temperature (°C) map of the west side of plate 2BZ at MOC 142A (48.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.98	57.35	57.56	57.67	57.72	57.71	57.61	57.44	57.28	57.58
23.00	59.37	62.18	63.38	63.52	63.57	63.57	63.47	63.10	60.43	58.49
24.00	64.12	97.37	101.64	101.82	101.86	101.86	101.77	101.30	83.58	61.38
25.00	64.28	97.56	101.83	102.01	102.05	102.05	101.96	101.49	83.77	61.55
26.00	64.34	97.13	101.35	101.53	101.58	101.57	101.48	101.01	83.55	61.72
27.00	64.47	97.31	101.53	101.71	101.76	101.75	101.66	101.18	83.72	61.86
28.00	64.51	96.81	100.97	101.16	101.20	101.20	101.10	100.63	83.44	61.90
29.00	64.63	97.00	101.16	101.35	101.40	101.39	101.29	100.81	83.61	61.97
30.00	64.70	96.85	100.98	101.17	101.22	101.22	101.12	100.64	83.56	62.04
31.00	64.80	97.01	101.15	101.34	101.39	101.38	101.28	100.80	83.72	62.16
32.00	64.72	96.05	100.08	100.28	100.33	100.32	100.22	99.74	83.14	62.14
33.00	64.81	96.21	100.24	100.43	100.49	100.48	100.37	99.90	83.28	62.20
34.00	64.70	95.18	99.10	99.30	99.35	99.35	99.24	98.77	82.65	62.17
35.00	64.76	95.33	99.25	99.45	99.50	99.50	99.38	98.91	82.79	62.28
36.00	64.52	93.55	97.30	97.50	97.55	97.54	97.43	96.97	81.67	62.18
37.00	64.56	93.68	97.44	97.63	97.69	97.68	97.57	97.10	81.79	62.19
38.00	64.15	91.00	94.38	94.57	94.63	94.62	94.51	94.07	80.01	61.91
39.00	64.16	91.10	94.49	94.69	94.74	94.74	94.62	94.18	80.11	61.91
40.00	63.68	88.00	91.03	91.20	91.26	91.25	91.14	90.75	78.06	61.64
41.00	63.65	88.07	91.11	91.28	91.33	91.33	91.22	90.83	78.13	61.62
42.00	63.05	84.39	87.10	87.27	87.32	87.32	87.21	86.83	75.69	61.23
43.00	62.99	84.45	87.15	87.32	87.38	87.37	87.26	86.89	75.74	61.18
44.00	59.89	61.31	61.75	61.92	61.99	61.98	61.84	61.58	60.91	59.31
45.00	59.35	60.80	61.08	61.23	61.30	61.29	61.15	60.96	60.51	58.88

Table B - 25. Temperature (°C) map of the east side of plate 2TT at MOC 142A (64.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.93	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.80	51.94
1.00	52.92	52.46	52.63	52.65	52.65	52.65	52.64	52.57	52.39	52.81
2.00	56.55	80.27	83.21	83.28	83.28	83.28	83.27	83.00	70.30	55.17
3.00	56.90	80.53	83.50	83.58	83.58	83.58	83.57	83.28	70.58	55.49
4.00	57.89	86.27	89.71	89.80	89.80	89.80	89.79	89.47	74.52	56.20
5.00	58.16	86.45	89.90	89.99	90.00	90.00	89.98	89.65	74.72	56.45
6.00	59.12	91.57	95.41	95.51	95.52	95.52	95.50	95.15	78.29	57.13
7.00	59.38	91.74	95.59	95.69	95.71	95.71	95.68	95.32	78.48	57.36
8.00	60.18	95.39	99.51	99.62	99.63	99.63	99.60	99.23	81.09	57.96
9.00	60.43	95.57	99.71	99.83	99.85	99.85	99.81	99.41	81.30	58.25
10.00	61.09	98.44	103.03	103.17	103.19	103.19	103.14	102.69	83.37	58.75
11.00	61.34	98.63	103.25	103.39	103.41	103.41	103.36	102.90	83.57	58.96
12.00	61.91	100.73	105.56	105.71	105.74	105.73	105.68	105.20	85.05	59.41
13.00	62.15	100.95	105.78	105.93	105.96	105.96	105.90	105.42	85.26	59.65
14.00	62.43	101.49	106.35	106.51	106.54	106.54	106.48	105.98	85.68	59.91
15.00	62.67	101.70	106.56	106.73	106.76	106.76	106.69	106.19	85.88	60.12
16.00	63.19	103.69	108.71	108.89	108.92	108.92	108.85	108.33	87.25	60.51
17.00	63.43	103.91	108.94	109.12	109.16	109.16	109.08	108.55	87.48	60.79
18.00	63.72	104.65	109.73	109.92	109.96	109.96	109.87	109.34	88.04	61.07
19.00	63.95	104.87	109.95	110.15	110.19	110.19	110.10	109.56	88.25	61.28
20.00	64.16	104.88	109.94	110.14	110.18	110.18	110.08	109.54	88.31	61.45
21.00	64.34	105.05	110.11	110.32	110.37	110.36	110.26	109.72	88.48	61.61
22.00	59.16	63.10	64.57	64.74	64.79	64.79	64.67	64.23	60.99	58.45
22.50	57.51	57.21	57.44	57.57	57.63	57.63	57.51	57.32	57.15	57.27

Table B - 26. Temperature (°C) map of the west side of plate 2TT at MOC 142A (64.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.97	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.80	51.97
1.00	53.05	52.46	52.63	52.65	52.65	52.65	52.64	52.57	52.39	52.88
2.00	56.87	80.27	83.21	83.28	83.28	83.28	83.27	83.00	70.29	55.26
3.00	57.24	80.53	83.50	83.57	83.58	83.58	83.56	83.28	70.57	55.59
4.00	58.29	86.27	89.71	89.79	89.80	89.80	89.78	89.47	74.51	56.32
5.00	58.57	86.46	89.90	89.98	89.99	89.99	89.97	89.65	74.71	56.57
6.00	59.59	91.57	95.41	95.51	95.51	95.51	95.49	95.15	78.28	57.26
7.00	59.85	91.75	95.59	95.69	95.70	95.70	95.67	95.32	78.47	57.49
8.00	60.70	95.40	99.51	99.61	99.62	99.62	99.60	99.23	81.08	58.09
9.00	60.96	95.57	99.70	99.82	99.83	99.83	99.80	99.40	81.29	58.44
10.00	61.65	98.45	103.02	103.15	103.17	103.17	103.13	102.69	83.37	58.93
11.00	61.91	98.64	103.24	103.37	103.39	103.39	103.35	102.90	83.57	59.12
12.00	62.50	100.75	105.55	105.69	105.71	105.71	105.67	105.20	85.05	59.57
13.00	62.75	100.96	105.77	105.91	105.94	105.93	105.89	105.42	85.26	59.83
14.00	63.04	101.50	106.34	106.49	106.51	106.51	106.46	105.98	85.68	60.09
15.00	63.29	101.72	106.55	106.70	106.73	106.73	106.67	106.19	85.88	60.28
16.00	63.82	103.71	108.70	108.86	108.89	108.89	108.83	108.33	87.26	60.66
17.00	64.07	103.93	108.92	109.09	109.12	109.12	109.05	108.55	87.49	61.01
18.00	64.37	104.68	109.71	109.88	109.92	109.91	109.85	109.34	88.05	61.30
19.00	64.60	104.90	109.94	110.11	110.15	110.14	110.07	109.56	88.26	61.50
20.00	64.81	104.90	109.92	110.10	110.13	110.13	110.06	109.54	88.33	61.63
21.00	64.99	105.08	110.10	110.28	110.32	110.31	110.23	109.71	88.50	61.79
22.00	59.55	63.13	64.55	64.70	64.75	64.74	64.64	64.23	61.02	58.58
22.50	57.86	57.23	57.43	57.54	57.59	57.58	57.48	57.32	57.18	57.47

Table B - 27. Temperature (°C) map of the east side of plate 2BZ at MOC 142A (64.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.62	57.25	57.49	57.62	57.68	57.67	57.56	57.36	57.18	57.38
23.00	58.89	61.84	63.03	63.19	63.25	63.25	63.13	62.75	60.18	58.27
24.00	63.20	95.40	99.55	99.75	99.80	99.80	99.69	99.20	82.27	61.00
25.00	63.36	95.59	99.73	99.94	100.00	99.99	99.88	99.38	82.46	61.16
26.00	63.44	95.25	99.34	99.55	99.61	99.61	99.49	99.00	82.29	61.30
27.00	63.57	95.41	99.51	99.73	99.79	99.78	99.66	99.16	82.46	61.43
28.00	63.62	94.95	98.99	99.20	99.27	99.27	99.14	98.64	82.20	61.49
29.00	63.75	95.13	99.17	99.39	99.46	99.45	99.32	98.82	82.36	61.58
30.00	63.83	95.00	99.02	99.24	99.31	99.30	99.17	98.67	82.32	61.67
31.00	63.93	95.16	99.18	99.40	99.47	99.47	99.33	98.83	82.47	61.78
32.00	63.93	94.61	98.57	98.79	98.86	98.86	98.72	98.22	82.15	61.81
33.00	64.02	94.76	98.72	98.95	99.02	99.01	98.87	98.37	82.29	61.88
34.00	63.96	93.92	97.79	98.02	98.09	98.09	97.94	97.44	81.79	61.87
35.00	64.03	94.06	97.93	98.17	98.24	98.24	98.09	97.59	81.92	61.96
36.00	63.89	92.77	96.51	96.74	96.82	96.81	96.66	96.17	81.12	61.90
37.00	63.95	92.90	96.65	96.88	96.96	96.95	96.80	96.30	81.24	61.93
38.00	63.74	91.32	94.81	95.04	95.12	95.12	94.96	94.48	80.18	61.79
39.00	63.77	91.43	94.93	95.16	95.24	95.24	95.08	94.60	80.29	61.81
40.00	63.41	88.86	92.03	92.24	92.31	92.31	92.17	91.73	78.58	61.59
41.00	63.40	88.95	92.12	92.33	92.40	92.39	92.25	91.82	78.66	61.59
42.00	62.85	85.23	88.07	88.28	88.36	88.36	88.21	87.79	76.20	61.22
43.00	62.81	85.29	88.13	88.34	88.42	88.41	88.26	87.85	76.25	61.17
44.00	59.76	61.17	61.66	61.85	61.94	61.94	61.76	61.47	60.76	59.25
45.00	59.22	60.64	60.96	61.14	61.23	61.22	61.05	60.82	60.35	58.81

Table B - 28. Temperature (°C) map of the west side of plate 2BZ at MOC 142A (64.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.93	57.27	57.47	57.58	57.63	57.63	57.53	57.36	57.22	57.54
23.00	59.25	61.87	63.02	63.16	63.21	63.20	63.10	62.75	60.21	58.40
24.00	63.77	95.43	99.53	99.70	99.74	99.74	99.65	99.20	82.29	61.16
25.00	63.94	95.62	99.71	99.89	99.93	99.93	99.84	99.38	82.48	61.33
26.00	64.01	95.27	99.32	99.50	99.55	99.54	99.45	98.99	82.31	61.49
27.00	64.13	95.44	99.49	99.67	99.72	99.71	99.62	99.16	82.47	61.63
28.00	64.16	94.97	98.97	99.15	99.19	99.19	99.09	98.63	82.21	61.67
29.00	64.29	95.15	99.15	99.33	99.38	99.37	99.27	98.81	82.38	61.73
30.00	64.35	95.02	98.99	99.18	99.23	99.22	99.12	98.66	82.34	61.81
31.00	64.45	95.18	99.15	99.34	99.39	99.38	99.28	98.82	82.49	61.92
32.00	64.43	94.63	98.54	98.73	98.78	98.77	98.67	98.21	82.17	61.94
33.00	64.51	94.78	98.69	98.88	98.93	98.92	98.82	98.36	82.31	62.00
34.00	64.43	93.94	97.76	97.95	98.00	97.99	97.89	97.43	81.80	61.98
35.00	64.49	94.09	97.90	98.09	98.15	98.14	98.03	97.57	81.94	62.09
36.00	64.32	92.79	96.48	96.67	96.72	96.72	96.61	96.16	81.14	62.03
37.00	64.36	92.93	96.61	96.81	96.86	96.85	96.74	96.29	81.25	62.05
38.00	64.12	91.34	94.78	94.97	95.02	95.02	94.90	94.46	80.20	61.87
39.00	64.13	91.45	94.90	95.09	95.14	95.14	95.02	94.58	80.30	61.87
40.00	63.74	88.88	92.00	92.17	92.22	92.21	92.11	91.72	78.60	61.65
41.00	63.71	88.96	92.08	92.25	92.30	92.30	92.19	91.80	78.68	61.64
42.00	63.11	85.25	88.04	88.21	88.26	88.26	88.15	87.77	76.22	61.25
43.00	63.05	85.31	88.10	88.27	88.32	88.31	88.20	87.83	76.27	61.20
44.00	59.82	61.18	61.63	61.79	61.86	61.85	61.71	61.45	60.79	59.24
45.00	59.26	60.65	60.93	61.08	61.14	61.13	61.00	60.81	60.37	58.80



Table B - 29. Temperature (°C) map of the east side of plate 2TT at EOC 142A (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.93	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.80	51.94
1.00	52.90	52.44	52.61	52.63	52.63	52.63	52.63	52.55	52.38	52.80
2.00	56.47	79.71	82.61	82.68	82.68	82.68	82.67	82.40	69.93	55.11
3.00	56.80	79.96	82.88	82.96	82.96	82.96	82.95	82.66	70.19	55.42
4.00	57.67	84.91	88.23	88.31	88.32	88.32	88.30	87.99	73.59	56.05
5.00	57.92	85.08	88.41	88.49	88.50	88.50	88.48	88.16	73.77	56.29
6.00	58.70	88.96	92.60	92.70	92.71	92.71	92.69	92.35	76.49	56.85
7.00	58.93	89.13	92.77	92.87	92.88	92.88	92.85	92.51	76.67	57.06
8.00	59.54	91.59	95.42	95.52	95.54	95.54	95.51	95.15	78.44	57.53
9.00	59.77	91.75	95.58	95.69	95.71	95.70	95.67	95.31	78.63	57.81
10.00	60.26	93.61	97.57	97.69	97.70	97.70	97.67	97.29	79.98	58.18
11.00	60.49	93.77	97.74	97.85	97.87	97.87	97.83	97.45	80.16	58.38
12.00	60.85	94.61	98.63	98.75	98.77	98.77	98.72	98.34	80.82	58.69
13.00	61.07	94.78	98.80	98.94	98.97	98.96	98.91	98.50	81.00	58.92
14.00	61.34	95.33	99.43	99.58	99.61	99.60	99.54	99.11	81.45	59.17
15.00	61.56	95.49	99.62	99.77	99.80	99.80	99.74	99.29	81.63	59.35
16.00	61.83	95.93	100.13	100.29	100.32	100.32	100.25	99.80	82.01	59.58
17.00	62.04	96.10	100.32	100.48	100.52	100.51	100.44	99.98	82.20	59.84
18.00	62.33	96.90	101.25	101.41	101.45	101.45	101.37	100.90	82.83	60.11
19.00	62.54	97.07	101.44	101.62	101.66	101.66	101.57	101.09	83.01	60.30
20.00	62.65	96.51	100.79	100.97	101.01	101.01	100.92	100.44	82.69	60.40
21.00	62.79	96.64	100.94	101.12	101.16	101.16	101.07	100.59	82.83	60.54
22.00	58.51	61.50	62.71	62.86	62.91	62.91	62.80	62.43	59.77	57.92
22.50	57.14	56.59	56.77	56.88	56.93	56.93	56.82	56.66	56.58	56.96

Table B - 30. Temperature (°C) map of the west side of plate 2TT at EOC 142A (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.97	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.80	51.97
1.00	53.03	52.44	52.61	52.63	52.63	52.63	52.63	52.55	52.38	52.88
2.00	56.78	79.71	82.60	82.68	82.68	82.68	82.67	82.40	69.92	55.20
3.00	57.14	79.96	82.88	82.95	82.96	82.96	82.95	82.66	70.18	55.52
4.00	58.06	84.91	88.23	88.31	88.32	88.32	88.30	87.99	73.57	56.17
5.00	58.33	85.08	88.40	88.49	88.50	88.49	88.48	88.16	73.76	56.41
6.00	59.14	88.97	92.60	92.69	92.70	92.70	92.68	92.35	76.48	56.97
7.00	59.39	89.13	92.76	92.86	92.87	92.87	92.85	92.51	76.66	57.18
8.00	60.03	91.60	95.41	95.51	95.52	95.52	95.50	95.15	78.43	57.65
9.00	60.27	91.76	95.58	95.68	95.69	95.69	95.66	95.31	78.63	57.99
10.00	60.79	93.62	97.57	97.67	97.69	97.68	97.66	97.29	79.98	58.36
11.00	61.03	93.78	97.73	97.84	97.85	97.85	97.82	97.45	80.16	58.54
12.00	61.40	94.63	98.62	98.73	98.74	98.74	98.71	98.34	80.82	58.84
13.00	61.63	94.79	98.79	98.92	98.94	98.94	98.89	98.50	81.01	59.09
14.00	61.91	95.34	99.42	99.55	99.58	99.57	99.53	99.11	81.45	59.34
15.00	62.14	95.50	99.61	99.75	99.77	99.77	99.72	99.29	81.63	59.52
16.00	62.42	95.95	100.12	100.26	100.29	100.28	100.23	99.79	82.01	59.73
17.00	62.63	96.11	100.30	100.45	100.48	100.47	100.42	99.98	82.21	60.05
18.00	62.93	96.92	101.23	101.38	101.41	101.41	101.35	100.90	82.84	60.33
19.00	63.14	97.09	101.43	101.58	101.61	101.61	101.54	101.09	83.02	60.51
20.00	63.25	96.52	100.77	100.93	100.96	100.96	100.89	100.44	82.70	60.58
21.00	63.40	96.65	100.92	101.08	101.11	101.11	101.04	100.58	82.85	60.71
22.00	58.88	61.51	62.70	62.83	62.87	62.86	62.78	62.43	59.79	58.06
22.50	57.49	56.61	56.75	56.84	56.88	56.88	56.80	56.66	56.61	57.16

Table B - 31. Temperature (°C) map of the east side of plate 2BZ at EOC 142A (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.23	56.62	56.80	56.92	56.97	56.97	56.86	56.70	56.61	57.05
23.00	58.29	60.47	61.46	61.60	61.66	61.65	61.55	61.22	59.12	57.79
24.00	61.90	89.02	92.41	92.56	92.61	92.60	92.52	92.13	77.71	60.08
25.00	62.05	89.16	92.54	92.70	92.75	92.75	92.65	92.26	77.87	60.23
26.00	62.12	88.85	92.20	92.37	92.41	92.41	92.32	91.92	77.73	60.35
27.00	62.23	88.98	92.33	92.50	92.55	92.54	92.45	92.05	77.87	60.47
28.00	62.30	88.78	92.10	92.27	92.32	92.32	92.22	91.82	77.78	60.54
29.00	62.42	88.93	92.25	92.42	92.47	92.47	92.36	91.97	77.92	60.62
30.00	62.53	89.16	92.48	92.66	92.71	92.71	92.60	92.20	78.12	60.72
31.00	62.62	89.28	92.61	92.78	92.83	92.83	92.72	92.32	78.25	60.82
32.00	62.64	88.94	92.23	92.41	92.47	92.46	92.35	91.95	78.07	60.86
33.00	62.71	89.06	92.35	92.53	92.59	92.58	92.47	92.07	78.18	60.92
34.00	62.70	88.65	91.90	92.08	92.14	92.14	92.02	91.62	77.95	60.93
35.00	62.76	88.78	92.03	92.21	92.27	92.27	92.15	91.75	78.08	61.02
36.00	62.75	88.46	91.68	91.86	91.92	91.92	91.80	91.40	77.90	61.03
37.00	62.80	88.57	91.79	91.97	92.03	92.03	91.91	91.51	78.01	61.06
38.00	62.62	87.23	90.32	90.51	90.57	90.57	90.44	90.04	77.13	60.93
39.00	62.64	87.33	90.42	90.61	90.67	90.67	90.54	90.14	77.22	60.95
40.00	62.41	85.68	88.63	88.82	88.88	88.88	88.75	88.35	76.15	60.81
41.00	62.41	85.77	88.71	88.90	88.96	88.96	88.84	88.44	76.23	60.81
42.00	61.99	82.99	85.69	85.88	85.94	85.94	85.81	85.42	74.40	60.53
43.00	61.95	83.05	85.75	85.94	86.00	86.00	85.87	85.49	74.45	60.48
44.00	59.05	60.06	60.49	60.66	60.73	60.73	60.58	60.32	59.73	58.65
45.00	58.53	59.55	59.82	59.97	60.05	60.04	59.90	59.70	59.33	58.22

Table B - 32. Temperature (°C) map of the west side of plate 2BZ at EOC 142A (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.55	56.64	56.79	56.88	56.92	56.92	56.84	56.69	56.64	57.21
23.00	58.66	60.49	61.45	61.57	61.61	61.60	61.52	61.22	59.14	57.93
24.00	62.44	89.04	92.38	92.52	92.55	92.55	92.48	92.12	77.72	60.24
25.00	62.59	89.17	92.52	92.66	92.69	92.69	92.62	92.25	77.88	60.39
26.00	62.65	88.87	92.18	92.32	92.35	92.35	92.28	91.91	77.74	60.54
27.00	62.75	89.00	92.31	92.45	92.48	92.48	92.41	92.04	77.88	60.67
28.00	62.81	88.80	92.08	92.22	92.26	92.25	92.18	91.81	77.79	60.72
29.00	62.92	88.94	92.22	92.36	92.40	92.40	92.32	91.95	77.93	60.77
30.00	63.03	89.17	92.46	92.60	92.64	92.63	92.56	92.19	78.13	60.86
31.00	63.11	89.29	92.58	92.72	92.76	92.75	92.68	92.31	78.26	60.97
32.00	63.11	88.96	92.20	92.35	92.39	92.38	92.30	91.94	78.07	60.99
33.00	63.18	89.07	92.32	92.47	92.51	92.50	92.42	92.05	78.19	61.04
34.00	63.15	88.68	91.88	92.03	92.07	92.07	91.98	91.62	77.97	61.06
35.00	63.20	88.79	92.00	92.15	92.19	92.18	92.10	91.73	78.09	61.15
36.00	63.17	88.47	91.64	91.79	91.83	91.83	91.74	91.37	77.91	61.17
37.00	63.20	88.58	91.75	91.90	91.94	91.94	91.85	91.48	78.01	61.18
38.00	62.99	87.24	90.28	90.43	90.48	90.47	90.38	90.02	77.14	61.02
39.00	63.00	87.33	90.38	90.53	90.57	90.57	90.48	90.12	77.23	61.02
40.00	62.74	85.69	88.59	88.74	88.78	88.78	88.69	88.33	76.16	60.88
41.00	62.71	85.77	88.67	88.82	88.87	88.86	88.77	88.41	76.23	60.87
42.00	62.25	83.00	85.65	85.80	85.84	85.84	85.74	85.40	74.40	60.56
43.00	62.19	83.06	85.71	85.86	85.90	85.90	85.80	85.46	74.46	60.52
44.00	59.12	60.07	60.45	60.59	60.65	60.64	60.52	60.30	59.75	58.66
45.00	58.58	59.56	59.78	59.91	59.96	59.95	59.84	59.68	59.34	58.23

Table B - 33. Temperature (°C) map of the east side of plate 2TT at BOC 142B (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.94	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.81	51.95
1.00	52.89	52.31	52.41	52.43	52.43	52.43	52.42	52.37	52.31	52.83
2.00	55.95	73.08	75.32	75.38	75.38	75.38	75.37	75.15	65.64	55.00
3.00	56.30	73.31	75.57	75.63	75.64	75.64	75.62	75.39	65.89	55.33
4.00	57.17	77.61	80.25	80.32	80.33	80.33	80.31	80.05	68.83	56.03
5.00	57.45	77.78	80.42	80.49	80.50	80.50	80.48	80.21	69.02	56.29
6.00	58.24	81.05	83.96	84.04	84.05	84.05	84.03	83.74	71.30	56.92
7.00	58.50	81.22	84.12	84.21	84.22	84.22	84.19	83.90	71.49	57.16
8.00	59.17	83.43	86.51	86.60	86.61	86.61	86.58	86.28	73.09	57.72
9.00	59.43	83.60	86.68	86.77	86.78	86.78	86.75	86.44	73.31	58.07
10.00	60.00	85.31	88.50	88.60	88.62	88.62	88.59	88.26	74.56	58.54
11.00	60.26	85.48	88.68	88.78	88.80	88.80	88.76	88.43	74.75	58.76
12.00	60.86	87.27	90.59	90.70	90.72	90.72	90.68	90.34	76.07	59.28
13.00	61.12	87.45	90.77	90.88	90.91	90.90	90.86	90.52	76.29	59.57
14.00	61.59	88.72	92.12	92.24	92.26	92.26	92.21	91.86	77.25	59.98
15.00	61.86	88.91	92.31	92.43	92.46	92.45	92.40	92.05	77.46	60.22
16.00	62.23	89.49	92.91	93.04	93.07	93.07	93.01	92.65	77.95	60.54
17.00	62.49	89.68	93.10	93.23	93.26	93.26	93.19	92.83	78.19	60.88
18.00	62.82	90.37	93.83	93.97	94.01	94.00	93.94	93.56	78.76	61.23
19.00	63.08	90.57	94.03	94.18	94.21	94.21	94.14	93.76	78.98	61.45
20.00	63.52	91.76	95.31	95.46	95.50	95.49	95.42	95.03	79.87	61.77
21.00	63.75	91.94	95.50	95.65	95.69	95.69	95.61	95.21	80.08	62.00
22.00	59.43	61.42	62.44	62.59	62.64	62.64	62.53	62.19	60.02	59.03
22.50	57.96	57.22	57.37	57.49	57.55	57.54	57.43	57.28	57.21	57.88

Table B - 34. Temperature (°C) map of the west side of plate 2TT at BOC 142B (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.98	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.81	51.98
1.00	53.15	52.31	52.42	52.43	52.43	52.43	52.43	52.38	52.31	52.98
2.00	56.94	73.11	75.35	75.41	75.41	75.41	75.40	75.18	65.64	55.51
3.00	57.36	73.37	75.63	75.70	75.70	75.70	75.69	75.45	65.93	55.88
4.00	58.44	77.73	80.36	80.43	80.44	80.44	80.42	80.16	68.91	56.70
5.00	58.78	77.95	80.58	80.66	80.67	80.67	80.65	80.38	69.15	56.99
6.00	59.82	81.28	84.18	84.27	84.28	84.28	84.26	83.96	71.48	57.74
7.00	60.14	81.52	84.42	84.51	84.53	84.53	84.50	84.20	71.73	58.00
8.00	61.02	83.82	86.89	86.99	87.01	87.01	86.97	86.66	73.41	58.67
9.00	61.33	84.07	87.15	87.25	87.27	87.27	87.23	86.91	73.70	59.14
10.00	62.11	85.87	89.06	89.18	89.20	89.20	89.15	88.82	75.03	59.70
11.00	62.44	86.14	89.33	89.45	89.48	89.48	89.42	89.08	75.30	59.90
12.00	63.22	88.03	91.36	91.48	91.51	91.51	91.45	91.10	76.73	60.50
13.00	63.54	88.32	91.65	91.78	91.81	91.81	91.74	91.38	77.04	60.84
14.00	64.16	89.69	93.11	93.24	93.28	93.28	93.21	92.83	78.09	61.34
15.00	64.49	90.00	93.41	93.55	93.59	93.59	93.51	93.13	78.41	61.58
16.00	65.00	90.71	94.15	94.30	94.34	94.34	94.26	93.87	79.02	61.95
17.00	65.32	91.02	94.46	94.62	94.66	94.66	94.57	94.17	79.36	62.42
18.00	65.74	91.84	95.34	95.52	95.57	95.57	95.46	95.03	80.05	62.85
19.00	66.07	92.16	95.70	95.89	95.94	95.94	95.82	95.39	80.37	63.07
20.00	66.64	93.48	97.19	97.39	97.45	97.44	97.32	96.87	81.40	63.40
21.00	66.94	93.80	97.54	97.74	97.80	97.80	97.67	97.21	81.72	63.65
22.00	61.34	63.14	64.20	64.38	64.45	64.44	64.30	63.92	61.68	59.99
22.50	59.38	59.01	59.21	59.36	59.44	59.43	59.28	59.09	58.94	58.63

Table B - 35. Temperature (°C) map of the east side of plate 2BZ at BOC 142B (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	58.09	57.26	57.41	57.53	57.59	57.58	57.47	57.31	57.25	58.00
23.00	59.28	60.50	61.30	61.45	61.50	61.49	61.38	61.09	59.45	58.96
24.00	63.05	84.47	87.32	87.47	87.51	87.51	87.42	87.07	75.20	61.73
25.00	63.26	84.67	87.51	87.67	87.71	87.71	87.62	87.27	75.42	61.93
26.00	63.39	84.71	87.54	87.70	87.74	87.74	87.65	87.30	75.52	62.13
27.00	63.56	84.88	87.71	87.87	87.92	87.91	87.81	87.46	75.72	62.34
28.00	63.69	84.83	87.64	87.81	87.86	87.85	87.75	87.40	75.74	62.43
29.00	63.86	85.02	87.83	88.00	88.05	88.05	87.94	87.58	75.93	62.54
30.00	63.97	84.94	87.74	87.91	87.96	87.96	87.85	87.49	75.94	62.66
31.00	64.11	85.10	87.90	88.07	88.13	88.12	88.01	87.65	76.12	62.83
32.00	64.12	84.62	87.37	87.54	87.60	87.59	87.48	87.12	75.86	62.86
33.00	64.24	84.78	87.53	87.70	87.76	87.76	87.64	87.27	76.01	62.95
34.00	64.22	84.33	87.03	87.21	87.27	87.26	87.14	86.78	75.76	62.94
35.00	64.32	84.48	87.18	87.36	87.42	87.41	87.30	86.93	75.93	63.10
36.00	64.23	83.80	86.43	86.62	86.68	86.67	86.55	86.18	75.52	63.08
37.00	64.31	83.94	86.58	86.76	86.82	86.82	86.70	86.33	75.65	63.11
38.00	64.10	82.62	85.13	85.32	85.38	85.38	85.25	84.89	74.80	62.91
39.00	64.15	82.75	85.26	85.45	85.51	85.50	85.38	85.01	74.93	62.95
40.00	63.89	81.14	83.50	83.69	83.75	83.75	83.62	83.26	73.90	62.79
41.00	63.90	81.25	83.61	83.80	83.86	83.86	83.73	83.37	74.00	62.80
42.00	63.48	78.87	81.00	81.18	81.25	81.24	81.11	80.77	72.44	62.46
43.00	63.45	78.95	81.08	81.26	81.33	81.32	81.19	80.85	72.51	62.43
44.00	60.88	61.76	62.15	62.34	62.42	62.41	62.25	62.00	61.40	60.66
45.00	60.37	61.39	61.68	61.86	61.94	61.93	61.77	61.56	61.09	60.25

Table B - 36. Temperature (°C) map of the west side of plate 2BZ at BOC 142B (80.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	59.52	59.06	59.26	59.42	59.49	59.48	59.34	59.13	58.99	58.73
23.00	61.22	62.31	63.15	63.32	63.39	63.39	63.24	62.91	61.19	59.93
24.00	66.36	86.71	89.59	89.78	89.84	89.84	89.71	89.31	77.14	63.45
25.00	66.61	87.04	89.92	90.12	90.18	90.18	90.04	89.64	77.47	63.67
26.00	66.74	87.20	90.08	90.28	90.35	90.34	90.20	89.80	77.70	63.94
27.00	66.96	87.51	90.38	90.59	90.66	90.66	90.51	90.10	78.01	64.21
28.00	67.13	87.60	90.46	90.68	90.76	90.76	90.59	90.18	78.16	64.28
29.00	67.35	87.94	90.83	91.06	91.14	91.14	90.96	90.52	78.48	64.35
30.00	67.49	88.00	90.89	91.13	91.21	91.21	91.03	90.58	78.62	64.47
31.00	67.67	88.29	91.21	91.45	91.54	91.54	91.35	90.90	78.92	64.68
32.00	67.66	87.96	90.83	91.07	91.16	91.16	90.97	90.52	78.78	64.69
33.00	67.83	88.25	91.14	91.39	91.48	91.48	91.29	90.83	79.05	64.78
34.00	67.76	87.95	90.80	91.06	91.15	91.15	90.95	90.49	78.94	64.75
35.00	67.90	88.23	91.10	91.36	91.46	91.45	91.25	90.78	79.21	64.98
36.00	67.71	87.69	90.49	90.75	90.85	90.84	90.64	90.17	78.93	64.95
37.00	67.82	87.96	90.76	91.03	91.13	91.12	90.91	90.44	79.16	64.95
38.00	67.51	86.78	89.45	89.72	89.82	89.81	89.60	89.13	78.43	64.62
39.00	67.58	87.02	89.69	89.96	90.06	90.06	89.84	89.38	78.65	64.66
40.00	67.19	85.54	88.04	88.31	88.41	88.41	88.19	87.73	77.73	64.44
41.00	67.21	85.73	88.25	88.52	88.62	88.62	88.40	87.94	77.91	64.47
42.00	66.63	83.51	85.75	86.02	86.13	86.12	85.90	85.45	76.46	63.99
43.00	66.60	83.66	85.92	86.18	86.29	86.28	86.06	85.61	76.60	63.97
44.00	63.30	65.68	66.17	66.42	66.53	66.52	66.29	65.95	65.20	61.85
45.00	62.65	65.33	65.72	65.95	66.06	66.05	65.82	65.53	64.91	61.40



Table B - 37. Temperature (°C) map of the east side of plate 2TT at MOC 142B (96.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.94	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.81	51.95
1.00	52.90	52.32	52.42	52.44	52.44	52.44	52.43	52.38	52.31	52.84
2.00	56.01	73.46	75.74	75.80	75.81	75.81	75.80	75.57	65.89	55.04
3.00	56.35	73.69	75.98	76.05	76.05	76.05	76.04	75.80	66.14	55.37
4.00	57.14	77.40	80.02	80.09	80.09	80.09	80.08	79.82	68.69	56.01
5.00	57.42	77.57	80.19	80.26	80.27	80.27	80.25	79.98	68.88	56.28
6.00	58.23	81.08	83.99	84.07	84.08	84.08	84.06	83.77	71.32	56.91
7.00	58.50	81.25	84.16	84.24	84.25	84.25	84.23	83.93	71.51	57.16
8.00	59.12	83.18	86.24	86.33	86.34	86.34	86.31	86.01	72.92	57.69
9.00	59.38	83.35	86.40	86.50	86.51	86.51	86.48	86.17	73.13	58.04
10.00	59.86	84.62	87.76	87.86	87.88	87.88	87.84	87.52	74.08	58.44
11.00	60.12	84.79	87.93	88.04	88.05	88.05	88.01	87.69	74.27	58.65
12.00	60.61	85.99	89.20	89.31	89.33	89.33	89.29	88.96	75.18	59.08
13.00	60.86	86.16	89.38	89.49	89.51	89.51	89.46	89.13	75.39	59.36
14.00	61.22	86.78	90.03	90.14	90.17	90.16	90.11	89.77	75.90	59.71
15.00	61.47	86.96	90.20	90.32	90.35	90.34	90.29	89.95	76.10	59.92
16.00	61.85	87.69	90.97	91.10	91.13	91.12	91.07	90.72	76.69	60.24
17.00	62.10	87.87	91.15	91.28	91.31	91.31	91.25	90.89	76.92	60.58
18.00	62.27	87.55	90.78	90.91	90.95	90.94	90.88	90.52	76.79	60.81
19.00	62.49	87.72	90.95	91.08	91.12	91.12	91.05	90.69	76.98	61.00
20.00	62.87	88.58	91.85	91.99	92.03	92.03	91.95	91.59	77.65	61.28
21.00	63.08	88.74	92.02	92.17	92.21	92.20	92.12	91.76	77.84	61.49
22.00	59.15	60.82	61.74	61.89	61.94	61.93	61.83	61.52	59.56	58.79
22.50	57.81	57.00	57.13	57.25	57.30	57.30	57.19	57.05	57.01	57.74

Table B - 38. Temperature (°C) map of the west side of plate 2TT at MOC 142B (96.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.98	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.81	51.98
1.00	53.16	52.32	52.43	52.44	52.44	52.44	52.44	52.39	52.32	52.99
2.00	57.00	73.49	75.77	75.83	75.83	75.83	75.82	75.60	65.90	55.55
3.00	57.42	73.75	76.05	76.11	76.12	76.12	76.10	75.86	66.18	55.92
4.00	58.42	77.52	80.13	80.20	80.21	80.21	80.19	79.93	68.77	56.68
5.00	58.75	77.74	80.35	80.43	80.44	80.44	80.42	80.15	69.01	56.98
6.00	59.81	81.31	84.22	84.31	84.32	84.32	84.29	84.00	71.50	57.73
7.00	60.13	81.55	84.45	84.55	84.56	84.56	84.53	84.23	71.75	57.99
8.00	60.95	83.57	86.62	86.72	86.74	86.74	86.70	86.39	73.23	58.62
9.00	61.27	83.82	86.87	86.98	87.00	86.99	86.95	86.63	73.52	59.09
10.00	61.92	85.18	88.32	88.43	88.45	88.45	88.41	88.08	74.55	59.56
11.00	62.24	85.44	88.58	88.70	88.73	88.72	88.67	88.34	74.82	59.75
12.00	62.88	86.74	89.97	90.09	90.12	90.12	90.06	89.71	75.83	60.26
13.00	63.19	87.02	90.24	90.37	90.40	90.40	90.34	89.98	76.13	60.59
14.00	63.68	87.74	91.00	91.13	91.17	91.17	91.10	90.73	76.73	61.01
15.00	64.00	88.03	91.28	91.43	91.46	91.46	91.39	91.02	77.03	61.23
16.00	64.49	88.89	92.18	92.33	92.37	92.37	92.29	91.91	77.73	61.59
17.00	64.80	89.18	92.48	92.63	92.68	92.67	92.59	92.20	78.06	62.04
18.00	65.04	88.98	92.23	92.40	92.44	92.44	92.34	91.96	78.04	62.35
19.00	65.32	89.27	92.52	92.69	92.74	92.73	92.63	92.24	78.33	62.53
20.00	65.81	90.26	93.56	93.73	93.79	93.78	93.68	93.28	79.12	62.81
21.00	66.08	90.54	93.85	94.05	94.11	94.10	93.98	93.56	79.41	63.04
22.00	60.97	62.46	63.42	63.59	63.66	63.65	63.52	63.17	61.14	59.69
22.50	59.18	58.71	58.88	59.03	59.10	59.09	58.95	58.77	58.65	58.46

Table B - 39. Temperature (°C) map of the east side of plate 2BZ at MOC 142B (96.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.93	57.03	57.17	57.29	57.34	57.33	57.23	57.08	57.04	57.85
23.00	59.00	59.97	60.69	60.83	60.88	60.88	60.77	60.50	59.03	58.71
24.00	62.42	81.78	84.41	84.55	84.59	84.59	84.50	84.18	73.30	61.22
25.00	62.62	81.99	84.61	84.76	84.80	84.80	84.71	84.38	73.52	61.42
26.00	62.78	82.21	84.84	84.99	85.03	85.03	84.94	84.61	73.75	61.64
27.00	62.95	82.37	85.00	85.15	85.20	85.19	85.10	84.77	73.94	61.84
28.00	63.11	82.60	85.23	85.38	85.43	85.43	85.33	84.99	74.14	61.96
29.00	63.27	82.77	85.40	85.56	85.61	85.60	85.51	85.17	74.31	62.06
30.00	63.38	82.85	85.48	85.63	85.69	85.68	85.58	85.24	74.42	62.17
31.00	63.50	83.00	85.62	85.78	85.84	85.83	85.73	85.39	74.59	62.32
32.00	63.51	82.44	85.00	85.17	85.22	85.21	85.11	84.77	74.27	62.36
33.00	63.62	82.59	85.15	85.31	85.37	85.36	85.25	84.91	74.42	62.43
34.00	63.68	82.57	85.12	85.28	85.34	85.34	85.22	84.88	74.45	62.49
35.00	63.77	82.71	85.26	85.43	85.49	85.48	85.37	85.02	74.61	62.63
36.00	63.66	81.92	84.39	84.56	84.62	84.62	84.50	84.16	74.13	62.60
37.00	63.73	82.05	84.52	84.70	84.76	84.75	84.64	84.29	74.25	62.63
38.00	63.65	81.52	83.95	84.12	84.18	84.18	84.06	83.71	73.93	62.51
39.00	63.69	81.64	84.07	84.25	84.31	84.30	84.18	83.84	74.05	62.55
40.00	63.41	79.92	82.19	82.36	82.42	82.42	82.30	81.96	72.94	62.38
41.00	63.42	80.02	82.29	82.46	82.53	82.52	82.40	82.06	73.04	62.40
42.00	63.13	78.45	80.57	80.74	80.80	80.79	80.67	80.35	72.01	62.14
43.00	63.11	78.53	80.65	80.82	80.88	80.88	80.76	80.43	72.09	62.11
44.00	60.53	61.26	61.63	61.81	61.89	61.88	61.73	61.49	60.94	60.33
45.00	60.02	60.89	61.16	61.32	61.40	61.39	61.24	61.05	60.62	59.92

Table B - 40. Temperature (°C) map of the west side of plate 2BZ at MOC 142B (96.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	59.30	58.75	58.93	59.08	59.15	59.14	59.00	58.81	58.70	58.56
23.00	60.83	61.69	62.45	62.62	62.68	62.68	62.54	62.23	60.69	59.63
24.00	65.48	83.93	86.59	86.77	86.83	86.83	86.70	86.33	75.16	62.80
25.00	65.73	84.25	86.91	87.10	87.16	87.16	87.03	86.65	75.48	63.03
26.00	65.91	84.59	87.26	87.45	87.51	87.51	87.37	86.99	75.81	63.33
27.00	66.12	84.87	87.54	87.74	87.80	87.80	87.66	87.27	76.10	63.59
28.00	66.33	85.22	87.90	88.10	88.17	88.16	88.02	87.63	76.42	63.69
29.00	66.54	85.53	88.22	88.42	88.49	88.49	88.34	87.94	76.72	63.75
30.00	66.66	85.74	88.42	88.63	88.70	88.70	88.54	88.14	76.94	63.85
31.00	66.82	86.01	88.69	88.91	88.98	88.98	88.82	88.42	77.21	64.05
32.00	66.82	85.59	88.21	88.43	88.51	88.50	88.34	87.93	77.01	64.07
33.00	66.98	85.85	88.48	88.70	88.78	88.77	88.61	88.20	77.26	64.14
34.00	67.01	85.97	88.59	88.82	88.91	88.90	88.72	88.30	77.42	64.19
35.00	67.14	86.22	88.86	89.10	89.19	89.19	89.00	88.56	77.68	64.41
36.00	66.94	85.56	88.12	88.36	88.45	88.45	88.25	87.83	77.31	64.36
37.00	67.04	85.80	88.37	88.62	88.71	88.71	88.51	88.07	77.53	64.36
38.00	66.88	85.40	87.92	88.17	88.27	88.26	88.06	87.62	77.31	64.14
39.00	66.95	85.62	88.16	88.41	88.51	88.50	88.30	87.86	77.52	64.18
40.00	66.55	84.04	86.39	86.63	86.73	86.72	86.52	86.10	76.52	63.95
41.00	66.57	84.22	86.58	86.83	86.93	86.92	86.72	86.29	76.69	63.98
42.00	66.15	82.78	84.99	85.23	85.32	85.31	85.12	84.71	75.76	63.61
43.00	66.12	82.93	85.14	85.38	85.48	85.47	85.27	84.86	75.90	63.60
44.00	62.81	64.92	65.38	65.61	65.72	65.71	65.49	65.18	64.48	61.46
45.00	62.16	64.57	64.92	65.14	65.24	65.24	65.02	64.75	64.18	61.00

Table B - 41. Temperature (°C) map of the east side of plate 2TT at MOC 142B (110.1 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.94	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.81	51.95
1.00	52.99	52.40	52.53	52.54	52.55	52.54	52.54	52.48	52.38	52.91
2.00	56.58	76.78	79.37	79.43	79.43	79.43	79.42	79.18	68.12	55.45
3.00	56.95	77.02	79.62	79.69	79.70	79.70	79.69	79.43	68.39	55.80
4.00	57.77	80.81	83.72	83.80	83.81	83.81	83.79	83.51	71.02	56.47
5.00	58.06	80.99	83.90	83.99	83.99	83.99	83.97	83.69	71.22	56.75
6.00	58.86	84.21	87.38	87.47	87.48	87.48	87.46	87.15	73.49	57.39
7.00	59.14	84.39	87.56	87.65	87.66	87.66	87.63	87.32	73.69	57.64
8.00	59.76	86.17	89.47	89.57	89.58	89.58	89.55	89.22	75.01	58.18
9.00	60.03	86.35	89.64	89.75	89.76	89.76	89.73	89.40	75.24	58.54
10.00	60.53	87.63	91.01	91.11	91.13	91.13	91.09	90.76	76.21	58.97
11.00	60.81	87.81	91.19	91.30	91.32	91.32	91.28	90.93	76.41	59.19
12.00	61.26	88.73	92.16	92.28	92.30	92.30	92.25	91.90	77.15	59.61
13.00	61.53	88.92	92.35	92.47	92.49	92.49	92.44	92.08	77.37	59.90
14.00	61.83	89.11	92.54	92.66	92.68	92.68	92.63	92.27	77.60	60.20
15.00	62.09	89.30	92.72	92.84	92.87	92.87	92.81	92.45	77.80	60.42
16.00	62.44	89.85	93.29	93.42	93.45	93.45	93.39	93.02	78.27	60.72
17.00	62.70	90.04	93.48	93.62	93.65	93.65	93.58	93.21	78.51	61.07
18.00	62.92	89.96	93.37	93.52	93.55	93.55	93.48	93.10	78.56	61.35
19.00	63.17	90.14	93.56	93.71	93.75	93.74	93.67	93.28	78.76	61.55
20.00	63.51	90.75	94.21	94.36	94.40	94.40	94.32	93.93	79.26	61.81
21.00	63.73	90.93	94.38	94.54	94.59	94.58	94.50	94.10	79.46	62.02
22.00	59.56	61.50	62.49	62.65	62.71	62.70	62.58	62.25	60.14	59.15
22.50	58.13	57.46	57.62	57.75	57.81	57.80	57.69	57.53	57.44	58.03

Table B - 42. Temperature (°C) map of the west side of plate 2TT at MOC 142B (110.1 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.98	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.81	51.98
1.00	53.27	52.40	52.53	52.55	52.55	52.55	52.55	52.48	52.38	53.08
2.00	57.71	76.81	79.39	79.46	79.46	79.46	79.45	79.21	68.13	56.04
3.00	58.15	77.10	79.70	79.77	79.78	79.77	79.76	79.50	68.44	56.43
4.00	59.20	80.94	83.85	83.93	83.94	83.94	83.92	83.63	71.11	57.23
5.00	59.55	81.18	84.09	84.18	84.19	84.19	84.17	83.87	71.37	57.54
6.00	60.61	84.47	87.64	87.73	87.75	87.75	87.72	87.41	73.70	58.30
7.00	60.95	84.73	87.90	88.00	88.01	88.01	87.98	87.66	73.97	58.57
8.00	61.78	86.61	89.91	90.01	90.03	90.03	89.99	89.66	75.38	59.22
9.00	62.12	86.88	90.18	90.29	90.31	90.31	90.27	89.92	75.69	59.71
10.00	62.81	88.26	91.64	91.76	91.78	91.78	91.73	91.38	76.74	60.21
11.00	63.15	88.55	91.93	92.05	92.08	92.08	92.02	91.66	77.04	60.41
12.00	63.75	89.59	93.03	93.16	93.19	93.19	93.12	92.76	77.88	60.90
13.00	64.07	89.89	93.32	93.46	93.50	93.50	93.43	93.05	78.21	61.24
14.00	64.50	90.20	93.63	93.78	93.82	93.82	93.74	93.36	78.54	61.61
15.00	64.83	90.51	93.94	94.09	94.13	94.13	94.05	93.66	78.85	61.85
16.00	65.28	91.19	94.65	94.81	94.86	94.85	94.76	94.37	79.45	62.17
17.00	65.60	91.51	94.97	95.15	95.21	95.20	95.09	94.68	79.80	62.64
18.00	65.92	91.55	95.02	95.21	95.26	95.26	95.15	94.71	79.96	63.01
19.00	66.22	91.87	95.37	95.56	95.62	95.62	95.50	95.05	80.28	63.21
20.00	66.68	92.62	96.21	96.42	96.48	96.48	96.35	95.89	80.91	63.46
21.00	66.96	92.92	96.55	96.76	96.83	96.82	96.68	96.22	81.22	63.69
22.00	61.52	63.34	64.37	64.56	64.63	64.63	64.48	64.10	61.91	60.13
22.50	59.61	59.37	59.59	59.75	59.83	59.82	59.67	59.45	59.28	58.81

Table B - 43. Temperature (°C) map of the east side of plate 2BZ at MOC 142B (110.1 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	58.26	57.50	57.66	57.79	57.85	57.84	57.73	57.56	57.47	58.15
23.00	59.40	60.60	61.38	61.53	61.59	61.58	61.46	61.17	59.58	59.07
24.00	63.02	83.56	86.31	86.47	86.51	86.51	86.42	86.07	74.65	61.73
25.00	63.25	83.81	86.57	86.72	86.77	86.77	86.67	86.33	74.90	61.95
26.00	63.46	84.36	87.15	87.31	87.36	87.35	87.25	86.90	75.35	62.21
27.00	63.64	84.53	87.32	87.48	87.53	87.53	87.43	87.07	75.55	62.42
28.00	63.82	84.79	87.58	87.75	87.81	87.80	87.70	87.34	75.78	62.56
29.00	63.99	84.98	87.78	87.95	88.00	88.00	87.89	87.53	75.97	62.67
30.00	64.14	85.15	87.95	88.13	88.18	88.18	88.07	87.70	76.15	62.81
31.00	64.27	85.31	88.12	88.29	88.35	88.35	88.23	87.86	76.33	62.97
32.00	64.27	84.75	87.49	87.67	87.73	87.72	87.60	87.24	76.00	63.00
33.00	64.40	84.90	87.65	87.83	87.89	87.88	87.77	87.39	76.16	63.09
34.00	64.48	85.02	87.76	87.94	88.01	88.00	87.88	87.51	76.29	63.16
35.00	64.59	85.17	87.92	88.10	88.17	88.16	88.04	87.66	76.47	63.33
36.00	64.56	84.81	87.52	87.71	87.77	87.76	87.64	87.27	76.28	63.37
37.00	64.65	84.96	87.67	87.86	87.92	87.91	87.79	87.41	76.42	63.41
38.00	64.56	84.28	86.92	87.11	87.18	87.17	87.04	86.67	76.00	63.29
39.00	64.62	84.42	87.06	87.25	87.31	87.31	87.18	86.81	76.13	63.34
40.00	64.39	83.03	85.55	85.74	85.81	85.80	85.67	85.30	75.25	63.20
41.00	64.41	83.15	85.67	85.86	85.93	85.92	85.79	85.42	75.36	63.23
42.00	64.08	81.24	83.58	83.77	83.84	83.83	83.70	83.34	74.11	62.94
43.00	64.06	81.33	83.67	83.86	83.93	83.93	83.79	83.43	74.20	62.92
44.00	61.19	62.16	62.58	62.77	62.86	62.85	62.68	62.42	61.77	60.94
45.00	60.63	61.75	62.05	62.24	62.32	62.31	62.15	61.93	61.43	60.49

Table B - 44. Temperature (°C) map of the west side of plate 2BZ at MOC 142B (110.1 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	59.74	59.42	59.63	59.80	59.88	59.87	59.71	59.50	59.33	58.91
23.00	61.38	62.52	63.34	63.53	63.60	63.60	63.44	63.11	61.44	60.06
24.00	66.32	85.94	88.74	88.93	89.00	89.00	88.86	88.46	76.72	63.44
25.00	66.61	86.32	89.12	89.33	89.40	89.39	89.25	88.84	77.08	63.70
26.00	66.84	86.99	89.83	90.03	90.11	90.10	89.95	89.55	77.65	64.04
27.00	67.07	87.30	90.13	90.34	90.42	90.42	90.26	89.85	77.96	64.32
28.00	67.31	87.69	90.55	90.78	90.86	90.86	90.69	90.25	78.31	64.43
29.00	67.54	88.03	90.92	91.16	91.25	91.24	91.06	90.61	78.64	64.51
30.00	67.71	88.34	91.26	91.50	91.59	91.59	91.40	90.95	78.94	64.65
31.00	67.89	88.63	91.59	91.83	91.92	91.92	91.73	91.27	79.24	64.86
32.00	67.87	88.22	91.10	91.36	91.45	91.44	91.25	90.79	79.05	64.86
33.00	68.04	88.51	91.42	91.68	91.77	91.76	91.57	91.10	79.32	64.95
34.00	68.11	88.79	91.70	91.96	92.06	92.05	91.85	91.38	79.58	65.01
35.00	68.26	89.09	92.01	92.27	92.37	92.36	92.16	91.68	79.87	65.26
36.00	68.18	88.87	91.75	92.02	92.12	92.11	91.90	91.42	79.80	65.30
37.00	68.30	89.15	92.04	92.31	92.41	92.40	92.19	91.71	80.04	65.31
38.00	68.14	88.61	91.43	91.70	91.81	91.80	91.58	91.10	79.74	65.09
39.00	68.23	88.87	91.69	91.97	92.07	92.07	91.85	91.37	79.98	65.14
40.00	67.87	87.61	90.29	90.57	90.68	90.67	90.45	89.97	79.21	64.95
41.00	67.91	87.83	90.53	90.80	90.91	90.90	90.68	90.20	79.41	64.99
42.00	67.43	86.04	88.55	88.83	88.93	88.93	88.70	88.23	78.28	64.58
43.00	67.42	86.23	88.73	89.01	89.12	89.11	88.89	88.41	78.44	64.57
44.00	63.72	66.26	66.78	67.04	67.15	67.14	66.90	66.55	65.74	62.19
45.00	63.00	65.87	66.28	66.52	66.64	66.63	66.39	66.08	65.42	61.68



Table B - 45. Temperature (°C) map of the east side of plate 2TT at EOC 142B (132.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.94	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.81	51.95
1.00	52.95	52.36	52.48	52.50	52.50	52.50	52.50	52.44	52.35	52.88
2.00	56.34	75.42	77.88	77.94	77.95	77.95	77.94	77.70	67.20	55.28
3.00	56.69	75.64	78.12	78.19	78.19	78.19	78.18	77.93	67.45	55.61
4.00	57.40	78.73	81.46	81.54	81.54	81.54	81.53	81.26	69.60	56.20
5.00	57.67	78.90	81.63	81.71	81.72	81.71	81.70	81.42	69.79	56.47
6.00	58.31	81.29	84.21	84.29	84.30	84.30	84.28	83.99	71.48	56.99
7.00	58.57	81.45	84.37	84.46	84.47	84.47	84.44	84.15	71.66	57.22
8.00	59.06	82.58	85.58	85.67	85.69	85.69	85.66	85.35	72.53	57.66
9.00	59.32	82.75	85.74	85.84	85.85	85.85	85.82	85.51	72.74	58.01
10.00	59.70	83.46	86.50	86.59	86.61	86.61	86.57	86.26	73.31	58.34
11.00	59.95	83.62	86.66	86.76	86.78	86.78	86.74	86.42	73.48	58.54
12.00	60.31	84.10	87.16	87.26	87.28	87.28	87.24	86.92	73.91	58.88
13.00	60.55	84.27	87.32	87.43	87.45	87.45	87.41	87.08	74.11	59.15
14.00	60.78	84.18	87.21	87.32	87.35	87.35	87.30	86.97	74.14	59.40
15.00	61.02	84.35	87.37	87.49	87.51	87.51	87.46	87.13	74.32	59.60
16.00	61.28	84.51	87.52	87.64	87.67	87.67	87.61	87.28	74.51	59.83
17.00	61.51	84.67	87.68	87.81	87.84	87.84	87.78	87.44	74.72	60.15
18.00	61.72	84.69	87.69	87.82	87.85	87.85	87.78	87.44	74.82	60.41
19.00	61.94	84.86	87.85	87.98	88.01	88.01	87.94	87.60	75.00	60.60
20.00	62.18	84.97	87.95	88.08	88.12	88.11	88.04	87.70	75.15	60.78
21.00	62.36	85.11	88.09	88.23	88.27	88.26	88.19	87.84	75.32	60.96
22.00	58.87	60.18	61.00	61.14	61.19	61.18	61.08	60.80	59.08	58.55
22.50	57.68	56.80	56.92	57.03	57.08	57.07	56.97	56.84	56.83	57.62

Table B - 46. Temperature (°C) map of the west side of plate 2TT at EOC 142B (132.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
0.125	51.98	51.78	51.77	51.77	51.77	51.77	51.77	51.77	51.81	51.98
1.00	53.23	52.37	52.49	52.51	52.51	52.51	52.50	52.44	52.35	53.04
2.00	57.42	75.45	77.91	77.97	77.97	77.97	77.96	77.72	67.21	55.84
3.00	57.84	75.72	78.19	78.26	78.26	78.26	78.25	78.00	67.50	56.20
4.00	58.75	78.86	81.58	81.66	81.67	81.67	81.65	81.38	69.69	56.92
5.00	59.08	79.08	81.81	81.89	81.90	81.90	81.88	81.60	69.93	57.21
6.00	59.93	81.53	84.45	84.54	84.56	84.55	84.53	84.23	71.68	57.83
7.00	60.25	81.77	84.69	84.78	84.80	84.80	84.77	84.46	71.92	58.08
8.00	60.92	82.99	85.99	86.09	86.11	86.11	86.07	85.76	72.87	58.61
9.00	61.22	83.24	86.24	86.35	86.37	86.37	86.32	86.00	73.15	59.08
10.00	61.76	84.04	87.08	87.20	87.22	87.22	87.17	86.84	73.80	59.46
11.00	62.07	84.30	87.34	87.46	87.48	87.48	87.43	87.10	74.06	59.65
12.00	62.54	84.89	87.95	88.08	88.11	88.10	88.04	87.70	74.58	60.04
13.00	62.84	85.16	88.22	88.35	88.38	88.38	88.31	87.97	74.87	60.35
14.00	63.16	85.18	88.22	88.35	88.38	88.38	88.31	87.96	74.99	60.66
15.00	63.46	85.45	88.48	88.63	88.66	88.66	88.58	88.23	75.27	60.86
16.00	63.80	85.73	88.76	88.91	88.95	88.94	88.86	88.50	75.56	61.11
17.00	64.08	86.00	89.03	89.19	89.23	89.23	89.14	88.77	75.87	61.54
18.00	64.37	86.14	89.15	89.31	89.36	89.35	89.26	88.89	76.07	61.88
19.00	64.65	86.41	89.43	89.59	89.64	89.64	89.54	89.16	76.35	62.06
20.00	64.96	86.65	89.66	89.82	89.88	89.87	89.77	89.38	76.61	62.22
21.00	65.19	86.90	89.91	90.08	90.14	90.13	90.02	89.64	76.88	62.41
22.00	60.62	61.79	62.64	62.81	62.87	62.86	62.73	62.41	60.63	59.42
22.50	59.02	58.47	58.62	58.76	58.83	58.82	58.69	58.52	58.43	58.33

Table B - 47. Temperature (°C) map of the east side of plate 2BZ at EOC 142B (132.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	57.79	56.83	56.95	57.06	57.11	57.11	57.01	56.87	56.86	57.72
23.00	58.74	59.41	60.05	60.18	60.23	60.22	60.12	59.88	58.61	58.49
24.00	61.77	78.68	81.03	81.17	81.21	81.20	81.12	80.82	71.16	60.72
25.00	61.98	78.91	81.27	81.41	81.46	81.45	81.37	81.06	71.40	60.93
26.00	62.19	79.56	81.96	82.10	82.14	82.14	82.05	81.74	71.90	61.18
27.00	62.35	79.71	82.11	82.25	82.30	82.29	82.20	81.89	72.07	61.37
28.00	62.52	80.02	82.44	82.58	82.63	82.63	82.53	82.22	72.33	61.49
29.00	62.67	80.19	82.60	82.75	82.80	82.79	82.70	82.38	72.49	61.59
30.00	62.79	80.33	82.74	82.89	82.94	82.94	82.84	82.52	72.64	61.71
31.00	62.91	80.47	82.88	83.04	83.09	83.08	82.98	82.66	72.80	61.86
32.00	62.96	80.31	82.70	82.85	82.91	82.90	82.80	82.48	72.75	61.92
33.00	63.06	80.45	82.84	82.99	83.05	83.04	82.94	82.62	72.88	61.99
34.00	63.16	80.70	83.10	83.26	83.31	83.31	83.20	82.88	73.10	62.07
35.00	63.25	80.84	83.24	83.40	83.45	83.44	83.34	83.01	73.25	62.22
36.00	63.28	80.87	83.27	83.43	83.48	83.48	83.37	83.05	73.32	62.29
37.00	63.36	81.00	83.40	83.56	83.62	83.61	83.50	83.18	73.44	62.32
38.00	63.33	80.76	83.13	83.30	83.35	83.35	83.24	82.91	73.31	62.25
39.00	63.38	80.88	83.26	83.42	83.48	83.47	83.36	83.03	73.43	62.29
40.00	63.23	80.06	82.35	82.52	82.58	82.57	82.46	82.13	72.92	62.21
41.00	63.25	80.17	82.46	82.63	82.69	82.68	82.57	82.24	73.02	62.23
42.00	63.00	78.79	80.96	81.13	81.18	81.18	81.06	80.74	72.13	62.00
43.00	62.98	78.88	81.05	81.21	81.27	81.27	81.15	80.83	72.21	61.98
44.00	60.29	60.89	61.25	61.42	61.49	61.48	61.34	61.11	60.59	60.12
45.00	59.75	60.51	60.75	60.91	60.98	60.97	60.83	60.65	60.26	59.68

Table B - 48. Temperature (°C) map of the west side of plate 2BZ at EOC 142B (132.4 EFPD).

Length of Plate (in)	Width of Plate (inches)									
	0.05	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.24
22.625	59.13	58.51	58.66	58.80	58.87	58.86	58.73	58.55	58.47	58.41
23.00	60.50	61.08	61.76	61.91	61.98	61.97	61.84	61.56	60.22	59.37
24.00	64.65	80.79	83.18	83.35	83.41	83.41	83.29	82.94	72.98	62.21
25.00	64.92	81.13	83.53	83.71	83.77	83.77	83.64	83.28	73.31	62.45
26.00	65.16	81.87	84.32	84.50	84.56	84.56	84.43	84.07	73.90	62.79
27.00	65.36	82.14	84.58	84.77	84.83	84.83	84.69	84.33	74.17	63.03
28.00	65.58	82.57	85.03	85.22	85.29	85.28	85.14	84.77	74.53	63.13
29.00	65.78	82.86	85.33	85.52	85.59	85.58	85.44	85.07	74.81	63.20
30.00	65.93	83.12	85.59	85.78	85.86	85.85	85.70	85.33	75.06	63.32
31.00	66.08	83.38	85.85	86.05	86.12	86.12	85.97	85.58	75.32	63.51
32.00	66.12	83.34	85.79	85.99	86.07	86.06	85.91	85.52	75.37	63.55
33.00	66.27	83.59	86.04	86.25	86.33	86.32	86.16	85.78	75.61	63.62
34.00	66.36	83.97	86.43	86.64	86.72	86.72	86.55	86.16	75.93	63.70
35.00	66.48	84.21	86.68	86.89	86.97	86.97	86.80	86.41	76.18	63.92
36.00	66.49	84.36	86.83	87.04	87.12	87.12	86.95	86.55	76.35	64.01
37.00	66.59	84.59	87.06	87.28	87.36	87.36	87.19	86.79	76.57	64.02
38.00	66.51	84.47	86.92	87.14	87.23	87.22	87.05	86.65	76.54	63.85
39.00	66.58	84.69	87.14	87.37	87.46	87.45	87.27	86.87	76.75	63.89
40.00	66.34	83.98	86.36	86.58	86.67	86.66	86.49	86.08	76.33	63.77
41.00	66.37	84.18	86.56	86.79	86.88	86.87	86.69	86.28	76.51	63.81
42.00	66.00	82.93	85.19	85.42	85.50	85.50	85.31	84.91	75.72	63.48
43.00	65.98	83.09	85.35	85.58	85.67	85.66	85.48	85.07	75.86	63.47
44.00	62.51	64.41	64.86	65.08	65.17	65.17	64.96	64.66	63.99	61.22
45.00	61.82	64.04	64.38	64.58	64.68	64.67	64.47	64.22	63.68	60.73