

**A COUPLED NEUTRONICS-
THERMOHYDRAULICS MODEL OF
THE HOMOGENEOUS SLOWPOKE
REACTOR**

**MODÈLE NUMÉRIQUE DU
RÉACTEUR SLOWPOKE HOMOGÈNE
À COUPLAGE NEUTRONIQUE ET
THERMOHYDRAULIQUE**

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by

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To my greatest supporters:

Victor and Diana

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Abstract

The Homogeneous SLOWPOKE reactor is intended as a replacement for the heterogeneous SLOWPOKE-2 reactors at universities, allowing the continuation of their teaching and research missions in neutron activation analysis and neutron radiography. The primary application of the Homogeneous SLOWPOKE reactor, however, is the production of radioisotopes for applications in industry and nuclear medicine. For the production of ^{99}Mo and $^{99\text{m}}\text{Tc}$, it was found that a network of about 15 Homogeneous SLOWPOKE reactors dispersed throughout North America can replace the National Research Universal (NRU) reactor which is nearing its service life. The design of the Homogeneous SLOWPOKE reactor is based on a liquid fuel core which enables these isotopes to be extracted more easily.

The continuation of previous research requires the development of a model to account for the changing distributions of temperature and density in the core as a result of natural convection. This component of the development is needed to address safety-related issues arising from the non-rigid core configuration. The proposed method involves the development of a computer-aided engineering (CAE) tool to address the legacy geometry capabilities of the Monte Carlo n-Particle Transport Code (MCNP6), specifically to model a distribution of temperature and density in the core, and integrate MCNP functionality into a thermohydraulic model in COMSOL Multiphysics. With both programs linked, the heat source distribution may be continually updated as a core temperature profile develops. The neutronic modeling at the maximal temperature gradient resulted in an excess reactivity of 0.8mk higher than models using a uniform temperature distribution at the same average core temperature.

Two thermohydraulic models are developed to judge the ability of natural convection to cool the core. In the absence of experimental data, neither model is expected to fully and accurately represent the heat transfer and coolant flow in the reactor core, but only estimate the upper and lower limits of the current design's cooling capability. Laminar flow models estimating the lower limit resulted in a maximum thermal power of 2.5kW for an average core temperature of 60°C and the Low Reynolds Number k- ϵ turbulence models resulted in a thermal power of 6.0kW for the same temperature.

Résumé

Le réacteur nucléaire SLOWPOKE homogène est conçu pour remplacer les réacteurs SLOWPOKE-2 dans certaines universités, afin de permettre de poursuivre leurs missions d'enseignement et de recherche en analyse par activation neutronique et en radiographie neutronique. Cependant, la fonction première du réacteur SLOWPOKE homogène est la production de radioisotopes pour applications industrielles et en médecine nucléaire. Pour la seule production de ^{99}Mo et de $^{99\text{m}}\text{Tc}$, on a trouvé qu'environ 15 réacteurs SLOWPOKE homogènes dispersés en Amérique du Nord pouvaient remplacer le réacteur NRU dont la vie utile tire à la fin. Le design du réacteur SLOWPOKE homogène est basé sur un cœur à combustible liquide, ce qui facilite de beaucoup l'extraction de ces isotopes.

La poursuite de la recherche en cours requiert le développement d'un modèle numérique qui tient compte des distributions changeantes de la température et de la densité résultant de la convection naturelle. Cette composante du développement est nécessaire pour répondre à des inquiétudes liées à la sûreté et provenant de la nature non-rigide de la configuration du cœur du réacteur. La méthode proposée dans cette recherche implique le développement d'un outil d'ingénierie assistée par ordinateur pour mettre à l'épreuve le legs du code MCNP6 en matière de ses capacités géométriques, plus spécialement pour la modélisation de la distribution de la température et de la densité dans le cœur, et pour intégrer la fonctionnalité de MCNP dans le modèle thermohydraulique de COMSOL Multiphysics. Avec les deux programmes reliés, la distribution des sources de chaleur peut être continuellement mise à jour alors que le profil de la température du cœur en régime permanent évolue. La modélisation neutronique pour un gradient maximal de la

température du cœur prédit une réactivité excédentaire de 0.8mk plus élevée que celle prédite par un modèle basé sur une distribution de température uniforme ayant la même température moyenne.

Deux modèles thermohydrauliques ont été développés afin de déterminer la capacité de la convection naturelle à refroidir le réacteur. En l'absence de données expérimentales, on ne s'attend pas à ce que l'un ou l'autre de ces modèles soit capable de représenter le transfert de chaleur et l'écoulement du caloporteur complètement et précisément. Ces modèles ne peuvent qu'estimer les limites supérieures et inférieures du système de refroidissement du design proposé du réacteur. Les modèles basés sur un écoulement laminaire et estimant la limite inférieure ont prédit une puissance thermique maximum de 2.5kW pour une température moyenne du cœur de 60°C. Les modèles dits « k- ϵ » basés sur les écoulements turbulents ont résulté en une valeur de 6.0 kW pour la puissance d'un réacteur ayant une même température moyenne.

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List of Symbols

C_p	Specific heat capacity at constant pressure ($\text{J}\cdot\text{kg}^{-1}\cdot\text{K}^{-1}$)
ε	Rate of turbulent dissipation ($\text{J}\cdot\text{kg}^{-1}\cdot\text{s}^{-1}$)
Σ_f	Macroscopic fission cross section of nuclei (cm^{-1})
g	Standard acceleration due to gravity ($9.806 \text{ m}\cdot\text{s}^{-2}$)
h	Convective heat transfer coefficient ($\text{W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$)
k	Thermal conductivity ($\text{W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$)
k	Turbulence kinetic energy ($\text{J}\cdot\text{kg}^{-1}$)
k_{eff}	Effective multiplication factor
mk	milli k. +1mk is equal to an excess reactivity of +0.001
Q	Volumetric heat generation rate ($\text{W}\cdot\text{cm}^{-3}$)
ρ	Excess reactivity, “unit” of mk
ρ	Density ($\text{kg}\cdot\text{m}^{-3}$)
T	Temperature (K)
μ	Dynamic viscosity ($\text{Pa}\cdot\text{s}$)
u	Fluid Velocity ($\text{m}\cdot\text{s}^{-1}$)
\bar{u}	Mean turbulent velocity ($\text{m}\cdot\text{s}^{-1}$)
\acute{u}	Fluctuating turbulent velocity ($\text{m}\cdot\text{s}^{-1}$)
ϕ	Neutron flux ($\text{neutrons}\cdot\text{cm}^{-2}\cdot\text{s}^{-1}$)

Chapter 1: Introduction

A homogeneous nuclear reactor design is currently being developed for the intended purpose of replacing existing SLOWPOKE-2 (Safe, Low Power, Critical Experiment) reactors at universities. The main advantage of the Homogeneous SLOWPOKE design is the ease in which valuable radioisotopes, such as Molybdenum-99 and Technetium-99, can be extracted for use in industry and nuclear medicine. These isotopes are by-products in nuclear reactors, yet the solid fuel design of nearly all reactors makes the separation and extraction of these isotopes challenging and costly.

The transportation of the highly enriched targets or fuel bundles create safety and security issues. Once at the separation facility, any materials involved in the extraction process generates significant amounts of additional waste to be disposed of. The Homogeneous SLOWPOKE avoids many of these challenges by virtue of the liquid nature of its fuel. The proposed design would use an extraction process similar to the one developed in 1998 by the Kurchatov Institute in Moscow. Their method removes the ^{99}Mo from the fuel solution of the ARGUS reactor using a proprietary sorbent material, while the remainder of the solution is cycled back into the reactor core for further use [1].

1.1 The SLOWPOKE-2 Reactor

The SLOWPOKE-2 reactor is a 20kW, inherently safe research reactor, invented in 1970 by Dr. John Hilborn and his team. It is one of the few reactor designs that is inherently safe. This comes largely by virtue of its simple design, and negative void

and temperature reactivity coefficients. The International Atomic Energy Agency defines inherent safety as follows.

The achievement of safety through the elimination or exclusion of inherent hazards through the fundamental conceptual design choices made for the nuclear plant. Potential inherent hazards in a nuclear power plant include radioactive fission products and their associated decay heat, excess reactivity and its associated potential for power excursions, and energy releases due to high temperatures, high pressures and energetic chemical reactions. Elimination of all these hazards is required to make a nuclear power plant inherently safe. For practical power reactor sizes this appears to be impossible, therefore the unqualified use of 'inherently safe' should be avoided for an entire nuclear power plant or its reactor [2].

In its current design, the SLOWPOKE-2 core consists of a small fuel bundle, 22cm in diameter, comprised of about 200 Zircaloy clad fuel rods containing 20% enriched UO₂ pellets. An annular and lower reflector made of beryllium surrounds the core, as well as beryllium shims above the core and which can be adjusted to compensate for the uranium burnup, and adjust the excess reactivity. The apparatus is submerged in a light water filled reactor vessel. Natural convection causes this water to circulate, providing cooling to the core. Reactivity control is provided by a central cadmium control rod. Due to its simple and inherently safe design, a full time operator is not required. Schematics of the SLOWPOKE-2 can be seen in Figures 1.1 and 1.2 [3].

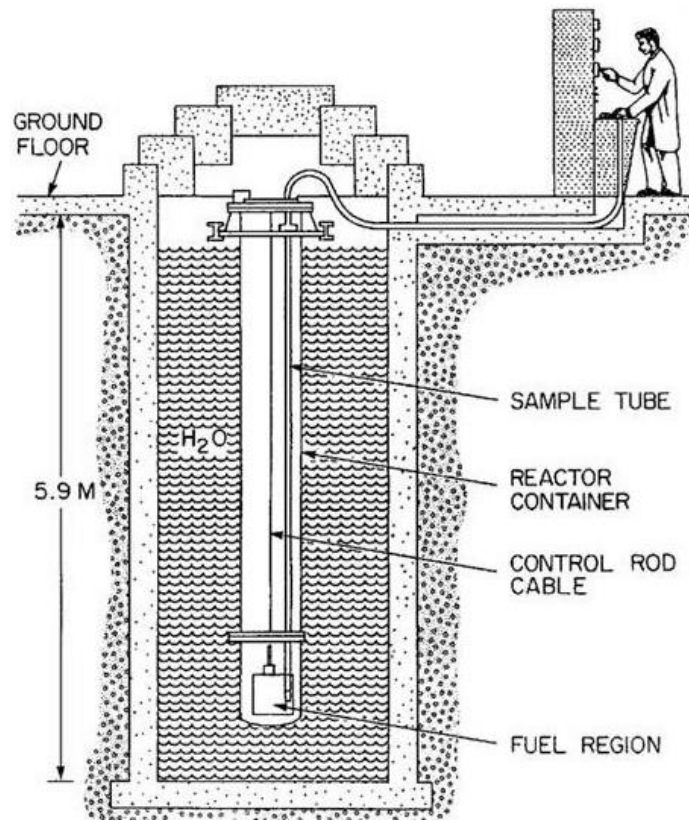


Figure 1.1: Schematic of the SLOWPOKE-2 Reactor

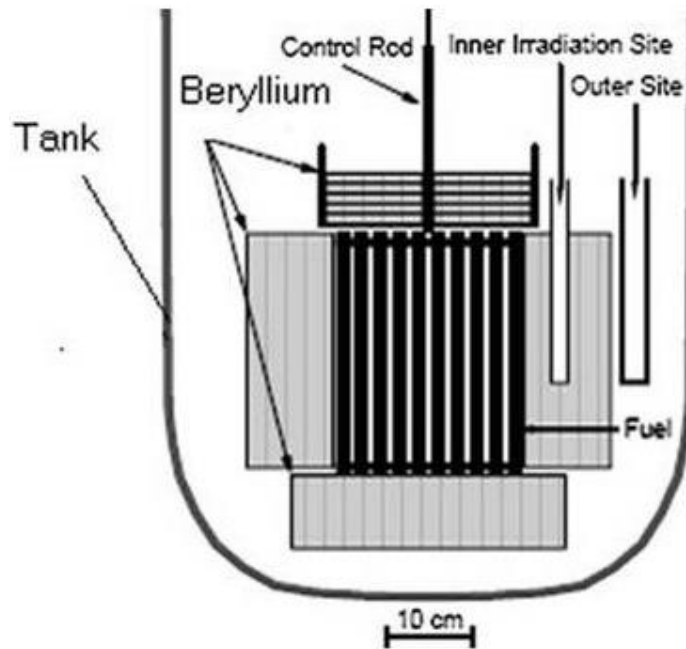


Figure 1.2: Schematic of the SLOWPOKE-2 Core

1.2 The Homogeneous SLOWPOKE Reactor

The Homogeneous SLOWPOKE reactor is largely based on the SLOWPOKE-2 and is intended as a direct replacement. Much of the existing SLOWPOKE-2 infrastructure is incorporated into its design which has been the thesis work of past graduate students at the Royal Military College of Canada [4],[5],[6].

The primary differences between the SLOWPOKE-2 and the Homogeneous SLOWPOKE are the size and type of core used. In its current design, the Homogeneous SLOWPOKE uses an aqueous uranyl sulfate fuel solution contained within a Zircaloy container, 20cm in diameter and 48.8cm in height. Figure 1.3 shows the main components of the current Homogeneous SLOWPOKE design.

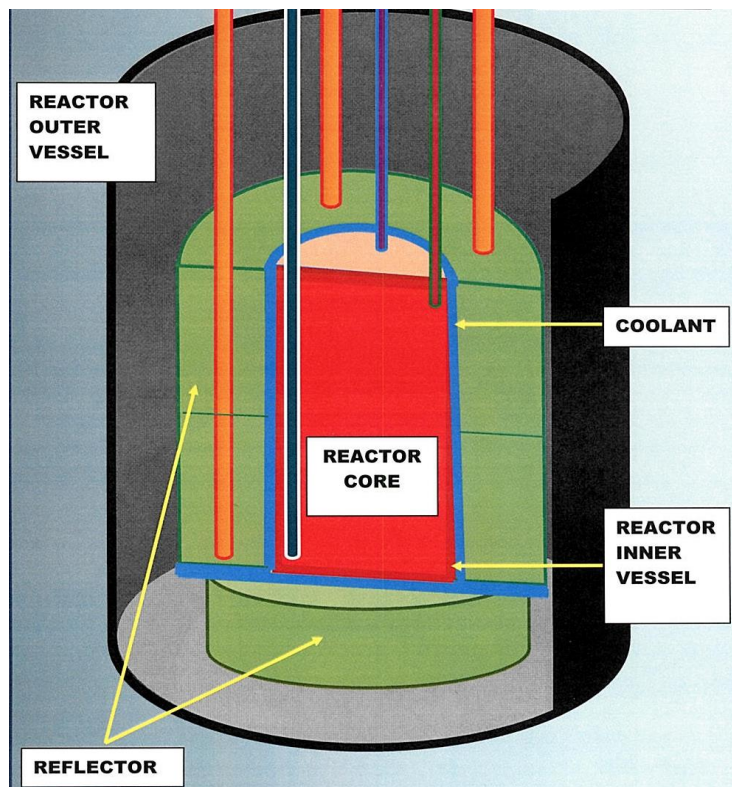


Figure 1.3: Main Components of the Homogeneous SLOWPOKE

Safety related concerns regarding the design stem from two areas. Firstly, is the non-rigid core configuration. In solid fueled reactors, the spatial distribution of fuel is fixed during normal, steady state operation. In the liquid fuel design, the spatial distribution of fuel changes as a result of temperature dependant density changes and natural convection.

The second concern is the ability of natural convection to cool the core. As no active cooling (forced convection) system is provided, natural convection must be sufficient to ensure sufficient cooling and to prevent the liquid fuel from approaching or exceeding its boiling point. The existing cooling channels have proven to be sufficient for the SLOWPOKE-2 operating at 20kW; however, the geometry and surface area of the new core design is significantly different. In the SLOWPOKE-2, cooling water can flow around each rod in the fuel bundle. For the Homogeneous SLOWPOKE, cooling water only passes along the walls of the fuel container which reduces the surface area through which heat must be transferred by approximately sixty percent (see table 8.1).

Chapter 2: Research Objectives

When the Homogeneous SLOWPOKE design was presented at a conference in 2014, there were concerns about the non-rigid core configuration and the changing distribution of fuel as a result of natural convection. At the time, neutronics calculations were based on a uniform core, at a characteristic temperature of 40°C, yet thermohydraulic models showed a significant temperature gradient with temperatures at the top of the reactor reaching 92°C. The uniform core temperature model was accepted by making the same assumptions used for point kinetic models, and also because there is no existing method to model a core temperature distribution.

The principal assumption when using the point kinetics theory, is that the shape of the neutron flux, and hence the distribution of power, does not change with time. Textbooks assert that this is a reasonable assumption because the change in density over the operating temperatures is very small. Using the temperature dependant material properties in Appendix B for uranyl sulfate, from 20°C to 90°C, the density changes 2.5%.

Others feel that point kinetics is simplistic and that one can and should do better with today's technology. The current research presents a method to model the core using the best tools available, which makes as few assumptions as possible, and investigates whether or not there is significant difference. This required developing a combined neutronic and thermohydraulic model that uses realistic core conditions and not just an average value for the temperature and density.

This model is used to address concerns for both the non-rigid core configuration and cooling capability. The developed source codes and algorithms necessary to complete the work are a substantial part of this research and are included in the appendices for future use.

Chapter 3: State of the Art

3.1 Feasibility Study (P. Busatta, June 2005)

The conception and initial design parameters of the Homogeneous SLOWPOKE was done in 2004 – 2005 in the thesis work of P. Busatta. The initial core design was restricted to 22cm in the radial direction in order to fit the existing beryllium reflector annulus of the SLOWPOKE-2. The Homogeneous SLOWPOKE consists of a Zircaloy-4 container mostly filled with a homogeneous solution of uranyl sulfate. At the top is an air space to allow for thermal expansion of the fuel solution and the collection of radiolytic gasses and gaseous fission products. As seen in Figure 3.1, Busatta's design includes ancillary piping for a fuel treatment system, an off-gas removal system, and a central channel made of Zircaloy-4 for the control rod [4].

With the goal of a creating a reactor with an excess reactivity similar to the SLOWPOKE-2, and size constraints imposed by the existing infrastructure, Busatta used MCNP 5 to determine a suitable combination of core height, uranyl sulfate concentration, and additional reflector height required to achieve criticality.

Once the core parameters were selected, the required worth of the central control rod and optimal location of ancillary piping were determined using the reactivity results from various MCNP5 models. With the design decided, he ran his MCNP 5 model at various temperatures to verify that a strong negative thermal reactivity coefficient was maintained. Verification of the MCNP5 model was done using WIMS-AECL, as no Homogeneous SLOWPOKE reactors exist to provide experimental data for validation.

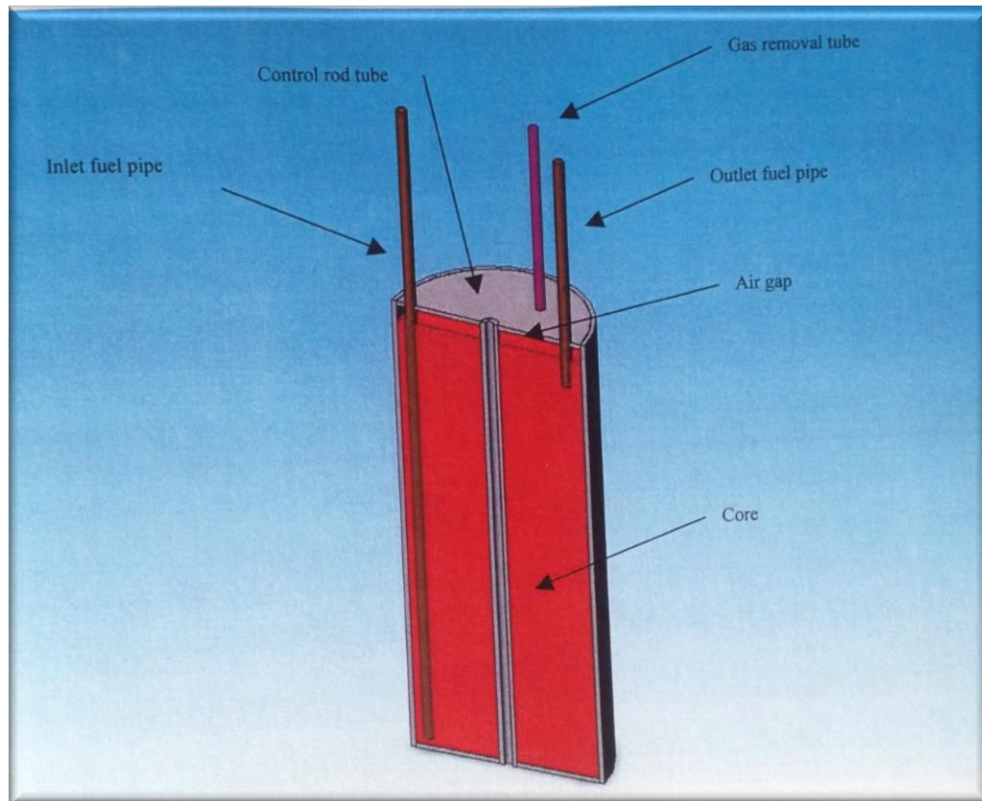


Figure 3.1: Schematic of the Mark I Homogeneous SLOWPOKE Core

Busatta conducted a heat transfer analysis to estimate the vertical temperature profile of the core container walls. His first analysis resulted in a maximum temperature at the top of the core in excess of 400K, exceeding the boiling point and temperature limit of the fuel which suggested that fins or other methods to increase cooling would be required since natural convection could not keep local temperatures below the boiling point.

In order to get a more accurate result, Busatta used the finite element modeling software FEMLAB to incorporate physical properties not accounted for in his initial analytical study, including natural convection within the core, and the temperature dependence of the fuel's density and heat capacity. His 2D azimuthally uniform

model calculated the temperature distribution and flow pattern at steady state while operating at a power of 20kW. Two simulations were run, one using a uniform power distribution, and the other using a power distribution as a function of height. Both simulations resulted in maximum temperatures of 313K, well below the temperature limit of the fuel, suggesting natural convection cooling would be possible without the use of additional cooling fins.

Specifications of Busatta's Homogeneous SLOWPOKE Mark I reactor may be found in Table 3.1, and his full work is in his published thesis [4].

Table 3.1: Specifications of the Mark I Homogeneous SLOWPOKE

Specification	Value
Core Height	48.8 cm
Core Radius	10 cm
Core Container Thickness	3 mm
Cladding Material	Zircaloy-4
Control Rod Orifice Radius	0.73 cm
Control Rod Material / Radius	Cadmium / 2 mm
Cladding Material / Thickness	Aluminum / 2 mm
Fuel Volume at 40°C	15.244 L
Beryllium Annulus Reflector Radii	11 cm / 21 cm
Beryllium Annulus Reflector Height	48.8 cm
Fuel	UO ₂ SO ₄
Fuel Enrichment	20%
Fuel Concentration	1.65 M
²³⁵ U Mass	1.181 kg
k _{eff}	1.00361
Thermal Power	20 kW
Steady State Operating Temperature	313 ^K

3.2 Safety Analysis (R. Gagnon, November 2008)

The thesis work of R. Gagnon further developed the design of the Homogeneous SLOWPOKE in 2007-2008, with particular attention paid to the effects of the void

fraction on the homogeneous fuel-moderator mixture and thermohydraulic effects at various temperatures. Modifications were proposed to increase the core volume for added radioisotope production. Accident scenarios were also simulated to demonstrate the self limiting nature and the safety of the design.

Gagnon chose to implement several modifications to Busatta's Mark I design, using it as a starting point for his research. The recommended changes were implemented to enhance the desirable characteristics of the reactor, to reduce the internal complexity, to achieve a qualitative increase in the expected life of the core, and to increase safety.

The resulting changes included the removal of the central control rod channel, replacing it with five cadmium control rods, symmetrically located within the five inner irradiation sites in the radial reflector. The removal of the central channel provided an increased volume for fuel within the core, increasing the excess reactivity and the potential production of radioisotopes.

Gagnon modeled various material modifications using MCNP5 and grouped desirable outcomes, eventually resulting in two competing designs. His two designs are designated the "Mark IIa" and "Mark IIb". Mark IIa consists of a Zircaloy-2 core vessel with additional radial reflector material made of graphite. The less effective graphite reflector helps to offset the large increase in reactivity from the removal of the central control rod channel. Mark IIb consists of a Stainless Steel Type 347 core container. Graphite reflector additions could not be used with this model, as it does not provide sufficient excess reactivity to overcome the more neutron absorbent

stainless steel core. Beryllium is used for the reflector extension in the Mark IIb model.

In both models, the sum of the material and structural changes significantly increased the excess reactivity of the reactor. In order to maintain an excess reactivity comparable to Busatta's design and the SLOWPOKE-2 reactor, the concentration of the uranyl sulphate solution needed to be adjusted. Final concentrations were chosen to give an excess reactivity similar to Busatta's design. A summary of design specifications of the two reactor models can be found in Table 3.2.

Gagnon conducted a safety analysis for the Mark II Homogeneous SLOWPOKE, investigating the void and temperature coefficients of reactivity. For the temperature coefficients, he used MCNP5 to determine the reactivity at various temperatures. Each run created a data point on the temperature vs reactivity graph. Fitting an equation to his data, the slope of the line provided the temperature coefficient of reactivity for the reactor.

To investigate the void coefficient of reactivity, Gagnon used his MCNP5 model with two types of variations. His first approach decreased the density of the uranyl sulfate to simulate micro bubbles. His second approach was to create various geometric voids in the model. The voids consisted of a central void cylinder, a 2-bubble model, and a 49-bubble model. In all cases, the simulations were run to determine the reactivity at given temperatures. The results were reported in a graph showing the excess reactivity vs the void fraction. Similar to his temperature analysis, an equation was fitted to the data, which allowed him to calculate the void coefficient of reactivity, for a given temperature.

Gagnon attempted to simulate a worst-case accident scenario, where the core had been over filled, leaving no air pocket at the top. He used COMSOL to create a 2D symmetrical model of the reactor and was able to observe a temperature profile developing, but encountered problems with the convergence of his model. His model used a constant heat source in the core and did not account for the self-regulating effects of temperature and void fraction.

Specifications of Gagnon's Homogeneous SLOWPOKE Mark II reactor can be found in Table 3.2, and his full work was published in his thesis [5].

Table 3.2: Specifications of the Mark II Homogeneous SLOWPOKE

Parameter	Mark IIa	Mark IIb
Core Height	48.8 cm	48.8 cm
Core Radius	10 cm	10 cm
Core Container Thickness	3 mm	3 mm
Core Container Material	Zircaloy-2	Type 347 Stainless
Control Rod Material / Radius	Cadmium 1.5 mm	Cadmium 2.25 mm
Cladding Material / Thickness	Aluminum 2mm	Aluminum 2 mm
Fuel Volume at 313K	15.861 L	15.861 L
Annulus Reflector Radii	11 - 21 cm	11 - 21 cm
Beryllium Annulus Reflector Height	22.75 cm	49.75 cm
Graphite Annulus Reflector Height	27 cm	-
Beryllium Top Reflector Thickness	-	10 cm
Graphite Top Reflector Thickness	10 cm	-
Fuel	Aqueous UO ₂ SO ₄	Aqueous UO ₂ SO ₄
Fuel Enrichment	20%	20%
Fuel Concentration	1.4575 ± 0.0061 M	1.7058 ± 0.0033 M
²³⁵ U Mass (in core)	994.2 g	1149 g
k _{eff}	1.0039 ± 0.001	1.0038 ± 0.001
Thermal Power	20 kW	20 kW
Steady State Operating Temperature	313K	313K

3.3 Thermohydraulic and Transient Analysis (G. Carlin, June 2013)

The work of George Carlin investigated the time-dependant thermohydraulic and transient characteristics of the Homogeneous SLOWPOKE, as well as the effects of radiolytic gas production.

For Carlin's thermohydraulic study, he assumed the reactor would be providing 20kW of power from the fuel solution. He created a 2D model with azimuthal uniformity in COMSOL, looking specifically at the cooling channel defined by the gap between the fuel container and the radial reflector. The goal of his study was to optimize the size and geometry of the channel for natural convection cooling.

By varying the geometry within his model, he demonstrated the cooling channel width to height ratio is the most effective way to increase the efficiency of the cooling circuit. Given the constraint of using the existing SLOWPOKE-2 reflector, significant changes to the inlet orifice geometry are not possible. The chimney type outlet of the cooling channel proposed by Gagnon was also investigated and resulted in a drop in core temperature of 1°C. This modification was incorporated into future design iterations.

In Carlin's transient analysis, he used point-kinetic equations to confirm the inherent safety of the Homogeneous SLOWPOKE in all reasonably possible accident scenarios. He used point-kinetics equations with the void and temperature coefficients determined by Gagnon to obtain the reactor power as a function of time. Using this in his COMSOL model, he was able to determine the thermal response following a reactivity change. Carlin's results suggest that the designed operating temperature of 40°C at 20kW may not be possible using only natural convection

cooling, as this temperature is reached when operating at only 4.6kW. Other notable results are seen following a maximal reactivity insertion where 0.15% of the fuel exceeds 100°C which is indicative of boiling.

Carlin investigated several accident scenarios, including a loss of coolant accident (LOCA) at full power operation after prolonged operation, and overfilling of the reactor tank while at steady state.

For the LOCA, replacing the outer reactor container and pool water with air represents a reactivity insertion of -48.51mk. This large removal of reactivity quickly drops the power and, within a few seconds, the remaining heat production is from the fission decay products [6]. Carlin demonstrated that neither the fuel or container reach a dangerous temperature during a LOCA.

For tank overfill scenarios, Carlin found that when the core is instantly overfilled from shutdown and the control rods are removed, a serious accident condition occurs. The reactivity insertion of +8.75mk results in the power spiking to 30MW and the entire fuel solution reaching temperatures indicative of rapid boiling. When the core is overfilled from the normal operating condition, the power is increased to 25kW and average core temperatures reach 70°C, but with constantly boiling liquid at the surface [6]. Other overfill scenarios were simulated by Carlin, all of which resulted in boiling at the top of the reactor container.

3.4 Suretech Development Ltd. (W. Lounsbury, July 2014)

W. Lounsbury developed a heat transfer model for the Homogeneous SLOWPOKE for Suretech Development's Isotope Initiative [7]. The primary focus of the study was to determine heat transfer from the outer surface of the core container into the

cooling channel water using Grashof, Raleigh, Nusselt, and Prandtl number correlations for vertical plates and vertical parallel-plates. His model assumed a vigorous mixing of the fuel due to radiolytic gas production and convection, and ignored the thermal resistance of the container material. His results showed that a natural convection cooling of 12kW was possible for a core temperature of 75°C and 8kW for a core temperature of 60°C. 8kW was the operating maximum power suggested, as maintaining criticality is not possible at higher temperatures due to the large negative temperature coefficient of the Homogeneous SLOWPOKE.

Chapter 4: Theory

4.1 Heat Transfer

The transfer of thermal energy between materials is well described by the laws of thermodynamics. When modelling heat transfer using COMSOL, the following energy balance equation is used [8]:

$$\rho C_p \frac{\delta T}{\delta t} + \rho C_p u \cdot \nabla T + \nabla(k \nabla T) = Q \quad (4.1)$$

where, ρ is the density in $\text{kg} \cdot \text{m}^{-3}$;

C_p is the specific heat capacity at constant pressure in $\text{J} \cdot \text{kg}^{-1} \cdot \text{K}^{-1}$;

T is the temperature in K;

k is the thermal conductivity in $\text{W} \cdot \text{m}^{-1} \cdot \text{K}^{-1}$;

u is the velocity in $\text{m} \cdot \text{s}^{-1}$; and

Q is the heat source in $\text{W} \cdot \text{m}^{-3}$.

In the context of a thermohydraulic finite element model, Q is the heat from fission that is deposited into the fuel solution and is zero for all non-fuel domains. This heat is distributed among the three terms on the left hand side of equation 4.1. The first term is the energy required to change the temperature of an element, the second term is the difference in heat energy entering and leaving the element, and the final term is the energy that is conducted into or out of the element from adjacent elements. For any given finite element, the spatial distribution of Q is proportional to the thermal neutron flux which is computed using MCNP and scaled to the appropriate value

such that the total thermal nominal power of the reactor is achieved. A thermo-hydraulic, finite element model is achieved with an energy balance, coupling the heat energy and kinetic energy of the fluid domains. In COMSOL, this is done using the non-isothermal flow package and the fluid velocity term, u [8].

4.2 Computational Fluid Dynamics

The equations used to formulate a fluid dynamics problem in COMSOL are the Navier-Stokes equations for the conservation of momentum and the continuity equation for the conservation of mass [8].

$$\rho \frac{\delta u}{\delta t} + \rho u \cdot \nabla u = -\nabla p + \nabla \cdot \mu((\nabla u + (\nabla u)^T)) - \rho g \quad (4.2)$$

$$\frac{\delta \rho}{\delta t} + \nabla \cdot (\rho u) = 0 \quad (4.3)$$

where, ρ is the density in $\text{kg}\cdot\text{m}^{-3}$;

u is the fluid velocity in $\text{m}\cdot\text{s}^{-1}$;

p is the pressure in Pa;

μ is the dynamic viscosity in $\text{Pa}\cdot\text{s}$; and

g is the standard acceleration due to gravity in $\text{m}\cdot\text{s}^{-2}$.

The Navier-Stokes equation is Newton's second law applied to a fluid. In the finite element model, the left hand side of Equation 4.2 represents the change in inertial force, or momentum of an element. On the right hand side, the first term is the force due to a pressure gradient. The middle term represents the viscous force associated

with the fluid flow, and the last term is the external force on the element. In this case, the gravitational force is the external force. Equation 4.3 is the continuity equation, which is a conservation of mass and results from the assumption that the fluid is incompressible. It states that a density change results in fluid entering or leaving an element. For given boundary conditions, the solution to Equations 4.2 and 4.3 provides the fluid velocity and pressure field in the given geometry for a laminar flow profile.

As analytical functions are not able to describe the random, oscillatory nature of turbulent fluid flow, numerous models have been developed to correlate with experimental results. The most common method to model turbulence is the Reynolds-averaged Navier-Stokes (RANS) approach. In this approach, the so-called Reynolds decomposition is used to divide the velocity terms of the Navier-Stokes equation into two components. One component represents the constant mean velocity of the fluid (\bar{u}) and the second term (\acute{u}) describes the time-averaged fluctuating component of the flow, and is represented as follows [9]:

$$u = \bar{u} + \acute{u} \quad (4.4)$$

where, u is the fluid velocity in $\text{m}\cdot\text{s}^{-1}$;

\bar{u} is the time-averaged mean fluid velocity in $\text{m}\cdot\text{s}^{-1}$; and

\acute{u} is the fluctuating component of fluid velocity in $\text{m}\cdot\text{s}^{-1}$.

Many turbulence models have been developed which build on the RANS approach, each having its own strengths and weaknesses. The unknowns introduced by

Equation 4.4 require additional equations to achieve closure of the Navier-Stokes equation. In k - ϵ (k -epsilon) turbulence models, equations for the turbulence kinetic energy, k , and rate of turbulence dissipation, ϵ , are used. All RANS turbulence models approximate the solution to these equations with functions and coefficients that have been selected to agree with experimental data. Some models agree very well with experimental data for certain applications, while being highly inaccurate in others [10]. Selecting the appropriate turbulence model is a non-trivial task and requires a sound understanding of the problem and the applications and limitations of the turbulence model. COMSOL includes the L-VEL, yPlus, Spalart-Allmaras, k -epsilon, k -omega, Low Reynolds number k -epsilon, and Shear Stress Transport turbulence models.

In this research, a Low Reynolds Number k -epsilon (LRN k - ϵ) model was used as it is well established and has shown to provide reasonable results for comparable applications. Yilmaz and Fraser found very good agreement between their experimental results and the LRN k - ϵ turbulence models for natural convection heat transfer in asymmetrically heated vertical parallel-plates [11]. COMSOL also recommends the LRN k - ϵ model as it tends to model heat flux accurately when solving the flow near walls [12].

4.3 Criticality and Fission Heat

In a nuclear reactor, neutrons are produced from the splitting of fissile or fissionable atoms in the fuel, in a process known as fission. In a fission, usually two or three free neutrons are emitted and the total neutron population of the system is a function of the fission rate as well as the rate at which neutrons are lost to the surroundings or absorbed in non-fissile atoms of the reactor's materials. When the nuclear chain

reaction is sustained such that the total neutron population remains constant between successive generations, the reactor is said to be critical. Criticality is quantified by the effective multiplicative factor, where k_{eff} is defined as:

$$k_{eff} = \frac{\text{Number of fissions in current generation}}{\text{Number of fissions in previous generation}} \quad (4.5)$$

For systems for which k_{eff} is greater than one, the rate of fission is increasing, and the system is said to be supercritical. If k_{eff} is less than one, the rate of fission is decreasing and the system is said to be subcritical. A steady state operation of a reactor corresponds to a critical system with a k_{eff} of unity. This results in a constant thermal power.

Because the k_{eff} of an operational reactor is most often very close to unity, the excess reactivity (ρ) is often used to express the criticality of the system, where the excess reactivity is defined as the relative departure from criticality in the following equation:

$$\rho = \frac{k_{eff} - 1}{k_{eff}} \quad (4.6)$$

4.4 Neutron Flux and Power Density Distributions

For a critical reactor at steady state, the distribution of neutrons is a function of position and energy. A neutron's energy greatly affects how it interacts with atoms in the reactor's materials. The macroscopic cross section (Σ), or microscopic cross sections (σ), provide the probability distribution for particle interactions, such as

absorption or scattering, for a given neutron energy in a given material. As neutrons produced by fission diffuse through the reactor, their kinetic energy is decreased by scattering reactions. When the neutron's energy is in equilibrium with its environment, typically around 0.025eV, it is classified as a thermal neutron. Thermal neutrons are of particular importance to the fission process, as the ^{235}U atoms in the fuel have very high cross sections for neutrons in the thermal energy range.

The energy released from fission, appears as the kinetic energy of the fission products and of the neutrons emitted, plus that of other forms of radiation emitted as a result of this process. Heat is produced as these particles interact by colliding with the atoms within the fuel and the reactor materials. Of the approximately 200MeV generated from each fission reaction, almost all of the energy is deposited in the fuel [13]. For a reactor at steady state, the spatial distribution of heat energy generated in the fuel is proportional to the fission rate and is given by:

$$Q(\vec{r}) = G \int_0^{\infty} \Sigma_f(\vec{r}, E) \phi(\vec{r}, E) dE \quad (4.7)$$

where: Q is the volumetric heat generation rate as a function of position;

G is the energy absorbed by the fuel from each fission;

Σ_f is the cross section as a function of both position and energy; and

ϕ is the neutron flux as a function of both position and energy.

Due to the inherent difficulty of analytically solving the complex equations governing reactor physics, codes that use deterministic or probabilistic methods,

such as WIMS-AECL or MCNP, are typically employed to determine the reactor's criticality, and the neutron flux and power distributions within the reactor. The Monte Carlo n-Particle Transport Code (MCNP 6) is a “general-purpose, continuous-energy, generalized-geometry, time-dependent, Monte Carlo radiation-transport code designed to track many particle types over broad ranges of energies[14].”

4.5 Monte Carlo n-Particle Transport Code

The Monte Carlo method is a probabilistic method that uses random sampling to solve problems numerically, typically used when an analytical solution is not possible or exceedingly difficult to determine. The name Monte Carlo comes from the casino in Monaco and was originally used as a code name by Stanislaw Ulam and his co-workers while working on a nuclear weapons project at Los Alamos [15]. A simulation using this method requires an extremely large number of possible outcomes from which the true value, associated statistical error, and variance can be inferred.

In the case of MCNP 6, this method is applied to simulate neutrons travelling through the reactor geometry and interacting with its material. At randomly generated track lengths (distance travelled by the simulated neutron), MCNP evaluates the probable outcomes for the neutron. Outcomes are determined using cross-section data taken from the Evaluated Nuclear Data File (ENDF/B-VII) database, which contains cross sections, spectra, angular distributions, fission product yields, and photo-atomic thermal scattering data, with emphasis put on neutron-induced reactions [16]. As the neutron moves through a particular geometric cell, the track length and any resulting reactions are tallied for both the cell and any pre-defined tally bins covering the same

geometric area. The track length is analogous to the neutron flux, and can be used to calculate other quantities of interest using the appropriate ENDF reaction number, such as absorption cross section, fission cross section, average neutron heating number, or gamma-ray production cross section [17].

Each cycle in MCNP consists of simulating a user defined number of neutron histories and is analogous to the concept of a generation. At the end of each cycle, k_{eff} , the standard deviation, and the collimated value of k_{eff} are computed. The neutrons produced as a result of fission reactions are used as a source for future cycles. This process continues until the set number of cycles, a minimum standard deviation, or a maximum computer run time is reached.

4.6 The MCNP Input File

Using the MCNP 6 code consists running a pre-compiled executable code and supplying a text based input file which completely describes the geometry, materials, and required calculations to perform. An input file consists of lines of text, where each line is known as a card. All cards in the input file fit into three main sections; cell cards, surface cards, and data cards, which are separated by a blank line.

Surface cards are the building blocks of the MCNP input file and define the surfaces used to compose cells. Surface cards come in various types, including spheres, cones, infinite cylinders, or arbitrary planes. Each surface type has a sense or direction associated with it that is necessary to describe space relative to the surface, as well as parameters to specify its size or relative position. Each surface card contains the surface number, surface type, and size and position parameters.

Cell cards are used to define the geometry, composition, and other parameters of a particular cell. Typically, a cell is created to represent each component in a reactor, as illustrated in Figure 4.1. Each cell card contains the cell number (seen in red in Figure 4.1), material number (references the material data card), density (a negative sign designates mass density units), the geometry (specified by the intersection, union or complement of surface cards), and other parameters (such as cell importance, or temperature).

Data cards are used to define all other parameters of the model not related to geometry. They can define the isotopic composition of each material (material cards), initial neutron source distribution (neutron source card), space, energy or time bins for tallying results (tally specification cards), calculation type (KCODE card), and any other parameters needed to fully define the reactor and results of interest.

4.6 MCNP Criticality Calculations and Tallies

The most commonly used function of MCNP 6 is to compute the effective multiplication factor for fissile systems. To obtain more advanced results with MCNP, tally and multiplier cards are required, as seen below. Tallies need to be set up prior to computing, and are used to sum contributions from the specified reaction. Tallies can count contributions to a cell, through a surface, or create a mesh of counting bins superimposed over the problem geometry. As the spatial distribution of heat in the fuel is of primary interest in this research, the superimposed neutron mesh tally cards (FMESH:n) were used. These cards set up cylindrical mesh of counting bins surrounding the fuel container.

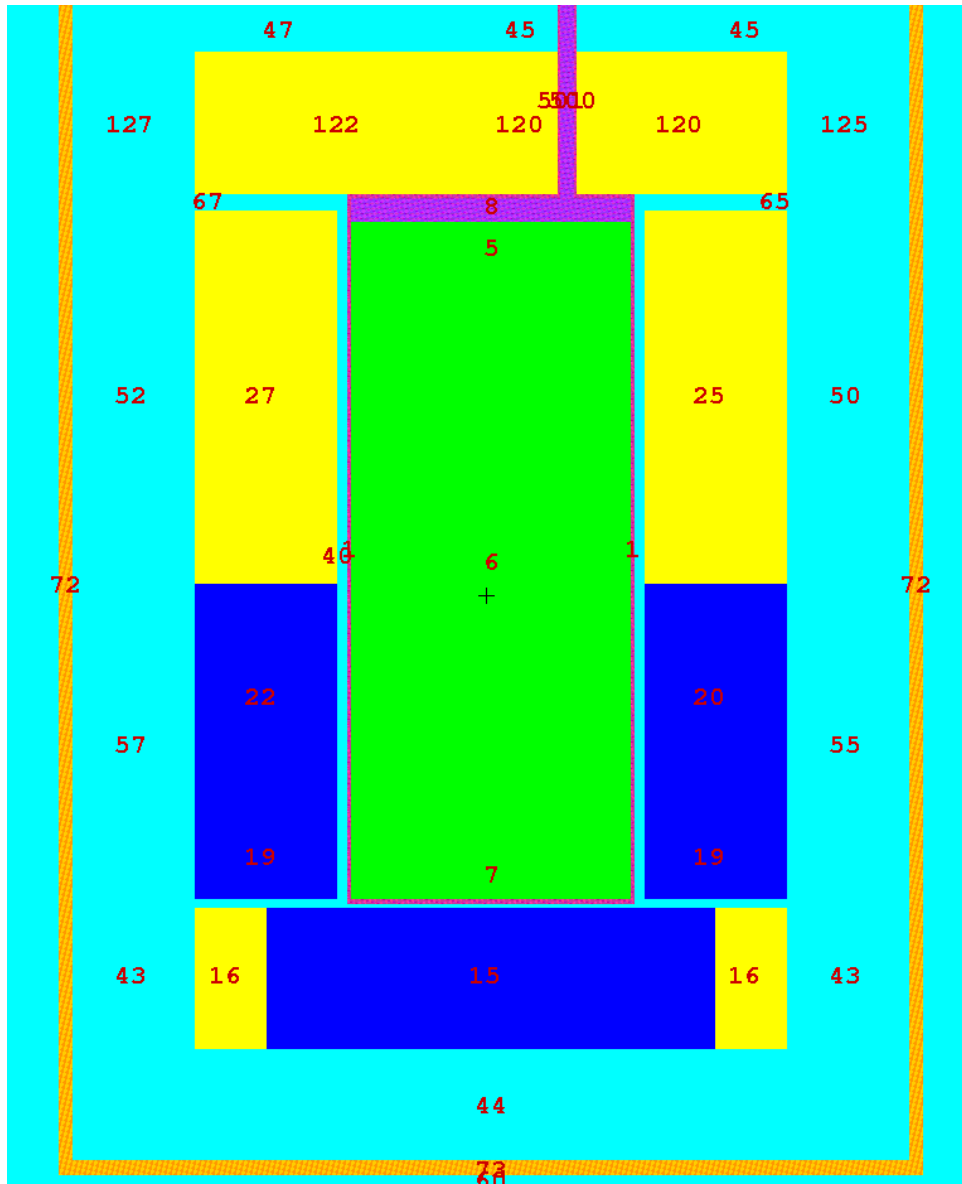


Figure 4.1: Basic MCNP Geometry Used in Prior Research:
Colors Show Materials, Cell Numbers Indicated in Red

By default, the FMESH:n card calculates the track length estimate of neutron flux in particles·cm⁻²·s⁻¹ averaged over the volume of each bin. To obtain the heating distribution in units of W·cm⁻³, one must use the appropriate tally multiplier (FM card), and multiplicative factors as written in the MCNP syntax in Equation 4.8:

$$FM4 \ c \ m \ R_1 \ R_2 \quad (4.8)$$

where:

$c = -1.602 \times 10^{-13}$	MeV to J conversion factor. The negative sign indicates that each score will also be multiplied by the material's atomic density;
$m = 0$	Material number. 0 indicates the local material is used;
$R_1 = 1$	ENDF reaction number for total cross section in barns; and
$R_2 = -4$	ENDF reaction number for average heating number in $\text{MeV} \cdot \text{collision}^{-1}$.

To calculate a 3D distribution of heat produced in the core, the following combination of mesh tally specification and tally multiplier cards is necessary:

```

FC14      3D Heating Distribution Tally ( $\text{W} \cdot \text{cm}^{-3}$ )
FMESH14:n GEOM=cyl  AXS=1,0,0  VEC=0,1,0  ORIGIN=10.16,0,0
          IMESH=10  IINTS=22
          JMESH=48.3101  JINTS=103
          KMESH=1  KINTS=180
          FACTOR=1  OUT=COL
FM14      -1.60217733e-13  0  1  -4

```

The output from these cards provide the numerically calculated power density distribution and is equivalent to the solution of the analytical equation for the power density given by Equation 4.3.

When capturing a heating distribution for use in a 2D azimuthal symmetric thermohydraulic model, an azimuthal average value is required. This is achieved by changing KINTS, the mesh density in the azimuthal direction, to 1.

To compute the total heat produced in the core, a single bin enveloping the core is used. This is achieved by changing the vertical, radial, and azimuthal mesh densities

to 1, and multiplying by the volume of the bin. Note that all tallies are reported on a per source neutron basis and values need to be scaled to the current operating power of the reactor.

Chapter 5: Methodology

5.1 Creation of a Computer-Aided Engineering Tool

All prior neutronic modelling of the Homogeneous SLOWPOKE reactor assumed a uniform fuel temperature of 40°C and did not account for natural temperature gradients that develop in the fuel or the position of the control rod when calculating the power density distribution.

With the non-rigid core design of the Homogeneous SLOWPOKE reactor, the distribution of the fissile atoms changes due to the natural convection of the core's fluid and the distribution of density in the fuel. Solid fuelled reactors can be more easily modeled in MCNP as the relative distribution of the fuel atoms is spatially fixed (i.e. the core is rigid). To calculate a heat profile representative of the changing conditions in the core, it is necessary to model this distribution in MCNP.

Each cell in MCNP is limited to a single value of temperature and density and no functionality for modeling a temperature gradient is available. To model the distribution, it was necessary to break down the fuel geometry into a lattice made of numerous small cells, which could each be assigned their own density and temperature values.

The creation of a complete MCNP input file is prone to human error and is time consuming because all surfaces, cells, and material data are created by hand with a text editor since no graphical user interface is provided. Any error in the geometry will result in a failed computation. In this research, a computer-aided engineering (CAE) tool was developed using C++ in Microsoft Visual Studio. The goal of the

created MCNP_Generator.exe program was to automate the creation and execution of MCNP models to achieve the following results.

- Sub divide the fuel geometry into numerous smaller cells in order to model a distribution of density and temperature in the fuel. In MCNP, each cell card can only be assigned a single value for the temperature and the density, which limited all prior research to modeling the core with a uniform temperature distribution.
- Automate the MCNP input file creation process with the ability to easily change reactor parameters, such as fuel mesh size, fuel concentration, fuel volume, fuel temperature and the associated thermal expansion, and the control rod position. It is necessary to first conduct a mesh sensitivity analysis and determine an acceptable fuel mesh density for modeling a temperature gradient. This is also useful for generating large data sets for future use, such as temperature vs reactivity for calculating the temperature coefficient of reactivity, density vs reactivity for calculating the void coefficient of reactivity, control rod position vs reactivity, etc. without the need to create numerous MCNP input files by hand.
- Extract the desired results from the 80 page MCNP output file and format the mesh tallies into a format that can be used in COMSOL or other software for the thermohydraulic modeling.
- Create a process that can easily be called from COMSOL in order to update the reactor's heating distribution based on the developing temperature distribution in the fuel.

The concept of using a computer-aided approach to model complex 3D geometries is not new and noted in numerous reports from Los Alamos National Laboratory, such as:

The attractiveness of the CAD/CAE tools in creating complex 3-D models has been so great that innovators have accepted the expense of building either CAD-to-MCNP convertors or developing approaches to track directly on CAD geometries. While these approaches have been successful in fulfilling a need and have helped to advance the state-of-the-art in particle transport code capability, they can only be considered band aids to the real problem – the inability of legacy geometry capabilities in Monte Carlo particle transport codes to meet the needs of 21st century particle simulation requirements, particularly when multi-physics analysis is needed [18].

The creation of such a tool for use with the Homogeneous SLOWPOKE was the most significant part of this research and is presented in the following sections.

5.2 Physical Dimensions of the Reactor

The following section provides the physical properties and dimensions of the Homogeneous SLOWPOKE modeled in this work. This information is necessary for future research to replicate the model without requiring an understanding of the syntax and code formats used by MCNP or C++ in the CAE Tool.

At the heart of the reactor is the fuel container which contains the uranyl sulfate fuel solution in the core. An air gap above the fuel is provided to allow for thermal expansion of the fuel and collect radiolytic gas produced during operation. Fuel inlet and outlet tubing penetrates the fuel container and allows fuel to be added or

removed from the container. A centerline off gas tube is also provided to remove radiolytic gas. Geometry specifications are given in Table 5.1 and temperature dependant material properties of each component can be found in Appendix B.

Table 5.1: Physical Dimensions of the Fuel Container and Ancillary Piping

Component	Mat	Z_{bot} (cm)	Z_{top} (cm)	r_i (cm)	r_o (cm)	Center (x,y) (cm)
Fuel Container Walls	Zircaloy	10.46	61.2	10	10.3	0,0
Fuel Container Top	Zircaloy	61.2	61.5	-	10.3	0,0
Fuel Container Bottom	Zircaloy	10.16	10.46	-	10.3	0,0
Fuel Inlet Tube	Zircaloy	55	-	0.5	0.65	9,0
Fuel Outlet Tube	Zircaloy	15	-	0.5	0.65	-9,0
Off Gas Tube	Zircaloy	61.2	-	0.5	0.65	0,0
Air Above Fuel	Moist Air	*	61.2	-	10	0,0
Fuel Solution	Fuel	10.46	*	-	10	0,0
* Thermal expansion calculated with CAE Tool						

The fuel container is surrounded by 5 reflectors made from either graphite or beryllium which make criticality possible given the low fuel concentration. In the vertical direction, the top reflector rests on top of the fuel container, which rests on top of the bottom reflectors. At the sides, the fuel container is surrounded by the annular reflectors. The gap between the fuel container and the annular reflectors defines the cooling channel which cools the core. Geometry specifications of each reflector are given below in Table 5.2

Table 5.2: Physical Dimensions of the Reflectors

Component	Mat	Z_{bot} (cm)	Z_{top} (cm)	r_i (cm)	r_o (cm)
Base Reflector	Beryllium	0	10.16	-	16.11
Added Base Reflector	Graphite	0	10.16	16.11	21.2344
Lower Annular Reflector	Beryllium	10.668	33.416	11.049	21.2344
Upper Annular Reflector	Graphite	33.416	71.5	11.049	21.2344
Top Reflector	Graphite	61.5	71.5	-	10.3

The SLOWPOKE-2 research reactor contains 5 inner irradiation sites and 5 outer irradiation sites. An irradiation site is typically used to irradiate samples in the high flux region of the reactor. For the Homogeneous SLOWPOKE, all of the inner irradiation sites have been re-purposed to house the control rods. The construction of the irradiation sites is similar, with the exception being outer sites number 2 and 4. Each irradiation site consists of a 1.6508cm thick aluminum shell containing dry air. The annular reflector is bored to house the channels into which the control rods slide. The outer irradiation sites shells are submerged in the water between the annular reflector and the outer reactor vessel wall. All sites extend above the surface of the pool and into the reactor room. Outer irradiation site number 2 is unique, in that it also has a 0.508mm thick cadmium cladding on the outside of the aluminium. Outer irradiation site number 4 is different, in that it is slightly larger than the others, as seen in Table 5.3.

Table 5.3: Physical Dimensions of the Irradiation Sites & Control Rods

Component	z_{bot} (cm)	r_o (cm)	Center (x,y) (cm)
Inner Irradiation Site # 1	17.668	1.56718	4.49985, 13.84911
Inner Irradiation Site # 2	17.668	1.56718	14.56182, 0
Inner Irradiation Site # 3	17.668	1.56718	4.49985, -13.84911
Inner Irradiation Site # 4	17.668	1.56718	-11.78076, -8.55972
Inner Irradiation Site # 5	17.668	1.56718	-11.78076, 8.55972
Outer Irradiation Site # 1	10.668	1.56718	-7.146, 22.825
Outer Irradiation Site # 2*	10.668	1.61798	19.416, 14.107
Outer Irradiation Site # 3	10.668	1.56718	19.416, -14.107
Outer Irradiation Site # 4*	10.668	1.905	-7.146, -22.825
Outer Irradiation Site # 5	10.668	1.56718	-23.7293, 0
* Non-identical irradiation sites			

Each of the 5 control rods is made of cadmium and is 1.5mm in diameter and 47.3cm in length. Rods are clad with 1mm of aluminium. In the model, the height of the control rods is calculated by the CAE tool. For 100% insertion, the cladding is

touching the bottom lining of the irradiation site and for a full withdrawal, the bottom of the control rod cladding is co-planar to the top of the fuel container.

All components of the reactor are contained within the aluminum reactor shell, detailed in Table 5.4. The reactor shell is filled with light water and is submerged in the pool. Cooling of the fuel container is provided by an annular cooling channel, which is created by the gap between the annular reflector and the fuel container.

Table 5.4: Physical Dimensions of the Reactor Shell

Component	Mat	Z_{bot} (cm)	Z_{top} (cm)	r_i (cm)	r_o (cm)	Center (x,y) (cm)
Reactor Shell Wall	Aluminum	-8	533	30	31	0,0
Reactor Shell Base	Aluminum	-9	-8	-	31	0,0

In the thermohydraulic model, the top reflector and lower annular reflectors are designed with a 1cm fillet to round the corners, as seen in Figure 5.1. This reduces the pressure drop as the water flows through the channel. In this work, the chimney style channel outlet was used, as prior research has demonstrated a greater efficiency with this geometry [19].

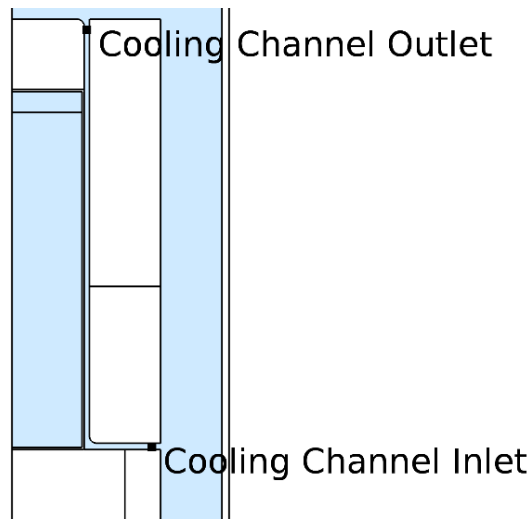


Figure 5.1: Cross Sectional View of the Annular Cooling Channel Created by the Gap Between the Fuel Container and Annular Reflectors

5.2 CAE Tool Logic

Figure 5.2 presents the logic flow of the developed MCNP_Generator program. The primary functions will be described in plain language to provide an understanding of how the program functions. The full source code, written in C++, is available at Appendix A, and a sample of an MCNP input file created by the tool is available at Appendix D.

The MCNP_Generator tool is designed to be run in the background with no user interface. Its purpose is simple; to take a core temperature distribution from COMSOL, generate an MCNP input file and calculate the power density distribution based on the temperature, and provide the results for use in COMSOL. All data is passed between COMSOL and MCNP in the form of text files.

When the MCNP_Generator tool is run, two data files are read; COMSOL_Data and COMSOL_Parameters. COMSOL_Parameters is a file that is exported from COMSOL and contains the volume-average temperature of the fuel. This is used in later steps to calculate the control rod position corresponding to a critical reactor, and the thermal expansion of the fuel. COMSOL_Data is also created by COMSOL and contains the current temperature distribution of the thermohydraulic model. In both MCNP and COMSOL, the density is a function of temperature and is calculated by the equation given in Appendix B.

The next step calculates the position of the control rod, based on the current volume-average fuel temperature. The method used to calculate the critical position without first doing an eigenvalue calculation with MCNP is explained in Section 5.3.

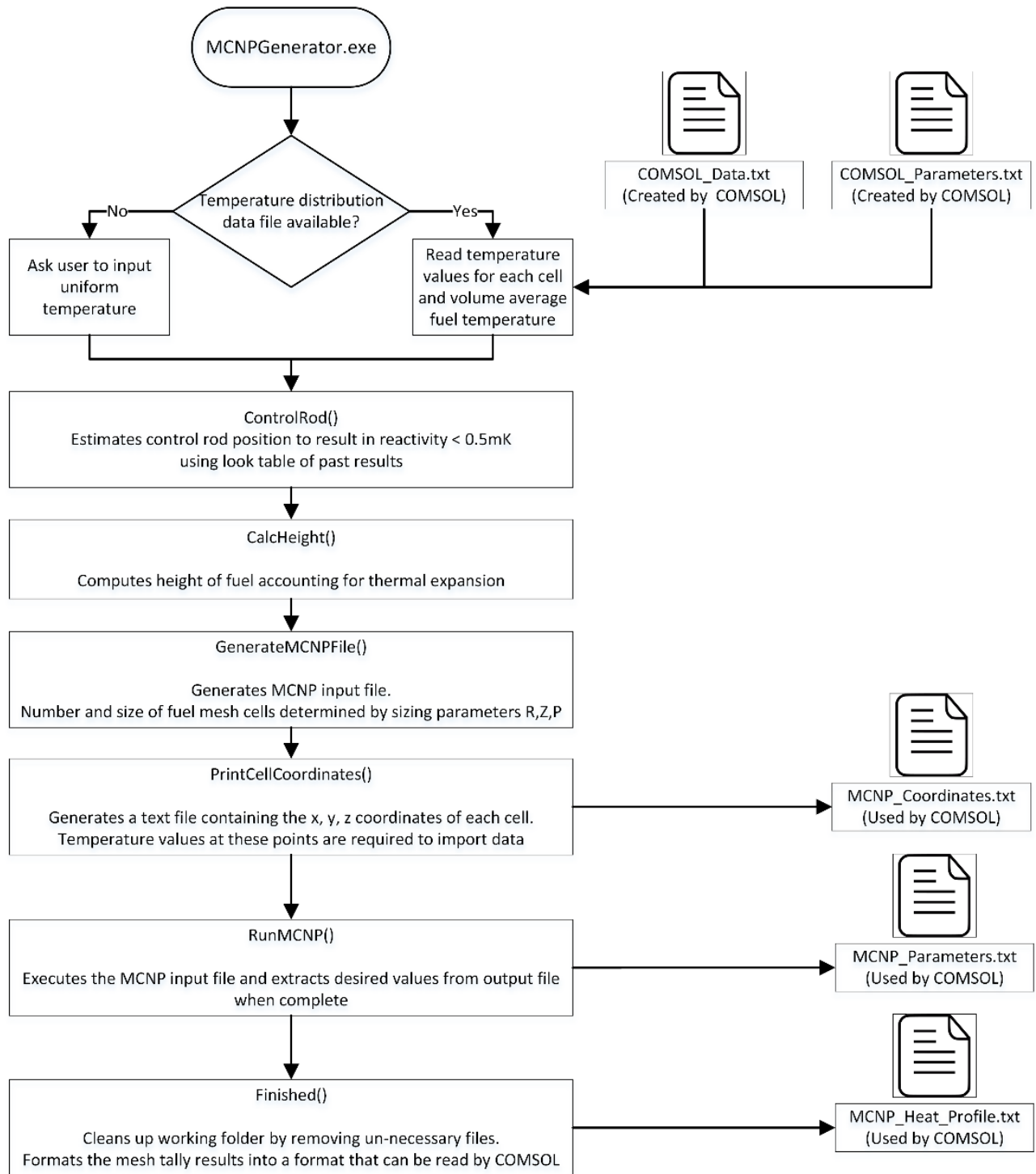


Figure 5.2: Logic Flow of the MCNP_Generator Program

The next function calculates the z coordinate for the upper bounding surface of the fuel solution. Although the temperature dependant volume change of the fuel solution is less than 2.5% over the operating temperatures of the reactor, this step is essential to maintain a constant mass of fuel in the reactor. If the fuel geometry, and hence volume, were fixed, modifying temperature and density values would equate to adding or removing fuel from the reactor, and the reactor would no longer be critical.

The next step generates the actual MCNP input file. Many components of the reactor, such as the reflectors, and reactor shell do not need to be created dynamically as their spatial position is fixed and temperature does not change. The surface and cell cards necessary to model these are simply stored in the source code and are re-printed as needed for the MCNP input file.

The surface cards necessary to define the fuel mesh cells are created by the developed algorithm. The fuel volume is divided in the vertical direction by horizontal planes, as seen in Figure 5.3. The number of horizontal planes created, and hence the mesh density in the vertical direction, is specified by the Z parameter. Planes to define the bottom of the fuel inlet tube and fuel outlet tubes are also necessary. For a Z parameter of n, this gives n+3 fuel mesh cells in the vertical direction to model the temperature distribution.

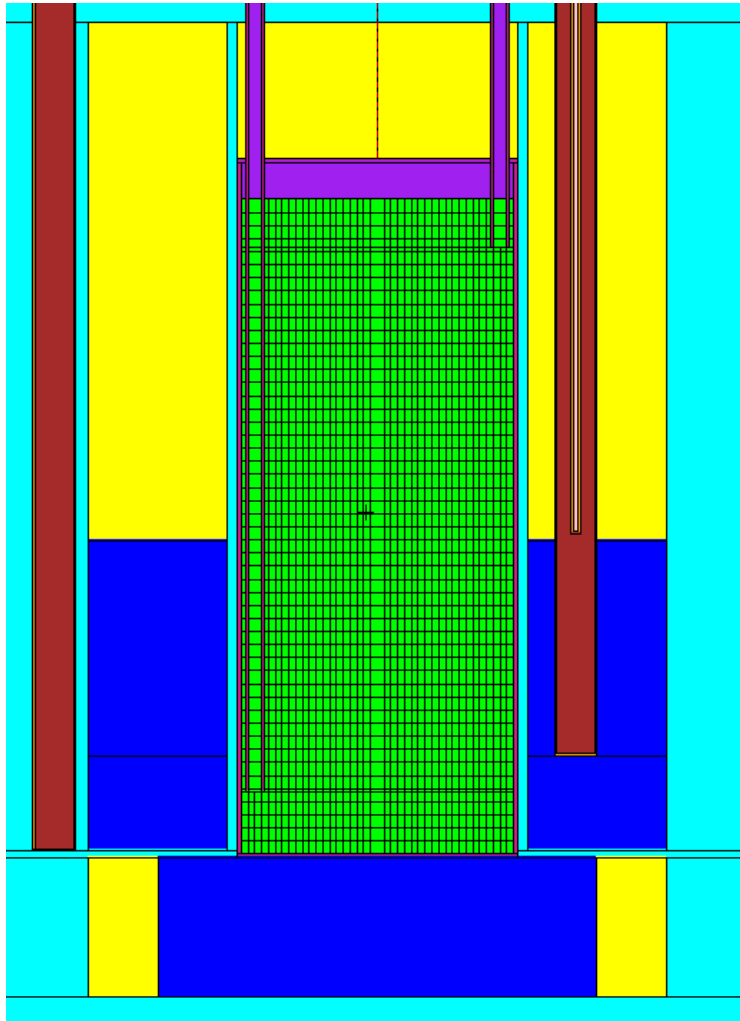


Figure 5.3: Cross Sectional View of an MCNP Model Showing the Horizontal Planes Used to Sub-divide the Fuel Geometry (Green)

In the radial direction, the fuel volume is divided by concentric, cylindrical surfaces, as seen in Figure 5.4. The number of cylindrical surfaces created, and hence the mesh density in the radial direction, is specified by the R parameter. For an R parameter of n , the created MCNP model has $n+1$ fuel mesh cells in the radial direction to model the temperature distribution.

Because the thermohydraulic model in COMSOL is 2D azimuthal symmetric, planes to divide the fuel volume into azimuthal sections (P) are not created. Since the

MCNP model is 3D and not truly symmetric in the azimuthal direction (due to the control rods, irradiation sites, and fuel inlet and outlet tubing) the concentric ring geometry of the cells provides an azimuthal average for flux and power distribution density calculations, taking contributions from all azimuthal directions into account.

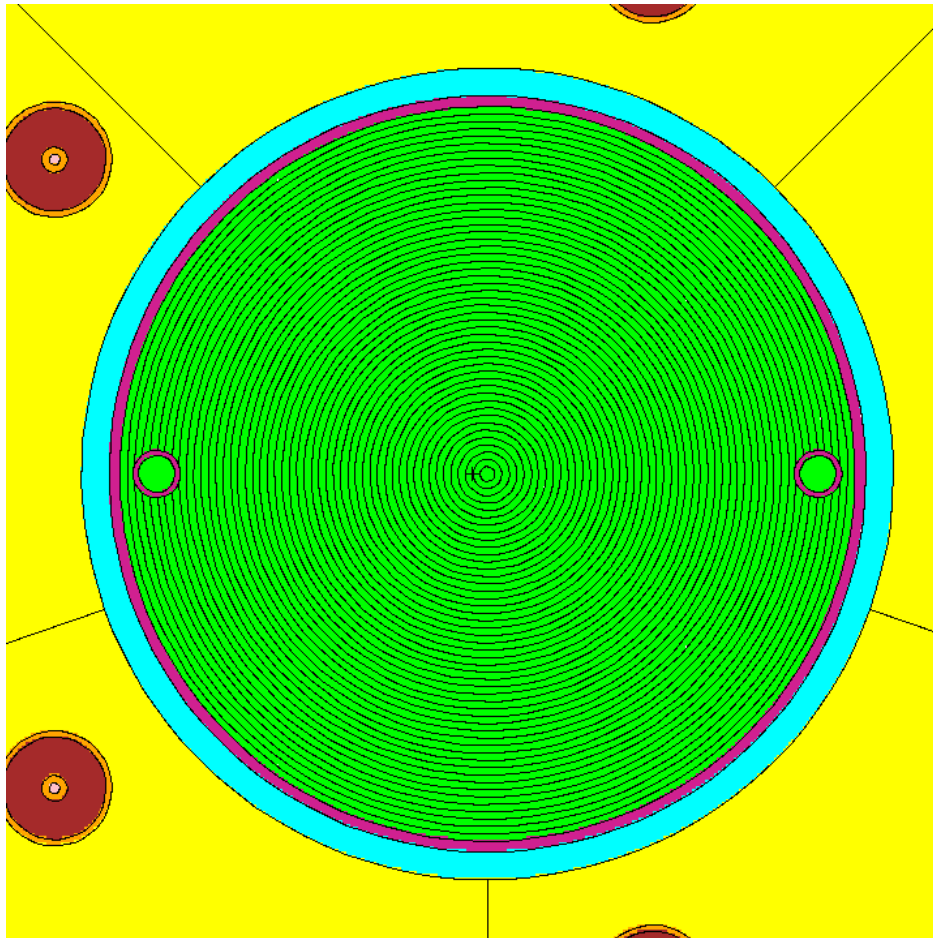


Figure 5.4: Cross Sectional View of an MCNP Model Showing the Cylindrical Surfaces used to Sub-divide the Fuel Geometry (Green)

Cells cards are created sequentially by the developed algorithm and using the surfaces cards created above. Cells are systematically assigned a cell number and the Cartesian coordinates of the center of each cell is saved to a text file,

MCNP_Coordinates. These coordinates are used by COMSOL to create the temperature distribution file, COMSOL_Data.

The temperature and density values for each cell card can be specified by uniform values, an equation, or a real temperature distribution can be imported from COMSOL, using the COMSOL_Data file. The file is created by COMSOL using the cell coordinate file. In the thermohydraulic model, COMSOL evaluates the temperature and density at the supplied coordinates, and the results are exported. The MCNP_Generator program is designed to accept the format exported by COMSOL. This process enables temperature and density distributions from COMSOL to be created in MCNP. Figure 5.5 shows a cross section of a temperature distribution created in this manner.

The next step runs the created input file using MCNP. When the MCNP calculations are complete, the program reads the MCNP output file and meshtal file containing the tally results. In this work, two mesh tallies are required. The first is the power density distribution and the second is the total power, both tallies are normalized by MCNP to a basis of one neutron. The total power tally is identical to the power density tally, but with the resolution decreased to one bin. The analytical equivalent to this is the integral of the power density over the fuel volume. This is needed in COMSOL to scale the normalized power density values and achieve the desired total thermal power of the reactor. The power density distribution is passed to COMSOL using the file, MCNP_Heat_Profile, while the total power tally value is contained in MCNP_Parameters file.

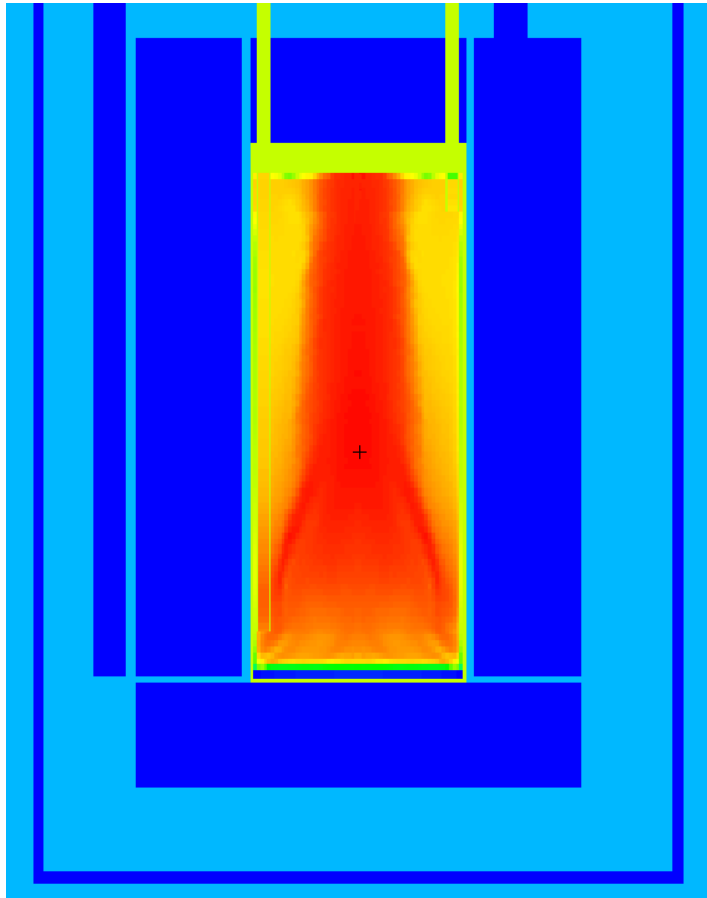


Figure 5.5: Cross Sectional View of an MCNP Model Demonstrating the Ability to Create a Non-Uniform Fuel Temperature Distribution

5.3 Predicting The Control Rod Position

The degree of insertion of the control rods has a significant impact on the distribution of the heat produced in the fuel. In order to calculate the most accurate heating profile, the position of the control rods must be known prior to running MCNP.

As core temperatures change after an increase in the operating power or as temperature gradients in the fuel develop, the control rod position may need to be adjusted to maintain the desired operating power.

As the model is intended to simulate operation at a fixed power, the control rod position used when computing a heat profile is determined such that the resulting excess reactivity remains close to zero. MCNP_Generator was adapted to automatically generate and run several hundred MCNP input files for this purpose. Fuel temperatures between 20°C and 100°C, and control rod insertion between 0% and 100% were randomly generated to determine k_{eff} as a function of both temperature and control rod insertion. Figure 5.4 shows the excess reactivity contours with the black lines showing $\pm 0.25mk$.

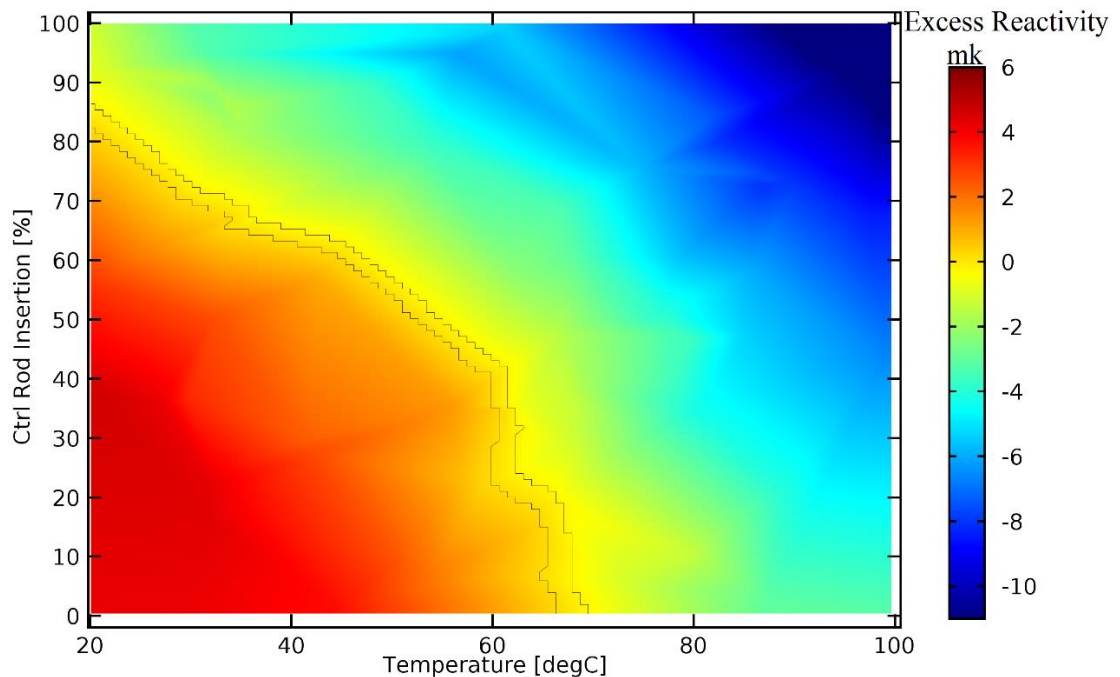


Figure 5.6: Excess Reactivity Contours Used by the Developed CAE Tool to Predict Control Rod Position Corresponding to a Critical Reactor

Using the generated data, the following non-continuous equations were fitted in order to estimate the control rod height as a function of average core temperature, such that the resulting reactivity was close to zero.

$$\begin{aligned} \% \text{ Insertion} = & -1.07T + 106\% \quad | \quad 20^{\circ}C < T < 60.5^{\circ}C \quad (5.1) \\ & -6.85T + 455\% \quad | \quad 60.5^{\circ}C < T < 66.5^{\circ}C \end{aligned}$$

With a suitable method for estimating the required control rod position, MCNP_Generator can accurately compute a heating profile with a single MCNP run.

5.4 Other CAE Tool Features

The MCNP_Generator program was written to automate the creation of MCNP input files and to integrate MCNP functionality into COMSOL. This functionality is useful when generating large sets of data, as demonstrated in Figure 5.6. By creating a simple for loop in the source code, numerous models can be both created and run in one operation. This is extremely useful for determining the temperature coefficient of reactivity, void coefficient of reactivity, excess reactivity as a function of fuel concentration, or any other calculation requiring numerous data points. Loops used in this work can be seen in Appendix A.

5.5 Development of a Thermohydraulic Model

COMSOL Multiphysics 5.2 was used to create a thermohydraulic model of the Homogeneous SLOWPOKE. A review of literature was undertaken to verify the correct temperature dependant material properties were used in the model, with emphasis on uranyl sulfate. References and functions for these material properties including density, heat capacity, thermal conductivity, and viscosity, are included in Appendix B for future reference.

A summary of the boundary conditions of the thermohydraulic model are described in Table 5.5 and the corresponding location shown in Figure 5.7. The boundary

conditions were chosen to limit the size of the model to the inside of the reactor container, while defining the physical state of the core as accurately as possible.

Table 5.5: Boundary Conditions of the Thermohydraulic Model

Location	Condition
1	Axial Symmetry
2	Convective Heat Flux (vertical cylinder)
3	Convective Heat Flux (horizontal plate, bottom)
4	Fluid Outlet
5	Fluid Inlet, Open Boundary
6	Volumetric Heat Source
7	Fixed Pressure
All Fluid Domains	Volume Force
Fluid/Solid Interfaces	Non-Slip
All Interfaces	Continuity of Temperature, Heat Flux
Initial Conditions	Dependant on simulation

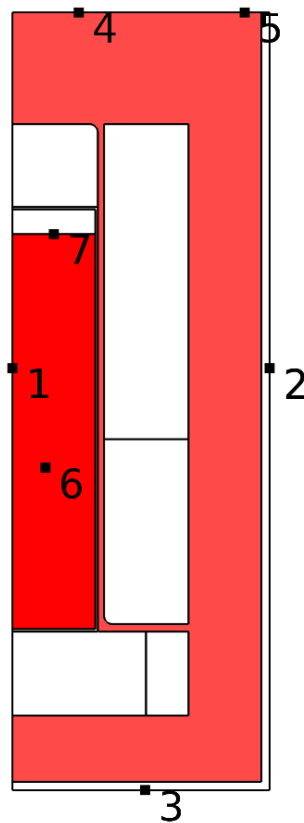


Figure 5.7: Locations of Boundary Conditions for the Thermohydraulic Model

Suitable boundary conditions were necessary to limit the size of the model to the lower portion of the reactor shell that contains the core and cooling channels. The bottom and side of the reactor shell, location 2 and 3 in Figure 5.7, are modeled with a general convective heat given by:

$$q = hA(T_{ext} - T) \quad (5.2)$$

where, q is the heat flux into the bulk fluid (pool) in $\text{W}\cdot\text{m}^{-2}$;

h is the convective heat transfer coefficient in $\text{W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$;

A is the area through which heat is transferred in m^2 ;

T_{ext} is the temperature of the bulk fluid (pool) in K; and

T is the temperature in K.

In COMSOL, the convective heat transfer coefficient is determined by the geometry and working fluid. In this model, a vertical plate correlation for water is used for the sides, and a horizontal plate correlation for water is used for the bottom of the reactor shell. Any error introduced from using these correlations is expected to be small, as the temperature at the wall is not expected to be significantly higher than the bulk fluid temperature of the pool water.

Two conditions bound the upper surface of the model and are shown at position 4 and 5 in Figure 5.7. A 2cm wide annular inlet boundary condition is specified next to the reactor shell, and an outlet boundary condition is specified for the centerline,

of $r < 28\text{cm}$. These boundary conditions are necessary to limit the amount of water simulated above the core and reduce the computational expense to a reasonable level. The 2cm width of the annular inlet was determined using a model that did simulate the full depth of water. The model demonstrated that warm water from the reactor core rose up the centerline, and the water cooled by the reactor shell wall and pool flowed down the outer wall. As seen in Figure 5.8, a cross sectional profile of the water velocity revealed that water flowing down the reactor shell into the lower region peaked in the region 2cm from the wall.

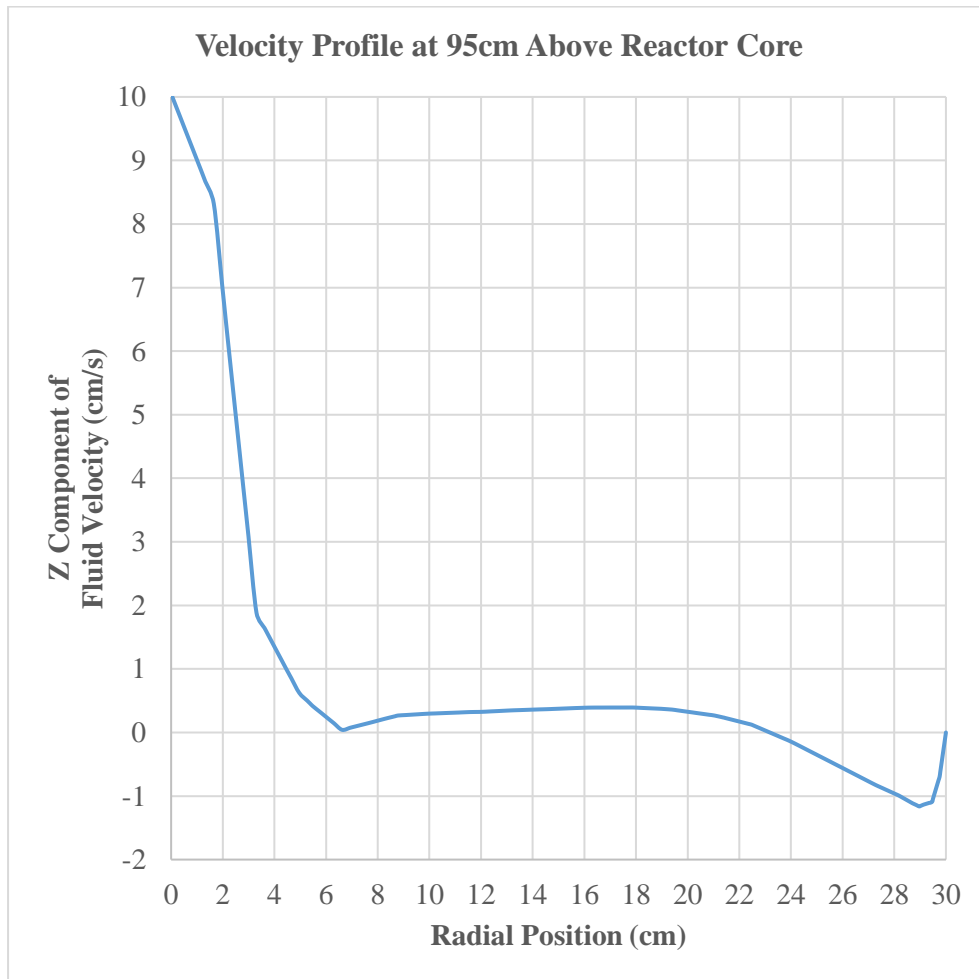


Figure 5.8: Velocity Profile of Reactor Container Water at 95cm Above the Core Used to Determine the Dimensions of the Inlet and Outlet

The equation defining the inlet boundary condition is given by:

$$\mu((\nabla u + (\nabla u)^T)) = 0 \quad (5.3)$$

where, μ is the dynamic viscosity in Pa·s; and

u is the fluid velocity in m·s⁻¹.

Equation 5.3 is the viscous stress term of the Navier-Stokes equation. By setting it to zero, the condition allows fluid to enter the model without resistance. The rate at which fluid enters and leaves the model is dictated by the fixed pressure outlet boundary. The temperature of water coming into the inlet is fixed at 20°C and creates a zero heat flux condition across the inlet. This assumes that the water higher above the core (which is not modeled) is sufficiently cooled by the pool and re-enters the model at 20°C.

The outlet boundary condition is specified as a fixed pressure, equal to the head pressure at the depth of the boundary. This is given by:

$$p = \rho gh \quad (5.4)$$

where, p is the pressure in Pa;

ρ is density in kg·m⁻³;

g is the acceleration due to gravity in N·kg⁻¹; and

h is the depth of water at the outlet in m.

The fixed pressure condition for the outlet constrains the pressure term of the Navier-Stokes equation to the head pressure from the column of fluid above the boundary. A local increase in pressure at the boundary, due to thermal expansion or fluid entering the element, is relieved by flow out of the model. The outlet also specifies that the heat flux across this boundary is zero. This is applicable because the fluid crossing the outlet boundary is at the same temperature as the fluid at the outlet boundary.

On all solid-fluid interfaces, the non-slip boundary condition is imposed. This is defined by:

$$u = 0 \quad (5.5)$$

where, u is the fluid velocity in $\text{m}\cdot\text{s}^{-1}$.

The non-slip boundary is used to account for friction at the solid-fluid interface and enforces a zero fluid velocity at the wall and a flow profile according to the fluid's viscosity.

The volume force condition represents the external force component in the Navier-Stokes equation and is given by:

$$F = \rho g \quad (5.6)$$

where, F is the external force (volume force) in $\text{N}\cdot\text{m}^{-3}$;

ρ is the density of the element in $\text{kg}\cdot\text{m}^{-3}$; and

g is the acceleration due to gravity in $\text{N}\cdot\text{kg}^{-1}$.

This is applied to all fluid domains and drives the natural convection by applying a downward force on each element, proportional to its density. Conversely, this can be thought of as applying an upward force on each element when the density of an element is decreased.

In COMSOL, a continuity of temperature and heat flux is enforced on all internal boundaries. On the centerline, the azimuthal symmetry boundary condition is used.

The volumetric heat source in the fuel is defined using the product of an interpolation function and a scaling factor. Both functions rely on external text files created by MCNP_Generator. The interpolation function defines the spatial distribution of heat and is generated by COMSOL using the r and z coordinates, and heating values in the file MCNP_Heat_Profile.txt. This is an improvement on prior models, where the power distribution was specified only as a function of vertical position. The scaling factor scales the volumetric heating values, to achieve the desired thermal operating power. This function relies on the file MCNP_Parameters.txt and uses the total heat tally, as calculated by MCNP. Both text files are not imported into COMSOL, but are only referenced. This enables the power distribution to be changed as the model is computing.

5.6 Adding MCNP Functionality to COMSOL

The ability of MCNP_Generator to automatically compute a heat profile using temperature data was combined with the time dependant thermohydraulic model to investigate the interaction between the temperature distribution and the heat distribution in the fuel at a fixed operating power. This is explicitly different from a coupled model that attempts to predict changes in operating power from reactivity

changes. To integrate MCNP_Generator with COMSOL, the COMSOL App Builder was used. App Builder is a tool that uses the Java based Application Program Interface (API) for COMSOL to provide a layer of scripting functionality and customizable user interface, seen in Figure 5.9, for an existing COMSOL model. The source code written to run MCNP_Generator, and import a new heating distribution and export temperature data can be found in Appendix C and the process logic is presented in Figure 5.10 and described below.

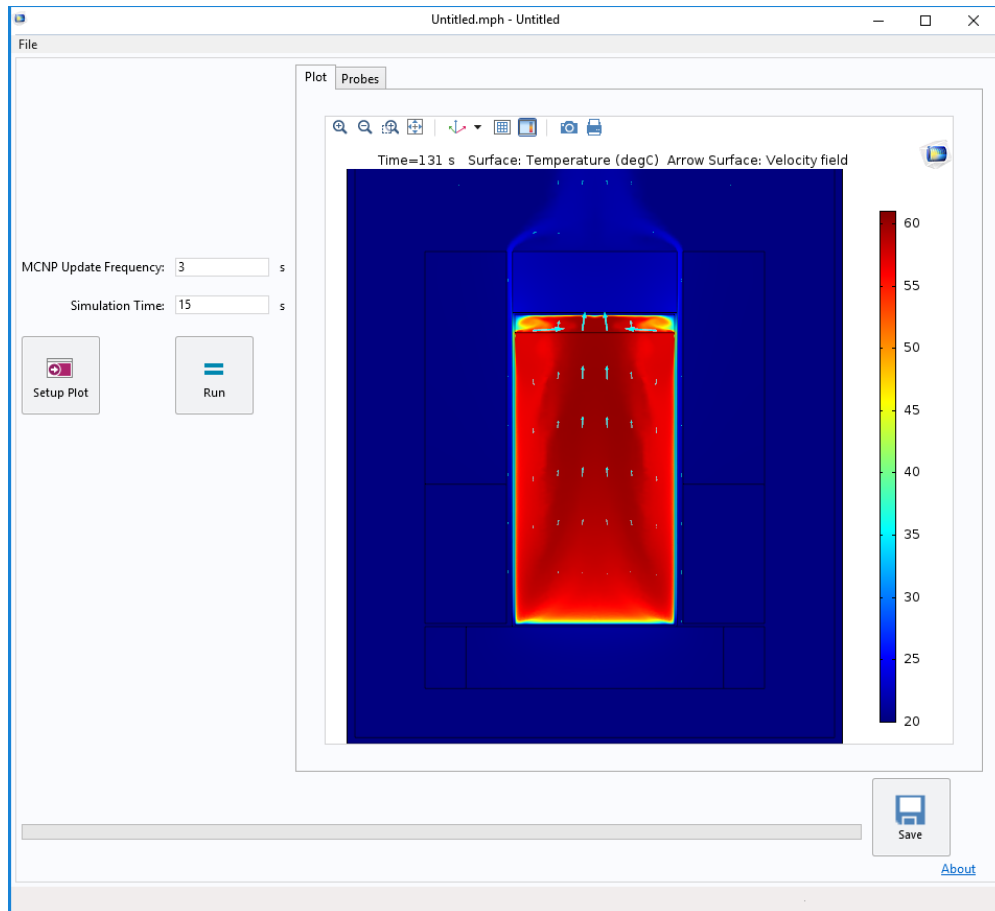


Figure 5.9: User Interface Created for the Coupled Model

The thermohydraulic model runs COMSOL and MCNP_Generator in a stepwise, iterative fashion. To begin a simulation, the user must input a total simulation time and the period at which the CAE tool will update the heating profile using MCNP.

The code first exports the initial temperature values, and runs the tool to generate the heat distribution. The thermohydraulic solver is then run for the given period of time.

The new temperature distribution values are exported, and the CAE tool is run again to update the heating distribution. This process continues until the total simulation time is reached.

When using this process, it is important to remember that MCNP computes a k_{eff} eigenvalue corresponding to a critical or near critical reactor. In this model, it is assumed that the reactor immediately reaches steady state with respect to neutrons, while the thermal response of the reactor changes with time.

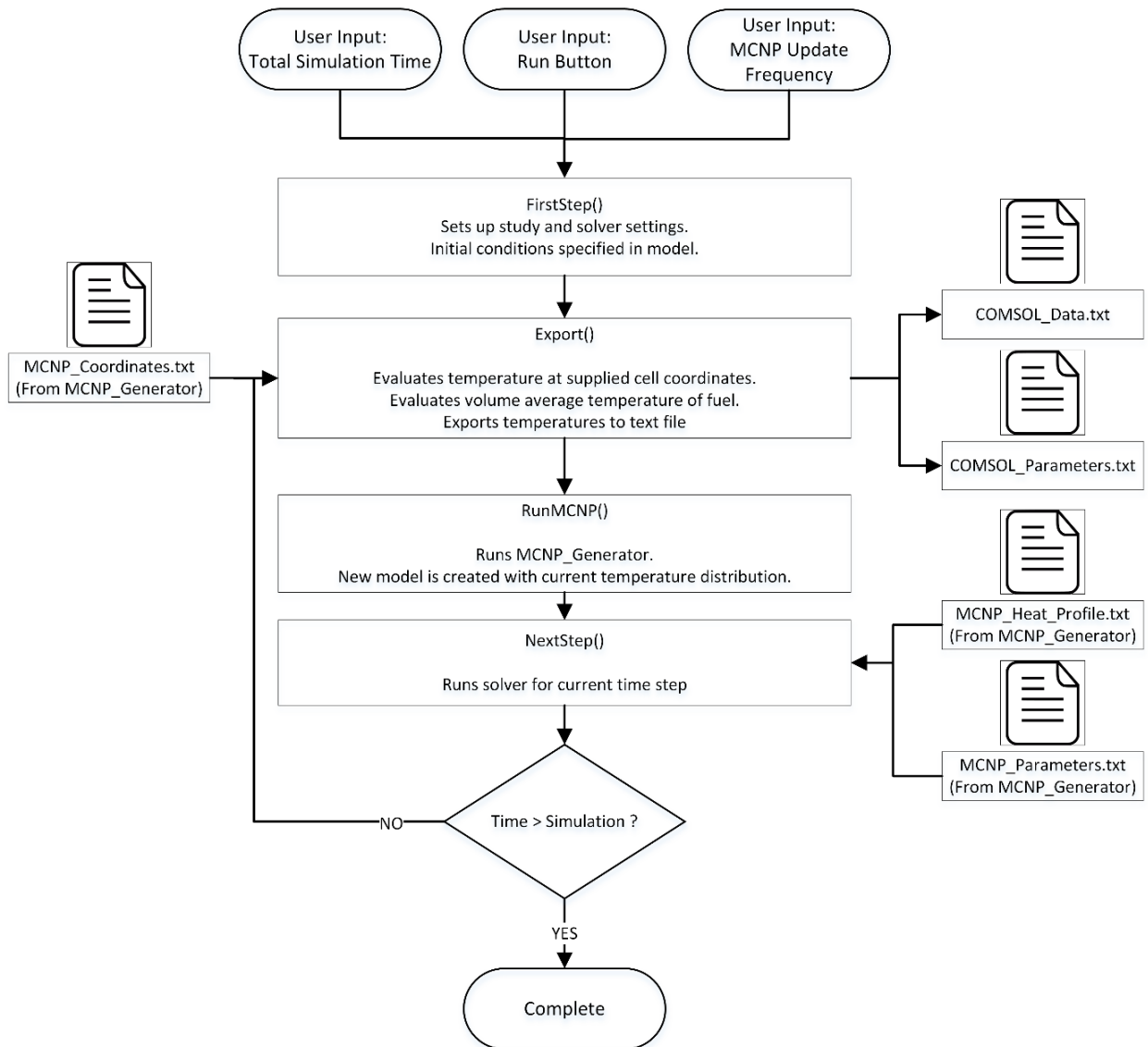


Figure 5.10: COMSOL-MCNP Coupling Logic

Chapter 6: Neutronic Modeling Results

6.1 Code Validation and Verification

For any computer code or simulation, validation and verification of the code are the essential first steps to ensure the model accurately represents the physical phenomena being simulated.

The validation process involves determining the absolute accuracy of code results vs. nature. In typical validations, results are computed for a set of benchmark experiments using a particular methodology (code, cross-section data with uncertainties, and modeling) and compared to the measured results from the set of benchmark experiments. The validation process determines bias, bias uncertainty, and possibly additional margins [20].

For neutronics calculations, MCNP 6 was used because it is well established and used extensively in industry, with code validation already achieved by Los Alamos National Laboratory [21] . It has been validated against numerous benchmark experiments and shows very good agreement with benchmark experimental data. Data from the LEU-SOL-THERM-004 Benchmark is shown in Table 6.1 and shows the MCNP criticality calculations are within 1% of the experimentally measured values [22].

In contrast to validation, verification is “generally conducted by the user of a code and confirms that the model is executed as intended [23].” For the Homogeneous SLOWPOKE, a validation of the model is not possible in the absence of a physical reactor and experimental data. Verification was conducted in previous research

where Gagnon demonstrated agreement between MCNP 5 (a probabilistic code) and WIMS-AECL (a deterministic code) [24].

Table 6.1: Simulation Results for the LEU-SOL-THERM-004 Benchmark

Code (cross section) → Experiment # ↓	Benchmark k_{eff}	Multi-KENO (137-Group MGCL based on JENDL-3.2)	MCNP (Continuous- Energy JENDL-3.2)	MCNP (Continuous- Energy ENDF60 W- 184)
1	0.9994 ± 0.0008	0.9959 ± 0.0007	1.0072 ± 0.0006	0.9992 ± 0.0006
29	0.9999 ± 0.0009	0.9976 ± 0.0007	1.0075 ± 0.0006	0.9996 ± 0.0006
33	0.9999 ± 0.0009	0.9949 ± 0.0006	1.0053 ± 0.0006	0.9984 ± 0.0006

The current research uses MCNP 6, which is considered a significant improvement on MCNP 5. This is primarily due to MCNP 6 using the improved ENDF/B-VII database which includes cross sections of more isotopes and at more temperatures than previous versions, resulting in less error when interpolating cross section data.

Verification of the MCNP_Generator CAE tool and current model, was achieved by first replicating Gagnon’s model, previously verified against WIMS-AECL. Criticality calculations matched Gagnon’s results to within the certainty reported by MCNP.

6.1 Thermal Neutron Flux Distribution

The newly created ability to model a core temperature and density distribution was used to determine the thermal neutron flux profile as a temperature gradient develops in the core. The following section is intended as a qualitative observation of the

thermal neutron flux profile in the core, during a changing distribution of temperature and density of the fuel.

In Figures 6.1 through 6.3, six distinct core profiles are shown, each taken at 100s intervals during a thermohydraulic simulation. Each figure shows the core at two different times and is further split into the temperatures profile (left half) and the corresponding normalized thermal neutron flux profile (right half) for comparison. In the simulation, the reactor core starts with a uniform core temperature and a temperature gradient develops as steady state is approached. As the temperature gradient develops, it can be seen that the shape of the thermal neutron flux (right half) changes very little.

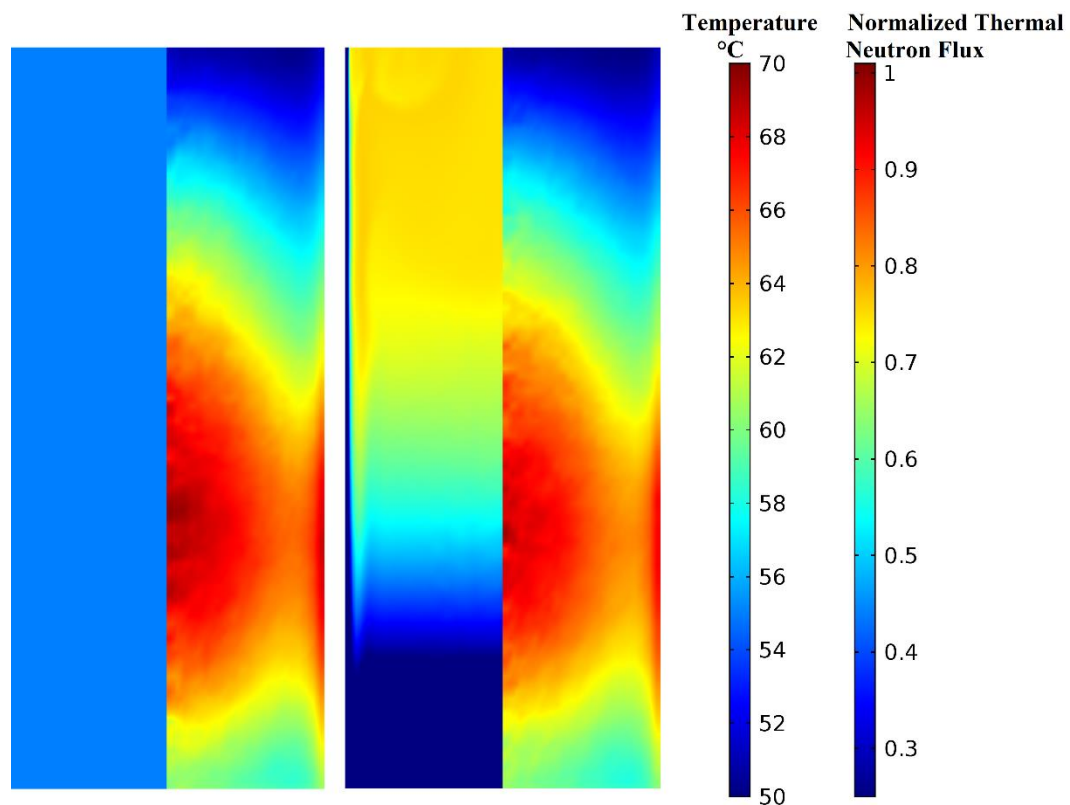


Figure 6.1: Temperature (left half) and Thermal Neutron Flux (right half) as a Temperature Gradient Develops (t=0 to t=100s)

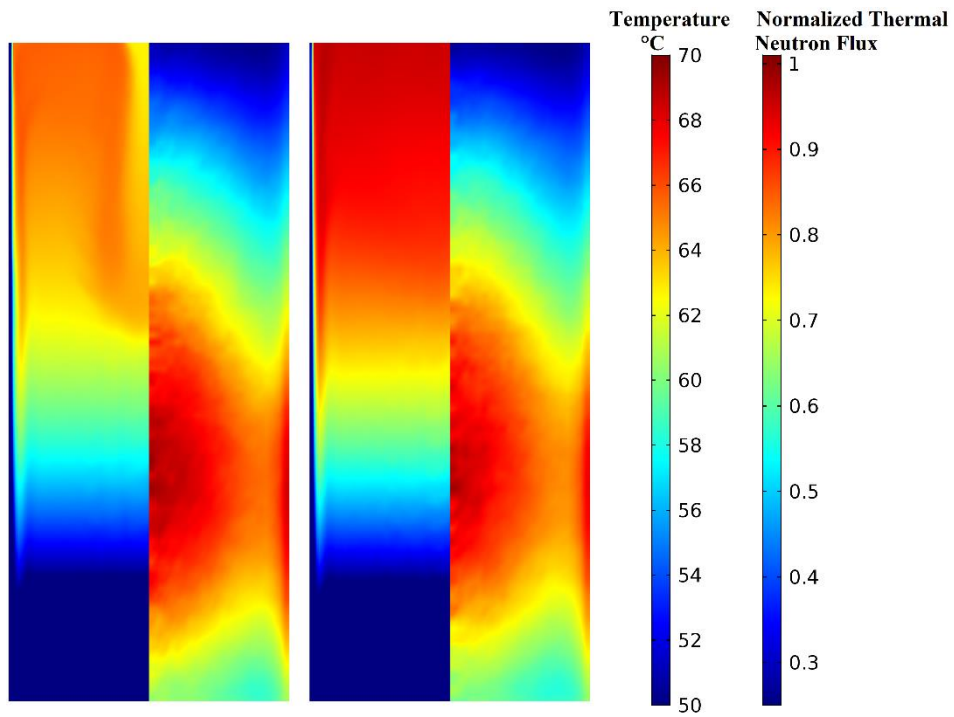


Figure 6.2: Temperature (left half) and Thermal Neutron Flux (right half) as a Temperature Gradient Develops (t=200 to t=300s)

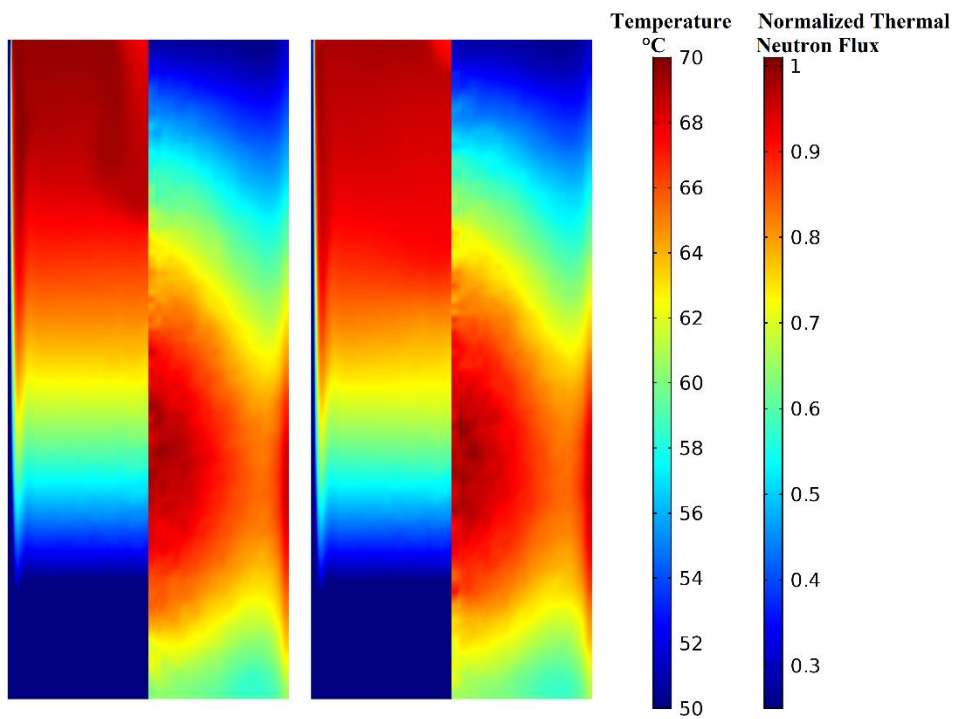


Figure 6.3: Temperature (left half) and Thermal Neutron Flux (right half) as a Temperature Gradient Develops (t=4 to t=500s)

Despite large changes in the distribution of temperature and density, a change in the thermal neutron flux shape is nearly not detectable. This result demonstrates that transient, point kinetic models, where it is assumed that the shape of the thermal neutron flux does not change with time or the operating power of the reactor, are in fact a very good approximation to a true 3 dimensional calculation.

For ease of visual comparison, figures in the following sections will be presented as a difference or percent difference and will use a core with a uniform distribution of temperature and density as the baseline for comparison.

6.2 Effect of the Control Rod Position on Power Distribution

The 5 cadmium control rods used in the Homogeneous SLOWPOKE are designed to maintain criticality and to reduce the excess reactivity by absorbing neutrons. Due to the large negative temperature coefficient of the reactor, the control rods need to be progressively withdrawn for operation at higher temperatures. Although their purpose is to control the overall reactivity, they also significantly suppress the neutron flux profile, and hence power density, locally.

The power density distribution used in prior models was based on a uniform core temperature of 40°C and the control rods fully withdrawn, which is not representative of the true operating conditions. Figure 6.4 shows the percentage difference in power density for the control rods at 0% and 70% inserted. Note this corresponds to steady state reactor operation at an average temperature of approximately 65°C and 30°C.

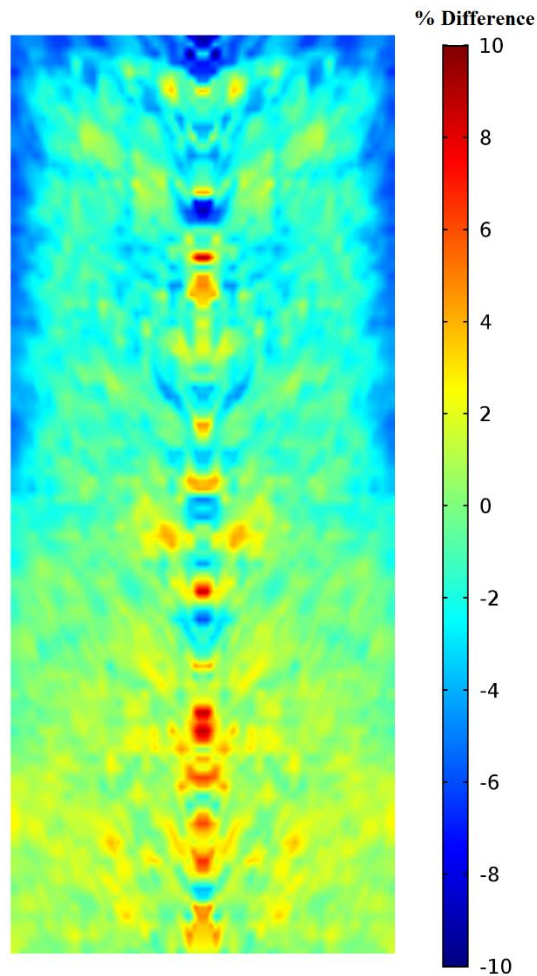


Figure 6.4: Relative Difference in Power Density Distribution due to Control Rods Being Inserted From 0% to 70%

This result demonstrates that, as the control rods are inserted, significantly less heat is produced along the outer wall of the fuel container, and is instead re-distributed to the lower central portion of the core. This local removal of heat effectively increases the rate at which the fuel along the outer wall is cooled by the cooling channels. The cooling of fuel along the container wall and heating of fuel in the center of the core provides the driving force for the convective flow. To properly estimate the cooling potential of the Homogeneous SLOWPOKE in the thermohydraulic model, it is necessary to determine the control rod position as it directly affects the degree of

convective flow within the core, and hence the amount of heat able to be removed by the cooling channels.

6.3 Effect of Fuel Temperature Gradients on Reactivity

Using MCNP_Generator, a series of MCNP models were created to investigate the effect of a vertical fuel temperature gradient on the excess reactivity. Criticality calculations were performed for models with increasing temperature gradients and compared to models with the same average fuel temperature, but with a uniform temperature distribution. The temperature gradient models were constructed to best reflect conditions encountered in thermohydraulic simulations. The temperature gradients were defined by increasing the temperature at the top surface of the fuel, while keeping the fuel at the bottom of the container at 22°C. This resulted in the average core temperatures being higher as the temperature gradient was increased, and is the reason the excess reactivity decreases for increasing temperature gradients, seen in Figure 6.5.

As the temperature gradient increased, a small difference in the excess reactivity developed between the uniform and temperature gradient models. This can be attributed to the relative increase in density in the areas of higher thermal neutron flux in the lower half of the core. In past research, Carlin found the top surface of the fuel reached 92°C at the maximum operating power, while the average fuel temperature was 63°C [6]. As this represents the maximum temperature gradient likely to be experienced during normal operation, this profile was used to determine the extent to which the excess reactivity would be affected.

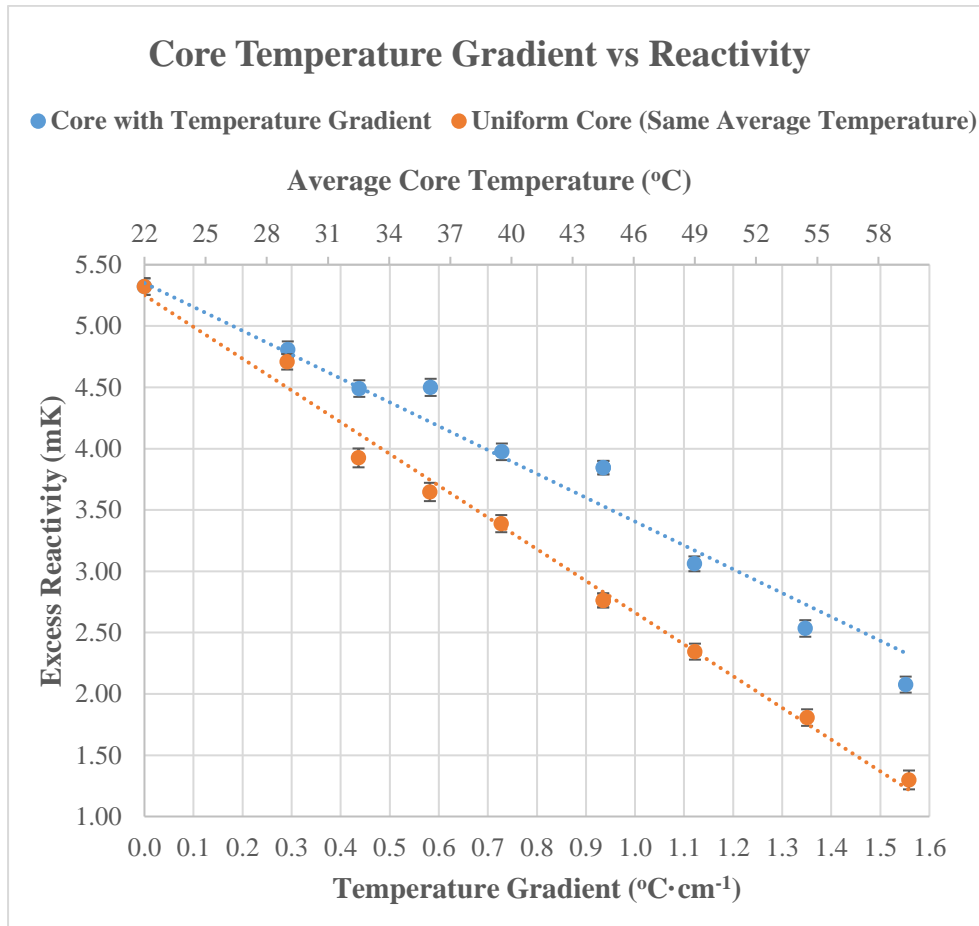


Figure 6.5: Excess Reactivity for Cores with an Increasing Temperature Gradient and Uniform Cores at Same Average Temperature for Comparison

At this maximal temperature gradient, the excess reactivity was calculated to be 0.8mK higher than when using a uniform temperature. This difference is not large enough to require a change to the reactor design, yet could require the necessary fuel concentration to be marginally decreased in future design iterations.

6.4 Effect of Fuel Temperature Gradients on Power Density

The MCNP_Generator tool was used to compute the power density distribution of the Homogeneous SLOWPOKE with a non-uniform fuel temperature.

Figure 6.7 shows the change in power density distribution for operation at 20kW, between a core of uniform temperature and a core having the maximal temperature gradient.

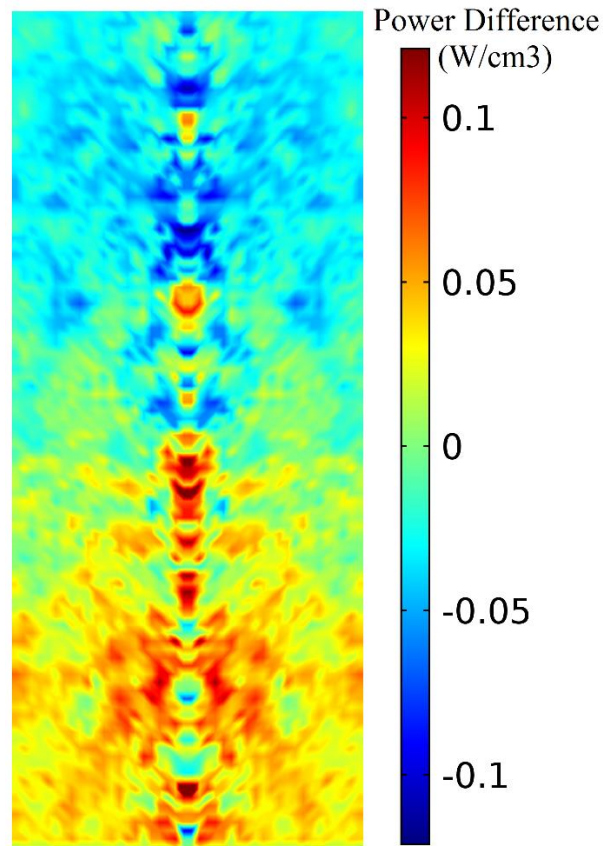


Figure 6.7: Difference in Power Density Between Cores with a Uniformly Distributed Temperature and a Significant Vertical Temperature Gradient

For reference, 20kW uniformly distributed throughout the fuel would give a volumetric heat generation rate of $1.33\text{W}\cdot\text{cm}^{-3}$. The power density is visibly increased towards the bottom of the core where the fuel temperature is lowest and decreased at the warmer areas nearer the fuel's surface.

To numerically quantify this shift, MCNP tallies were set up to capture the total power produced in the top 16cm (approximately one third) and bottom 26.4cm of

fuel and are presented in Table 6.2. These tallies were intended to be of equal size to facilitate comparison; however, a numerical error resulted in the bottom bin having a height of 26.4cm. The results still illustrate and quantify the shift in power density distribution.

Table 6.2: Displacement of Power Due to Maximum Temperature Gradient

Fuel Location	Relative Power Difference From Uniform Temperature	Power Difference From Uniform Temperature for 20kW Operation
Top 16cm	- 1.49%	-65W
Bottom 26.4cm	+ 0.70%	+91W

The small shift in power, with localized differences being in the order of 5% or less, suggests that the formation of hot spots or localized boiling due to the non-rigid core configuration is unlikely or, at best, with insignificant consequences. During further thermohydraulic modeling, it was also noted that these areas of marginally increased power did not result in significantly higher local temperatures, but are quickly dissipated by the natural convection within the fuel, to which they may contribute.

6.5 Fuel Mesh Sensitivity Analysis

A mesh sensitivity analysis was conducted to determine the optimal fuel mesh sizing parameters for MCNP Generator. Using the maximal temperature gradient, MCNP models were generated with an increasingly finer mesh of cells and the k_{eff} was computed, as seen in Figure 6.8.

Since the temperature gradients expected in the Homogeneous SLOWPOKE reactor are largest in the vertical direction, the number of horizontal surfaces (and hence, cell height) used to model the temperature distribution was chosen as the

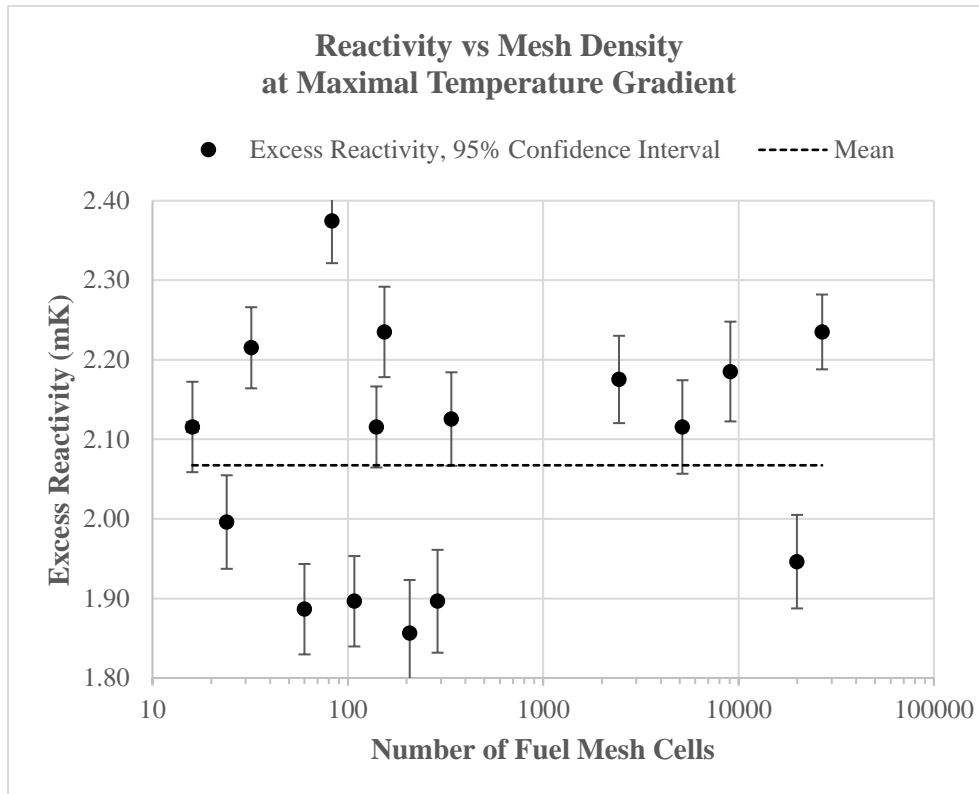


Figure 6.8: Effect of Fuel Mesh Density on Reactivity

independent variable. The number of vertical surfaces used was selected to give cells an equal or smaller length in the radial and azimuthal directions.

For all computations, the average core temperature and temperature gradient remained the same and only the resolution of the fuel mesh was increased. All computed values of k_{eff} remained within $\pm 0.3\text{mK}$ of the mean with no visible correlation between the mesh density and reactivity. Since no statistically significant change in k_{eff} was observed, k_{eff} was not useful to optimize the fuel mesh parameters.

Despite the unchanged k_{eff} value, the change in the heating distribution, was consistent for even a very coarse fuel mesh. The upper and lower power density distribution tallies provided a suitable metric to optimize mesh density. The

percentage of total core heat produced in the top 16cm and bottom 26.4cm as a function of mesh density can be seen in Figure 6.9.

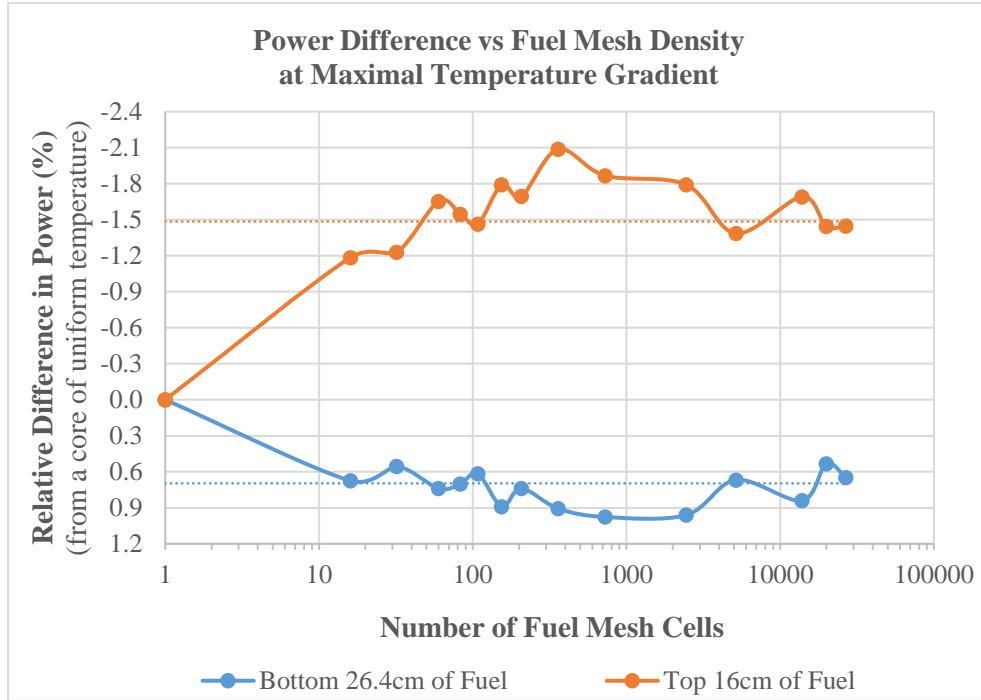


Figure 6.9: Effect of Fuel Mesh Density on Power Distribution

As the number of temperature layers modeled are increased, a distinct shift in power was noticed, but also did not change significantly after further refinement in the mesh, suggesting that even a relatively coarse fuel mesh is sufficient to the model temperature gradients.

Using a standard desktop computer (i7-6700k CPU clocked at 4.2GHz), the time to generate an MCNP input file and compute the k_{eff} and the heat distribution was not noticeably impacted by the number of fuel mesh cells used. The final mesh sizing parameters selected divided the fuel into 100 vertical layers, resulting in the largest dimension of any cell being less than 0.5cm and resulting in approximately 2,500

cells for a 2D temperature distribution and 120,000 cells for a 3D temperature distribution.

Chapter 7: Thermohydraulic Modeling Results

In this research, two thermohydraulic models were used to estimate the ability of natural convection to cool the core of the Homogeneous SLOWPOKE. Neither model by itself is expected to fully and accurately represent the heat transfer and coolant flow in the reactor core, but only estimate the upper and lower limit of the natural convective cooling capability.

A defining characteristic of aqueous homogeneous reactors is the production of radiolytic gas in the fuel which contributes significantly to the negative void coefficient of reactivity and convection in the fuel [25]. The extent to which these phenomena affect the convection and heat transfer from the fuel is beyond the scope of this thesis and leads to the two extreme cases presented.

7.1 Laminar Flow Model

In this model, the heat produced in the fuel is calculated by MCNP and the relative distribution is updated as the temperature distribution changes. All fluid flow in the core and cooling channels are modeled using the Navier-Stokes and continuity equations. The assumption of laminar flow will likely under estimate the heat transfer capability if used where turbulent flows are expected, but serves to estimate the lower bracket to the actual cooling ability [26].

To determine the maximum thermal operating power that would result in an average core temperature of 60°C, numerous simulations at increasing power levels were conducted. All simulations above 2.53kW resulted in average core temperatures increasing to values in excess of 60°C, which are not applicable as they correspond to a sub-critical reactor. The steady state cooling channel outlet velocity,

temperature, and total thermal power of the reactor are presented in Table 7.1 and the flow pattern and temperature distribution can be seen in Figure 7.1.

To ensure the results were converged with respect to the mesh density, the simulation was repeated with further refinements to the mesh.

Table 7.1: Results of the Laminar Flow Model at 2.53kW(th)

Mesh Elements Used	Average Core Temperature (°C)	Cooling Channel Outlet		Thermal Power (kW)
		Velocity (cm·s ⁻¹)	Temperature (°C)	
14,337	59.0	3.0	23.3	2.53
18,054	60.4	2.9	23.4	2.53
38,529	59.3	2.9	22.4	2.53

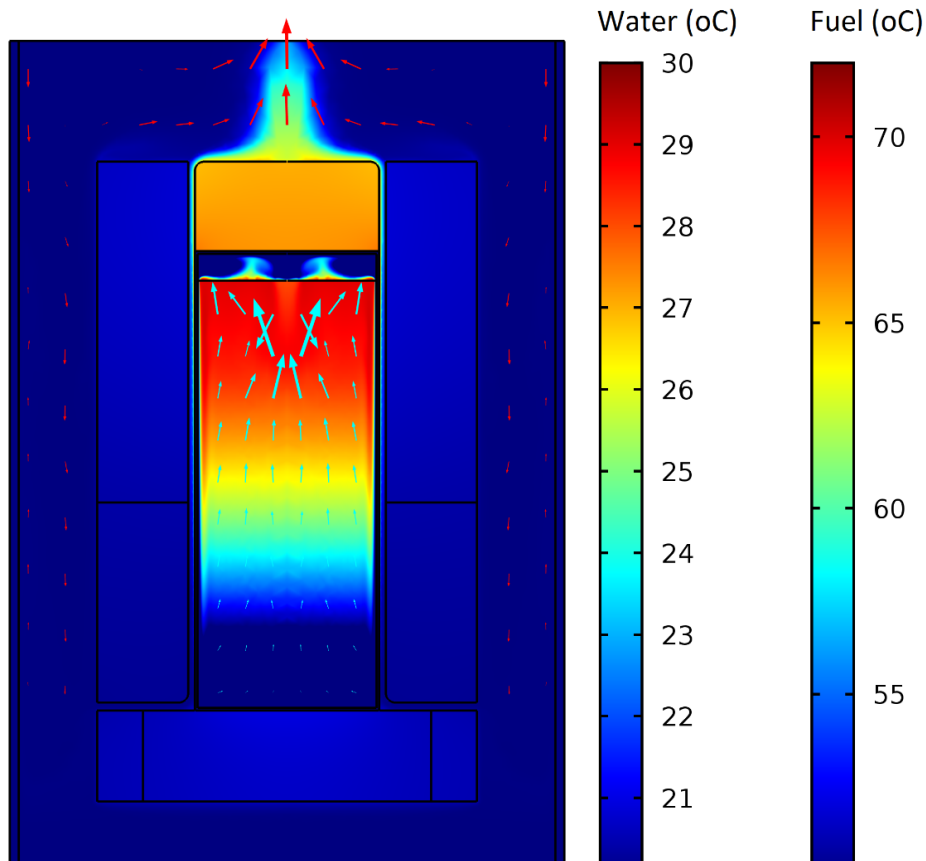


Figure 7.1: Steady State Temperature Distribution and Flow Pattern for the Laminar Model Operating at 2.53kW

7.2 Low Reynolds Number k- ϵ Turbulent Model

In this model, it is assumed that the core is vigorously mixed such that the inner walls of the fuel container are maintained at a uniform 60°C. This serves to estimate the maximal cooling potential of the current cooling channel design. Heat losses from the top and bottom of the fuel container are not considered, but are expected to be small in comparison. The bottom of the fuel container is physically separated from cooling water by the base reflector, and the top of the fuel is insulated from the cooling water by the air gap provided for thermal expansion.

The LRN k- ϵ turbulence model was used to model the coolant flow through the cooling channel and the resulting heat transfer. For the container walls at 60°C, flow in the cooling channel is expected to transition from laminar at the inlet, to fully developed turbulent flow, as indicated by calculation of the Raleigh Number [7]. The cooling channel outlet velocity, temperature, and heat removed from container walls are presented in Table 7.2. To ensure the results were converged with respect to the mesh density, the simulation was repeated with further refinements to the mesh.

Table 7.2: Results of the LRN k- ϵ Turbulence Operating at 60°C

Mesh Elements Used	Core Temperature (°C)	Cooling Channel Outlet		Rate of Heat Removal (kW)
		Velocity (cm·s ⁻¹)	Temperature (°C)	
23,018	60	3.6	21.7	92
59,335	60	4.5	24.2	6.05
71,062	60	4.4	23.8	6.04

Chapter 8: Conclusions

8.1 Neutronic Modelling

This work has shown that a large temperature gradient in the fuel results in a small but measurable impact on both the overall reactivity, as well as the distribution of heat in the core. It was demonstrated that, for the maximum possible temperature gradient, the excess reactivity was +0.8mK higher than for a uniform temperature model. For future neutronic modelling where a significant temperature gradient is expected, it is recommended that this method be employed to better account for core conditions.

The modeling of a large core temperature gradient also resulted in a minor change in the distribution of heat in the fuel. At the maximal gradient, a very small downward shift in heat production occurred which resulted in 0.70% more heat being produced in the bottom 26.4cm of fuel, and 1.49% less heat being produced in the top 16cm. The extent to which this small shift affects the convective flow, degree of turbulence, and overall heat transfer properties of the core was not determined, but is expected to be minimal.

MCNP calculations for highly non-uniform cores also demonstrated that the thermal neutron flux profile is consistent for even large changes to the temperature or density distribution in the fuel. This further validates assumptions necessary for transient, point kinetic models, which can provide a very good approximation to a true 3 dimensional solution.

The Homogeneous SLOWPOKE reactor was shown to be largely insensitive to temperature and density distributions made possible by its non-rigid core configuration. Safety concerns about the formation of localized hot spots or increases in reactivity due to its liquid nature are therefore not justified.

The minimal changes that resulted in no way take away from the validity and utility of the computer-aided engineering approach. The tools developed in this research could easily be adapted to model other processes, such as the production of radiolytic gas bubbles, localized boiling during accident scenarios, or other phenomena, which may or may not result in a greater impact on the overall performance of the reactor.

8.2 Thermohydraulic Modelling

The two thermohydraulic models developed in this research were intended to establish a reasonable upper and lower bracket to the natural convective cooling ability of the Homogeneous SLOWPOKE reactor.

The results from the LRN k- ϵ turbulence model indicate that the current channel configuration could remove up to 6.0kW for a core container maintained at 60°C. This result shows a reasonable agreement with a study conducted by Lounsbury for Suretech Development, where a maximum power of 8kW was recommended [7]. Other than the modelling approach, notable differences from the current LRN k- ϵ model include the thermal resistance of the container, and minor differences in the channel inlet and top reflector geometry.

The laminar flow model underestimates the heat transfer potential, and estimates that a thermal operating power of only 2.53kW is possible.

In the absence of a physical reactor to determine the absolute error of the model, confidence in the result must be questioned appropriately and it must be asked whether or not the results are reasonable.

Given the Homogeneous SLOWPOKE's operating power is limited by the heat transfer into the coolant, the simplest assessment of reasonability can be inferred by looking at the individual factors involved in convective heat transfer, with the SLOWPOKE-2 providing a basis for comparison. Heat transfer from the fuel container or fuel pins into the coolant is given by:

$$Q = hA(T_{ext} - T) \quad (8.1)$$

Looking first at temperatures, the bulk fluid temperature is the same for both reactors meaning only the surface temperature of the fuel container or fuel pins is significant. For the Homogeneous SLOWPOKE, the average core temperature is limited to 63°C due to the large negative temperature coefficient of reactivity. The surface temperature of the fuel container will always be less than this due to the thermal resistance of the container material and also the convective heat transfer on the inside of the container. Fuel pins in the SLOWPOKE-2 are solid and thermal resistance is a function of the gap between the fuel pellet and sheath. Determining the centreline or surface temperature of fuel pins in the SLOWPOKE-2 reactor are outside of the scope of this research, but are expected to be higher than 60°C.

The most complex factor is the convective heat transfer coefficient. This is perhaps the most difficult to compare quantitatively. It is dependant on numerous factors including the core geometry, aspect ratio of the fuel elements, flow velocity in the

cooling channels, and thermal boundary layer thickness of the coolant. Non-dimensional correlations are not expected to be useful given the complex geometry of the SLOWPOKE-2's fuel bundle.

The area through which the heat is removed is another factor for comparison. All other factors held constant, the difference in surface area between the Homogeneous SLOWPOKE and the SLOWPOKE-2 can provide a reasonable estimate for the cooling capability of the Homogeneous SLOWPOKE. Table 8.1 provides a comparison between the wetted heat transfer area of the Homogeneous SLOWPOKE and the SLOWPOKE-2.

Table 8.1: Heat Transfer Areas of the SLOWPOKE-2 and the Homogeneous SLOWPOKE Reactors

Parameter	SLOWPOKE-2	Homogeneous SLOWPOKE
Fuel Pins / Container	198	1
Radius (cm)	0.526	10.3
Wetted Height (cm)	23.65	47.75
Aspect Ratio	44.96	4.63
Wetted Area (cm ²)	7,738	3,090
Relative Area	100%	40%

Given the above analysis, a maximum operating power of 40% of the SLOWPOKE-2's maximum power would be considered reasonable. This gives an estimate of 7.98kW and does not account for the difference in surface temperatures.

The present research and all previous thermohydraulic modelling to date for the Homogeneous SLOWPOKE indicate that the desired thermal power of 20kW is not achievable with the present design. Alternative designs should be considered which incorporate an active cooling system (forced convection), or significantly optimize the core design for improved heat transfer.

Chapter 9: Recommendations

Numerous design modifications should be investigated to improve the heat transfer from the core. From a thermodynamics perspective, the hottest portion of a system is the ideal location for a heat exchanger. In the present design, the hottest portion of the fuel is insulated from the coolant by the air gap. An investigation into the feasibility of replacing the air gap with an expansion tank of equivalent volume, situated well above the top reflector and forming part of the off-gas tube, is suggested. The top reflector may then be designed to act as a heat sink or incorporate a coil from an active cooling system. This concept may also help to mitigate reactivity insertions from accidental tank overfilling, and amplify the desirable characteristics associated with radiolytic gas production during transients, as the overfilled volume would be away from the high flux areas in the core.

The following recommendations were initially made by Carlin and Gagnon in past work and have yet to be addressed [5] [6]. These are only some of the many issues which would need to be addressed before a Homogeneous SLOWPOKE reactor could be considered a viable design. The tools created in this work may be a useful tool in the analysis of these areas.

- A continued investigation of methods to decrease the possible reactivity insertion due to tank overfill is strongly recommended. A tank overfill was the only scenario which could put the reactor into an unsafe state resulting from high power pulses and boiling of the fuel solution.
- Further work on a radiolytic gas modeling should be investigated as this is a strong operational characteristic of an aqueous homogeneous reactor. High

radiolytic gas production during transients is something which will influence the reactors response, and the resulting gas plume must be dealt with to eliminate hydrogen gas buildup and loss of reactor water.

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Appendix A: MCNP Generator Source Code

C:\Users\Brent\Desktop\Demo\Slowpoke V2.cpp

1

```
// Brent Limbeek
// Homogeneous Slowpoke
// MCNP Generator

#define _USE_MATH_DEFINES

#include <iostream>
#include <fstream>
#include <string>
#include <cmath>
#include <iomanip>
#include <conio.h>

using namespace std;

//Options
int R = 50; //Number of radial layers (R=50)
int P = 3; //Number of azimuthal planes. Sections = 2*P
int Z = 100; //Number of vertical sections. 2 more added in code
(Z=100)

const int MaxCells = 30000; //Number of fuel matrix cells: Max ~ (1+2PR)(Z+2)+(2Z)
const int SurfaceStart = 1000; //Starting number of generated surfaces
const int CellStart = 1000; //Starting number of generated cells
bool D3 = false; //Option for 3D or 2D COMSOL model
bool Teqn = false; //Option to specify cell temperatures with equation
const char* MCNP_Inp = "C:\\Users\\Brent\\Desktop\\Demo\\Model.in"; //Path and name of MCNP Input File
const char* MCNP_Out = "C:\\Users\\Brent\\Desktop\\Demo\\Model.out"; //Path and name of MCNP Output File
const char* Cell_Coords = "C:\\Users\\Brent\\Desktop\\Demo\\MCNP_Coordinates.txt"; //Path and name of cell coordinates
const char* COMSOL_Data = "C:\\Users\\Brent\\Desktop\\Demo\\COMSOL_Data.txt"; //Path and name of temperature distribution from COMSOL
const char* COMSOL_Param = "C:\\Users\\Brent\\Desktop\\Demo\\COMSOL_Parameters.txt"; //Path and name of parameters calculated by COMSOL
const char* MCNP_bat = "C:\\Users\\Brent\\Desktop\\Demo\\Run.bat"; // .bat script to run MCNP files
const char* meshtal = "C:\\Users\\Brent\\Desktop\\Demo\\meshtal"; //Location of meshtal file generated by MCNP
const char* profile = "C:\\Users\\Brent\\Desktop\\Demo\\MCNP_Heat_Profile.txt"; //Heat profile for use in COMSOL
const char* parameters = "C:\\Users\\Brent\\Desktop\\Demo\\MCNP_Parameters.txt"; //Parameters for use in COMSOL
const char* done = "C:\\Users\\Brent\\Desktop\\Demo\\MCNP_Done.txt"; //File indicating MCNP is not running
const char* runtpe = "C:\\Users\\Brent\\Desktop\\Demo\\runtpe"; //MCNP files not used
const char* srctp = "C:\\Users\\Brent\\Desktop\\Demo\\srctp"; //MCNP files not used
const char* datalog = "C:\\Users\\Brent\\Desktop\\Demo\\datalog.txt"; //File for auto generation of data sets

//Reactor Variables
double CtrIRodInsertion; //Percentage of control rod insertion (0 - 100);
const double Fuel_Molarity = 1.3519; //Fuel Molarity at 200C
const double Vnominal = 15; //Volume of Fuel (L @ 200C) in reactor;
double Fuel_TempAvg; //Fuel Temperature (oC) from COMSOL Data
double Fuel_DensityAvg; //Average Density Value from COMSOL;
double Vthermal; //Fuel Volume at temperature
double Keff = 0; //MCNP calculated value of Keff
double Sdev; //Standard deviation of Keff
double mK;
double GenTime; //MCNP calculated value of Neutron Generation Time
double RossiAlpha; //MCNP calculated value of Rossi Alpha
double Beff; //MCNP calculated value of Beta Effective
double t; //COMSOL simulation time;
bool COMSOLData = false; //Flag if data was read from COMSOL;

//Reactor Parameters
const double FuelBP = 10.46; //Bottom plane of fuel (z coordinate)
const double FuelTP; //Top plane of fuel (z coordinate) (59.246 in past work)
const double FuelR = 10; //Outer Radius of fuel (ID Container)
const double FITBP = 55; //Bottom Plane of FiT (z coordinate)
const double FoTBP = 15; //Bottom Plane of FoT (z coordinate)
const int SFoTOD = 301; //Surface number of FoT OD
const int SFoTID = 302; //Surface number of FoT ID
const int SFITOD = 401; //Surface number of FiT OD
const int SFITID = 402; //Surface number of FiT ID

//Variables
int i; //counter
int r; //Radial layer counter
int s; //Azimuthal section counter
int z; //Height layer counter
double dz;
double dr;
double dtheta;
int Surface; //Surface number counter
int SurfaceFinal; //Last generated surface number
int Rstart; //index of first radial surface
int RFinal; //index of last radial surface
int Zstart; //index of first vertical plane
int ZFoT; //index of bottom surface of FoT
int ZFiT; //index of bottom surface of FiT
int ZFinal; //index of last vertical plane
int Pstart; //index of first azimuthal plane surface
```

```

int PFinal; //index of first final azimuthal plane surface
int Cell; //Cell number counter
int CellFinal; //Last generated cell number

//Fuel Matrix Variables [Cell#]: Cell 1000 = 0, etc
double Density[MaxCells]; //Cell Density (g/cm^3)
string den; //String representation of density value
double TMP[MaxCells]; //Cell Temperature (MeV)
string tmp; //String representation of tmp value
double Xcoord[MaxCells]; //MCNP X Coordinate (cm)
double Ycoord[MaxCells]; //MCNP Y Coordinate (cm)
double Zcoord[MaxCells]; //MCNP Z Coordinate (cm)
double wU238, wU235;
double wO, wS, wD, wH;
double Ttop, Tbot;
double Qtot, Qbot, Qtop;

ofstream outfile;
ifstream infile;

double CalcDensity(double T) {
    //Converts to density[g/cm^3] from Temperature [K]
    return ((303.7*Fuel_Molarity) + 838.466135 + 1.40050603*T - 0.0030112376*T*T + 0.000000371822313*T*T*T) / 1000;
}

void UserCellCards(void) {
    outfile << "c \n";
    outfile << left << setw(80) << setfill('=') << "c === User Generated Cell Cards" << "\n";
    outfile << "c Cell# Mat Density Surf Parameters Comments \n";
    outfile << "c \n";
    outfile << "c Core and Container(40 C) \n";
    outfile << "1 1 -6.549 -61 60 51 -53 IMP:n=1 TMP=2.6984e-8 $ fuel container cylinder \n";
    outfile << "2 1 -6.549 53 -55 -61 301 401 501 IMP:n=1 TMP=2.6984e-8 $ fuel container top plate \n";
    outfile << "3 1 -6.549 50 -51 -61 IMP:n=1 TMP=2.6984e-8 $ fuel container base plate \n";
    outfile << "4 8 0.0010965 -60 52 -53 301 401 IMP:n=1 TMP=2.6984e-8 $ air gap in container(moist air) \n";
    outfile << "c \n";
    outfile << "c Control Rods(x5) \n";
    outfile << "130 7 -8.65 -221 205 -207 IMP:n=1 TMP=2.53e-8 $ rod site 1 \n";
    outfile << "131 6 -2.7 -211 204 -206 (207 : -205 : 221) IMP:n=1 TMP=2.53e-8 $ cladding site 1 \n";
    outfile << "230 7 -8.65 -222 205 -207 IMP:n=1 TMP=2.53e-8 $ rod site 2 \n";
    outfile << "231 6 -2.7 -212 204 -206 (207 : -205 : 222) IMP:n=1 TMP=2.53e-8 $ cladding Site 2 \n";
    outfile << "330 7 -8.65 -223 205 -207 IMP:n=1 TMP=2.53e-8 $ rod site 3 \n";
    outfile << "331 6 -2.7 -213 204 -206 (207 : -205 : 223) IMP:n=1 TMP=2.53e-8 $ cladding site 3 \n";
    outfile << "430 7 -8.65 -224 205 -207 IMP:n=1 TMP=2.53e-8 $ rod site 4 \n";
    outfile << "431 6 -2.7 -214 204 -206 (207 : -205 : 224) IMP:n=1 TMP=2.53e-8 $ cladding site 4 \n";
    outfile << "530 7 -8.65 -225 205 -207 IMP:n=1 TMP=2.53e-8 $ rod site 5 \n";
    outfile << "531 6 -2.7 -215 204 -206 (207 : -205 : 225) IMP:n=1 TMP=2.53e-8 $ cladding site 5 \n";
    outfile << "c \n";
    outfile << "c Original Reflector Annulus \n";
    outfile << "19 2 -1.85 3 -5 11 -12 IMP:n=1 TMP=2.53e-8 $ lower reflector annulus(1 piece) \n";
    outfile << "20 2 -1.85 5 -4 11 -12 600 604 14 IMP:n=1 TMP=2.53e-8 $ region 1, 10h30 to 1330 \n";
    outfile << "21 2 -1.85 5 -4 11 -12 600 601 13 IMP:n=1 TMP=2.53e-8 $ region 2, 13h30 to 15h30 \n";
    outfile << "22 2 -1.85 5 -4 11 -12 602 -601 17 IMP:n=1 TMP=2.53e-8 $ region 3, 03h30 to 06h00 \n";
    outfile << "23 2 -1.85 5 -4 11 -12 -603 -602 16 IMP:n=1 TMP=2.53e-8 $ region 4, 06h00 to 08h30 \n";
    outfile << "24 2 -1.85 5 -4 11 -12 -604 603 15 IMP:n=1 TMP=2.53e-8 $ region 5, 08h30 to 10h30 \n";
    outfile << "c \n";
    outfile << "c Additional Reflector Annulus(above original annulus) GRAPHITE \n";
    outfile << "25 3 -1.7 4 -56 11 -12 600 604 14 IMP:n=1 TMP=2.53e-8 $ region 1, 10h30 to 133h30 \n";
    outfile << "26 3 -1.7 4 -56 11 -12 -600 601 13 IMP:n=1 TMP=2.53e-8 $ region 2, 13h30 to 15h30 \n";
    outfile << "27 3 -1.7 4 -56 11 -12 602 -601 17 IMP:n=1 TMP=2.53e-8 $ region 3, 03h30 to 06h00 \n";
    outfile << "28 3 -1.7 4 -56 11 -12 -603 -602 16 IMP:n=1 TMP=2.53e-8 $ region 4, 06h00 to 08h30 \n";
    outfile << "29 3 -1.7 4 -56 11 -12 -604 603 15 IMP:n=1 TMP=2.53e-8 $ region 5, 08h30 to 10h30 \n";
    outfile << "c \n";
    outfile << "c Additional Top Reflector(above reactor container) GRAPHITE \n";
    outfile << "120 3 -1.7 55 -56 -61 600 604 501 IMP:n=1 TMP=2.53e-8 $ region 1, 10h30 to 13h30 \n";
    outfile << "121 3 -1.7 55 -56 -61 -600 601 401 IMP:n=1 TMP=2.53e-8 $ region 2, 13h30 to 15h30 \n";
    outfile << "122 3 -1.7 55 -56 -61 602 -601 IMP:n=1 TMP=2.53e-8 $ region 3, 03h30 to 06h00 \n";
    outfile << "123 3 -1.7 55 -56 -61 -603 -602 16 IMP:n=1 TMP=2.53e-8 $ region 4, 06h00 to 08h30 \n";
    outfile << "124 3 -1.7 55 -56 -61 -604 603 301 IMP:n=1 TMP=2.53e-8 $ region 5, 08h30 to 10h30 \n";
    outfile << "c \n";
    outfile << "c Original Base Reflector BERYLLIUM \n";
    outfile << "15 2 -1.85 1 -2 -10 IMP:n=1 TMP=2.53e-8 $ base reflector \n";
    outfile << "c \n";
    outfile << "c Added Donut OD Base Reflector GRAPHITE \n";
    outfile << "16 3 -1.7 1 -2 10 -12 IMP:n=1 TMP=2.53e-8 $ donut reflector \n";
    outfile << "c \n";
    outfile << "c Inner irradiation sites \n";
    outfile << "90 9 0.0011845 6 -113 -141 (206 :-204 : 211) IMP:n=1 TMP=2.53e-8 $ site #1, rod + air \n";
    outfile << "91 9 0.0011845 6 -113 -131 (206 :-204 : 212) IMP:n=1 TMP=2.53e-8 $ site #2, rod + air \n";
    outfile << "92 9 0.0011845 6 -113 -171 (206 :-204 : 213) IMP:n=1 TMP=2.53e-8 $ site #3, rod + air \n";
    outfile << "93 9 0.0011845 6 -113 -161 (206 :-204 : 214) IMP:n=1 TMP=2.53e-8 $ site #4, rod + air \n";
    outfile << "94 9 0.0011845 6 -113 -151 (206 :-204 : 215) IMP:n=1 TMP=2.53e-8 $ site #5, rod + air \n";
}

```

```

outfile << "100 6 -2.7 6 -113 -14 141 IMP:n=1 TMP=2.53e-8 $ site #1, Al shell \n";
outfile << "101 6 -2.7 6 -113 -13 131 IMP:n=1 TMP=2.53e-8 $ site #2, Al shell \n";
outfile << "102 6 -2.7 6 -113 -17 171 IMP:n=1 TMP=2.53e-8 $ site #3, Al shell \n";
outfile << "103 6 -2.7 6 -113 -16 161 IMP:n=1 TMP=2.53e-8 $ site #4, Al shell \n";
outfile << "104 6 -2.7 6 -113 -15 151 IMP:n=1 TMP=2.53e-8 $ site #5, Al shell \n";
outfile << "105 6 -2.7 5 -6 -14 IMP:n=1 TMP=2.53e-8 $ site #1, Al bottom plate \n";
outfile << "106 6 -2.7 5 -6 -13 IMP:n=1 TMP=2.53e-8 $ site #2, Al bottom plate \n";
outfile << "107 6 -2.7 5 -6 -17 IMP:n=1 TMP=2.53e-8 $ site #3, Al bottom plate \n";
outfile << "108 6 -2.7 5 -6 -16 IMP:n=1 TMP=2.53e-8 $ site #4, Al bottom plate \n";
outfile << "109 6 -2.7 5 -6 -15 IMP:n=1 TMP=2.53e-8 $ site #5, Al bottom plate \n";
outfile << "c \n";
outfile << "c Outer irradiation Sites \n";
outfile << "190 9 0.0011854 7 -113 -163 IMP:n=1 TMP=2.53e-8 $ site #1, dry air fill \n";
outfile << "191 9 0.0011854 7 -113 -154 IMP:n=1 TMP=2.53e-8 $ site #2, dry air fill, Cd lined \n";
outfile << "192 9 0.0011854 7 -113 -143 IMP:n=1 TMP=2.53e-8 $ site #3, dry air fill \n";
outfile << "193 9 0.0011854 7 -113 -133 IMP:n=1 TMP=2.53e-8 $ site #4, dry air fill, large bore \n";
outfile << "194 9 0.0011854 7 -113 -173 IMP:n=1 TMP=2.53e-8 $ site #5, dry air fill \n";
outfile << "200 6 -2.7 7 -113 -162 163 IMP:n=1 TMP=2.53e-8 $ site #1, Al shell \n";
outfile << "201 6 -2.7 7 -113 -153 154 IMP:n=1 TMP=2.53e-8 $ site #2, Al shell, Cd lined \n";
outfile << "202 6 -2.7 7 -113 -142 143 IMP:n=1 TMP=2.53e-8 $ site #3, Al shell \n";
outfile << "203 6 -2.7 7 -113 -132 133 IMP:n=1 TMP=2.53e-8 $ site #4, Al shell, large bore \n";
outfile << "204 6 -2.7 7 -113 -172 173 IMP:n=1 TMP=2.53e-8 $ site #5, Al shell \n";
outfile << "205 6 -2.7 3 -7 -162 IMP:n=1 TMP=2.53e-8 $ site #1, Al bottom plate \n";
outfile << "206 6 -2.7 3 -7 -153 IMP:n=1 TMP=2.53e-8 $ site #2, Al bottom plate \n";
outfile << "207 6 -2.7 3 -7 -142 IMP:n=1 TMP=2.53e-8 $ site #3, Al bottom plate \n";
outfile << "208 6 -2.7 3 -7 -132 IMP:n=1 TMP=2.53e-8 $ site #4, Al bottom plate \n";
outfile << "209 6 -2.7 3 -7 -172 IMP:n=1 TMP=2.53e-8 $ site #5, Al bottom plate \n";
outfile << "211 6 -8.65 3 -56 -152 153 IMP:n=1 TMP=2.53e-8 $ site #2, Cd lining \n";
outfile << "c \n";
outfile << "c Fuel Inlet, Fuel Outlet & Gas Removal Tube(40 C) \n";
outfile << "300 1 -6.59 300 -301 302 -113 IMP:n=1 TMP=2.6984e-8 $ Outlet tube \n";
outfile << "400 1 -6.59 400 -401 402 -113 IMP:n=1 TMP=2.6984e-8 $ Inlet tube \n";
outfile << "500 1 -6.59 53 -501 502 -113 IMP:n=1 TMP=2.6984e-8 $ gas removal tube \n";
outfile << "301 8 0.0010965 52 -113 -302 IMP:n=1 TMP=2.6984e-8 $ moist air above FoT \n";
outfile << "401 8 0.0010965 52 -113 -402 IMP:n=1 TMP=2.6984e-8 $ moist air above FIT \n";
outfile << "501 8 0.0010965 53 -502 -113 IMP:n=1 TMP=2.6984e-8 $ moist air inside gas removal tube \n";
outfile << "c \n";
outfile << "c Water Above Entire Core(inside shell) (25 C) \n";
outfile << "45 5 -0.99658 56 -113 -100 600 604 501 14 162 IMP:n=1 TMP=2.5692e-8 $ region 1, 10h30 -13h30 \n";
outfile << "46 5 -0.99658 56 -113 -100 -600 601 401 13 153 IMP:n=1 TMP=2.5692e-8 $ region 2, 13h30 -15h30 \n";
outfile << "47 5 -0.99658 56 -113 -100 602 -601 17 142 IMP:n=1 TMP=2.5692e-8 $ region 3, 03h30 -06h30 \n";
outfile << "48 5 -0.99658 56 -113 -100 -603 -602 16 132 IMP:n=1 TMP=2.5692e-8 $ region 4, 06h30 -08h30 \n";
outfile << "49 5 -0.99658 56 -113 -100 -604 603 301 15 172 IMP:n=1 TMP=2.5692e-8 $ region 5, 08h30-10h30 \n";
outfile << "c \n";
outfile << "c Water OD Reflector Annulus(inside shell) (25 C) \n";
outfile << "55 5 -0.99180 -100 3 -56 12 600 604 162 IMP:n=1 TMP=2.5692e-8 $ OD original region 1, 10h30 -13h30 \n";
outfile << "56 5 -0.99180 -100 3 -56 12 -600 601 152 IMP:n=1 TMP=2.5692e-8 $ OD original region 2, 10h30 -13h30 \n";
outfile << "57 5 -0.99180 -100 3 -56 12 602 -601 142 IMP:n=1 TMP=2.5692e-8 $ OD original region 3, 13h30 -15h30 \n";
outfile << "58 5 -0.99180 -100 3 -56 12 -603 -602 132 IMP:n=1 TMP=2.5692e-8 $ OD original region 4, 03h30 -06h30 \n";
outfile << "59 5 -0.99180 -100 3 -56 12 -604 603 172 IMP:n=1 TMP=2.5692e-8 $ OD original region 4, 06h30 -08h30 \n";
outfile << "c \n";
outfile << "c Water Remainder(inside shell) (25 C) \n";
outfile << "40 5 -0.99180 61 -11 3 -56 IMP:n=1 TMP=2.5692e-8 $ vertical cooling channel \n";
outfile << "c \n";
outfile << "c Water Remainder(inside shell) (25 C) \n";
outfile << "41 5 -0.99658 2 -3 -100 61 IMP:n=1 TMP=2.5692e-8 $ water above base below annulus \n";
outfile << "43 5 -0.99658 -2 1 12 -100 IMP:n=1 TMP=2.5692e-8 $ water OD donut reflector \n";
outfile << "44 5 -0.99658 -1 110 -100 IMP:n=1 TMP=2.5692e-8 $ water below base reflector \n";
outfile << "c \n";
outfile << "c Pool(outside reactor shell) (25 C) \n";
outfile << "60 5 -0.99778 -111 112 -101 IMP:n=1 TMP=2.5692e-8 $ pool below reactor shell \n";
outfile << "61 5 -0.99778 101 -102 112 -113 IMP:n=1 TMP=2.5692e-8 $ pool OD reactor \n";
outfile << "c \n";
outfile << "c Reactor Shell \n";
outfile << "72 6 -2.7 100 -101 110 -113 IMP:n=1 TMP=2.53e-8 $ shell cylinder \n";
outfile << "73 6 -2.7 -110 111 -101 IMP:n=1 TMP=2.53e-8 $ shell base plate \n";
outfile << "c \n";
outfile << "c Outside Voids \n";
outfile << "70 0 (113 :-112 : 102) -999 IMP:n=1 $ OD pool void \n";
outfile << "999 0 999 IMP:n=0 $ outside world \n";
outfile << "\n"; //End of Cell Cards
}

void UserSurfaceCards(void) {
outfile << "c \n";
outfile << left << setw(80) << setfill('=') << "c ==== User Generated Surface Cards" << "\n";
outfile << "c Surface# Type Parameters Comments \n";
outfile << "1 px 0 $ bottom plane of base reflector \n";
outfile << "2 px 10.16 $ top plane of base reflector \n";
outfile << "3 px 10.668 $ bottom plane of original reflector annulus \n";
outfile << "4 px 33.416 $ top plane of original reflector annulus \n";
outfile << "5 px 17.668 $ bottom plane of inner irradiation sites(out) \n";
outfile << "6 px 17.83308 $ bottom plane of inner irradiation sites(in) \n";
outfile << "7 px 10.83308 $ bottom plane of outer irradiation sites(in) \n";
}

```

```

outfile << "10 cx 16.11 $ OD base reflector \n";
outfile << "11 cx 11.049 $ ID reflector annulii \n";
outfile << "12 cx 21.2344 $ OD reflector annulii \n";
outfile << "50 px 10.16 $ bottom plane of fuel container(out) \n";
outfile << "51 px 10.46 $ bottom plane of fuel container(in) \n";
outfile << "53 px 61.2 $ top plane of fuel container(in) \n";
outfile << "55 px 61.5 $ top plane of fuel container(out) \n";
outfile << "56 px 71.5 $ top plane of top and added annulus reflectors \n";
outfile << "60 cx 10 $ ID fuel container \n";
outfile << "61 cx 10.3 $ OD fuel container \n";
outfile << "c \n";
outfile << "c Control Rod Boundaries \n";
outfile << "211 c/x 4.49985 13.84911 0.35 $ OD rod cladding site 1 \n";
outfile << "221 c/x 4.49985 13.84911 0.15 $ OD control rod site 1 \n";
outfile << "212 c/x 14.56182 0 0.35 $ OD rod cladding site 2 \n";
outfile << "222 c/x 14.56182 0 0.15 $ OD control rod site 2 \n";
outfile << "213 c/x 4.49985 -13.84911 0.35 $ OD rod cladding site 3 \n";
outfile << "223 c/x 4.49985 -13.84911 0.15 $ OD control rod site 3 \n";
outfile << "214 c/x -11.78076 -8.55972 0.35 $ OD rod cladding site 4 \n";
outfile << "224 c/x -11.78076 -8.55972 0.15 $ OD control rod site 4 \n";
outfile << "215 c/x -11.78076 8.55972 0.35 $ OD rod cladding site 5 \n";
outfile << "225 c/x -11.78076 8.55972 0.15 $ OD control rod site 5 \n";
outfile << "c \n";
outfile << "100 cx 30 $ ID reactor shell \n";
outfile << "101 cx 31 $ OD reactor shell \n";
outfile << "102 c/x 30 30 133 $ OD pool \n";
outfile << "110 px -8 $ top plane reactor shell base plate \n";
outfile << "111 px -9 $ bottom plane reactor shell base plate \n";
outfile << "112 px -31 $ bottom plane pool \n";
outfile << "113 px 533 $ top plane pool \n";
outfile << "c \n";
outfile << "c Inner Irradiation Site Boundaries \n";
outfile << "14 c/x 4.49985 13.84911 1.56718 $ OD shell inner site 1 \n";
outfile << "141 c/x 4.49985 13.84911 1.4021 $ ID shell inner site 1 \n";
outfile << "13 c/x 14.56182 0 1.56718 $ OD shell inner site 2 \n";
outfile << "131 c/x 14.56182 0 1.4021 $ ID shell inner site 2 \n";
outfile << "17 c/x 4.49985 -13.84911 1.56718 $ OD shell inner site 3 \n";
outfile << "171 c/x 4.49985 -13.84911 1.4021 $ ID shell inner site 3 \n";
outfile << "16 c/x -11.78076 -8.55972 1.56718 $ OD shell inner site 4 \n";
outfile << "161 c/x -11.78076 -8.55972 1.4021 $ ID shell inner site 4 \n";
outfile << "15 c/x -11.78076 8.55972 1.56718 $ OD shell inner site 5 \n";
outfile << "151 c/x -11.78076 8.55972 1.4021 $ ID shell inner site 5 \n";
outfile << "c \n";
outfile << "c Outer Irradiation Site Boundaries \n";
outfile << "162 c/x -7.146 22.825 1.56718 $ OD shell outer site 1 \n";
outfile << "163 c/x -7.146 22.825 1.4021 $ ID shell outer site 1 \n";
outfile << "152 c/x 19.416 14.107 1.61798 $ OD Cd lining site 2 \n";
outfile << "153 c/x 19.416 14.107 1.56718 $ OD shell outer site 2 \n";
outfile << "154 c/x 19.416 14.107 1.4021 $ ID shell outer site 2 \n";
outfile << "142 c/x 19.416 -14.107 1.56718 $ OD shell outer site 3 \n";
outfile << "143 c/x 19.416 -14.107 1.4021 $ ID shell outer site 3 \n";
outfile << "132 c/x -7.146 -22.825 1.905 $ OD shell outer site 4 \n";
outfile << "133 c/x -7.146 -22.825 1.6 $ ID shell outer site 4 \n";
outfile << "172 c/x -23.7293 0 1.56718 $ OD shell outer site 5 \n";
outfile << "173 c/x -23.7293 0 1.4021 $ ID shell outer site 5 \n";
outfile << "c \n";
outfile << "c Fuel Inlet, Outlet & Gas Removal Tube Boundaries \n";
outfile << "300 px 15 $ bottom plane fuel outlet tube \n";
outfile << "301 c/x -9 0 0.65 $ OD fuel outlet tube \n";
outfile << "302 c/x -9 0 0.5 $ ID fuel outlet tube \n";
outfile << "400 px 55 $ bottom plane fuel inlet tube \n";
outfile << "401 c/x 9 0 0.65 $ OD fuel inlet tube \n";
outfile << "402 c/x 9 0 0.5 $ ID fuel inlet tube \n";
outfile << "501 c/x 0 5.465 0.65 $ OD gas removal tube \n";
outfile << "502 c/x 0 5.465 0.5 $ ID gas removal tube \n";
outfile << "c \n";
outfile << "c Planes to subdivide reflector, pool(for max three tubes in each) \n";
outfile << "600 p 0 -1 1 0 $ at 01h30 \n";
outfile << "601 p 0 6 17 0 $ at 03h30 \n";
outfile << "602 py 0 $ at 06h00 \n";
outfile << "603 p 0 -6 17 0 $ at 08h30 \n";
outfile << "604 p 0 1 1 0 $ at 10h30 \n";
outfile << "999 sx 21 1000 $ outside world \n";
outfile << "\n"; //Moves to Data Cards
}

void UserDataCards(void) {
outfile << left << setw(80) << setfill('=') << "c ==== Data Cards" << "\n";
outfile << "c Material Data \n";
outfile << "c Zircaloy-2 \n";
outfile << "m1 40000 -0.982 \n";
outfile << " 50000 -0.015 \n";
outfile << " 26000 -0.0015 \n";
outfile << " 24000 -0.001 \n";
}

```



```

outfile << " 28000 -0.0005 \n";
outfile << "c Beryllium with pre-irradiation impurities \n";
outfile << "m2 4009. -0.9952898 \n";
outfile << " 13027. -0.0005965 \n";
outfile << " 25055. -0.0003947 \n";
outfile << " 26000. -0.0037037 \n";
outfile << " 5010. -2e-007 \n";
outfile << " 5011. -1e-006 \n";
outfile << " 48000. -1.24e-005 \n";
outfile << " 64000. -1.7e-006 \n";
outfile << "c Graphite with pre-irradiation impurities \n";
outfile << "m3 6000. -0.999721 \n";
outfile << " 14000. -3e-005 \n";
outfile << " 16000. -2e-005 \n";
outfile << " 17000. -2e-005 \n";
outfile << " 19000. -9e-006 \n";
outfile << " 20000. -2e-005 \n";
outfile << " 22000. -2e-005 \n";
outfile << " 23000. -0.0001 \n";
outfile << " 25055. -1e-005 \n";
outfile << " 26000. -3e-005 \n";
outfile << " 28000. -2e-005 \n";
outfile << "c Fuel solution(UO2SO4) @ " << Fuel_Molarity << "M \n";
outfile << "m4 92238. -" << wU238 << " \n";
outfile << " 92235. -" << wU235 << " \n";
outfile << " 8016. -" << wO << " \n";
outfile << " 1001. -" << wH << " \n";
outfile << " 1002. -" << wD << " \n";
outfile << " 16000. -" << wS << " \n";
outfile << "c Water with natural abundance of D \n";
outfile << "m5 1001. -0.1118684 \n";
outfile << " 1002. -3.354e-005 \n";
outfile << " 8016. -0.8880981 \n";
outfile << "c Aluminum Alloy \n";
outfile << "m6 13027. -0.9792 \n";
outfile << " 14000. -0.006 \n";
outfile << " 29000. -0.0028 \n";
outfile << " 12000. -0.01 \n";
outfile << " 24000. -0.002 \n";
outfile << "c Pure Cadmium \n";
outfile << "m7 48000. -1 \n";
outfile << "c Air(saturated at 40 C, with Ar + CO2 added) \n";
outfile << "m8 7014. -0.7171522 \n";
outfile << " 7015. -0.002822 \n";
outfile << " 8016. -0.2623858 \n";
outfile << " 18000. -0.0122809 \n";
outfile << " 1001. -0.0052152 \n";
outfile << " 1002. -1.6e-006 \n";
outfile << " 6000. -0.0001423 \n";
outfile << "c Air(dry at 25 C, with Ar + CO2 added) \n";
outfile << "m9 7014. -0.75222 \n";
outfile << " 7015. -0.00296 \n";
outfile << " 8016. -0.23179 \n";
outfile << " 18000. -0.01288 \n";
outfile << " 6000. -0.00015 \n";
outfile << "c \n";
outfile << "c S(a,b) Treatments \n";
outfile << "mt4 lwtr.01t \n";
outfile << "mt5 lwtr.01t \n";
outfile << "mt8 lwtr.01t \n";
outfile << "c \n";
outfile << "c K Calculations : (Histories / Cycle, Keff Guess, Tally Start Cycle, Total Cycles = should be 120) \n";
outfile << "kcode 80000 1.000000 20 120 \n";
outfile << "kopts kinetics=yes precursor=yes \n";
outfile << "c \n";
//Total Heat Generated in fuel (W) (not scaled)
outfile << "FC4 Total Heat in Fuel (W) (Qvol=" << 10*10*M_PI*(FuelTP-FuelBP) << "cm^3) $(F4)x(MeV->J)x(atom density)x(XSection)x(Heating #)x(Qvol) \n";
outfile << "FMESH4:n GEOM=cyl AXS=1,0,0 VEC=0,1,0 ORIGIN=10.46,0,0 \n";
outfile << " IMESH=10 IINTS=1 JMESH=" << (FuelTP-FuelBP) << " JINTS=1 KMESH=1 KINTS=1 \n";
outfile << " FACTOR=" << 10*10*M_PI*(FuelTP-FuelBP) << " OUT=COL \n";
outfile << "FM4 -1.60217733e-13 0 1 -4 \n";
outfile << "c \n";
//Total Heat Generated in bottom 16cm of fuel (W, not scaled)
outfile << "FC14 Total Heat in bottom 16cm of fuel (W) $(F4)x(MeV->J)x(atom density)x(XSection)x(Heating #)x(Qvol) \n";
outfile << "FMESH14:n GEOM=cyl AXS=1,0,0 VEC=0,1,0 ORIGIN=10.46,0,0 \n";
outfile << " IMESH=10 IINTS=1 JMESH=16 JINTS=1 KMESH=1 KINTS=1 \n";
outfile << " FACTOR=" << 10 * 10 * M_PI*(FuelBP + 16) << " OUT=COL \n";
outfile << "FM14 -1.60217733e-13 0 1 -4 \n";
outfile << "c \n";
//Total Heat Generated in top 16cm of fuel (W, not scaled)
outfile << "FC24 Total Heat in top 16cm of fuel (W) $(F4)x(MeV->J)x(atom density)x(XSection)x(Heating #)x(Qvol) \n";

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outfile << "FMESH24:n GEOM=cyl AXS=1,0,0 VEC=0,1,0 ORIGIN=" << FuelTP - 16 << ",0,0 \n";
outfile << "          IMESH=10 IINTS=1 JMESH=16 JINTS=1 KMESH=1 KINTS=1 \n";
outfile << "          FACTOR=" << 10 * 10 * M_PI * 16 << " OUT=COL \n";
outfile << "FM24 -1.60217733e-13 0 1 -4 \n";
outfile << "c \n";
//Heat distribution for 3D COMSOL Model (W/cm^3)
if (D3) {
  outfile << "FC34 3D Heating Distribution Tally(W/cm^3) (FuelVolume= " << Vthermal/1000 << " L $(F4)x(MeV->J)x(atom density)x(XSection)x
  (Heating#) \n";
  outfile << "FMESH34:n GEOM=cyl AXS=1,0,0 VEC=0,1,0 ORIGIN=10.16,0,0 \n";
  outfile << "          IMESH=10 IINTS=22 JMESH=" << (FuelTP - FuelBP) << " JINTS=103 KMESH=1 KINTS=40 \n";
  outfile << "          FACTOR=1 OUT=COL \n";
  outfile << "FM34 -1.60217733e-13 0 1 -4 \n";
  outfile << "c \n";
}
//Heat distribution for 2D COMSOL Model (W/cm^3)
if (D3) {
  outfile << "FC34 2D Heating Distribution Tally(W/cm^3) (FuelVolume= " << Vthermal / 1000 << " L $(F4)x(MeV->J)x(atom density)x(XSection)x
  (Heating#) \n";
  outfile << "FMESH34:n GEOM=cyl AXS=1,0,0 VEC=0,1,0 ORIGIN=10.16,0,0 \n";
  outfile << "          IMESH=10 IINTS=22 JMESH=" << (FuelTP - FuelBP) << " JINTS=103 KMESH=1 KINTS=1 \n";
  outfile << "          FACTOR=1 OUT=COL \n";
  outfile << "FM34 -1.60217733e-13 0 1 -4 \n";
  outfile << "c \n";
}
outfile << "rand gen=4 \n";
outfile << "c \n";
outfile << "c Fission Source : (x1 y1 z1, x2 y2 z2...) \n";
outfile << "ksrc 13 -4.5 0 35 4.5 0 57.25 -4.5 0 259 -9 0 7 9 0 \n";
outfile << "print \n";
}

void GenerateSurfaceNumbers(void) {

  Surface = SurfaceStart;

  //Radial Surfaces
  dr = FuelR / R;
  Rstart = SurfaceStart;
  RFinal = SurfaceStart + (R - 1);
  Surface = Surface + R;

  //Vertical Surfaces
  dz = ((FuelTP - FuelBP) / Z);
  Zstart = Surface;
  double height;
  for (int z = 0; z <= Z; z++) {
    height = z*dz + FuelBP;
    if ((height > FoTBP) && (height < (FoTBP + dz))) {
      ZFoT = Surface;
      Surface++;
    }
    if ((height > FiTBP) && (height <= FuelTP) && (height < (FiTBP + dz))) {
      ZFIT = Surface;
      Surface++;
    }
  }
  Surface++;
}
ZFinal = Surface - 1;

//Azimuthal Planes
dtheta = 360 / (2 * P);
Pstart = Surface;
PFinal = Surface + (P - 1);
}

void PrintHeader(void) {
  outfile << "Homogeneous Slowpoke v2 \n";
  outfile << "c ==== Data ===== \n";
  outfile << "c Using " << Vnominal << "L (corrected to 200C) of " << Fuel_Molarity << "mol/L U02S04 Solution \n";
  if (COMSOLData) {
    outfile << "c Fuel Temperature profile taken from COMSOL data file \n";
  }
  else {
    outfile << "c Uniform Fuel Temperature T=" << Fuel_TempAvg-273.15 << "oC used \n";
  }
  outfile << "c 5 x 1.5mm rod at inner sites. " << CtrlRodInsertion << "% inserted \n";
  outfile << "c ==== Code Updates ===== \n";
  outfile << "c X direction is vertical(known program bug) \n";
  outfile << "c fuel mass fractions updated using correct density \n";
  outfile << "c now using chimney style cooling outlet channels \n";
  outfile << "c fuel container extended to remove water below \n";
  outfile << "c Zircaloy vessel material(m1) \n";
  outfile << "c all beryllium with pre - irradiation impurities(m2) \n";
}

```



```

outfile << "c graphite with impurities for added reflector annulus(m3 in cells 25 - 29) \n";
outfile << "c natural abundance deuterium in material m4, m5 and m8(0.015 a / o 1002) \n";
outfile << "c pool water only at 200C(m5 density altered in cells 60 - 61) \n";
outfile << "c Ar and CO2 added to H2O saturated air at 400C(m8) for air gap \n";
outfile << "c Ar + CO2 added - dry air at 250C(m9) for air fill in all irradiation sites \n";

}

void PrintCellCards(void) {
outfile << left << setw(80) << setfill('=') << "c\nc === Code Generated Cell Cards" << "\n";
outfile << left << setw(80) << setfill(' ') << "c Cell# Mat Density Surf Parameters" << "Comments \n";
outfile << "c Fuel Mesh Cells (1000+ Series)\n";

int P1;
int P2;
int Ro;
int Ri;
int Top;
int Bot;
double Tz;

double theta;
double radius;
double height;

Cell = 0;

//Height Loop
for (int z = 0; z < ZFinal - ZStart; z++) {
Bot = z + ZStart;
Top = z + ZStart + 1;

//Zcoordinate
if (z < ZFiT - ZStart) {
height = FuelBP + (z - 1)*dz + (dz / 2);
}
if (z < ZFoT - ZStart) {
height = FuelBP + (z*dz) + (dz / 2);
}
if (z > ZFiT - ZStart) {
height = FuelBP + (z - 2)*dz + (dz / 2);
}
if (z == (ZFoT - ZStart) - 1) {
height = ((FoTBP + ((z)*dz) + FuelBP) / 2);
}
if (z == (ZFoT - ZStart)) {
height = ((FoTBP + ((z)*dz) + FuelBP) / 2);
}
if (z == (ZFiT - ZStart) - 1) {
height = ((FiTBP + (((z)-1)*dz) + FuelBP) / 2);
}
if (z == (ZFiT - ZStart)) {
height = ((FiTBP + (((z)-1)*dz) + FuelBP) / 2);
}

//Equation to specify temperature as function of height
if (Teqn) {
Tz = ((Ttop - Tbot) / (FuelTP - FuelBP))*(height - FuelBP) + Tbot;
}

//Innermost Element
r = 1;
Ro = RStart;

outfile.precision(6);
outfile.fixed;
tmp = to_string(1e8*TMP[Cell]);
den = to_string(-Density[Cell]);
if (Teqn) {
tmp = to_string(1e8*(Tz + 273.15)*8.617e-11);
den = to_string(-CalcDensity(Tz+273.15));
}
tmp = tmp.substr(0, 6) + "e-8";
den = den.substr(0, 7);
outfile << left << setw(80) << setfill(' ') << to_string(Cell + CellStart) + " 4 " + den + " " + to_string(-Ro) + " " + to_string(Bot) + " " +
to_string(-Top) + " TMP=" + tmp + " IMP:n=1" << "$ Fuel Mesh Cell(Centerline) (Cell# " << Cell << ")" << endl;
Zcoord[Cell] = 0;
Ycoord[Cell] = 0;
Xcoord[Cell] = height;
Cell++;

//Radial Layers
for (int r = 2; r <= R; r++) { //Non-inner sections have Ri reference
Ri = RStart + r - 2;
}

```

```

Ro = RStart + r - 1;
radius = (r - 1)*dr + (dr / 2);

//Cells if using 2D Comsol model
if (!D3) {
    tmp = to_string(1e8*TMP[Cell]);
    den = to_string(-Density[Cell]);
    if (Teqn) {
        tmp = to_string(1e8*(Tz + 273.15)*8.617e-11);
        den = to_string(-CalcDensity(Tz + 273.15));
    }
    tmp = tmp.substr(0, 6) + "e-8";
    den = den.substr(0, 7);

    //Below FoT
    if (Top <= ZFoT) {
        outfile << left << setw(80) << setfill(' ') << to_string(Cell + CellStart) + " 4 " + den + " " + to_string(Ri) + " " + to_string(-Ro) + " " + to_string(Bot) + " " + to_string(-Top) + " TMP=" + tmp + " IMP:n=1" << "$ Fuel Mesh Cell (Cell# " << Cell << ") " << endl;
    }

    //Between FiT and FoT
    if ((Top > ZFoT) && (Top <= ZFiT)) {
        outfile << left << setw(80) << setfill(' ') << to_string(Cell + CellStart) + " 4 " + den + " " + to_string(Ri) + " " + to_string(-Ro) + " " + to_string(Bot) + " " + to_string(-Top) + " " + to_string(SFoTOD) + " TMP=" + tmp + " IMP:n=1" << "$ Fuel Mesh Cell (Cell# " << Cell << ") " << endl;
    }

    //Above FiT
    if (Top > ZFiT) {
        outfile << left << setw(80) << setfill(' ') << to_string(Cell + CellStart) + " 4 " + den + " " + to_string(Ri) + " " + to_string(-Ro) + " " + to_string(Bot) + " " + to_string(-Top) + " " + to_string(SFiTOD) + " " + to_string(SFoTOD) + " TMP=" + tmp + " IMP:n=1" << "$ Fuel Mesh Cell (Cell# " << Cell << ") " << endl;
    }

    Zcoord[Cell] = 0;
    Ycoord[Cell] = radius;
    Xcoord[Cell] = height;
    Cell++;
}

//Cells if using 3D COMSOL model
if (D3) {
    for (int p = 1; p <= P; p++) { //Planes defining the positive sense
        P1 = PStart + p - 1;
        P2 = PStart + p;
        if (p == P) {
            P2 = -PStart;
        }
        outfile.precision(6);
        outfile.fixed;
        if (Top > ZFiT) {
            tmp = to_string(1e8*TMP[Cell]);
            den = to_string(-Density[Cell]);
            if (Teqn) {
                tmp = to_string(1e8*(Tz + 273.15)*8.617e-11);
                den = to_string(-CalcDensity(Tz + 273.15));
            }
            tmp = tmp.substr(0, 6) + "e-8";
            den = den.substr(0, 7);
            outfile << left << setw(80) << setfill(' ') << to_string(Cell + CellStart) + " 4 " + den + " " + to_string(P1) + " " + to_string(-P2) + " " + to_string(Ri) + " " + to_string(-Ro) + " " + to_string(Bot) + " " + to_string(-Top) + " " + to_string(SFiTOD) + " TMP=" + tmp + " IMP:n=1" << "$ Fuel Mesh Cell\n";
        }
        else {
            tmp = to_string(1e8*TMP[Cell]);
            den = to_string(-Density[Cell]);
            if (Teqn) {
                tmp = to_string(1e8*(Tz + 273.15)*8.617e-11);
                den = to_string(-CalcDensity(Tz + 273.15));
            }
            tmp = tmp.substr(0, 6) + "e-8";
            den = den.substr(0, 7);
            outfile << left << setw(80) << setfill(' ') << to_string(Cell + CellStart) + " 4 " + den + " " + to_string(P1) + " " + to_string(-P2) + " " + to_string(Ri) + " " + to_string(-Ro) + " " + to_string(Bot) + " " + to_string(-Top) + " TMP=" + tmp + " IMP:n=1" << "$ Fuel Mesh Cell\n";
        }
        theta = (M_PI / 180)*(-90 + (p - 1)*dtheta + (dtheta / 2));
        Zcoord[Cell] = radius*sin(theta);
        Ycoord[Cell] = radius*cos(theta);
        Xcoord[Cell] = height;
        Cell++;
    }
}

```

```

for (int p = 1; p <= P; p++) { //Planes defining the negative sense
    P1 = PStart + p - 1;
    P2 = PStart + p;
    if (p == P) {
        P2 = -PStart;
    }
    outfile.precision(6);
    outfile.fixed;
    if (Top > ZFoT) {
        tmp = to_string(1e8*TMP[Cell]);
        den = to_string(-Density[Cell]);
        if (Teqn) {
            tmp = to_string(1e8*(Tz + 273.15)*8.617e-11);
            den = to_string(-CalcDensity(Tz + 273.15));
        }
        tmp = tmp.substr(0, 6) + "e-8";
        den = den.substr(0, 7);
        outfile << left << setw(80) << setfill(' ') << to_string(Cell + CellStart) + " 4 " + den + " " + to_string(P2) + " " +
            to_string(-P1) + " " + to_string(Ri) + " " + to_string(-Ro) + " " + to_string(Bot) + " " + to_string(-Top) + " " + to_string
            (SFoTOD) + " TMP=" + tmp + " IMP:n=1" << "$ Fuel Mesh Cell\n";
    }
    else {
        tmp = to_string(1e8*TMP[Cell]);
        den = to_string(-Density[Cell]);
        if (Teqn) {
            tmp = to_string(1e8*(Tz + 273.15)*8.617e-11);
            den = to_string(-CalcDensity(Tz + 273.15));
        }
        tmp = tmp.substr(0, 6) + "e-8";
        den = den.substr(0, 7);
        outfile << left << setw(80) << setfill(' ') << to_string(Cell + CellStart) + " 4 " + den + " " + to_string(P2) + " " +
            to_string(-P1) + " " + to_string(Ri) + " " + to_string(-Ro) + " " + to_string(Bot) + " " + to_string(-Top) + " TMP=" + tmp + "
            IMP:n=1" << "$ Fuel Mesh Cell\n";
    }
    theta = (M_PI / 180)*(90 + (p - 1)*dtheta + (dtheta / 2));
    Zcoord[Cell] = radius*sin(theta);
    Ycoord[Cell] = radius*cos(theta);
    Xcoord[Cell] = height;
    Cell++;
}
}

//Fit Cells
if (z >= ZFiT - ZStart) {
    tmp = to_string(1e8*TMP[Cell]);
    den = to_string(-Density[Cell]);
    if (Teqn) {
        tmp = to_string(1e8*(Tz + 273.15)*8.617e-11);
        den = to_string(-CalcDensity(Tz + 273.15));
    }
    tmp = tmp.substr(0, 6) + "e-8";
    den = den.substr(0, 7);
    outfile << left << setw(80) << setfill(' ') << to_string(Cell + CellStart) + " 4 " + den + " " + to_string(Bot) + " " + to_string(-Top) +
        " " + to_string(-SFiTID) + " TMP=" + tmp + " IMP:n=1" << "$ Fuel Mesh Cell (Fit) (Cell# " << Cell << ") " << endl;
    Zcoord[Cell] = 0;
    Ycoord[Cell] = 9;
    Xcoord[Cell] = height;
    Cell++;
}

//FoT Cells
if (z >= ZFoT - ZStart) {
    tmp = to_string(1e8*TMP[Cell]);
    den = to_string(-Density[Cell]);
    if (Teqn) {
        tmp = to_string(1e8*(Tz + 273.15)*8.617e-11);
        den = to_string(-CalcDensity(Tz + 273.15));
    }
    tmp = tmp.substr(0, 6) + "e-8";
    den = den.substr(0, 7);
    outfile << left << setw(80) << setfill(' ') << to_string(Cell + CellStart) + " 4 " + den + " " + to_string(Bot) + " " + to_string(-Top) +
        " " + to_string(-SFoTID) + " TMP=" + tmp + " IMP:n=1" << "$ Fuel Mesh Cell (FoT) (Cell# " << Cell << ") " << endl;
    Zcoord[Cell] = 0;
    Ycoord[Cell] = -9;
    Xcoord[Cell] = height;
    Cell++;
}
}
CellFinal = (CellStart + Cell) - 1;

//Pre-Defined User Cards
UserCellCards();
}

```

```

void PrintSurfaceCards(void) {
    Surface = SurfaceStart;

    outfile << left << setw(80) << setfill('=') << "c\nc === Code Generated Surface Cards" << "\n";
    outfile << left << setw(80) << setfill(' ') << "c Surface# Type Parameters" << "Comments \n";
    outfile << "c Fuel Mesh Surfaces (1000+ Series)\n";

    //Radial Layers
    RStart = SurfaceStart;
    dr = FuelR / R;
    double radius;
    for (int r = 1; r <= R; r++) {
        radius = r*dr;
        outfile << left << setw(80) << setfill(' ') << to_string(Surface) + " cx " + to_string(radius) << "$ Radial surfaces to divide fuel \n";
        Surface++;
    }
    RFinal = Surface - 1;

    //Horizontal Layers
    ZStart = Surface;
    double height;
    dz = ((FuelTP - FuelBP) / Z);
    for (int z = 0; z <= Z; z++) {
        height = z*dz + FuelBP;
        if ((height > FoTBP) && (height < (FoTBP + dz))) {
            outfile << left << setw(80) << setfill(' ') << to_string(Surface) + " px " + to_string(FoTBP) << "$ Bottom of FoT \n";
            ZFoT = Surface;
            Surface++;
        }

        if ((height > FiTBP) && (height <= FuelTP) && (height < (FiTBP + dz))) {
            outfile << left << setw(80) << setfill(' ') << to_string(Surface) + " px " + to_string(FiTBP) << "$ Bottom of FiT \n";
            ZFiT = Surface;
            Surface++;
        }

        outfile << left << setw(80) << setfill(' ') << to_string(Surface) + " px " + to_string(((z*dz) + FuelBP)) << "$ Horizontal surface to divide fuel \n";
        Surface++;
    }
    ZFinal = Surface - 1;

    if (D3) {
        //Azimuthal Planes
        PStart = Surface;
        double dp = 180 / P;
        for (int p = 0; p < P; p++) {
            outfile.precision(6);
            outfile.fixed;
            double y = cos(((p*dp) - 90)*(M_PI / 180));
            y = round(100000 * y) / 100000;
            double z = sin(((p*dp) - 90)*(M_PI / 180));
            z = round(100000 * z) / 100000;
            outfile << left << setw(80) << setfill(' ') << to_string(Surface) + " p 0 0 0 1 0 0 0 " + to_string(y) + " " + to_string(z) << "$ Azimuthal plane to divide fuel \n";
            Surface++;
        }
        PFinal = Surface - 1;
    }

    //Control Rod Height Surfaces
    double CladBottom = (CtrlRodInsertion*(17.83308 - 61.3) / 100) + 61.3;

    outfile << "c\nc Control Rod Height Surfaces \n";
    outfile << left << setw(80) << setfill(' ') << "204 px " + to_string(CladBottom) << "$ bottom plane control rod cladding \n";
    outfile << left << setw(80) << setfill(' ') << "205 px " + to_string(CladBottom + 0.2) << "$ bottom plane control rod(+0.2 from bottom cladding) \n";
    outfile << left << setw(80) << setfill(' ') << "206 px " + to_string(CladBottom + 47.9) << "$ top plane control rod cladding(+47.9 from bottom cladding) \n";
    outfile << left << setw(80) << setfill(' ') << "207 px " + to_string(CladBottom + 47.5) << "$ top plane control rod(+47.5 from bottom cladding) \n";

    //Fuel Level Surface
    outfile << "c\nc Fuel Level Surface \n";
    outfile << left << setw(80) << setfill(' ') << "52 px " + to_string(FuelTP) << "$ Fuel height, Fuel/Air interface \n";

    //Pre-defined Surface Cards
    UserSurfaceCards();
}

void PrintDataCards(void) {

```

```

//Pre-defined Data Cards
UserDataCards();
}

void PrintCellCoordinates(void) {

    const char separator = ' ';
    const int DataWidth = 12;

    outfile.open(Cell_Coords);
    outfile.precision(6);
    outfile.fixed;

    //Output cell coordinates (x,y,z) for COMSOL (MCNP->COMSOL: X->Z, Y->X, Z->Y)
    // 2D: R,Z      3D: X,Y,Z
    for (int Cell = 0; Cell <= (CellFinal - CellStart); Cell++) {
        if (ID3) {
            outfile << left << setw(DataWidth) << setfill(separator) << abs(Ycoord[Cell]);
            outfile << left << setw(DataWidth) << setfill(separator) << abs(Xcoord[Cell]);
            outfile << endl;
        }
        if (D3) {
            outfile << left << setw(DataWidth) << setfill(separator) << Ycoord[Cell];
            outfile << left << setw(DataWidth) << setfill(separator) << Zcoord[Cell];
            outfile << left << setw(DataWidth) << setfill(separator) << Xcoord[Cell];
            outfile << endl;
        }
    }

    outfile.close();
}

void ReadCOMSOLData(void) {

    string text;
    double data; //Read data
    int header_lines = 8; //lines of text in COMSOL header

    //Read Parameters from "Comsol_Parameters.txt"
    infile.open(COMSOL_Param);
    if (infile) {

        //Dump COMSOL Header lines
        for (int i = 1; i <= header_lines; i++) {
            getline(infile, text);
        }

        //Read Data from COMSOL file
        infile >> t; //Time
        infile >> Fuel_TempAvg; //Average Fuel Temperature
        Fuel_DensityAvg = CalcDensity(Fuel_TempAvg);

        infile.close();
    }
    //Manual Input if COMSOL file does not exist
    else {
        std::cout << "MCNP requires COMSOL Parameters file (Avg Temperature) to account for thermal expansion. \n";
        cout << "Include file " << COMSOL_Param << " in this directory, or \n";
        cout << "Enter Average Temperature (oC): ";
        cin >> Fuel_TempAvg;
        cout << endl;
        Fuel_TempAvg += 273.15;
        Fuel_DensityAvg = CalcDensity(Fuel_TempAvg);
    }

    //Read temperature profile from "Temperature Data.txt"
    infile.open(COMSOL_Data);
    if (infile) {

        //Dump COMSOL Header lines
        for (int i = 1; i <= header_lines+1; i++) {
            getline(infile, text);
        }

        //Read Data from COMSOL file
        Cell = 0;
        while (!infile.eof())
        {
            infile >> text; //Don't read X coordinate
            if (D3) {
                infile >> text; //Don't read Y coordinate
            }
            infile >> text; //Don't read Z coordinate
            infile >> data; //Read Temperature (K)
        }
    }
}

```

```

    TMP[Cell] = (data)*8.617e-11;           //TMP is in MeV
    Density[Cell] = CalcDensity(data);
    Cell++;
}
infile.close();
COMSOLData = true;

}
//Input Temperature if COMSOL file does not exist
else {
    cout << "MCNP requires temperature distribution data. \n";
    cout << "Include file " << COMSOL_Data << " in this directory. \n";
    cout << "Using uniform distribution at: ";
    cout << Fuel_TempAvg << "K" << endl;
    //cin >> Fuel_TempAvg;
    cout << endl;
    //Fuel_TempAvg += 273.15;

    for (i = 0; i < MaxCells; i++) {
        TMP[i] = (Fuel_TempAvg)* 8.617e-11;
        Density[i] = CalcDensity(Fuel_TempAvg);
    }
    Fuel_DensityAvg = CalcDensity(Fuel_TempAvg);

    cout << "Fuel values used: TMP=" << TMP[0] << "\tDensity=" << CalcDensity(Fuel_TempAvg) << endl;
    COMSOLData = false;
}
}

void CalcHeight(void) {
    double v1, v2, v3, m;

    //Total solution mass
    m = CalcDensity(20+273.15) * Vnominal*1000;
    Vthermal = m/Fuel_DensityAvg;

    //v1: Bottom to FoT (1,426.2830cm^3)
    v1 = (FoTBP - FuelBP)*M_PI*FuelR*FuelR;

    //v2: FoT to FiT (Less FoT tubing volume (12,544.6936cm^3)
    v2 = (FiTBP - FoTBP)*M_PI*((FuelR*FuelR) - (0.65*0.65 - 0.5*0.5));

    //v3:FiT to FuelTP (Less FoT, FiT tubing volume) (A=313.0754cm^2)
    v3 = Vthermal - (v2 + v1);
    FuelTP = (v3 / 313.0754) + FiTBP;

    cout << "FuelTP = " << FuelTP << "cm at " << Fuel_TempAvg-273.15 << "oC \n";
    //cout << "Fuel Volume = " << Vthermal/1000 << "L \n";
    //cout << "Solution mass = " << Vthermal*CalcDensity(Fuel_TempAvg)/1000 << "kg. \n";
}

void FormatMeshtal() {
    string file;
    string dump;           //Text that is not used
    string data;          //Text that is used
    double Qin;
    double z;
    double r;
    double Rev;

    //Read from "meshtal"
    infile.open(meshtal);

    if (infile) {

        //Dump 16 lines
        for (int i = 1; i <= 16; i++) {
            getline(infile, dump);
        }

        //Read data in position 4 (Qtot)
        infile >> dump;
        infile >> dump;
        infile >> dump;
        infile >> Qtot;
        getline(infile, dump);

        //Dump 13 lines
        for (int i = 1; i <= 13; i++) {
            getline(infile, dump);
        }

        //Read data in position 4 (Qbot)
        infile >> dump;
    }
}

```

```

infile >> dump;
infile >> dump;
infile >> Qbot;
getline(infile, dump);

//Dump 13 lines
for (int i = 1; i <= 13; i++) {
    getline(infile, dump);
}

//Read data in position 4 (Qtop)
infile >> dump;
infile >> dump;
infile >> dump;
infile >> Qtop;
getline(infile, dump);

//Dump 2 lines
for (int i = 1; i <= 2; i++) {
    getline(infile, dump);
}

//Read data in position 6 (Vthermal)
infile >> dump;
infile >> dump;
infile >> dump;
infile >> dump;
infile >> dump;
infile >> Vthermal;
getline(infile, dump);

//Output Qtot, Vthermal parameters for use in COMSOL
outfile.open(parameters);
outfile << "Argument \tQtot \t\tVthermal \n";
outfile << "-1 \t\t" << Qtot*0.99 << "\t" << Vthermal*0.99 << endl;
outfile << "1 \t\t" << Qtot*1.01 << "\t" << Vthermal*1.01 << endl;
outfile.close();

//Dump 10 lines
for (int i = 1; i <= 10; i++) {
    getline(infile, dump);
}

//Put Qin profile in profile file
outfile.open(profile);

if (D3) {
    outfile << "X \t\tY \t\tZ \t\tQin(W/cm^3)" << endl;
}
if (ID3) {
    outfile << "R \t\tZ \t\tQin(W/cm^3)" << endl;
}

while (!infile.eof()) {
    //Read Data
    infile >> r; //MCNP coordinate
    infile >> z; //MCNP coordinate
    infile >> Rev; //MCNP coordinate
    infile >> Qin; //Read Q value (W/cm^3)
    infile >> dump; //Dump Error value

    //When using 3D meshtal
    if (D3) {
        //Change Coordinates to X,Y,Z for COMSOL
        //x = r*cos(Rev * 2 * M_PI);
        //y = r*sin(Rev * 2 * M_PI);
        //z = z + 10.16;
        outfile << r*cos(Rev * 2 * M_PI) << " \t" << r*sin(Rev * 2 * M_PI) << " \t" << z + 10.16 << " \t" << Qin << endl;
    }

    //When using 2D meshtal
    if (ID3) {
        //z = z + 10.16;
        outfile << r << " \t" << z + 10.16 << " \t" << Qin << endl;
    }
}
outfile.close();
infile.close();
cout << "meshtal data Formatted." << endl;

file = meshtal;
file.append("(t=" + to_string(t) + ")");
rename(meshtal, file.c_str());
}

```

```

        //Generates Error if meshtal file not available
    else {
        cout << "MCNP meshtal file not available to format." << endl;
    }
}

void CalcWeightFraction() {

    double gU238;
    double gU235;
    double gO;
    double gS;
    double gWater;
    double nWater;
    double gD;
    double gH;
    double FuelDensity20 = CalcDensity(293.15);

    gU238 = (238.0507826*0.8*Fuel_Molarity);
    gU235 = (235.0439231*0.2*Fuel_Molarity);
    gS = (32.06359*Fuel_Molarity);
    gO = (15.9949146 * 6 * Fuel_Molarity);

    gWater = 1000* FuelDensity20 - (gO + gS + gU238 + gU235);

    nWater = gWater / 18.01086648304;

    gD = 2.0141018*(2 * nWater*0.00015);
    gH = 1.007825*(2 * nWater*.99985);

    gO = (nWater*15.9949146) + gO;

    wU238 = gU238 / (1000* FuelDensity20);
    wU235 = gU235/ (1000 * FuelDensity20);
    wO = gO / (1000 * FuelDensity20);
    wH = gH / (1000 * FuelDensity20);
    wD = gD / (1000 * FuelDensity20);
    wS = gS / (1000 * FuelDensity20);

    /*
    cout << "wU238= " << wU238 << endl;
    cout << "wU235= " << wU235 << endl;
    cout << "wO= " << wO << endl;
    cout << "wH= " << wH << endl;
    cout << "wD= " << wD << endl;
    cout << "wS= " << wS << endl;
    cout << "Total= " << wU238 + wU235 + wO + wH + wD + wS << endl;
    */
}

void CtrlRod(void) {
    double Kest;
    string file;

    //First MCNP run: Estimate Ctrl Rod based on Tavg
    if (Keff == 0) {

        CtrlRodInsertion = -1.075*(Fuel_TempAvg - 273.15) + 106;

        if (Fuel_TempAvg - 273.15) > 60.5){
            CtrlRodInsertion = -6.85*(Fuel_TempAvg - 273.15) + 455;
        }
    }

    //Second MCNP run: Tune Ctrl Rod based on computed Keff
    else {
        mK = 1000 * (Keff-1) / Keff;
        CtrlRodInsertion += mK*2.263;
    }

    //Constrain to 0 to 100%
    if (CtrlRodInsertion > 100) {
        CtrlRodInsertion = 100;
    }
    if (CtrlRodInsertion < 0) {
        CtrlRodInsertion = 0;
    }

    cout << "Control Rod inserted to: " << CtrlRodInsertion << "% " << endl;
}

void CtrlRodManual(void) {

```



```

    cout << "Enter Control Rod insertion (0-100): ";
    cin >> CtrlRodInsertion;
    cout << "Ctrl Rod inserted to " << CtrlRodInsertion << "%" << endl;
}

void ReadMCNPOut(void) {
    //Reads MCNP Output file to extract point kinetics parameters
    //Appends time step number output file name

    string search1 = "gen. time";
    string search2 = "final keff =";
    string search3 = "final result";
    string text;
    string line;
    bool found = false;
    size_t pointer;
    size_t pos;

    infile.open(MCNP_Out);
    if (infile) {

        while (getline(infile, line) && !found) {

            if (line.find(search1) != std::string::npos) {
                pos = line.find(search1);
                pointer = infile.tellg();
                pointer = (pointer - line.length()) + pos + search1.length();
                infile.seekg(pointer);
                infile >> GenTime;
                cout << "Neutron Gen. Time = " << GenTime << endl;
                infile >> text;
                infile >> text;
                infile >> text;
                infile >> RossiAlpha;
                cout << "Rossi-Alpha = " << RossiAlpha << endl;
                infile >> text;
                infile >> text;
                infile >> text;
                infile >> Beff;
                cout << "Beta Eff = " << Beff << endl;
            }

            if (line.find(search2) != std::string::npos) {
                pos = line.find(search2);
                pointer = infile.tellg();
                pointer = (pointer - line.length()) + pos + search2.length();
                infile.seekg(pointer);
                infile >> Keff;
                cout << "Keff = " << Keff << endl;
                mK = 1000 * (Keff - 1) / Keff;
                cout << "Reactivity = " << mK << "mK" << endl;
            }

            if (line.find(search3) != std::string::npos) {
                pos = line.find(search3);
                pointer = infile.tellg();
                pointer = (pointer - line.length()) + pos + search3.length();
                infile.seekg(pointer);
                infile >> text;
                infile >> Sdev;
                cout << "Keff SD = " << Sdev << endl;
                found = true;
            }
        }

        infile.close();
    }
    else {
        cout << "MCNP output file " << MCNP_Out << " not found." << endl;
    }
}

void RunMCNP(void) {
    //Runs MCNP input file and cleans up extra files

    system(MCNP_bat);
    remove(runtpe);
    remove(srctp);
    ReadMCNPOut();
}

void GenerateMCNPFile(void) {

```

```

    CalcWeightFraction();
    GenerateSurfaceNumbers();
    outfile.open(MCNP_Inp);
    PrintHeader();
    PrintCellCards();
    PrintSurfaceCards();
    PrintDataCards();
    outfile.close();
}

void Finished(void) {
    string file;

    FormatMeshtal();

    //Cleans up files in directory
    remove(MCNP_Inp);

    file = MCNP_Out;
    file.append("(t=" + to_string((int)t) + ")");
    rename(MCNP_Out, file.c_str());
    remove(MCNP_Out);

    outfile.open(done);
    outfile << "MCNP is not running.";
    outfile.close();
}

void AutoGenerate(void) {
    const char separator = ' ';
    const int DataWidth = 12;

    //===== Generate T vs C vs K Data =====
    /*
    double T,C,K;
    double Tmin=55, Tmax=75;
    double Cmin=10, Cmax=45;

    //Print data column titles
    outfile.open(datalog, ios::app);
    outfile << left << setw(DataWidth) << setfill(separator) << "Temperature";
    outfile << left << setw(DataWidth) << setfill(separator) << "Ctrl Rod";
    outfile << left << setw(DataWidth) << setfill(separator) << "Keff";
    outfile << endl;
    outfile.close();

    //Burn used random #s
    for (int i = 1; i <= 65; i++) {
        T = (((double)rand() / (RAND_MAX)) * (Tmax - Tmin)) + Tmin;
        C = (((double)rand() / (RAND_MAX)) * (Cmax - Cmin)) + Cmin;
    }

    //Loop of computations
    for (int c = 0; c <= 100; c++) {

        //Generate random values between max and min
        T = (((double)rand() / (RAND_MAX)) * (Tmax - Tmin)) + Tmin;
        C = (((double)rand() / (RAND_MAX)) * (Cmax - Cmin)) + Cmin;

        cout << i << "th Autogen: T = " << T << ", C = " << C << "%." << endl;

        CtrlRodInsertion = C;
        Fuel_TempAvg = T + 273.15;
        Fuel_DensityAvg = CalcDensity(Fuel_TempAvg);
        for (i = 0; i < MaxCells; i++) {
            TMP[i] = (Fuel_TempAvg)* 8.617e-11;
            Density[i] = Fuel_DensityAvg;
        }

        CalcHeight();
        GenerateMCNPFile();
        RunMCNP();
        K = Keff;
        //remove(MCNP_Inp);
        remove(MCNP_Out);
        remove(meshtal);

        //Append data to log
        outfile.open(datalog, ios::app);
        outfile.precision(3);
        outfile.fixed;
        outfile << left << setw(DataWidth) << setfill(separator) << T;

```

```

        outfile << left << setw(DataWidth) << setfill(separator) << C;
        outfile.precision(6);
        outfile << left << setw(DataWidth) << setfill(separator) << K;
        outfile << endl;
        outfile.close();
    }
    */

//===== Generate Mesh Sensitivity Data =====
/*
    Teqn = true;

//Print data column titles
outfile.open(datalog, ios::app);
outfile << left << setw(DataWidth) << setfill(separator) << "Z";
outfile << left << setw(DataWidth) << setfill(separator) << "R";
outfile << left << setw(DataWidth) << setfill(separator) << "2D_Cells";
outfile << left << setw(DataWidth) << setfill(separator) << "Keff";
outfile << left << setw(DataWidth) << setfill(separator) << "SD";
outfile << left << setw(DataWidth) << setfill(separator) << "Qtot";
outfile << left << setw(DataWidth) << setfill(separator) << "Qbot";
outfile << left << setw(DataWidth) << setfill(separator) << "Qtop";
outfile << endl;
outfile.close();

CtrlRodInsertion = 0;
//Carlin Gradient
Ttop = 92;
Tbot = 22;
//Uniform Gradient
//Tbot = 57;
//Ttop = 57;
Fuel_TempAvg = ((Ttop + Tbot) / 2) + 273.15;
Fuel_DensityAvg = CalcDensity(Fuel_TempAvg);

//Loop of computations
for (int c = 550; c <= 500; c=c+150) {

    Z = c;
    R = 1+cell((Z + 3) / 4.8);

    CalcHeight();
    GenerateMCNPFile();
    cout << "Autogen " << c << ": Z = " << Z << ", R = " << R << ", Cells = " << 1+CellFinal - CellStart << endl;
    RunMCNP();
    t = (1+CellFinal-CellStart);
    Finished();

//Append data to log
outfile.open(datalog, ios::app);
outfile.precision(3);
outfile.fixed;
outfile << left << setw(DataWidth) << setfill(separator) << Z;
outfile << left << setw(DataWidth) << setfill(separator) << R;
outfile << left << setw(DataWidth) << setfill(separator) << 1+CellFinal-CellStart;
outfile.precision(6);
outfile << left << setw(DataWidth) << setfill(separator) << Keff;
outfile << left << setw(DataWidth) << setfill(separator) << Sdev;
outfile << left << setw(DataWidth) << setfill(separator) << Qtot;
outfile << left << setw(DataWidth) << setfill(separator) << Qbot;
outfile << left << setw(DataWidth) << setfill(separator) << Qtop;
outfile << endl;
outfile.close();
}
*/

//===== Generate Reactivity vs Gradient Data =====

double gradient;

//Print data column titles
outfile.open(datalog, ios::app);
outfile << left << setw(DataWidth) << setfill(separator) << "Tavg";
outfile << left << setw(DataWidth) << setfill(separator) << "Grad";
outfile << left << setw(DataWidth) << setfill(separator) << "Kgra";
outfile << left << setw(DataWidth) << setfill(separator) << "SDgra";
outfile << left << setw(DataWidth) << setfill(separator) << "Kuni";
outfile << left << setw(DataWidth) << setfill(separator) << "SDuni";
outfile << endl;
outfile.close();

CtrlRodInsertion = 0;

//Loop of computations
for (int c = 22; c <= 92; c++) {

```

```

    Teqn = true;
    Ttop = c;
    Tbot = 22;
    Fuel_TempAvg = ((Ttop + Tbot) / 2) + 273.15;
    Fuel_DensityAvg = CalcDensity(Fuel_TempAvg);
    CalcHeight();
    gradient = (Ttop - Tbot) / (FuelTP - FuelBP);

    GenerateMCNPFile();
    cout << "Autogen Grad: Tavg=" << Fuel_TempAvg-273.15 << ", Ttop=" << Ttop << ", Grad=" << gradient << endl;
    RunMCNP();
    Finished();

    //Append data to log
    outfile.open(datalog, ios::app);
    outfile.precision(7);
    outfile.fixed;
    outfile << left << setw(DataWidth) << setfill(separator) << Fuel_TempAvg-273.15;
    outfile << left << setw(DataWidth) << setfill(separator) << gradient;
    outfile << left << setw(DataWidth) << setfill(separator) << Keff;
    outfile << left << setw(DataWidth) << setfill(separator) << Sdev;
    //outfile << left << setw(DataWidth) << setfill(separator) << " - ";
    //outfile << left << setw(DataWidth) << setfill(separator) << " - ";
    //outfile << endl;
    outfile.close();
    t++;

    _getch();

    Teqn = false;
    for (int i = 0; i < MaxCells; i++) {
        TMP[i] = (Fuel_TempAvg)* 8.617e-11;
        Density[i] = CalcDensity(Fuel_TempAvg);
    }
    GenerateMCNPFile();
    cout << "Autogen Uniform: Tavg=" << Fuel_TempAvg-273.15 << endl;
    RunMCNP();
    Finished();

    //Append data to log
    outfile.open(datalog, ios::app);
    outfile.precision(7);
    outfile.fixed;
    //outfile << left << setw(DataWidth) << setfill(separator) << Tavg;
    //outfile << left << setw(DataWidth) << setfill(separator) << " - ";
    //outfile << left << setw(DataWidth) << setfill(separator) << " - ";
    //outfile << left << setw(DataWidth) << setfill(separator) << " - ";
    outfile << left << setw(DataWidth) << setfill(separator) << Keff;
    outfile << left << setw(DataWidth) << setfill(separator) << Sdev;
    outfile << endl;
    outfile.close();
    t++;
}

cout << endl << "AutoGenerate() Done." << endl;
_getch();
exit(EXIT_SUCCESS);
}

void main() {
    //Auxillary Programs
    //AutoGenerate();

    //MCNP now running flag file
    remove(done);

    //Read Temperature data from COMSOL file
    ReadCOMSOLData();

    //Control Rod Position
    CtrlRod();
    //CtrlRodManual();

    //Calculate Fuel volume from temperatures
    CalcHeight();

    //MCNP File Generation
    GenerateMCNPFile();

    //Cell Coordinate File (for use in COMSOL)
    PrintCellCoordinates();
}

```

```
//Runs MCNP
RunMCNP();

//Tune Ctrl Rod
if (abs(1 - Keff) > 0.001) {
    CtrlRod();
    GenerateMCNPFile();
    remove(MCNP_Out);
    remove(mesh.tal);
    RunMCNP();
}

//Cleanup and Store files
Finished();

cout << endl << "Done." << endl;
_getch();
}
```

Appendix B: Temperature Dependant Material Properties

The following temperature dependant material properties were used in this work and are valid over the operating temperatures of 20°C to 100°C. The functions are included for further thermohydraulic modeling of the Homogeneous SLOWPOKE. Materials not listed here can be found in the COMSOL Multiphysics 5.2 materials database.

Material	Property	Material property function of T (K)	Ref
Graphite	ρ (kg·m ⁻³)	1700	[1]
	C_p (J·kg ⁻¹ ·K ⁻¹)	156	
	k (W·m ⁻¹ ·K ⁻¹)	710	
Zircaloy-4	ρ (kg·m ⁻³)	6595.2 - 0.1477T	[2]
	C_p (J·kg ⁻¹ ·K ⁻¹)	255.66 + 0.1024T	
	k (W·m ⁻¹ ·K ⁻¹)	12.767 - 5.4348x10 ⁻⁴ T + 8.9818x10 ⁻⁶ T ²	
Water	ρ (kg·m ⁻³)	838.466135 + 1.40050603T - 0.0030112376T ² + 3.71822313x10 ⁻⁷ *T ³	[3]
	C_p (J·kg ⁻¹ ·K ⁻¹)	12010.1471 - 80.4072879T + 0.309866854T ² - 5.38186884x10 ⁻⁴ T ³ + 3.62536437x10 ⁻⁷ T ⁴	
	k (W·m ⁻¹ ·K ⁻¹)	-0.869083936 + 0.00894880345T -1.58366345x10 ⁻⁵ T ² + 7.97543259x10 ⁻⁹ T ³	
	μ (Pa·s)	1.3799566804 - 0.021224019151T + 1.3604562827x10 ⁻⁴ T ² - 4.6454090319x10 ⁻⁷ T ³ + 8.9042735735x10 ⁻¹⁰ T ⁴ - 9.0790692686x10 ⁻¹³ T ⁵ +3.8457331488x10 ⁻¹⁶ T ⁶	
Aqueous Uranyl Sulfate	ρ (kg·m ⁻³)	0.3037M + 838.466135 + 1.40050603T -0.0030112376T ² + 3.71822313x10 ⁻⁷ T ³	[3,4,5]
	C_p (J·kg ⁻¹ ·K ⁻¹)	((870.08M ² - 3188.5M + 5202.1)/4180.8) * (12010.1471 - 80.4072879T + 0.309866854T ² - 5.38186884x10 ⁻⁴ T ³ + 3.62536437x10 ⁻⁷ T ⁴) where M is concentration in mol·L ⁻¹ at SATP	[4]
	k (W·m ⁻¹ ·K ⁻¹)	k for water used. Some data is available at ref.	[6]
	μ (Pa·s)	Interpolation function from data points in ref	[7]

- [1] Glasstone, Sesonke. *Nuclear Reactor Engineering, 4th Edition*, Vol. 2.
- [2] International Atomic Energy Agency (2006), *Thermophysical Properties Database of Materials for Light Water Reactors and Heavy Water Reactors*, Document #: IAEA-TECDOC-1496.
- [3] COMSOL, Inc. (2016), *COMSOL Multiphysics Material Database*, Version 5.2, Burlington, MA.
- [4] Roarty, J.D., Oak Ridge National Laboratory, *Physical Properties of Uranyl Sulfate Solutions at Atmospheric Pressure*, Document #: CF-52-3-253.
- [5] Marshall, W.L., Oak Ridge National Laboratory, *Molarity Conversion Equations for Uranyl Sulfate-Water Solutions*, Document #: CF-52-1-93.
- [6] Argonne National Laboratory, *Mo Recovery Updates and Physical Properties of Uranyl Sulfate Solutions*, Document #: ANL/CSE-13/20.
- [7] Lane, J.A., *Fluid Fuel Reactors*, Addison-Wesley, 1953.

Appendix C: COMSOL API Source Code

```
//MAIN()
First_Step();
++step;
while ((step*tstep) < tmax) {
  Next_Step();
  Export();
  Run_MCNP();
  ++step;
}
alert("Simulation complete");

//FIRST STEP()
model.study().create("std1");
model.study("std1").create("time1", "Transient");
model.study("std1").feature("time1").activate("ht", true);
model.study("std1").feature("time1").activate("spf", true);
model.study("std1").feature("time1").label("0 to "+toString(tstep));
with(model.study("std1").feature("time1"));
  set("tlist", "range(0,"+toString(resolution)+",""+toString(tstep)+")");
  set("useinitsol", "on");
  set("usesol", "on");
  set("plot", "on");
  set("plotgroup", "pg2");
endwith();
model.sol().create("sol1");
model.sol("sol1").study("std1");
with(model.study("std1").feature("time1"));
  set("notlistsolnum", 1);
  set("notsolnum", "1");
  set("listsolnum", 1);
  set("solnum", "1");
endwith();
model.sol("sol1").create("st1", "StudyStep");
with(model.sol("sol1").feature("st1"));
  set("study", "std1");
  set("studystep", "time1");
endwith();
model.sol("sol1").create("v1", "Variables");
with(model.sol("sol1").feature("v1"));
  set("control", "time1");
endwith();
model.sol("sol1").create("t1", "Time");
with(model.sol("sol1").feature("t1"));
  set("tlist", "range(0,"+toString(resolution)+",""+toString(tstep)+")");
  set("plot", "off");
  set("plotgroup", "Default");
  set("plotfreq", "tout");
  set("probesel", "all");
  set("probes", new String[]{"pdom1", "pdom2", "dom1", "dom2", "dom3", "dom4"});
```

```

set("probefreq", "tsteps");
set("atolglobalmethod", "scaled");
set("atolglobal", 5.0E-4);
set("estrat", "exclude");
set("maxorder", 2);
set("control", "time1");
endwith();
model.sol("sol1").feature("t1").create("seDef", "Segregated");
model.sol("sol1").feature("t1").create("fc1", "FullyCoupled");
with(model.sol("sol1").feature("t1").feature("fc1"));
  set("jtech", "once");
  set("maxiter", 6);
  set("damp", 0.9);
endwith();
model.sol("sol1").feature("t1").create("d1", "Direct");
with(model.sol("sol1").feature("t1").feature("d1"));
  set("linsolver", "pardiso");
endwith();
with(model.sol("sol1").feature("t1").feature("fc1"));
  set("linsolver", "d1");
  set("jtech", "once");
  set("maxiter", 6);
  set("damp", 0.9);
  set("dtech", "hnlm");
endwith();
model.sol("sol1").feature("t1").feature().remove("fcDef");
model.sol("sol1").feature("t1").feature().remove("seDef");
model.sol("sol1").attach("std1");
model.probe("pdom1").getResult("none");
model.probe("pdom2").getResult("none");
model.probe("dom1").getResult("none");
model.probe("dom2").getResult("none");
model.probe("dom3").getResult("none");
model.probe("dom4").getResult("none");
model.sol("sol1").runFromTo("st1", "v1");
model.sol("sol1").label("Working Solver");
model.sol("sol1").create("su1", "StoreSolution");
model.sol("sol1").feature("su1").label("Step 1");
//Plots Working Data
with(model.result("pg2"));
  set("data", "dset1");
endwith();
model.result("pg2").run();
//Exports Initial Values
Export();
Run_MCNP();
//Runs First Step
model.sol("sol1").runFromTo("st1", "su1");

```

```
//NEXT STEP()
```



```

model.study("std1").create("time"+toString(step), "Transient");
model.study("std1").feature("time"+toString(step)).label(toString((step-1)*tstep)+
"+toString(step*tstep));
with(model.study("std1").feature("time"+toString(step)));
  set("tlist", "range("+toString((step-1)*tstep)+","+toString(resolution)+","+toString(step*tstep)+")");
  set("plot", "on");
  set("plotgroup", "pg2");
  set("useinitsol", "on");
  set("initmethod", "sol");
  set("initstudy", "std1");
  set("initsol", "sol1");
  set("initsoluse", "sol"+toString(step));
  set("solnum", "last");
  set("usesol", "on");
  set("notsolmethod", "sol");
  set("notstudy", "std1");
  set("notsol", "sol1");
  set("notsoluse", "sol"+toString(step));
  set("notsolnum", "last");
endwith();
with(model.sol("sol1").feature("st1"));
  set("studystep", "time"+toString(step));
endwith();
model.sol("sol1").create("su"+toString(step), "StoreSolution");
model.sol("sol1").feature("su"+toString(step)).label("Step "+toString(step));
//Disable Past Store Solutions
for (int i = (step-1); i >= 1; --i) {
  model.sol("sol1").feature("su"+toString(i)).active(false);
}
//Run
model.sol("sol1").runFromTo("st1", "su"+toString(step));

```

```

//EXPORT()
//Exports Temperature Profile
model.result().export().create("data1", "Data");
with(model.result().export("data1"));
  set("timeinterp", "on");
  set("t", toString((step-1)*tstep));
  setIndex("expr", "R.T", 0);
  set("location", "file");
  set("filename", "COMSOL_Data.txt");
  set("coordfilename", "MCNP_Coordinates.txt");
endwith();
model.result().export("data1").run();
model.result().export().remove("data1");
//Exports Avg Fuel Temp and Simulation Time
model.result().export().create("data1", "Data");
with(model.result().export("data1"));
  set("data", "avh1");

```

```
set("timeinterp", "on");
set("t", toString((step-1)*tstep));
set("expr", new String[]{"t"});
set("descr", new String[]{"Time"});
set("expr", new String[]{"t", "TFavg"});
set("descr", new String[]{"Time", "Probe variable TFavg"});
set("filename", "COMSOL_Parameters.txt");
endwith();
model.result().export("data1").run();
model.result().export().remove("data1");
```

```
//RUN_MCNP()
//Runs MCNP Generator program
MCNP_Running = true;
fileOpen("User://MCNPGenerator.exe");
while (MCNP_Running) {
    //Loop until MCNP is done
    if (exists("User://MCNP_done.txt")) {
        MCNP_Running = false;
    }
}
```

Appendix D: Sample of an Automatically Generated MCNP Input File

```

c ==== Data =====
Homogeneous Slowpoke v2
c Using 15L (corrected to 20oC) of 1.3519mol/L UO2SO4 Solution
c Fuel Temperature profile taken from COMSOL data file
c 5 x 1.5mm rod at inner sites. 43.9072% inserted
c ==== Code Updates =====
c X direction is vertical(known program bug)
c fuel mass fractions updated using correct density
c now using chimney style cooling outlet channels
c fuel container extended to remove water below
c Zircaloy vessel material(m1)
c all beryllium with pre - irradiation impurities(m2)
c graphite with impurities for added reflector annulus(m3 in cells 25 - 29)
c natural abundance deuterium in material m4, m5 and m8(0.015 a / o 1002)
c pool water only at 20oC(m5 density altered in cells 60 - 61)
c Ar and CO2 added to H2O saturated air at 40oC(m8) for air gap
c Ar + CO2 added - dry air at 25oC(m9) for air fill in all irradiation sites
c
c ==== Code Generated Cell Cards=====
c Cell# Mat Density Surf Parameters                               Comments
c Fuel Mesh Cells (1000+ Series)
1000 4 -1.4086 -1000 1050 -1051 TMP=2.5719e-8 IMP:n=1          $ Fuel Mesh Cell(Centerline) (Cell# 0)
1001 4 -1.4086 1000 -1001 1050 -1051 TMP=2.5723e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 1)
1002 4 -1.4086 1001 -1002 1050 -1051 TMP=2.5722e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 2)
1003 4 -1.4086 1002 -1003 1050 -1051 TMP=2.5724e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 3)
1004 4 -1.4086 1003 -1004 1050 -1051 TMP=2.5724e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 4)
1005 4 -1.4086 1004 -1005 1050 -1051 TMP=2.5723e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 5)
1006 4 -1.4086 1005 -1006 1050 -1051 TMP=2.5723e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 6)
1007 4 -1.4086 1006 -1007 1050 -1051 TMP=2.5725e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 7)
1008 4 -1.4086 1007 -1008 1050 -1051 TMP=2.5724e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 8)
1009 4 -1.4086 1008 -1009 1050 -1051 TMP=2.5723e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 9)
1010 4 -1.4086 1009 -1010 1050 -1051 TMP=2.5722e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 10)
1011 4 -1.4086 1010 -1011 1050 -1051 TMP=2.5722e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 11)
1012 4 -1.4086 1011 -1012 1050 -1051 TMP=2.5725e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 12)
1013 4 -1.4086 1012 -1013 1050 -1051 TMP=2.5725e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 13)
1014 4 -1.4086 1013 -1014 1050 -1051 TMP=2.5724e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 14)
1015 4 -1.4086 1014 -1015 1050 -1051 TMP=2.5721e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 15)
1016 4 -1.4086 1015 -1016 1050 -1051 TMP=2.5718e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 16)
1017 4 -1.4086 1016 -1017 1050 -1051 TMP=2.5717e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 17)
1018 4 -1.4086 1017 -1018 1050 -1051 TMP=2.5717e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 18)
1019 4 -1.4086 1018 -1019 1050 -1051 TMP=2.5717e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 19)
1020 4 -1.4086 1019 -1020 1050 -1051 TMP=2.5716e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 20)
1021 4 -1.4086 1020 -1021 1050 -1051 TMP=2.5716e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 21)
1022 4 -1.4086 1021 -1022 1050 -1051 TMP=2.5713e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 22)
1023 4 -1.4087 1022 -1023 1050 -1051 TMP=2.5712e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 23)
1024 4 -1.4087 1023 -1024 1050 -1051 TMP=2.5711e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 24)
1025 4 -1.4087 1024 -1025 1050 -1051 TMP=2.5710e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 25)
1026 4 -1.4087 1025 -1026 1050 -1051 TMP=2.5708e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 26)
1027 4 -1.4087 1026 -1027 1050 -1051 TMP=2.5707e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 27)
1028 4 -1.4087 1027 -1028 1050 -1051 TMP=2.5705e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 28)
1029 4 -1.4087 1028 -1029 1050 -1051 TMP=2.5703e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 29)
1030 4 -1.4087 1029 -1030 1050 -1051 TMP=2.5701e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 30)
1031 4 -1.4087 1030 -1031 1050 -1051 TMP=2.5699e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 31)
1032 4 -1.4087 1031 -1032 1050 -1051 TMP=2.5697e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 32)
1033 4 -1.4087 1032 -1033 1050 -1051 TMP=2.5695e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 33)
1034 4 -1.4087 1033 -1034 1050 -1051 TMP=2.5694e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 34)
1035 4 -1.4087 1034 -1035 1050 -1051 TMP=2.5693e-8 IMP:n=1    $ Fuel Mesh Cell (Cell# 35)

```

1036	4	-1.4087	1035	-1036	1050	-1051	TMP=2.5690e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 36)
1037	4	-1.4087	1036	-1037	1050	-1051	TMP=2.5687e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 37)
1038	4	-1.4088	1037	-1038	1050	-1051	TMP=2.5683e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 38)
1039	4	-1.4088	1038	-1039	1050	-1051	TMP=2.5680e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 39)
1040	4	-1.4088	1039	-1040	1050	-1051	TMP=2.5678e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 40)
1041	4	-1.4088	1040	-1041	1050	-1051	TMP=2.5675e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 41)
1042	4	-1.4088	1041	-1042	1050	-1051	TMP=2.5670e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 42)
1043	4	-1.4088	1042	-1043	1050	-1051	TMP=2.5662e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 43)
1044	4	-1.4089	1043	-1044	1050	-1051	TMP=2.5652e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 44)
1045	4	-1.4089	1044	-1045	1050	-1051	TMP=2.5644e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 45)
1046	4	-1.4089	1045	-1046	1050	-1051	TMP=2.5647e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 46)
1047	4	-1.4089	1046	-1047	1050	-1051	TMP=2.5652e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 47)
1048	4	-1.4090	1047	-1048	1050	-1051	TMP=2.5623e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 48)
1049	4	-1.4094	1048	-1049	1050	-1051	TMP=2.5496e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 49)
1050	4	-1.4070	-1000	1051	-1052	TMP=2.6157e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 50)	
1051	4	-1.4071	1000	-1001	1051	-1052	TMP=2.6154e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 51)
1052	4	-1.4071	1001	-1002	1051	-1052	TMP=2.6155e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 52)
1053	4	-1.4071	1002	-1003	1051	-1052	TMP=2.6155e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 53)
1054	4	-1.4071	1003	-1004	1051	-1052	TMP=2.6152e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 54)
1055	4	-1.4070	1004	-1005	1051	-1052	TMP=2.6157e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 55)
1056	4	-1.4070	1005	-1006	1051	-1052	TMP=2.6160e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 56)
1057	4	-1.4070	1006	-1007	1051	-1052	TMP=2.6158e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 57)
1058	4	-1.4071	1007	-1008	1051	-1052	TMP=2.6153e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 58)
1059	4	-1.4071	1008	-1009	1051	-1052	TMP=2.6153e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 59)
1060	4	-1.4071	1009	-1010	1051	-1052	TMP=2.6154e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 60)
1061	4	-1.4071	1010	-1011	1051	-1052	TMP=2.6153e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 61)
1062	4	-1.4071	1011	-1012	1051	-1052	TMP=2.6152e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 62)
1063	4	-1.4071	1012	-1013	1051	-1052	TMP=2.6149e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 63)
1064	4	-1.4071	1013	-1014	1051	-1052	TMP=2.6150e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 64)
1065	4	-1.4071	1014	-1015	1051	-1052	TMP=2.6145e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 65)
1066	4	-1.4071	1015	-1016	1051	-1052	TMP=2.6144e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 66)
1067	4	-1.4071	1016	-1017	1051	-1052	TMP=2.6144e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 67)
1068	4	-1.4071	1017	-1018	1051	-1052	TMP=2.6143e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 68)
1069	4	-1.4071	1018	-1019	1051	-1052	TMP=2.6144e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 69)
1070	4	-1.4071	1019	-1020	1051	-1052	TMP=2.6140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 70)
1071	4	-1.4071	1020	-1021	1051	-1052	TMP=2.6140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 71)
1072	4	-1.4071	1021	-1022	1051	-1052	TMP=2.6138e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 72)
1073	4	-1.4071	1022	-1023	1051	-1052	TMP=2.6138e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 73)
1074	4	-1.4071	1023	-1024	1051	-1052	TMP=2.6136e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 74)
1075	4	-1.4071	1024	-1025	1051	-1052	TMP=2.6134e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 75)
1076	4	-1.4071	1025	-1026	1051	-1052	TMP=2.6130e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 76)
1077	4	-1.4071	1026	-1027	1051	-1052	TMP=2.6131e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 77)
1078	4	-1.4072	1027	-1028	1051	-1052	TMP=2.6127e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 78)
1079	4	-1.4072	1028	-1029	1051	-1052	TMP=2.6127e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 79)
1080	4	-1.4072	1029	-1030	1051	-1052	TMP=2.6124e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 80)
1081	4	-1.4072	1030	-1031	1051	-1052	TMP=2.6124e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 81)
1082	4	-1.4072	1031	-1032	1051	-1052	TMP=2.6121e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 82)
1083	4	-1.4072	1032	-1033	1051	-1052	TMP=2.6122e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 83)
1084	4	-1.4072	1033	-1034	1051	-1052	TMP=2.6119e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 84)
1085	4	-1.4072	1034	-1035	1051	-1052	TMP=2.6116e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 85)
1086	4	-1.4072	1035	-1036	1051	-1052	TMP=2.6111e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 86)
1087	4	-1.4072	1036	-1037	1051	-1052	TMP=2.6107e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 87)
1088	4	-1.4072	1037	-1038	1051	-1052	TMP=2.6103e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 88)
1089	4	-1.4073	1038	-1039	1051	-1052	TMP=2.6100e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 89)
1090	4	-1.4073	1039	-1040	1051	-1052	TMP=2.6097e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 90)
1091	4	-1.4073	1040	-1041	1051	-1052	TMP=2.6094e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 91)
1092	4	-1.4073	1041	-1042	1051	-1052	TMP=2.6092e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 92)
1093	4	-1.4073	1042	-1043	1051	-1052	TMP=2.6086e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 93)
1094	4	-1.4074	1043	-1044	1051	-1052	TMP=2.6074e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 94)
1095	4	-1.4073	1044	-1045	1051	-1052	TMP=2.6085e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 95)

1096	4	-1.4072	1045	-1046	1051	-1052	TMP=2.6122e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 96)
1097	4	-1.4071	1046	-1047	1051	-1052	TMP=2.6141e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 97)
1098	4	-1.4075	1047	-1048	1051	-1052	TMP=2.6042e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 98)
1099	4	-1.4086	1048	-1049	1051	-1052	TMP=2.5714e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 99)
1100	4	-1.4061	-1000	1052	-1053	TMP=2.6398e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 100)	
1101	4	-1.4061	1000	-1001	1052	-1053	TMP=2.6390e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 101)
1102	4	-1.4061	1001	-1002	1052	-1053	TMP=2.6392e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 102)
1103	4	-1.4061	1002	-1003	1052	-1053	TMP=2.6394e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 103)
1104	4	-1.4061	1003	-1004	1052	-1053	TMP=2.6395e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 104)
1105	4	-1.4061	1004	-1005	1052	-1053	TMP=2.6391e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 105)
1106	4	-1.4062	1005	-1006	1052	-1053	TMP=2.6388e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 106)
1107	4	-1.4061	1006	-1007	1052	-1053	TMP=2.6390e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 107)
1108	4	-1.4061	1007	-1008	1052	-1053	TMP=2.6395e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 108)
1109	4	-1.4061	1008	-1009	1052	-1053	TMP=2.6394e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 109)
1110	4	-1.4062	1009	-1010	1052	-1053	TMP=2.6389e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 110)
1111	4	-1.4062	1010	-1011	1052	-1053	TMP=2.6389e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 111)
1112	4	-1.4061	1011	-1012	1052	-1053	TMP=2.6391e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 112)
1113	4	-1.4061	1012	-1013	1052	-1053	TMP=2.6391e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 113)
1114	4	-1.4061	1013	-1014	1052	-1053	TMP=2.6391e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 114)
1115	4	-1.4061	1014	-1015	1052	-1053	TMP=2.6400e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 115)
1116	4	-1.4062	1015	-1016	1052	-1053	TMP=2.6390e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 116)
1117	4	-1.4062	1016	-1017	1052	-1053	TMP=2.6390e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 117)
1118	4	-1.4062	1017	-1018	1052	-1053	TMP=2.6389e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 118)
1119	4	-1.4062	1018	-1019	1052	-1053	TMP=2.6387e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 119)
1120	4	-1.4062	1019	-1020	1052	-1053	TMP=2.6386e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 120)
1121	4	-1.4062	1020	-1021	1052	-1053	TMP=2.6387e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 121)
1122	4	-1.4062	1021	-1022	1052	-1053	TMP=2.6382e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 122)
1123	4	-1.4062	1022	-1023	1052	-1053	TMP=2.6381e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 123)
1124	4	-1.4062	1023	-1024	1052	-1053	TMP=2.6380e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 124)
1125	4	-1.4062	1024	-1025	1052	-1053	TMP=2.6380e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 125)
1126	4	-1.4062	1025	-1026	1052	-1053	TMP=2.6379e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 126)
1127	4	-1.4062	1026	-1027	1052	-1053	TMP=2.6378e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 127)
1128	4	-1.4062	1027	-1028	1052	-1053	TMP=2.6380e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 128)
1129	4	-1.4062	1028	-1029	1052	-1053	TMP=2.6377e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 129)
1130	4	-1.4062	1029	-1030	1052	-1053	TMP=2.6374e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 130)
1131	4	-1.4062	1030	-1031	1052	-1053	TMP=2.6374e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 131)
1132	4	-1.4062	1031	-1032	1052	-1053	TMP=2.6372e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 132)
1133	4	-1.4062	1032	-1033	1052	-1053	TMP=2.6370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 133)
1134	4	-1.4062	1033	-1034	1052	-1053	TMP=2.6368e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 134)
1135	4	-1.4062	1034	-1035	1052	-1053	TMP=2.6368e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 135)
1136	4	-1.4062	1035	-1036	1052	-1053	TMP=2.6368e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 136)
1137	4	-1.4062	1036	-1037	1052	-1053	TMP=2.6368e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 137)
1138	4	-1.4062	1037	-1038	1052	-1053	TMP=2.6370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 138)
1139	4	-1.4062	1038	-1039	1052	-1053	TMP=2.6374e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 139)
1140	4	-1.4062	1039	-1040	1052	-1053	TMP=2.6372e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 140)
1141	4	-1.4062	1040	-1041	1052	-1053	TMP=2.6371e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 141)
1142	4	-1.4062	1041	-1042	1052	-1053	TMP=2.6365e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 142)
1143	4	-1.4063	1042	-1043	1052	-1053	TMP=2.6357e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 143)
1144	4	-1.4063	1043	-1044	1052	-1053	TMP=2.6361e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 144)
1145	4	-1.4062	1044	-1045	1052	-1053	TMP=2.6382e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 145)
1146	4	-1.4060	1045	-1046	1052	-1053	TMP=2.6420e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 146)
1147	4	-1.4060	1046	-1047	1052	-1053	TMP=2.6434e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 147)
1148	4	-1.4065	1047	-1048	1052	-1053	TMP=2.6293e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 148)
1149	4	-1.4082	1048	-1049	1052	-1053	TMP=2.5853e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 149)
1150	4	-1.4054	-1000	1053	-1054	TMP=2.6572e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 150)	
1151	4	-1.4054	1000	-1001	1053	-1054	TMP=2.6569e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 151)
1152	4	-1.4054	1001	-1002	1053	-1054	TMP=2.6573e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 152)
1153	4	-1.4054	1002	-1003	1053	-1054	TMP=2.6571e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 153)
1154	4	-1.4054	1003	-1004	1053	-1054	TMP=2.6572e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 154)
1155	4	-1.4054	1004	-1005	1053	-1054	TMP=2.6572e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 155)

1156	4	-1.4054	1005	-1006	1053	-1054	TMP=2.6571e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 156)
1157	4	-1.4054	1006	-1007	1053	-1054	TMP=2.6573e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 157)
1158	4	-1.4054	1007	-1008	1053	-1054	TMP=2.6577e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 158)
1159	4	-1.4054	1008	-1009	1053	-1054	TMP=2.6571e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 159)
1160	4	-1.4054	1009	-1010	1053	-1054	TMP=2.6576e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 160)
1161	4	-1.4054	1010	-1011	1053	-1054	TMP=2.6568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 161)
1162	4	-1.4054	1011	-1012	1053	-1054	TMP=2.6568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 162)
1163	4	-1.4054	1012	-1013	1053	-1054	TMP=2.6565e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 163)
1164	4	-1.4054	1013	-1014	1053	-1054	TMP=2.6567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 164)
1165	4	-1.4054	1014	-1015	1053	-1054	TMP=2.6567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 165)
1166	4	-1.4055	1015	-1016	1053	-1054	TMP=2.6563e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 166)
1167	4	-1.4055	1016	-1017	1053	-1054	TMP=2.6564e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 167)
1168	4	-1.4054	1017	-1018	1053	-1054	TMP=2.6566e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 168)
1169	4	-1.4054	1018	-1019	1053	-1054	TMP=2.6565e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 169)
1170	4	-1.4054	1019	-1020	1053	-1054	TMP=2.6567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 170)
1171	4	-1.4054	1020	-1021	1053	-1054	TMP=2.6570e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 171)
1172	4	-1.4054	1021	-1022	1053	-1054	TMP=2.6571e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 172)
1173	4	-1.4054	1022	-1023	1053	-1054	TMP=2.6572e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 173)
1174	4	-1.4054	1023	-1024	1053	-1054	TMP=2.6571e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 174)
1175	4	-1.4054	1024	-1025	1053	-1054	TMP=2.6571e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 175)
1176	4	-1.4055	1025	-1026	1053	-1054	TMP=2.6561e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 176)
1177	4	-1.4055	1026	-1027	1053	-1054	TMP=2.6564e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 177)
1178	4	-1.4054	1027	-1028	1053	-1054	TMP=2.6568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 178)
1179	4	-1.4054	1028	-1029	1053	-1054	TMP=2.6569e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 179)
1180	4	-1.4054	1029	-1030	1053	-1054	TMP=2.6568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 180)
1181	4	-1.4054	1030	-1031	1053	-1054	TMP=2.6569e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 181)
1182	4	-1.4054	1031	-1032	1053	-1054	TMP=2.6567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 182)
1183	4	-1.4054	1032	-1033	1053	-1054	TMP=2.6569e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 183)
1184	4	-1.4054	1033	-1034	1053	-1054	TMP=2.6570e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 184)
1185	4	-1.4054	1034	-1035	1053	-1054	TMP=2.6571e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 185)
1186	4	-1.4054	1035	-1036	1053	-1054	TMP=2.6570e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 186)
1187	4	-1.4054	1036	-1037	1053	-1054	TMP=2.6570e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 187)
1188	4	-1.4054	1037	-1038	1053	-1054	TMP=2.6570e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 188)
1189	4	-1.4054	1038	-1039	1053	-1054	TMP=2.6568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 189)
1190	4	-1.4054	1039	-1040	1053	-1054	TMP=2.6568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 190)
1191	4	-1.4054	1040	-1041	1053	-1054	TMP=2.6566e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 191)
1192	4	-1.4055	1041	-1042	1053	-1054	TMP=2.6564e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 192)
1193	4	-1.4055	1042	-1043	1053	-1054	TMP=2.6554e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 193)
1194	4	-1.4055	1043	-1044	1053	-1054	TMP=2.6561e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 194)
1195	4	-1.4053	1044	-1045	1053	-1054	TMP=2.6590e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 195)
1196	4	-1.4051	1045	-1046	1053	-1054	TMP=2.6640e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 196)
1197	4	-1.4051	1046	-1047	1053	-1054	TMP=2.6640e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 197)
1198	4	-1.4058	1047	-1048	1053	-1054	TMP=2.6466e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 198)
1199	4	-1.4078	1048	-1049	1053	-1054	TMP=2.5953e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 199)
1200	4	-1.4048	-1000	1054	-1055	TMP=2.6718e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 200)	
1201	4	-1.4048	1000	-1001	1054	-1055	TMP=2.6723e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 201)
1202	4	-1.4048	1001	-1002	1054	-1055	TMP=2.6727e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 202)
1203	4	-1.4048	1002	-1003	1054	-1055	TMP=2.6722e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 203)
1204	4	-1.4048	1003	-1004	1054	-1055	TMP=2.6725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 204)
1205	4	-1.4048	1004	-1005	1054	-1055	TMP=2.6725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 205)
1206	4	-1.4048	1005	-1006	1054	-1055	TMP=2.6726e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 206)
1207	4	-1.4048	1006	-1007	1054	-1055	TMP=2.6727e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 207)
1208	4	-1.4048	1007	-1008	1054	-1055	TMP=2.6724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 208)
1209	4	-1.4048	1008	-1009	1054	-1055	TMP=2.6723e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 209)
1210	4	-1.4048	1009	-1010	1054	-1055	TMP=2.6726e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 210)
1211	4	-1.4048	1010	-1011	1054	-1055	TMP=2.6724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 211)
1212	4	-1.4048	1011	-1012	1054	-1055	TMP=2.6722e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 212)
1213	4	-1.4048	1012	-1013	1054	-1055	TMP=2.6719e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 213)
1214	4	-1.4048	1013	-1014	1054	-1055	TMP=2.6723e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 214)
1215	4	-1.4048	1014	-1015	1054	-1055	TMP=2.6723e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 215)

1216	4	-1.4048	1015	-1016	1054	-1055	TMP=2.6725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 216)
1217	4	-1.4048	1016	-1017	1054	-1055	TMP=2.6728e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 217)
1218	4	-1.4048	1017	-1018	1054	-1055	TMP=2.6727e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 218)
1219	4	-1.4048	1018	-1019	1054	-1055	TMP=2.6723e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 219)
1220	4	-1.4048	1019	-1020	1054	-1055	TMP=2.6725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 220)
1221	4	-1.4048	1020	-1021	1054	-1055	TMP=2.6722e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 221)
1222	4	-1.4048	1021	-1022	1054	-1055	TMP=2.6721e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 222)
1223	4	-1.4048	1022	-1023	1054	-1055	TMP=2.6722e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 223)
1224	4	-1.4048	1023	-1024	1054	-1055	TMP=2.6729e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 224)
1225	4	-1.4048	1024	-1025	1054	-1055	TMP=2.6725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 225)
1226	4	-1.4048	1025	-1026	1054	-1055	TMP=2.6729e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 226)
1227	4	-1.4048	1026	-1027	1054	-1055	TMP=2.6732e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 227)
1228	4	-1.4048	1027	-1028	1054	-1055	TMP=2.6731e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 228)
1229	4	-1.4048	1028	-1029	1054	-1055	TMP=2.6727e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 229)
1230	4	-1.4048	1029	-1030	1054	-1055	TMP=2.6725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 230)
1231	4	-1.4048	1030	-1031	1054	-1055	TMP=2.6726e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 231)
1232	4	-1.4048	1031	-1032	1054	-1055	TMP=2.6718e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 232)
1233	4	-1.4048	1032	-1033	1054	-1055	TMP=2.6723e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 233)
1234	4	-1.4048	1033	-1034	1054	-1055	TMP=2.6725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 234)
1235	4	-1.4048	1034	-1035	1054	-1055	TMP=2.6724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 235)
1236	4	-1.4048	1035	-1036	1054	-1055	TMP=2.6725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 236)
1237	4	-1.4048	1036	-1037	1054	-1055	TMP=2.6725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 237)
1238	4	-1.4048	1037	-1038	1054	-1055	TMP=2.6724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 238)
1239	4	-1.4048	1038	-1039	1054	-1055	TMP=2.6724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 239)
1240	4	-1.4048	1039	-1040	1054	-1055	TMP=2.6728e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 240)
1241	4	-1.4048	1040	-1041	1054	-1055	TMP=2.6726e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 241)
1242	4	-1.4048	1041	-1042	1054	-1055	TMP=2.6718e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 242)
1243	4	-1.4048	1042	-1043	1054	-1055	TMP=2.6712e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 243)
1244	4	-1.4048	1043	-1044	1054	-1055	TMP=2.6721e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 244)
1245	4	-1.4046	1044	-1045	1054	-1055	TMP=2.6761e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 245)
1246	4	-1.4044	1045	-1046	1054	-1055	TMP=2.6811e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 246)
1247	4	-1.4045	1046	-1047	1054	-1055	TMP=2.6801e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 247)
1248	4	-1.4053	1047	-1048	1054	-1055	TMP=2.6597e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 248)
1249	4	-1.4075	1048	-1049	1054	-1055	TMP=2.6035e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 249)
1250	4	-1.4042	-1000	1055	-1056	TMP=2.6855e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 250)	
1251	4	-1.4042	1000	-1001	1055	-1056	TMP=2.6854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 251)
1252	4	-1.4042	1001	-1002	1055	-1056	TMP=2.6860e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 252)
1253	4	-1.4042	1002	-1003	1055	-1056	TMP=2.6857e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 253)
1254	4	-1.4042	1003	-1004	1055	-1056	TMP=2.6855e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 254)
1255	4	-1.4042	1004	-1005	1055	-1056	TMP=2.6859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 255)
1256	4	-1.4042	1005	-1006	1055	-1056	TMP=2.6856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 256)
1257	4	-1.4042	1006	-1007	1055	-1056	TMP=2.6858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 257)
1258	4	-1.4042	1007	-1008	1055	-1056	TMP=2.6862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 258)
1259	4	-1.4042	1008	-1009	1055	-1056	TMP=2.6861e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 259)
1260	4	-1.4042	1009	-1010	1055	-1056	TMP=2.6865e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 260)
1261	4	-1.4042	1010	-1011	1055	-1056	TMP=2.6866e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 261)
1262	4	-1.4042	1011	-1012	1055	-1056	TMP=2.6863e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 262)
1263	4	-1.4042	1012	-1013	1055	-1056	TMP=2.6863e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 263)
1264	4	-1.4042	1013	-1014	1055	-1056	TMP=2.6868e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 264)
1265	4	-1.4042	1014	-1015	1055	-1056	TMP=2.6863e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 265)
1266	4	-1.4042	1015	-1016	1055	-1056	TMP=2.6862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 266)
1267	4	-1.4042	1016	-1017	1055	-1056	TMP=2.6859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 267)
1268	4	-1.4042	1017	-1018	1055	-1056	TMP=2.6853e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 268)
1269	4	-1.4042	1018	-1019	1055	-1056	TMP=2.6858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 269)
1270	4	-1.4042	1019	-1020	1055	-1056	TMP=2.6864e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 270)
1271	4	-1.4042	1020	-1021	1055	-1056	TMP=2.6867e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 271)
1272	4	-1.4042	1021	-1022	1055	-1056	TMP=2.6869e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 272)
1273	4	-1.4042	1022	-1023	1055	-1056	TMP=2.6865e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 273)
1274	4	-1.4042	1023	-1024	1055	-1056	TMP=2.6865e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 274)
1275	4	-1.4042	1024	-1025	1055	-1056	TMP=2.6864e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 275)

1276	4	-1.4042	1025	-1026	1055	-1056	TMP=2.6863e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 276)
1277	4	-1.4042	1026	-1027	1055	-1056	TMP=2.6861e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 277)
1278	4	-1.4042	1027	-1028	1055	-1056	TMP=2.6858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 278)
1279	4	-1.4042	1028	-1029	1055	-1056	TMP=2.6855e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 279)
1280	4	-1.4042	1029	-1030	1055	-1056	TMP=2.6861e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 280)
1281	4	-1.4042	1030	-1031	1055	-1056	TMP=2.6853e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 281)
1282	4	-1.4042	1031	-1032	1055	-1056	TMP=2.6856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 282)
1283	4	-1.4042	1032	-1033	1055	-1056	TMP=2.6860e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 283)
1284	4	-1.4042	1033	-1034	1055	-1056	TMP=2.6859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 284)
1285	4	-1.4042	1034	-1035	1055	-1056	TMP=2.6855e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 285)
1286	4	-1.4042	1035	-1036	1055	-1056	TMP=2.6856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 286)
1287	4	-1.4042	1036	-1037	1055	-1056	TMP=2.6856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 287)
1288	4	-1.4042	1037	-1038	1055	-1056	TMP=2.6859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 288)
1289	4	-1.4042	1038	-1039	1055	-1056	TMP=2.6862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 289)
1290	4	-1.4042	1039	-1040	1055	-1056	TMP=2.6863e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 290)
1291	4	-1.4042	1040	-1041	1055	-1056	TMP=2.6860e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 291)
1292	4	-1.4043	1041	-1042	1055	-1056	TMP=2.6851e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 292)
1293	4	-1.4043	1042	-1043	1055	-1056	TMP=2.6845e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 293)
1294	4	-1.4042	1043	-1044	1055	-1056	TMP=2.6856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 294)
1295	4	-1.4041	1044	-1045	1055	-1056	TMP=2.6898e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 295)
1296	4	-1.4038	1045	-1046	1055	-1056	TMP=2.6948e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 296)
1297	4	-1.4039	1046	-1047	1055	-1056	TMP=2.6938e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 297)
1298	4	-1.4049	1047	-1048	1055	-1056	TMP=2.6708e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 298)
1299	4	-1.4072	1048	-1049	1055	-1056	TMP=2.6105e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 299)
1300	4	-1.4038	-1000	1056	-1057	TMP=2.6968e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 300)	
1301	4	-1.4038	1000	-1001	1056	-1057	TMP=2.6968e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 301)
1302	4	-1.4037	1001	-1002	1056	-1057	TMP=2.6976e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 302)
1303	4	-1.4037	1002	-1003	1056	-1057	TMP=2.6977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 303)
1304	4	-1.4037	1003	-1004	1056	-1057	TMP=2.6972e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 304)
1305	4	-1.4037	1004	-1005	1056	-1057	TMP=2.6973e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 305)
1306	4	-1.4037	1005	-1006	1056	-1057	TMP=2.6975e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 306)
1307	4	-1.4037	1006	-1007	1056	-1057	TMP=2.6972e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 307)
1308	4	-1.4037	1007	-1008	1056	-1057	TMP=2.6971e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 308)
1309	4	-1.4037	1008	-1009	1056	-1057	TMP=2.6972e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 309)
1310	4	-1.4037	1009	-1010	1056	-1057	TMP=2.6974e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 310)
1311	4	-1.4037	1010	-1011	1056	-1057	TMP=2.6973e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 311)
1312	4	-1.4037	1011	-1012	1056	-1057	TMP=2.6975e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 312)
1313	4	-1.4037	1012	-1013	1056	-1057	TMP=2.6977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 313)
1314	4	-1.4037	1013	-1014	1056	-1057	TMP=2.6979e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 314)
1315	4	-1.4037	1014	-1015	1056	-1057	TMP=2.6984e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 315)
1316	4	-1.4037	1015	-1016	1056	-1057	TMP=2.6983e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 316)
1317	4	-1.4037	1016	-1017	1056	-1057	TMP=2.6977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 317)
1318	4	-1.4037	1017	-1018	1056	-1057	TMP=2.6977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 318)
1319	4	-1.4037	1018	-1019	1056	-1057	TMP=2.6977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 319)
1320	4	-1.4037	1019	-1020	1056	-1057	TMP=2.6973e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 320)
1321	4	-1.4037	1020	-1021	1056	-1057	TMP=2.6977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 321)
1322	4	-1.4037	1021	-1022	1056	-1057	TMP=2.6978e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 322)
1323	4	-1.4037	1022	-1023	1056	-1057	TMP=2.6975e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 323)
1324	4	-1.4037	1023	-1024	1056	-1057	TMP=2.6972e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 324)
1325	4	-1.4037	1024	-1025	1056	-1057	TMP=2.6976e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 325)
1326	4	-1.4037	1025	-1026	1056	-1057	TMP=2.6979e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 326)
1327	4	-1.4037	1026	-1027	1056	-1057	TMP=2.6979e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 327)
1328	4	-1.4037	1027	-1028	1056	-1057	TMP=2.6977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 328)
1329	4	-1.4037	1028	-1029	1056	-1057	TMP=2.6971e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 329)
1330	4	-1.4037	1029	-1030	1056	-1057	TMP=2.6977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 330)
1331	4	-1.4037	1030	-1031	1056	-1057	TMP=2.6979e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 331)
1332	4	-1.4037	1031	-1032	1056	-1057	TMP=2.6975e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 332)
1333	4	-1.4037	1032	-1033	1056	-1057	TMP=2.6976e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 333)
1334	4	-1.4037	1033	-1034	1056	-1057	TMP=2.6976e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 334)
1335	4	-1.4037	1034	-1035	1056	-1057	TMP=2.6978e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 335)

1336	4	-1.4037	1035	-1036	1056	-1057	TMP=2.6976e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 336)
1337	4	-1.4037	1036	-1037	1056	-1057	TMP=2.6976e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 337)
1338	4	-1.4037	1037	-1038	1056	-1057	TMP=2.6976e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 338)
1339	4	-1.4037	1038	-1039	1056	-1057	TMP=2.6977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 339)
1340	4	-1.4037	1039	-1040	1056	-1057	TMP=2.6977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 340)
1341	4	-1.4037	1040	-1041	1056	-1057	TMP=2.6970e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 341)
1342	4	-1.4038	1041	-1042	1056	-1057	TMP=2.6964e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 342)
1343	4	-1.4038	1042	-1043	1056	-1057	TMP=2.6960e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 343)
1344	4	-1.4037	1043	-1044	1056	-1057	TMP=2.6973e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 344)
1345	4	-1.4035	1044	-1045	1056	-1057	TMP=2.7017e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 345)
1346	4	-1.4033	1045	-1046	1056	-1057	TMP=2.7073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 346)
1347	4	-1.4034	1046	-1047	1056	-1057	TMP=2.7051e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 347)
1348	4	-1.4045	1047	-1048	1056	-1057	TMP=2.6802e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 348)
1349	4	-1.4070	1048	-1049	1056	-1057	TMP=2.6163e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 349)
1350	4	-1.4033	-1000	1057	-1058	TMP=2.7074e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 350)	
1351	4	-1.4033	1000	-1001	1057	-1058	TMP=2.7067e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 351)
1352	4	-1.4033	1001	-1002	1057	-1058	TMP=2.7071e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 352)
1353	4	-1.4033	1002	-1003	1057	-1058	TMP=2.7079e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 353)
1354	4	-1.4033	1003	-1004	1057	-1058	TMP=2.7078e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 354)
1355	4	-1.4033	1004	-1005	1057	-1058	TMP=2.7072e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 355)
1356	4	-1.4033	1005	-1006	1057	-1058	TMP=2.7075e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 356)
1357	4	-1.4033	1006	-1007	1057	-1058	TMP=2.7077e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 357)
1358	4	-1.4033	1007	-1008	1057	-1058	TMP=2.7078e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 358)
1359	4	-1.4033	1008	-1009	1057	-1058	TMP=2.7075e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 359)
1360	4	-1.4033	1009	-1010	1057	-1058	TMP=2.7073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 360)
1361	4	-1.4033	1010	-1011	1057	-1058	TMP=2.7070e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 361)
1362	4	-1.4033	1011	-1012	1057	-1058	TMP=2.7068e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 362)
1363	4	-1.4033	1012	-1013	1057	-1058	TMP=2.7070e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 363)
1364	4	-1.4033	1013	-1014	1057	-1058	TMP=2.7062e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 364)
1365	4	-1.4033	1014	-1015	1057	-1058	TMP=2.7062e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 365)
1366	4	-1.4033	1015	-1016	1057	-1058	TMP=2.7069e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 366)
1367	4	-1.4033	1016	-1017	1057	-1058	TMP=2.7071e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 367)
1368	4	-1.4033	1017	-1018	1057	-1058	TMP=2.7071e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 368)
1369	4	-1.4033	1018	-1019	1057	-1058	TMP=2.7072e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 369)
1370	4	-1.4033	1019	-1020	1057	-1058	TMP=2.7072e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 370)
1371	4	-1.4033	1020	-1021	1057	-1058	TMP=2.7068e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 371)
1372	4	-1.4033	1021	-1022	1057	-1058	TMP=2.7070e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 372)
1373	4	-1.4033	1022	-1023	1057	-1058	TMP=2.7075e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 373)
1374	4	-1.4033	1023	-1024	1057	-1058	TMP=2.7077e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 374)
1375	4	-1.4033	1024	-1025	1057	-1058	TMP=2.7075e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 375)
1376	4	-1.4033	1025	-1026	1057	-1058	TMP=2.7073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 376)
1377	4	-1.4033	1026	-1027	1057	-1058	TMP=2.7073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 377)
1378	4	-1.4033	1027	-1028	1057	-1058	TMP=2.7073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 378)
1379	4	-1.4033	1028	-1029	1057	-1058	TMP=2.7075e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 379)
1380	4	-1.4033	1029	-1030	1057	-1058	TMP=2.7079e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 380)
1381	4	-1.4033	1030	-1031	1057	-1058	TMP=2.7077e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 381)
1382	4	-1.4033	1031	-1032	1057	-1058	TMP=2.7072e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 382)
1383	4	-1.4033	1032	-1033	1057	-1058	TMP=2.7079e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 383)
1384	4	-1.4033	1033	-1034	1057	-1058	TMP=2.7080e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 384)
1385	4	-1.4033	1034	-1035	1057	-1058	TMP=2.7073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 385)
1386	4	-1.4033	1035	-1036	1057	-1058	TMP=2.7073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 386)
1387	4	-1.4033	1036	-1037	1057	-1058	TMP=2.7075e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 387)
1388	4	-1.4033	1037	-1038	1057	-1058	TMP=2.7078e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 388)
1389	4	-1.4033	1038	-1039	1057	-1058	TMP=2.7077e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 389)
1390	4	-1.4033	1039	-1040	1057	-1058	TMP=2.7076e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 390)
1391	4	-1.4033	1040	-1041	1057	-1058	TMP=2.7069e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 391)
1392	4	-1.4033	1041	-1042	1057	-1058	TMP=2.7062e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 392)
1393	4	-1.4033	1042	-1043	1057	-1058	TMP=2.7060e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 393)
1394	4	-1.4033	1043	-1044	1057	-1058	TMP=2.7078e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 394)
1395	4	-1.4031	1044	-1045	1057	-1058	TMP=2.7125e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 395)

1396	4	-1.4028	1045	-1046	1057	-1058	TMP=2.7176e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 396)
1397	4	-1.4029	1046	-1047	1057	-1058	TMP=2.7150e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 397)
1398	4	-1.4041	1047	-1048	1057	-1058	TMP=2.6887e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 398)
1399	4	-1.4068	1048	-1049	1057	-1058	TMP=2.6215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 399)
1400	4	-1.4029	-1000	1058	-1059	TMP=2.7172e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 400)	
1401	4	-1.4029	1000	-1001	1058	-1059	TMP=2.7165e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 401)
1402	4	-1.4029	1001	-1002	1058	-1059	TMP=2.7160e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 402)
1403	4	-1.4029	1002	-1003	1058	-1059	TMP=2.7160e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 403)
1404	4	-1.4029	1003	-1004	1058	-1059	TMP=2.7161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 404)
1405	4	-1.4029	1004	-1005	1058	-1059	TMP=2.7162e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 405)
1406	4	-1.4029	1005	-1006	1058	-1059	TMP=2.7161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 406)
1407	4	-1.4029	1006	-1007	1058	-1059	TMP=2.7162e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 407)
1408	4	-1.4029	1007	-1008	1058	-1059	TMP=2.7162e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 408)
1409	4	-1.4029	1008	-1009	1058	-1059	TMP=2.7160e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 409)
1410	4	-1.4029	1009	-1010	1058	-1059	TMP=2.7158e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 410)
1411	4	-1.4029	1010	-1011	1058	-1059	TMP=2.7158e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 411)
1412	4	-1.4029	1011	-1012	1058	-1059	TMP=2.7156e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 412)
1413	4	-1.4029	1012	-1013	1058	-1059	TMP=2.7151e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 413)
1414	4	-1.4029	1013	-1014	1058	-1059	TMP=2.7161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 414)
1415	4	-1.4028	1014	-1015	1058	-1059	TMP=2.7175e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 415)
1416	4	-1.4028	1015	-1016	1058	-1059	TMP=2.7178e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 416)
1417	4	-1.4029	1016	-1017	1058	-1059	TMP=2.7167e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 417)
1418	4	-1.4029	1017	-1018	1058	-1059	TMP=2.7166e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 418)
1419	4	-1.4029	1018	-1019	1058	-1059	TMP=2.7171e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 419)
1420	4	-1.4028	1019	-1020	1058	-1059	TMP=2.7172e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 420)
1421	4	-1.4029	1020	-1021	1058	-1059	TMP=2.7169e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 421)
1422	4	-1.4029	1021	-1022	1058	-1059	TMP=2.7162e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 422)
1423	4	-1.4029	1022	-1023	1058	-1059	TMP=2.7166e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 423)
1424	4	-1.4029	1023	-1024	1058	-1059	TMP=2.7166e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 424)
1425	4	-1.4029	1024	-1025	1058	-1059	TMP=2.7164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 425)
1426	4	-1.4029	1025	-1026	1058	-1059	TMP=2.7161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 426)
1427	4	-1.4029	1026	-1027	1058	-1059	TMP=2.7163e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 427)
1428	4	-1.4029	1027	-1028	1058	-1059	TMP=2.7161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 428)
1429	4	-1.4029	1028	-1029	1058	-1059	TMP=2.7161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 429)
1430	4	-1.4029	1029	-1030	1058	-1059	TMP=2.7161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 430)
1431	4	-1.4029	1030	-1031	1058	-1059	TMP=2.7162e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 431)
1432	4	-1.4029	1031	-1032	1058	-1059	TMP=2.7165e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 432)
1433	4	-1.4029	1032	-1033	1058	-1059	TMP=2.7166e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 433)
1434	4	-1.4029	1033	-1034	1058	-1059	TMP=2.7164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 434)
1435	4	-1.4029	1034	-1035	1058	-1059	TMP=2.7163e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 435)
1436	4	-1.4029	1035	-1036	1058	-1059	TMP=2.7170e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 436)
1437	4	-1.4029	1036	-1037	1058	-1059	TMP=2.7165e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 437)
1438	4	-1.4029	1037	-1038	1058	-1059	TMP=2.7163e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 438)
1439	4	-1.4029	1038	-1039	1058	-1059	TMP=2.7166e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 439)
1440	4	-1.4029	1039	-1040	1058	-1059	TMP=2.7164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 440)
1441	4	-1.4029	1040	-1041	1058	-1059	TMP=2.7160e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 441)
1442	4	-1.4029	1041	-1042	1058	-1059	TMP=2.7154e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 442)
1443	4	-1.4029	1042	-1043	1058	-1059	TMP=2.7150e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 443)
1444	4	-1.4029	1043	-1044	1058	-1059	TMP=2.7168e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 444)
1445	4	-1.4027	1044	-1045	1058	-1059	TMP=2.7214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 445)
1446	4	-1.4024	1045	-1046	1058	-1059	TMP=2.7267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 446)
1447	4	-1.4025	1046	-1047	1058	-1059	TMP=2.7240e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 447)
1448	4	-1.4038	1047	-1048	1058	-1059	TMP=2.6962e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 448)
1449	4	-1.4067	1048	-1049	1058	-1059	TMP=2.6261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 449)
1450	4	-1.4027	-1000	1059	-1060	TMP=2.7210e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 450)	
1451	4	-1.4027	1000	-1001	1059	-1060	TMP=2.7214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 451)
1452	4	-1.4027	1001	-1002	1059	-1060	TMP=2.7214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 452)
1453	4	-1.4026	1002	-1003	1059	-1060	TMP=2.7220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 453)
1454	4	-1.4026	1003	-1004	1059	-1060	TMP=2.7219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 454)
1455	4	-1.4026	1004	-1005	1059	-1060	TMP=2.7217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 455)

1456	4	-1.4027	1005	-1006	1059	-1060	TMP=2.7214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 456)	
1457	4	-1.4026	1006	-1007	1059	-1060	TMP=2.7217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 457)	
1458	4	-1.4026	1007	-1008	1059	-1060	TMP=2.7219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 458)	
1459	4	-1.4026	1008	-1009	1059	-1060	TMP=2.7218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 459)	
1460	4	-1.4026	1009	-1010	1059	-1060	TMP=2.7219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 460)	
1461	4	-1.4026	1010	-1011	1059	-1060	TMP=2.7224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 461)	
1462	4	-1.4026	1011	-1012	1059	-1060	TMP=2.7224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 462)	
1463	4	-1.4026	1012	-1013	1059	-1060	TMP=2.7221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 463)	
1464	4	-1.4026	1013	-1014	1059	-1060	TMP=2.7223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 464)	
1465	4	-1.4026	1014	-1015	1059	-1060	TMP=2.7228e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 465)	
1466	4	-1.4026	1015	-1016	1059	-1060	TMP=2.7228e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 466)	
1467	4	-1.4026	1016	-1017	1059	-1060	TMP=2.7221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 467)	
1468	4	-1.4027	1017	-1018	1059	-1060	TMP=2.7215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 468)	
1469	4	-1.4027	1018	-1019	1059	-1060	TMP=2.7216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 469)	
1470	4	-1.4026	1019	-1020	1059	-1060	TMP=2.7217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 470)	
1471	4	-1.4027	1020	-1021	1059	-1060	TMP=2.7214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 471)	
1472	4	-1.4026	1021	-1022	1059	-1060	TMP=2.7219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 472)	
1473	4	-1.4026	1022	-1023	1059	-1060	TMP=2.7221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 473)	
1474	4	-1.4026	1023	-1024	1059	-1060	TMP=2.7219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 474)	
1475	4	-1.4027	1024	-1025	1059	-1060	TMP=2.7215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 475)	
1476	4	-1.4027	1025	-1026	1059	-1060	TMP=2.7214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 476)	
1477	4	-1.4026	1026	-1027	1059	-1060	TMP=2.7216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 477)	
1478	4	-1.4026	1027	-1028	1059	-1060	TMP=2.7219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 478)	
1479	4	-1.4027	1028	-1029	1059	-1060	TMP=2.7216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 479)	
1480	4	-1.4027	1029	-1030	1059	-1060	TMP=2.7215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 480)	
1481	4	-1.4026	1030	-1031	1059	-1060	TMP=2.7217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 481)	
1482	4	-1.4026	1031	-1032	1059	-1060	TMP=2.7217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 482)	
1483	4	-1.4026	1032	-1033	1059	-1060	TMP=2.7217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 483)	
1484	4	-1.4027	1033	-1034	1059	-1060	TMP=2.7214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 484)	
1485	4	-1.4027	1034	-1035	1059	-1060	TMP=2.7214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 485)	
1486	4	-1.4026	1035	-1036	1059	-1060	TMP=2.7217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 486)	
1487	4	-1.4026	1036	-1037	1059	-1060	TMP=2.7221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 487)	
1488	4	-1.4026	1037	-1038	1059	-1060	TMP=2.7218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 488)	
1489	4	-1.4026	1038	-1039	1059	-1060	TMP=2.7220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 489)	
1490	4	-1.4026	1039	-1040	1059	-1060	TMP=2.7220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 490)	
1491	4	-1.4026	1040	-1041	1059	-1060	TMP=2.7217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 491)	
1492	4	-1.4027	1041	-1042	1059	-1060	TMP=2.7210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 492)	
1493	4	-1.4027	1042	-1043	1059	-1060	TMP=2.7206e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 493)	
1494	4	-1.4026	1043	-1044	1059	-1060	TMP=2.7226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 494)	
1495	4	-1.4024	1044	-1045	1059	-1060	TMP=2.7271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 495)	
1496	4	-1.4021	1045	-1046	1059	-1060	TMP=2.7326e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 496)	
1497	4	-1.4023	1046	-1047	1059	-1060	TMP=2.7296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 497)	
1498	4	-1.4036	1047	-1048	1059	-1060	TMP=2.7009e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 498)	
1499	4	-1.4065	1048	-1049	1059	-1060	TMP=2.6290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 499)	
1500	4	-1.4025	-1000	1060	-1061		TMP=2.7256e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 500)	
1501	4	-1.4024	1000	-1001	1060	-1061	301	TMP=2.7271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 501)
1502	4	-1.4025	1001	-1002	1060	-1061	301	TMP=2.7260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 502)
1503	4	-1.4025	1002	-1003	1060	-1061	301	TMP=2.7254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 503)
1504	4	-1.4025	1003	-1004	1060	-1061	301	TMP=2.7254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 504)
1505	4	-1.4025	1004	-1005	1060	-1061	301	TMP=2.7254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 505)
1506	4	-1.4025	1005	-1006	1060	-1061	301	TMP=2.7254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 506)
1507	4	-1.4025	1006	-1007	1060	-1061	301	TMP=2.7258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 507)
1508	4	-1.4025	1007	-1008	1060	-1061	301	TMP=2.7258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 508)
1509	4	-1.4025	1008	-1009	1060	-1061	301	TMP=2.7256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 509)
1510	4	-1.4025	1009	-1010	1060	-1061	301	TMP=2.7253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 510)
1511	4	-1.4025	1010	-1011	1060	-1061	301	TMP=2.7258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 511)
1512	4	-1.4025	1011	-1012	1060	-1061	301	TMP=2.7260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 512)
1513	4	-1.4025	1012	-1013	1060	-1061	301	TMP=2.7257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 513)
1514	4	-1.4025	1013	-1014	1060	-1061	301	TMP=2.7253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 514)
1515	4	-1.4025	1014	-1015	1060	-1061	301	TMP=2.7260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 515)

1516	4	-1.4024	1015	-1016	1060	-1061	301	TMP=2.7261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 516)
1517	4	-1.4025	1016	-1017	1060	-1061	301	TMP=2.7255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 517)
1518	4	-1.4025	1017	-1018	1060	-1061	301	TMP=2.7252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 518)
1519	4	-1.4025	1018	-1019	1060	-1061	301	TMP=2.7250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 519)
1520	4	-1.4025	1019	-1020	1060	-1061	301	TMP=2.7251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 520)
1521	4	-1.4025	1020	-1021	1060	-1061	301	TMP=2.7254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 521)
1522	4	-1.4025	1021	-1022	1060	-1061	301	TMP=2.7258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 522)
1523	4	-1.4025	1022	-1023	1060	-1061	301	TMP=2.7258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 523)
1524	4	-1.4025	1023	-1024	1060	-1061	301	TMP=2.7253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 524)
1525	4	-1.4025	1024	-1025	1060	-1061	301	TMP=2.7249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 525)
1526	4	-1.4025	1025	-1026	1060	-1061	301	TMP=2.7250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 526)
1527	4	-1.4025	1026	-1027	1060	-1061	301	TMP=2.7251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 527)
1528	4	-1.4025	1027	-1028	1060	-1061	301	TMP=2.7252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 528)
1529	4	-1.4025	1028	-1029	1060	-1061	301	TMP=2.7252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 529)
1530	4	-1.4025	1029	-1030	1060	-1061	301	TMP=2.7253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 530)
1531	4	-1.4025	1030	-1031	1060	-1061	301	TMP=2.7254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 531)
1532	4	-1.4025	1031	-1032	1060	-1061	301	TMP=2.7254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 532)
1533	4	-1.4025	1032	-1033	1060	-1061	301	TMP=2.7252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 533)
1534	4	-1.4025	1033	-1034	1060	-1061	301	TMP=2.7249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 534)
1535	4	-1.4025	1034	-1035	1060	-1061	301	TMP=2.7248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 535)
1536	4	-1.4025	1035	-1036	1060	-1061	301	TMP=2.7250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 536)
1537	4	-1.4025	1036	-1037	1060	-1061	301	TMP=2.7253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 537)
1538	4	-1.4025	1037	-1038	1060	-1061	301	TMP=2.7257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 538)
1539	4	-1.4025	1038	-1039	1060	-1061	301	TMP=2.7260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 539)
1540	4	-1.4025	1039	-1040	1060	-1061	301	TMP=2.7257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 540)
1541	4	-1.4025	1040	-1041	1060	-1061	301	TMP=2.7254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 541)
1542	4	-1.4025	1041	-1042	1060	-1061	301	TMP=2.7246e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 542)
1543	4	-1.4025	1042	-1043	1060	-1061	301	TMP=2.7244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 543)
1544	4	-1.4024	1043	-1044	1060	-1061	301	TMP=2.7263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 544)
1545	4	-1.4022	1044	-1045	1060	-1061	301	TMP=2.7310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 545)
1546	4	-1.4020	1045	-1046	1060	-1061	301	TMP=2.7363e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 546)
1547	4	-1.4021	1046	-1047	1060	-1061	301	TMP=2.7334e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 547)
1548	4	-1.4034	1047	-1048	1060	-1061	301	TMP=2.7042e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 548)
1549	4	-1.4065	1048	-1049	1060	-1061	301	TMP=2.6310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 549)
1550	4	-1.4023	1060	-1061	-302			TMP=2.7284e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 550)
1551	4	-1.4022	-1000	1061	-1062			TMP=2.7310e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 551)
1552	4	-1.4022	1000	-1001	1061	-1062	301	TMP=2.7306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 552)
1553	4	-1.4022	1001	-1002	1061	-1062	301	TMP=2.7307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 553)
1554	4	-1.4022	1002	-1003	1061	-1062	301	TMP=2.7314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 554)
1555	4	-1.4022	1003	-1004	1061	-1062	301	TMP=2.7320e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 555)
1556	4	-1.4022	1004	-1005	1061	-1062	301	TMP=2.7318e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 556)
1557	4	-1.4022	1005	-1006	1061	-1062	301	TMP=2.7314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 557)
1558	4	-1.4022	1006	-1007	1061	-1062	301	TMP=2.7313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 558)
1559	4	-1.4022	1007	-1008	1061	-1062	301	TMP=2.7314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 559)
1560	4	-1.4022	1008	-1009	1061	-1062	301	TMP=2.7315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 560)
1561	4	-1.4022	1009	-1010	1061	-1062	301	TMP=2.7315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 561)
1562	4	-1.4022	1010	-1011	1061	-1062	301	TMP=2.7316e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 562)
1563	4	-1.4022	1011	-1012	1061	-1062	301	TMP=2.7319e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 563)
1564	4	-1.4022	1012	-1013	1061	-1062	301	TMP=2.7320e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 564)
1565	4	-1.4022	1013	-1014	1061	-1062	301	TMP=2.7318e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 565)
1566	4	-1.4022	1014	-1015	1061	-1062	301	TMP=2.7312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 566)
1567	4	-1.4022	1015	-1016	1061	-1062	301	TMP=2.7306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 567)
1568	4	-1.4022	1016	-1017	1061	-1062	301	TMP=2.7304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 568)
1569	4	-1.4022	1017	-1018	1061	-1062	301	TMP=2.7304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 569)
1570	4	-1.4022	1018	-1019	1061	-1062	301	TMP=2.7306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 570)
1571	4	-1.4022	1019	-1020	1061	-1062	301	TMP=2.7308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 571)
1572	4	-1.4022	1020	-1021	1061	-1062	301	TMP=2.7312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 572)
1573	4	-1.4022	1021	-1022	1061	-1062	301	TMP=2.7313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 573)
1574	4	-1.4022	1022	-1023	1061	-1062	301	TMP=2.7311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 574)
1575	4	-1.4022	1023	-1024	1061	-1062	301	TMP=2.7306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 575)

1576	4	-1.4022	1024	-1025	1061	-1062	301	TMP=2.7313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 576)
1577	4	-1.4022	1025	-1026	1061	-1062	301	TMP=2.7316e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 577)
1578	4	-1.4022	1026	-1027	1061	-1062	301	TMP=2.7311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 578)
1579	4	-1.4022	1027	-1028	1061	-1062	301	TMP=2.7307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 579)
1580	4	-1.4022	1028	-1029	1061	-1062	301	TMP=2.7310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 580)
1581	4	-1.4022	1029	-1030	1061	-1062	301	TMP=2.7311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 581)
1582	4	-1.4022	1030	-1031	1061	-1062	301	TMP=2.7312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 582)
1583	4	-1.4022	1031	-1032	1061	-1062	301	TMP=2.7312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 583)
1584	4	-1.4022	1032	-1033	1061	-1062	301	TMP=2.7312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 584)
1585	4	-1.4022	1033	-1034	1061	-1062	301	TMP=2.7314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 585)
1586	4	-1.4022	1034	-1035	1061	-1062	301	TMP=2.7316e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 586)
1587	4	-1.4022	1035	-1036	1061	-1062	301	TMP=2.7316e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 587)
1588	4	-1.4022	1036	-1037	1061	-1062	301	TMP=2.7314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 588)
1589	4	-1.4022	1037	-1038	1061	-1062	301	TMP=2.7314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 589)
1590	4	-1.4022	1038	-1039	1061	-1062	301	TMP=2.7315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 590)
1591	4	-1.4022	1039	-1040	1061	-1062	301	TMP=2.7316e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 591)
1592	4	-1.4022	1040	-1041	1061	-1062	301	TMP=2.7312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 592)
1593	4	-1.4023	1041	-1042	1061	-1062	301	TMP=2.7302e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 593)
1594	4	-1.4023	1042	-1043	1061	-1062	301	TMP=2.7301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 594)
1595	4	-1.4022	1043	-1044	1061	-1062	301	TMP=2.7320e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 595)
1596	4	-1.4019	1044	-1045	1061	-1062	301	TMP=2.7370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 596)
1597	4	-1.4017	1045	-1046	1061	-1062	301	TMP=2.7426e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 597)
1598	4	-1.4018	1046	-1047	1061	-1062	301	TMP=2.7393e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 598)
1599	4	-1.4032	1047	-1048	1061	-1062	301	TMP=2.7093e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 599)
1600	4	-1.4063	1048	-1049	1061	-1062	301	TMP=2.6344e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 600)
1601	4	-1.4021	1061	-1062	-302	TMP=2.7342e-8	IMP:n=1			\$ Fuel Mesh Cell (FoT) (Cell# 601)
1602	4	-1.4019	-1000	1062	-1063	TMP=2.7389e-8	IMP:n=1			\$ Fuel Mesh Cell(Centerline) (Cell# 602)
1603	4	-1.4018	1000	-1001	1062	-1063	301	TMP=2.7396e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 603)
1604	4	-1.4019	1001	-1002	1062	-1063	301	TMP=2.7388e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 604)
1605	4	-1.4019	1002	-1003	1062	-1063	301	TMP=2.7381e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 605)
1606	4	-1.4019	1003	-1004	1062	-1063	301	TMP=2.7382e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 606)
1607	4	-1.4019	1004	-1005	1062	-1063	301	TMP=2.7384e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 607)
1608	4	-1.4019	1005	-1006	1062	-1063	301	TMP=2.7385e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 608)
1609	4	-1.4019	1006	-1007	1062	-1063	301	TMP=2.7385e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 609)
1610	4	-1.4019	1007	-1008	1062	-1063	301	TMP=2.7385e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 610)
1611	4	-1.4019	1008	-1009	1062	-1063	301	TMP=2.7385e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 611)
1612	4	-1.4019	1009	-1010	1062	-1063	301	TMP=2.7383e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 612)
1613	4	-1.4019	1010	-1011	1062	-1063	301	TMP=2.7381e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 613)
1614	4	-1.4019	1011	-1012	1062	-1063	301	TMP=2.7382e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 614)
1615	4	-1.4019	1012	-1013	1062	-1063	301	TMP=2.7385e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 615)
1616	4	-1.4019	1013	-1014	1062	-1063	301	TMP=2.7383e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 616)
1617	4	-1.4019	1014	-1015	1062	-1063	301	TMP=2.7381e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 617)
1618	4	-1.4019	1015	-1016	1062	-1063	301	TMP=2.7378e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 618)
1619	4	-1.4019	1016	-1017	1062	-1063	301	TMP=2.7377e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 619)
1620	4	-1.4019	1017	-1018	1062	-1063	301	TMP=2.7382e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 620)
1621	4	-1.4019	1018	-1019	1062	-1063	301	TMP=2.7384e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 621)
1622	4	-1.4019	1019	-1020	1062	-1063	301	TMP=2.7384e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 622)
1623	4	-1.4019	1020	-1021	1062	-1063	301	TMP=2.7384e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 623)
1624	4	-1.4019	1021	-1022	1062	-1063	301	TMP=2.7382e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 624)
1625	4	-1.4019	1022	-1023	1062	-1063	301	TMP=2.7380e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 625)
1626	4	-1.4019	1023	-1024	1062	-1063	301	TMP=2.7377e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 626)
1627	4	-1.4019	1024	-1025	1062	-1063	301	TMP=2.7375e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 627)
1628	4	-1.4019	1025	-1026	1062	-1063	301	TMP=2.7378e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 628)
1629	4	-1.4019	1026	-1027	1062	-1063	301	TMP=2.7382e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 629)
1630	4	-1.4019	1027	-1028	1062	-1063	301	TMP=2.7384e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 630)
1631	4	-1.4019	1028	-1029	1062	-1063	301	TMP=2.7384e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 631)
1632	4	-1.4019	1029	-1030	1062	-1063	301	TMP=2.7382e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 632)
1633	4	-1.4019	1030	-1031	1062	-1063	301	TMP=2.7385e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 633)
1634	4	-1.4019	1031	-1032	1062	-1063	301	TMP=2.7383e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 634)
1635	4	-1.4019	1032	-1033	1062	-1063	301	TMP=2.7381e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 635)

1636	4	-1.4019	1033	-1034	1062	-1063	301	TMP=2.7381e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 636)
1637	4	-1.4019	1034	-1035	1062	-1063	301	TMP=2.7382e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 637)
1638	4	-1.4019	1035	-1036	1062	-1063	301	TMP=2.7386e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 638)
1639	4	-1.4019	1036	-1037	1062	-1063	301	TMP=2.7387e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 639)
1640	4	-1.4019	1037	-1038	1062	-1063	301	TMP=2.7384e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 640)
1641	4	-1.4019	1038	-1039	1062	-1063	301	TMP=2.7387e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 641)
1642	4	-1.4019	1039	-1040	1062	-1063	301	TMP=2.7386e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 642)
1643	4	-1.4019	1040	-1041	1062	-1063	301	TMP=2.7379e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 643)
1644	4	-1.4019	1041	-1042	1062	-1063	301	TMP=2.7371e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 644)
1645	4	-1.4019	1042	-1043	1062	-1063	301	TMP=2.7370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 645)
1646	4	-1.4019	1043	-1044	1062	-1063	301	TMP=2.7389e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 646)
1647	4	-1.4016	1044	-1045	1062	-1063	301	TMP=2.7441e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 647)
1648	4	-1.4013	1045	-1046	1062	-1063	301	TMP=2.7499e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 648)
1649	4	-1.4015	1046	-1047	1062	-1063	301	TMP=2.7463e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 649)
1650	4	-1.4029	1047	-1048	1062	-1063	301	TMP=2.7155e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 650)
1651	4	-1.4062	1048	-1049	1062	-1063	301	TMP=2.6382e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 651)
1652	4	-1.4018	1062	-1063	-302			TMP=2.7411e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 652)
1653	4	-1.4016	-1000	1063	-1064			TMP=2.7442e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 653)
1654	4	-1.4016	1000	-1001	1063	-1064	301	TMP=2.7445e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 654)
1655	4	-1.4016	1001	-1002	1063	-1064	301	TMP=2.7444e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 655)
1656	4	-1.4016	1002	-1003	1063	-1064	301	TMP=2.7445e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 656)
1657	4	-1.4016	1003	-1004	1063	-1064	301	TMP=2.7454e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 657)
1658	4	-1.4016	1004	-1005	1063	-1064	301	TMP=2.7454e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 658)
1659	4	-1.4016	1005	-1006	1063	-1064	301	TMP=2.7452e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 659)
1660	4	-1.4016	1006	-1007	1063	-1064	301	TMP=2.7450e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 660)
1661	4	-1.4016	1007	-1008	1063	-1064	301	TMP=2.7450e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 661)
1662	4	-1.4016	1008	-1009	1063	-1064	301	TMP=2.7451e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 662)
1663	4	-1.4016	1009	-1010	1063	-1064	301	TMP=2.7453e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 663)
1664	4	-1.4016	1010	-1011	1063	-1064	301	TMP=2.7453e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 664)
1665	4	-1.4016	1011	-1012	1063	-1064	301	TMP=2.7449e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 665)
1666	4	-1.4016	1012	-1013	1063	-1064	301	TMP=2.7450e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 666)
1667	4	-1.4016	1013	-1014	1063	-1064	301	TMP=2.7454e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 667)
1668	4	-1.4015	1014	-1015	1063	-1064	301	TMP=2.7458e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 668)
1669	4	-1.4015	1015	-1016	1063	-1064	301	TMP=2.7461e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 669)
1670	4	-1.4015	1016	-1017	1063	-1064	301	TMP=2.7458e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 670)
1671	4	-1.4016	1017	-1018	1063	-1064	301	TMP=2.7454e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 671)
1672	4	-1.4015	1018	-1019	1063	-1064	301	TMP=2.7456e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 672)
1673	4	-1.4015	1019	-1020	1063	-1064	301	TMP=2.7458e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 673)
1674	4	-1.4015	1020	-1021	1063	-1064	301	TMP=2.7458e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 674)
1675	4	-1.4015	1021	-1022	1063	-1064	301	TMP=2.7456e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 675)
1676	4	-1.4015	1022	-1023	1063	-1064	301	TMP=2.7455e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 676)
1677	4	-1.4015	1023	-1024	1063	-1064	301	TMP=2.7459e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 677)
1678	4	-1.4015	1024	-1025	1063	-1064	301	TMP=2.7469e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 678)
1679	4	-1.4015	1025	-1026	1063	-1064	301	TMP=2.7472e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 679)
1680	4	-1.4015	1026	-1027	1063	-1064	301	TMP=2.7469e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 680)
1681	4	-1.4015	1027	-1028	1063	-1064	301	TMP=2.7459e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 681)
1682	4	-1.4016	1028	-1029	1063	-1064	301	TMP=2.7454e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 682)
1683	4	-1.4016	1029	-1030	1063	-1064	301	TMP=2.7454e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 683)
1684	4	-1.4015	1030	-1031	1063	-1064	301	TMP=2.7455e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 684)
1685	4	-1.4015	1031	-1032	1063	-1064	301	TMP=2.7456e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 685)
1686	4	-1.4015	1032	-1033	1063	-1064	301	TMP=2.7459e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 686)
1687	4	-1.4015	1033	-1034	1063	-1064	301	TMP=2.7461e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 687)
1688	4	-1.4015	1034	-1035	1063	-1064	301	TMP=2.7457e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 688)
1689	4	-1.4016	1035	-1036	1063	-1064	301	TMP=2.7452e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 689)
1690	4	-1.4016	1036	-1037	1063	-1064	301	TMP=2.7452e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 690)
1691	4	-1.4016	1037	-1038	1063	-1064	301	TMP=2.7454e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 691)
1692	4	-1.4016	1038	-1039	1063	-1064	301	TMP=2.7454e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 692)
1693	4	-1.4016	1039	-1040	1063	-1064	301	TMP=2.7453e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 693)
1694	4	-1.4016	1040	-1041	1063	-1064	301	TMP=2.7450e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 694)
1695	4	-1.4016	1041	-1042	1063	-1064	301	TMP=2.7439e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 695)

1696 4 -1.4016 1042 -1043 1063 -1064 301 TMP=2.7439e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 696)
1697 4 -1.4015 1043 -1044 1063 -1064 301 TMP=2.7460e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 697)
1698 4 -1.4013 1044 -1045 1063 -1064 301 TMP=2.7513e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 698)
1699 4 -1.4010 1045 -1046 1063 -1064 301 TMP=2.7571e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 699)
1700 4 -1.4012 1046 -1047 1063 -1064 301 TMP=2.7532e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 700)
1701 4 -1.4027 1047 -1048 1063 -1064 301 TMP=2.7213e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 701)
1702 4 -1.4060 1048 -1049 1063 -1064 301 TMP=2.6418e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 702)
1703 4 -1.4014 1063 -1064 -302 TMP=2.7484e-8 IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 703)
1704 4 -1.4012 -1000 1064 -1065 TMP=2.7523e-8 IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 704)
1705 4 -1.4012 1000 -1001 1064 -1065 301 TMP=2.7526e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 705)
1706 4 -1.4012 1001 -1002 1064 -1065 301 TMP=2.7520e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 706)
1707 4 -1.4013 1002 -1003 1064 -1065 301 TMP=2.7515e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 707)
1708 4 -1.4013 1003 -1004 1064 -1065 301 TMP=2.7513e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 708)
1709 4 -1.4013 1004 -1005 1064 -1065 301 TMP=2.7517e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 709)
1710 4 -1.4012 1005 -1006 1064 -1065 301 TMP=2.7519e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 710)
1711 4 -1.4012 1006 -1007 1064 -1065 301 TMP=2.7520e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 711)
1712 4 -1.4013 1007 -1008 1064 -1065 301 TMP=2.7517e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 712)
1713 4 -1.4012 1008 -1009 1064 -1065 301 TMP=2.7518e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 713)
1714 4 -1.4012 1009 -1010 1064 -1065 301 TMP=2.7519e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 714)
1715 4 -1.4012 1010 -1011 1064 -1065 301 TMP=2.7519e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 715)
1716 4 -1.4013 1011 -1012 1064 -1065 301 TMP=2.7517e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 716)
1717 4 -1.4013 1012 -1013 1064 -1065 301 TMP=2.7513e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 717)
1718 4 -1.4012 1013 -1014 1064 -1065 301 TMP=2.7522e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 718)
1719 4 -1.4012 1014 -1015 1064 -1065 301 TMP=2.7524e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 719)
1720 4 -1.4012 1015 -1016 1064 -1065 301 TMP=2.7524e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 720)
1721 4 -1.4012 1016 -1017 1064 -1065 301 TMP=2.7522e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 721)
1722 4 -1.4012 1017 -1018 1064 -1065 301 TMP=2.7520e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 722)
1723 4 -1.4013 1018 -1019 1064 -1065 301 TMP=2.7518e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 723)
1724 4 -1.4012 1019 -1020 1064 -1065 301 TMP=2.7519e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 724)
1725 4 -1.4012 1020 -1021 1064 -1065 301 TMP=2.7521e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 725)
1726 4 -1.4012 1021 -1022 1064 -1065 301 TMP=2.7520e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 726)
1727 4 -1.4012 1022 -1023 1064 -1065 301 TMP=2.7521e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 727)
1728 4 -1.4012 1023 -1024 1064 -1065 301 TMP=2.7522e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 728)
1729 4 -1.4012 1024 -1025 1064 -1065 301 TMP=2.7523e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 729)
1730 4 -1.4012 1025 -1026 1064 -1065 301 TMP=2.7523e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 730)
1731 4 -1.4013 1026 -1027 1064 -1065 301 TMP=2.7516e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 731)
1732 4 -1.4013 1027 -1028 1064 -1065 301 TMP=2.7515e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 732)
1733 4 -1.4012 1028 -1029 1064 -1065 301 TMP=2.7522e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 733)
1734 4 -1.4012 1029 -1030 1064 -1065 301 TMP=2.7526e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 734)
1735 4 -1.4012 1030 -1031 1064 -1065 301 TMP=2.7521e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 735)
1736 4 -1.4012 1031 -1032 1064 -1065 301 TMP=2.7521e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 736)
1737 4 -1.4012 1032 -1033 1064 -1065 301 TMP=2.7520e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 737)
1738 4 -1.4012 1033 -1034 1064 -1065 301 TMP=2.7518e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 738)
1739 4 -1.4013 1034 -1035 1064 -1065 301 TMP=2.7513e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 739)
1740 4 -1.4013 1035 -1036 1064 -1065 301 TMP=2.7516e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 740)
1741 4 -1.4012 1036 -1037 1064 -1065 301 TMP=2.7520e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 741)
1742 4 -1.4012 1037 -1038 1064 -1065 301 TMP=2.7521e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 742)
1743 4 -1.4012 1038 -1039 1064 -1065 301 TMP=2.7520e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 743)
1744 4 -1.4012 1039 -1040 1064 -1065 301 TMP=2.7519e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 744)
1745 4 -1.4013 1040 -1041 1064 -1065 301 TMP=2.7515e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 745)
1746 4 -1.4013 1041 -1042 1064 -1065 301 TMP=2.7506e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 746)
1747 4 -1.4013 1042 -1043 1064 -1065 301 TMP=2.7504e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 747)
1748 4 -1.4012 1043 -1044 1064 -1065 301 TMP=2.7527e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 748)
1749 4 -1.4009 1044 -1045 1064 -1065 301 TMP=2.7583e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 749)
1750 4 -1.4007 1045 -1046 1064 -1065 301 TMP=2.7638e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 750)
1751 4 -1.4009 1046 -1047 1064 -1065 301 TMP=2.7598e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 751)
1752 4 -1.4024 1047 -1048 1064 -1065 301 TMP=2.7272e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 752)
1753 4 -1.4059 1048 -1049 1064 -1065 301 TMP=2.6456e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 753)
1754 4 -1.4011 1064 -1065 -302 TMP=2.7552e-8 IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 754)
1755 4 -1.4010 -1000 1065 -1066 TMP=2.7566e-8 IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 755)

1756	4	-1.4010	1000	-1001	1065	-1066	301	TMP=2.7573e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 756)
1757	4	-1.4010	1001	-1002	1065	-1066	301	TMP=2.7574e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 757)
1758	4	-1.4010	1002	-1003	1065	-1066	301	TMP=2.7574e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 758)
1759	4	-1.4009	1003	-1004	1065	-1066	301	TMP=2.7581e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 759)
1760	4	-1.4009	1004	-1005	1065	-1066	301	TMP=2.7585e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 760)
1761	4	-1.4009	1005	-1006	1065	-1066	301	TMP=2.7585e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 761)
1762	4	-1.4009	1006	-1007	1065	-1066	301	TMP=2.7583e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 762)
1763	4	-1.4010	1007	-1008	1065	-1066	301	TMP=2.7579e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 763)
1764	4	-1.4010	1008	-1009	1065	-1066	301	TMP=2.7577e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 764)
1765	4	-1.4010	1009	-1010	1065	-1066	301	TMP=2.7580e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 765)
1766	4	-1.4009	1010	-1011	1065	-1066	301	TMP=2.7581e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 766)
1767	4	-1.4009	1011	-1012	1065	-1066	301	TMP=2.7581e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 767)
1768	4	-1.4010	1012	-1013	1065	-1066	301	TMP=2.7579e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 768)
1769	4	-1.4010	1013	-1014	1065	-1066	301	TMP=2.7575e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 769)
1770	4	-1.4010	1014	-1015	1065	-1066	301	TMP=2.7577e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 770)
1771	4	-1.4010	1015	-1016	1065	-1066	301	TMP=2.7579e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 771)
1772	4	-1.4010	1016	-1017	1065	-1066	301	TMP=2.7580e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 772)
1773	4	-1.4010	1017	-1018	1065	-1066	301	TMP=2.7580e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 773)
1774	4	-1.4010	1018	-1019	1065	-1066	301	TMP=2.7580e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 774)
1775	4	-1.4010	1019	-1020	1065	-1066	301	TMP=2.7578e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 775)
1776	4	-1.4010	1020	-1021	1065	-1066	301	TMP=2.7576e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 776)
1777	4	-1.4010	1021	-1022	1065	-1066	301	TMP=2.7576e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 777)
1778	4	-1.4010	1022	-1023	1065	-1066	301	TMP=2.7576e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 778)
1779	4	-1.4010	1023	-1024	1065	-1066	301	TMP=2.7576e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 779)
1780	4	-1.4010	1024	-1025	1065	-1066	301	TMP=2.7576e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 780)
1781	4	-1.4010	1025	-1026	1065	-1066	301	TMP=2.7578e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 781)
1782	4	-1.4010	1026	-1027	1065	-1066	301	TMP=2.7576e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 782)
1783	4	-1.4010	1027	-1028	1065	-1066	301	TMP=2.7577e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 783)
1784	4	-1.4010	1028	-1029	1065	-1066	301	TMP=2.7578e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 784)
1785	4	-1.4010	1029	-1030	1065	-1066	301	TMP=2.7579e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 785)
1786	4	-1.4010	1030	-1031	1065	-1066	301	TMP=2.7580e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 786)
1787	4	-1.4010	1031	-1032	1065	-1066	301	TMP=2.7580e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 787)
1788	4	-1.4010	1032	-1033	1065	-1066	301	TMP=2.7580e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 788)
1789	4	-1.4009	1033	-1034	1065	-1066	301	TMP=2.7582e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 789)
1790	4	-1.4009	1034	-1035	1065	-1066	301	TMP=2.7584e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 790)
1791	4	-1.4009	1035	-1036	1065	-1066	301	TMP=2.7586e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 791)
1792	4	-1.4009	1036	-1037	1065	-1066	301	TMP=2.7584e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 792)
1793	4	-1.4009	1037	-1038	1065	-1066	301	TMP=2.7584e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 793)
1794	4	-1.4009	1038	-1039	1065	-1066	301	TMP=2.7587e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 794)
1795	4	-1.4009	1039	-1040	1065	-1066	301	TMP=2.7584e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 795)
1796	4	-1.4010	1040	-1041	1065	-1066	301	TMP=2.7577e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 796)
1797	4	-1.4010	1041	-1042	1065	-1066	301	TMP=2.7568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 797)
1798	4	-1.4010	1042	-1043	1065	-1066	301	TMP=2.7566e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 798)
1799	4	-1.4009	1043	-1044	1065	-1066	301	TMP=2.7590e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 799)
1800	4	-1.4006	1044	-1045	1065	-1066	301	TMP=2.7648e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 800)
1801	4	-1.4004	1045	-1046	1065	-1066	301	TMP=2.7702e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 801)
1802	4	-1.4006	1046	-1047	1065	-1066	301	TMP=2.7659e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 802)
1803	4	-1.4021	1047	-1048	1065	-1066	301	TMP=2.7326e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 803)
1804	4	-1.4057	1048	-1049	1065	-1066	301	TMP=2.6491e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 804)
1805	4	-1.4008	1065	-1066	-302			TMP=2.7615e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 805)
1806	4	-1.4007	-1000	1066	-1067			TMP=2.7640e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 806)
1807	4	-1.4006	1000	-1001	1066	-1067	301	TMP=2.7661e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 807)
1808	4	-1.4006	1001	-1002	1066	-1067	301	TMP=2.7653e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 808)
1809	4	-1.4006	1002	-1003	1066	-1067	301	TMP=2.7645e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 809)
1810	4	-1.4007	1003	-1004	1066	-1067	301	TMP=2.7637e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 810)
1811	4	-1.4007	1004	-1005	1066	-1067	301	TMP=2.7639e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 811)
1812	4	-1.4007	1005	-1006	1066	-1067	301	TMP=2.7642e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 812)
1813	4	-1.4007	1006	-1007	1066	-1067	301	TMP=2.7643e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 813)
1814	4	-1.4007	1007	-1008	1066	-1067	301	TMP=2.7642e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 814)
1815	4	-1.4007	1008	-1009	1066	-1067	301	TMP=2.7640e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 815)

1816	4	-1.4007	1009	-1010	1066	-1067	301	TMP=2.7641e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 816)
1817	4	-1.4007	1010	-1011	1066	-1067	301	TMP=2.7643e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 817)
1818	4	-1.4006	1011	-1012	1066	-1067	301	TMP=2.7643e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 818)
1819	4	-1.4007	1012	-1013	1066	-1067	301	TMP=2.7642e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 819)
1820	4	-1.4007	1013	-1014	1066	-1067	301	TMP=2.7639e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 820)
1821	4	-1.4007	1014	-1015	1066	-1067	301	TMP=2.7635e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 821)
1822	4	-1.4007	1015	-1016	1066	-1067	301	TMP=2.7638e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 822)
1823	4	-1.4007	1016	-1017	1066	-1067	301	TMP=2.7640e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 823)
1824	4	-1.4007	1017	-1018	1066	-1067	301	TMP=2.7641e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 824)
1825	4	-1.4007	1018	-1019	1066	-1067	301	TMP=2.7641e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 825)
1826	4	-1.4007	1019	-1020	1066	-1067	301	TMP=2.7640e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 826)
1827	4	-1.4007	1020	-1021	1066	-1067	301	TMP=2.7637e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 827)
1828	4	-1.4007	1021	-1022	1066	-1067	301	TMP=2.7635e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 828)
1829	4	-1.4007	1022	-1023	1066	-1067	301	TMP=2.7635e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 829)
1830	4	-1.4007	1023	-1024	1066	-1067	301	TMP=2.7635e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 830)
1831	4	-1.4007	1024	-1025	1066	-1067	301	TMP=2.7638e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 831)
1832	4	-1.4007	1025	-1026	1066	-1067	301	TMP=2.7637e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 832)
1833	4	-1.4007	1026	-1027	1066	-1067	301	TMP=2.7635e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 833)
1834	4	-1.4007	1027	-1028	1066	-1067	301	TMP=2.7640e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 834)
1835	4	-1.4007	1028	-1029	1066	-1067	301	TMP=2.7642e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 835)
1836	4	-1.4007	1029	-1030	1066	-1067	301	TMP=2.7643e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 836)
1837	4	-1.4007	1030	-1031	1066	-1067	301	TMP=2.7641e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 837)
1838	4	-1.4007	1031	-1032	1066	-1067	301	TMP=2.7640e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 838)
1839	4	-1.4007	1032	-1033	1066	-1067	301	TMP=2.7641e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 839)
1840	4	-1.4007	1033	-1034	1066	-1067	301	TMP=2.7641e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 840)
1841	4	-1.4007	1034	-1035	1066	-1067	301	TMP=2.7640e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 841)
1842	4	-1.4007	1035	-1036	1066	-1067	301	TMP=2.7639e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 842)
1843	4	-1.4007	1036	-1037	1066	-1067	301	TMP=2.7638e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 843)
1844	4	-1.4007	1037	-1038	1066	-1067	301	TMP=2.7639e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 844)
1845	4	-1.4007	1038	-1039	1066	-1067	301	TMP=2.7643e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 845)
1846	4	-1.4007	1039	-1040	1066	-1067	301	TMP=2.7642e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 846)
1847	4	-1.4007	1040	-1041	1066	-1067	301	TMP=2.7637e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 847)
1848	4	-1.4007	1041	-1042	1066	-1067	301	TMP=2.7628e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 848)
1849	4	-1.4007	1042	-1043	1066	-1067	301	TMP=2.7625e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 849)
1850	4	-1.4006	1043	-1044	1066	-1067	301	TMP=2.7652e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 850)
1851	4	-1.4003	1044	-1045	1066	-1067	301	TMP=2.7709e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 851)
1852	4	-1.4001	1045	-1046	1066	-1067	301	TMP=2.7762e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 852)
1853	4	-1.4003	1046	-1047	1066	-1067	301	TMP=2.7720e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 853)
1854	4	-1.4019	1047	-1048	1066	-1067	301	TMP=2.7381e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 854)
1855	4	-1.4056	1048	-1049	1066	-1067	301	TMP=2.6528e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 855)
1856	4	-1.4005	1066	-1067	-302			TMP=2.7678e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 856)
1857	4	-1.4004	-1000	1067	-1068			TMP=2.7685e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 857)
1858	4	-1.4004	1000	-1001	1067	-1068	301	TMP=2.7685e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 858)
1859	4	-1.4005	1001	-1002	1067	-1068	301	TMP=2.7684e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 859)
1860	4	-1.4004	1002	-1003	1067	-1068	301	TMP=2.7685e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 860)
1861	4	-1.4004	1003	-1004	1067	-1068	301	TMP=2.7691e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 861)
1862	4	-1.4004	1004	-1005	1067	-1068	301	TMP=2.7698e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 862)
1863	4	-1.4003	1005	-1006	1067	-1068	301	TMP=2.7705e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 863)
1864	4	-1.4004	1006	-1007	1067	-1068	301	TMP=2.7705e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 864)
1865	4	-1.4004	1007	-1008	1067	-1068	301	TMP=2.7702e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 865)
1866	4	-1.4004	1008	-1009	1067	-1068	301	TMP=2.7699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 866)
1867	4	-1.4004	1009	-1010	1067	-1068	301	TMP=2.7695e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 867)
1868	4	-1.4004	1010	-1011	1067	-1068	301	TMP=2.7697e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 868)
1869	4	-1.4004	1011	-1012	1067	-1068	301	TMP=2.7699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 869)
1870	4	-1.4004	1012	-1013	1067	-1068	301	TMP=2.7700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 870)
1871	4	-1.4004	1013	-1014	1067	-1068	301	TMP=2.7699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 871)
1872	4	-1.4004	1014	-1015	1067	-1068	301	TMP=2.7697e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 872)
1873	4	-1.4004	1015	-1016	1067	-1068	301	TMP=2.7695e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 873)
1874	4	-1.4004	1016	-1017	1067	-1068	301	TMP=2.7699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 874)
1875	4	-1.4004	1017	-1018	1067	-1068	301	TMP=2.7701e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 875)

1876	4	-1.4004	1018	-1019	1067	-1068	301	TMP=2.7702e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 876)
1877	4	-1.4004	1019	-1020	1067	-1068	301	TMP=2.7702e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 877)
1878	4	-1.4004	1020	-1021	1067	-1068	301	TMP=2.7701e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 878)
1879	4	-1.4004	1021	-1022	1067	-1068	301	TMP=2.7698e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 879)
1880	4	-1.4004	1022	-1023	1067	-1068	301	TMP=2.7702e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 880)
1881	4	-1.4003	1023	-1024	1067	-1068	301	TMP=2.7706e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 881)
1882	4	-1.4003	1024	-1025	1067	-1068	301	TMP=2.7707e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 882)
1883	4	-1.4004	1025	-1026	1067	-1068	301	TMP=2.7705e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 883)
1884	4	-1.4004	1026	-1027	1067	-1068	301	TMP=2.7697e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 884)
1885	4	-1.4004	1027	-1028	1067	-1068	301	TMP=2.7699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 885)
1886	4	-1.4004	1028	-1029	1067	-1068	301	TMP=2.7702e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 886)
1887	4	-1.4004	1029	-1030	1067	-1068	301	TMP=2.7703e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 887)
1888	4	-1.4004	1030	-1031	1067	-1068	301	TMP=2.7702e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 888)
1889	4	-1.4004	1031	-1032	1067	-1068	301	TMP=2.7700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 889)
1890	4	-1.4004	1032	-1033	1067	-1068	301	TMP=2.7700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 890)
1891	4	-1.4004	1033	-1034	1067	-1068	301	TMP=2.7700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 891)
1892	4	-1.4004	1034	-1035	1067	-1068	301	TMP=2.7698e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 892)
1893	4	-1.4004	1035	-1036	1067	-1068	301	TMP=2.7700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 893)
1894	4	-1.4004	1036	-1037	1067	-1068	301	TMP=2.7701e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 894)
1895	4	-1.4004	1037	-1038	1067	-1068	301	TMP=2.7699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 895)
1896	4	-1.4004	1038	-1039	1067	-1068	301	TMP=2.7703e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 896)
1897	4	-1.4004	1039	-1040	1067	-1068	301	TMP=2.7700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 897)
1898	4	-1.4004	1040	-1041	1067	-1068	301	TMP=2.7693e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 898)
1899	4	-1.4005	1041	-1042	1067	-1068	301	TMP=2.7684e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 899)
1900	4	-1.4005	1042	-1043	1067	-1068	301	TMP=2.7684e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 900)
1901	4	-1.4003	1043	-1044	1067	-1068	301	TMP=2.7711e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 901)
1902	4	-1.4000	1044	-1045	1067	-1068	301	TMP=2.7769e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 902)
1903	4	-1.3998	1045	-1046	1067	-1068	301	TMP=2.7822e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 903)
1904	4	-1.4000	1046	-1047	1067	-1068	301	TMP=2.7774e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 904)
1905	4	-1.4017	1047	-1048	1067	-1068	301	TMP=2.7431e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 905)
1906	4	-1.4055	1048	-1049	1067	-1068	301	TMP=2.6559e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 906)
1907	4	-1.4002	1067	-1068	-302			TMP=2.7738e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 907)
1908	4	-1.4002	-1000	1068	-1069			TMP=2.7735e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 908)
1909	4	-1.4001	1000	-1001	1068	-1069	301	TMP=2.7753e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 909)
1910	4	-1.4001	1001	-1002	1068	-1069	301	TMP=2.7764e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 910)
1911	4	-1.4000	1002	-1003	1068	-1069	301	TMP=2.7768e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 911)
1912	4	-1.4001	1003	-1004	1068	-1069	301	TMP=2.7760e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 912)
1913	4	-1.4001	1004	-1005	1068	-1069	301	TMP=2.7752e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 913)
1914	4	-1.4001	1005	-1006	1068	-1069	301	TMP=2.7751e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 914)
1915	4	-1.4001	1006	-1007	1068	-1069	301	TMP=2.7751e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 915)
1916	4	-1.4001	1007	-1008	1068	-1069	301	TMP=2.7750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 916)
1917	4	-1.4001	1008	-1009	1068	-1069	301	TMP=2.7750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 917)
1918	4	-1.4001	1009	-1010	1068	-1069	301	TMP=2.7751e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 918)
1919	4	-1.4001	1010	-1011	1068	-1069	301	TMP=2.7751e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 919)
1920	4	-1.4001	1011	-1012	1068	-1069	301	TMP=2.7753e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 920)
1921	4	-1.4001	1012	-1013	1068	-1069	301	TMP=2.7754e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 921)
1922	4	-1.4001	1013	-1014	1068	-1069	301	TMP=2.7755e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 922)
1923	4	-1.4001	1014	-1015	1068	-1069	301	TMP=2.7754e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 923)
1924	4	-1.4001	1015	-1016	1068	-1069	301	TMP=2.7752e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 924)
1925	4	-1.4001	1016	-1017	1068	-1069	301	TMP=2.7750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 925)
1926	4	-1.4001	1017	-1018	1068	-1069	301	TMP=2.7754e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 926)
1927	4	-1.4001	1018	-1019	1068	-1069	301	TMP=2.7758e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 927)
1928	4	-1.4001	1019	-1020	1068	-1069	301	TMP=2.7761e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 928)
1929	4	-1.4001	1020	-1021	1068	-1069	301	TMP=2.7761e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 929)
1930	4	-1.4001	1021	-1022	1068	-1069	301	TMP=2.7758e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 930)
1931	4	-1.4001	1022	-1023	1068	-1069	301	TMP=2.7755e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 931)
1932	4	-1.4001	1023	-1024	1068	-1069	301	TMP=2.7754e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 932)
1933	4	-1.4001	1024	-1025	1068	-1069	301	TMP=2.7750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 933)
1934	4	-1.4001	1025	-1026	1068	-1069	301	TMP=2.7751e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 934)
1935	4	-1.4001	1026	-1027	1068	-1069	301	TMP=2.7755e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 935)

1936	4	-1.4001	1027	-1028	1068	-1069	301	TMP=2.7756e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 936)
1937	4	-1.4001	1028	-1029	1068	-1069	301	TMP=2.7756e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 937)
1938	4	-1.4001	1029	-1030	1068	-1069	301	TMP=2.7755e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 938)
1939	4	-1.4001	1030	-1031	1068	-1069	301	TMP=2.7753e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 939)
1940	4	-1.4001	1031	-1032	1068	-1069	301	TMP=2.7750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 940)
1941	4	-1.4001	1032	-1033	1068	-1069	301	TMP=2.7749e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 941)
1942	4	-1.4001	1033	-1034	1068	-1069	301	TMP=2.7750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 942)
1943	4	-1.4001	1034	-1035	1068	-1069	301	TMP=2.7750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 943)
1944	4	-1.4001	1035	-1036	1068	-1069	301	TMP=2.7752e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 944)
1945	4	-1.4001	1036	-1037	1068	-1069	301	TMP=2.7753e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 945)
1946	4	-1.4001	1037	-1038	1068	-1069	301	TMP=2.7758e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 946)
1947	4	-1.4001	1038	-1039	1068	-1069	301	TMP=2.7757e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 947)
1948	4	-1.4001	1039	-1040	1068	-1069	301	TMP=2.7754e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 948)
1949	4	-1.4001	1040	-1041	1068	-1069	301	TMP=2.7747e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 949)
1950	4	-1.4002	1041	-1042	1068	-1069	301	TMP=2.7740e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 950)
1951	4	-1.4002	1042	-1043	1068	-1069	301	TMP=2.7741e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 951)
1952	4	-1.4000	1043	-1044	1068	-1069	301	TMP=2.7769e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 952)
1953	4	-1.3998	1044	-1045	1068	-1069	301	TMP=2.7823e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 953)
1954	4	-1.3995	1045	-1046	1068	-1069	301	TMP=2.7876e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 954)
1955	4	-1.3997	1046	-1047	1068	-1069	301	TMP=2.7829e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 955)
1956	4	-1.4014	1047	-1048	1068	-1069	301	TMP=2.7482e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 956)
1957	4	-1.4053	1048	-1049	1068	-1069	301	TMP=2.6592e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 957)
1958	4	-1.3999	1068	-1069	-302			TMP=2.7793e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 958)
1959	4	-1.3999	-1000	1069	-1070			TMP=2.7806e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 959)
1960	4	-1.3999	1000	-1001	1069	-1070	301	TMP=2.7805e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 960)
1961	4	-1.3999	1001	-1002	1069	-1070	301	TMP=2.7804e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 961)
1962	4	-1.3999	1002	-1003	1069	-1070	301	TMP=2.7804e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 962)
1963	4	-1.3999	1003	-1004	1069	-1070	301	TMP=2.7803e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 963)
1964	4	-1.3999	1004	-1005	1069	-1070	301	TMP=2.7802e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 964)
1965	4	-1.3999	1005	-1006	1069	-1070	301	TMP=2.7805e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 965)
1966	4	-1.3998	1006	-1007	1069	-1070	301	TMP=2.7808e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 966)
1967	4	-1.3998	1007	-1008	1069	-1070	301	TMP=2.7811e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 967)
1968	4	-1.3998	1008	-1009	1069	-1070	301	TMP=2.7813e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 968)
1969	4	-1.3998	1009	-1010	1069	-1070	301	TMP=2.7811e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 969)
1970	4	-1.3999	1010	-1011	1069	-1070	301	TMP=2.7804e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 970)
1971	4	-1.3999	1011	-1012	1069	-1070	301	TMP=2.7802e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 971)
1972	4	-1.3999	1012	-1013	1069	-1070	301	TMP=2.7805e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 972)
1973	4	-1.3998	1013	-1014	1069	-1070	301	TMP=2.7807e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 973)
1974	4	-1.3998	1014	-1015	1069	-1070	301	TMP=2.7808e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 974)
1975	4	-1.3998	1015	-1016	1069	-1070	301	TMP=2.7808e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 975)
1976	4	-1.3999	1016	-1017	1069	-1070	301	TMP=2.7806e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 976)
1977	4	-1.3999	1017	-1018	1069	-1070	301	TMP=2.7807e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 977)
1978	4	-1.3998	1018	-1019	1069	-1070	301	TMP=2.7814e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 978)
1979	4	-1.3998	1019	-1020	1069	-1070	301	TMP=2.7817e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 979)
1980	4	-1.3998	1020	-1021	1069	-1070	301	TMP=2.7817e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 980)
1981	4	-1.3998	1021	-1022	1069	-1070	301	TMP=2.7812e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 981)
1982	4	-1.3999	1022	-1023	1069	-1070	301	TMP=2.7805e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 982)
1983	4	-1.3999	1023	-1024	1069	-1070	301	TMP=2.7805e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 983)
1984	4	-1.3999	1024	-1025	1069	-1070	301	TMP=2.7806e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 984)
1985	4	-1.3999	1025	-1026	1069	-1070	301	TMP=2.7807e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 985)
1986	4	-1.3999	1026	-1027	1069	-1070	301	TMP=2.7807e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 986)
1987	4	-1.3999	1027	-1028	1069	-1070	301	TMP=2.7805e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 987)
1988	4	-1.3999	1028	-1029	1069	-1070	301	TMP=2.7804e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 988)
1989	4	-1.3999	1029	-1030	1069	-1070	301	TMP=2.7803e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 989)
1990	4	-1.3999	1030	-1031	1069	-1070	301	TMP=2.7804e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 990)
1991	4	-1.3999	1031	-1032	1069	-1070	301	TMP=2.7806e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 991)
1992	4	-1.3998	1032	-1033	1069	-1070	301	TMP=2.7808e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 992)
1993	4	-1.3998	1033	-1034	1069	-1070	301	TMP=2.7808e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 993)
1994	4	-1.3998	1034	-1035	1069	-1070	301	TMP=2.7807e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 994)
1995	4	-1.3998	1035	-1036	1069	-1070	301	TMP=2.7809e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 995)

1996	4	-1.3998	1036	-1037	1069	-1070	301	TMP=2.7808e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 996)
1997	4	-1.3998	1037	-1038	1069	-1070	301	TMP=2.7807e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 997)
1998	4	-1.3998	1038	-1039	1069	-1070	301	TMP=2.7809e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 998)
1999	4	-1.3999	1039	-1040	1069	-1070	301	TMP=2.7806e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 999)
2000	4	-1.3999	1040	-1041	1069	-1070	301	TMP=2.7800e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1000)
2001	4	-1.3999	1041	-1042	1069	-1070	301	TMP=2.7789e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1001)
2002	4	-1.3999	1042	-1043	1069	-1070	301	TMP=2.7791e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1002)
2003	4	-1.3998	1043	-1044	1069	-1070	301	TMP=2.7822e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1003)
2004	4	-1.3995	1044	-1045	1069	-1070	301	TMP=2.7878e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1004)
2005	4	-1.3992	1045	-1046	1069	-1070	301	TMP=2.7928e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1005)
2006	4	-1.3995	1046	-1047	1069	-1070	301	TMP=2.7883e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1006)
2007	4	-1.4012	1047	-1048	1069	-1070	301	TMP=2.7530e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1007)
2008	4	-1.4052	1048	-1049	1069	-1070	301	TMP=2.6622e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1008)
2009	4	-1.3996	1069	-1070	-302			TMP=2.7849e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1009)
2010	4	-1.3997	-1000	1070	-1071			TMP=2.7836e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1010)
2011	4	-1.3997	1000	-1001	1070	-1071	301	TMP=2.7846e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1011)
2012	4	-1.3996	1001	-1002	1070	-1071	301	TMP=2.7851e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1012)
2013	4	-1.3996	1002	-1003	1070	-1071	301	TMP=2.7853e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1013)
2014	4	-1.3996	1003	-1004	1070	-1071	301	TMP=2.7853e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1014)
2015	4	-1.3996	1004	-1005	1070	-1071	301	TMP=2.7851e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1015)
2016	4	-1.3996	1005	-1006	1070	-1071	301	TMP=2.7857e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1016)
2017	4	-1.3996	1006	-1007	1070	-1071	301	TMP=2.7860e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1017)
2018	4	-1.3996	1007	-1008	1070	-1071	301	TMP=2.7862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1018)
2019	4	-1.3996	1008	-1009	1070	-1071	301	TMP=2.7861e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1019)
2020	4	-1.3996	1009	-1010	1070	-1071	301	TMP=2.7859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1020)
2021	4	-1.3996	1010	-1011	1070	-1071	301	TMP=2.7854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1021)
2022	4	-1.3996	1011	-1012	1070	-1071	301	TMP=2.7849e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1022)
2023	4	-1.3996	1012	-1013	1070	-1071	301	TMP=2.7854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1023)
2024	4	-1.3996	1013	-1014	1070	-1071	301	TMP=2.7858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1024)
2025	4	-1.3996	1014	-1015	1070	-1071	301	TMP=2.7861e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1025)
2026	4	-1.3996	1015	-1016	1070	-1071	301	TMP=2.7860e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1026)
2027	4	-1.3996	1016	-1017	1070	-1071	301	TMP=2.7859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1027)
2028	4	-1.3996	1017	-1018	1070	-1071	301	TMP=2.7858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1028)
2029	4	-1.3996	1018	-1019	1070	-1071	301	TMP=2.7859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1029)
2030	4	-1.3996	1019	-1020	1070	-1071	301	TMP=2.7860e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1030)
2031	4	-1.3996	1020	-1021	1070	-1071	301	TMP=2.7857e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1031)
2032	4	-1.3996	1021	-1022	1070	-1071	301	TMP=2.7851e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1032)
2033	4	-1.3996	1022	-1023	1070	-1071	301	TMP=2.7854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1033)
2034	4	-1.3996	1023	-1024	1070	-1071	301	TMP=2.7859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1034)
2035	4	-1.3996	1024	-1025	1070	-1071	301	TMP=2.7862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1035)
2036	4	-1.3996	1025	-1026	1070	-1071	301	TMP=2.7857e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1036)
2037	4	-1.3996	1026	-1027	1070	-1071	301	TMP=2.7851e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1037)
2038	4	-1.3996	1027	-1028	1070	-1071	301	TMP=2.7855e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1038)
2039	4	-1.3996	1028	-1029	1070	-1071	301	TMP=2.7859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1039)
2040	4	-1.3996	1029	-1030	1070	-1071	301	TMP=2.7862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1040)
2041	4	-1.3996	1030	-1031	1070	-1071	301	TMP=2.7861e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1041)
2042	4	-1.3996	1031	-1032	1070	-1071	301	TMP=2.7862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1042)
2043	4	-1.3996	1032	-1033	1070	-1071	301	TMP=2.7863e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1043)
2044	4	-1.3996	1033	-1034	1070	-1071	301	TMP=2.7862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1044)
2045	4	-1.3996	1034	-1035	1070	-1071	301	TMP=2.7858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1045)
2046	4	-1.3996	1035	-1036	1070	-1071	301	TMP=2.7854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1046)
2047	4	-1.3996	1036	-1037	1070	-1071	301	TMP=2.7856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1047)
2048	4	-1.3996	1037	-1038	1070	-1071	301	TMP=2.7862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1048)
2049	4	-1.3996	1038	-1039	1070	-1071	301	TMP=2.7862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1049)
2050	4	-1.3996	1039	-1040	1070	-1071	301	TMP=2.7858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1050)
2051	4	-1.3996	1040	-1041	1070	-1071	301	TMP=2.7849e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1051)
2052	4	-1.3997	1041	-1042	1070	-1071	301	TMP=2.7840e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1052)
2053	4	-1.3997	1042	-1043	1070	-1071	301	TMP=2.7844e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1053)
2054	4	-1.3995	1043	-1044	1070	-1071	301	TMP=2.7876e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1054)
2055	4	-1.3992	1044	-1045	1070	-1071	301	TMP=2.7930e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1055)

2056	4	-1.3990	1045	-1046	1070	-1071	301	TMP=2.7984e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1056)
2057	4	-1.3992	1046	-1047	1070	-1071	301	TMP=2.7933e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1057)
2058	4	-1.4010	1047	-1048	1070	-1071	301	TMP=2.7578e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1058)
2059	4	-1.4051	1048	-1049	1070	-1071	301	TMP=2.6656e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1059)
2060	4	-1.3994	1070	-1071	-302			TMP=2.7903e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1060)
2061	4	-1.3994	-1000	1071	-1072			TMP=2.7897e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1061)
2062	4	-1.3993	1000	-1001	1071	-1072	301	TMP=2.7921e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1062)
2063	4	-1.3992	1001	-1002	1071	-1072	301	TMP=2.7933e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1063)
2064	4	-1.3993	1002	-1003	1071	-1072	301	TMP=2.7926e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1064)
2065	4	-1.3993	1003	-1004	1071	-1072	301	TMP=2.7920e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1065)
2066	4	-1.3993	1004	-1005	1071	-1072	301	TMP=2.7913e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1066)
2067	4	-1.3994	1005	-1006	1071	-1072	301	TMP=2.7905e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1067)
2068	4	-1.3993	1006	-1007	1071	-1072	301	TMP=2.7909e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1068)
2069	4	-1.3993	1007	-1008	1071	-1072	301	TMP=2.7911e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1069)
2070	4	-1.3993	1008	-1009	1071	-1072	301	TMP=2.7912e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1070)
2071	4	-1.3993	1009	-1010	1071	-1072	301	TMP=2.7911e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1071)
2072	4	-1.3993	1010	-1011	1071	-1072	301	TMP=2.7909e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1072)
2073	4	-1.3994	1011	-1012	1071	-1072	301	TMP=2.7905e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1073)
2074	4	-1.3994	1012	-1013	1071	-1072	301	TMP=2.7906e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1074)
2075	4	-1.3993	1013	-1014	1071	-1072	301	TMP=2.7907e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1075)
2076	4	-1.3993	1014	-1015	1071	-1072	301	TMP=2.7908e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1076)
2077	4	-1.3993	1015	-1016	1071	-1072	301	TMP=2.7908e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1077)
2078	4	-1.3993	1016	-1017	1071	-1072	301	TMP=2.7908e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1078)
2079	4	-1.3993	1017	-1018	1071	-1072	301	TMP=2.7908e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1079)
2080	4	-1.3993	1018	-1019	1071	-1072	301	TMP=2.7907e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1080)
2081	4	-1.3994	1019	-1020	1071	-1072	301	TMP=2.7905e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1081)
2082	4	-1.3994	1020	-1021	1071	-1072	301	TMP=2.7900e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1082)
2083	4	-1.3994	1021	-1022	1071	-1072	301	TMP=2.7900e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1083)
2084	4	-1.3994	1022	-1023	1071	-1072	301	TMP=2.7900e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1084)
2085	4	-1.3994	1023	-1024	1071	-1072	301	TMP=2.7902e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1085)
2086	4	-1.3994	1024	-1025	1071	-1072	301	TMP=2.7904e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1086)
2087	4	-1.3993	1025	-1026	1071	-1072	301	TMP=2.7908e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1087)
2088	4	-1.3993	1026	-1027	1071	-1072	301	TMP=2.7910e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1088)
2089	4	-1.3993	1027	-1028	1071	-1072	301	TMP=2.7910e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1089)
2090	4	-1.3993	1028	-1029	1071	-1072	301	TMP=2.7909e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1090)
2091	4	-1.3993	1029	-1030	1071	-1072	301	TMP=2.7909e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1091)
2092	4	-1.3993	1030	-1031	1071	-1072	301	TMP=2.7909e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1092)
2093	4	-1.3993	1031	-1032	1071	-1072	301	TMP=2.7909e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1093)
2094	4	-1.3993	1032	-1033	1071	-1072	301	TMP=2.7908e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1094)
2095	4	-1.3993	1033	-1034	1071	-1072	301	TMP=2.7910e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1095)
2096	4	-1.3993	1034	-1035	1071	-1072	301	TMP=2.7910e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1096)
2097	4	-1.3993	1035	-1036	1071	-1072	301	TMP=2.7912e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1097)
2098	4	-1.3993	1036	-1037	1071	-1072	301	TMP=2.7914e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1098)
2099	4	-1.3993	1037	-1038	1071	-1072	301	TMP=2.7910e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1099)
2100	4	-1.3993	1038	-1039	1071	-1072	301	TMP=2.7910e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1100)
2101	4	-1.3993	1039	-1040	1071	-1072	301	TMP=2.7908e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1101)
2102	4	-1.3994	1040	-1041	1071	-1072	301	TMP=2.7904e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1102)
2103	4	-1.3994	1041	-1042	1071	-1072	301	TMP=2.7892e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1103)
2104	4	-1.3994	1042	-1043	1071	-1072	301	TMP=2.7892e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1104)
2105	4	-1.3993	1043	-1044	1071	-1072	301	TMP=2.7923e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1105)
2106	4	-1.3990	1044	-1045	1071	-1072	301	TMP=2.7985e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1106)
2107	4	-1.3987	1045	-1046	1071	-1072	301	TMP=2.8037e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1107)
2108	4	-1.3990	1046	-1047	1071	-1072	301	TMP=2.7979e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1108)
2109	4	-1.4008	1047	-1048	1071	-1072	301	TMP=2.7623e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1109)
2110	4	-1.4050	1048	-1049	1071	-1072	301	TMP=2.6685e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1110)
2111	4	-1.3991	1071	-1072	-302			TMP=2.7951e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1111)
2112	4	-1.3991	-1000	1072	-1073			TMP=2.7956e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1112)
2113	4	-1.3991	1000	-1001	1072	-1073	301	TMP=2.7954e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1113)
2114	4	-1.3991	1001	-1002	1072	-1073	301	TMP=2.7954e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1114)
2115	4	-1.3991	1002	-1003	1072	-1073	301	TMP=2.7954e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1115)

2116	4	-1.3991	1003	-1004	1072	-1073	301	TMP=2.7955e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1116)
2117	4	-1.3991	1004	-1005	1072	-1073	301	TMP=2.7955e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1117)
2118	4	-1.3991	1005	-1006	1072	-1073	301	TMP=2.7954e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1118)
2119	4	-1.3991	1006	-1007	1072	-1073	301	TMP=2.7956e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1119)
2120	4	-1.3991	1007	-1008	1072	-1073	301	TMP=2.7960e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1120)
2121	4	-1.3991	1008	-1009	1072	-1073	301	TMP=2.7962e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1121)
2122	4	-1.3991	1009	-1010	1072	-1073	301	TMP=2.7962e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1122)
2123	4	-1.3991	1010	-1011	1072	-1073	301	TMP=2.7960e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1123)
2124	4	-1.3991	1011	-1012	1072	-1073	301	TMP=2.7955e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1124)
2125	4	-1.3991	1012	-1013	1072	-1073	301	TMP=2.7950e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1125)
2126	4	-1.3991	1013	-1014	1072	-1073	301	TMP=2.7953e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1126)
2127	4	-1.3991	1014	-1015	1072	-1073	301	TMP=2.7955e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1127)
2128	4	-1.3991	1015	-1016	1072	-1073	301	TMP=2.7957e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1128)
2129	4	-1.3991	1016	-1017	1072	-1073	301	TMP=2.7958e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1129)
2130	4	-1.3991	1017	-1018	1072	-1073	301	TMP=2.7958e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1130)
2131	4	-1.3991	1018	-1019	1072	-1073	301	TMP=2.7958e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1131)
2132	4	-1.3991	1019	-1020	1072	-1073	301	TMP=2.7956e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1132)
2133	4	-1.3990	1020	-1021	1072	-1073	301	TMP=2.7967e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1133)
2134	4	-1.3991	1021	-1022	1072	-1073	301	TMP=2.7966e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1134)
2135	4	-1.3991	1022	-1023	1072	-1073	301	TMP=2.7964e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1135)
2136	4	-1.3991	1023	-1024	1072	-1073	301	TMP=2.7961e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1136)
2137	4	-1.3991	1024	-1025	1072	-1073	301	TMP=2.7957e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1137)
2138	4	-1.3991	1025	-1026	1072	-1073	301	TMP=2.7952e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1138)
2139	4	-1.3991	1026	-1027	1072	-1073	301	TMP=2.7955e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1139)
2140	4	-1.3991	1027	-1028	1072	-1073	301	TMP=2.7958e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1140)
2141	4	-1.3991	1028	-1029	1072	-1073	301	TMP=2.7960e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1141)
2142	4	-1.3991	1029	-1030	1072	-1073	301	TMP=2.7960e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1142)
2143	4	-1.3991	1030	-1031	1072	-1073	301	TMP=2.7956e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1143)
2144	4	-1.3991	1031	-1032	1072	-1073	301	TMP=2.7959e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1144)
2145	4	-1.3991	1032	-1033	1072	-1073	301	TMP=2.7958e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1145)
2146	4	-1.3991	1033	-1034	1072	-1073	301	TMP=2.7957e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1146)
2147	4	-1.3991	1034	-1035	1072	-1073	301	TMP=2.7955e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1147)
2148	4	-1.3991	1035	-1036	1072	-1073	301	TMP=2.7953e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1148)
2149	4	-1.3991	1036	-1037	1072	-1073	301	TMP=2.7958e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1149)
2150	4	-1.3991	1037	-1038	1072	-1073	301	TMP=2.7960e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1150)
2151	4	-1.3991	1038	-1039	1072	-1073	301	TMP=2.7960e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1151)
2152	4	-1.3991	1039	-1040	1072	-1073	301	TMP=2.7957e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1152)
2153	4	-1.3991	1040	-1041	1072	-1073	301	TMP=2.7949e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1153)
2154	4	-1.3992	1041	-1042	1072	-1073	301	TMP=2.7940e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1154)
2155	4	-1.3992	1042	-1043	1072	-1073	301	TMP=2.7941e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1155)
2156	4	-1.3990	1043	-1044	1072	-1073	301	TMP=2.7974e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1156)
2157	4	-1.3987	1044	-1045	1072	-1073	301	TMP=2.8038e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1157)
2158	4	-1.3984	1045	-1046	1072	-1073	301	TMP=2.8087e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1158)
2159	4	-1.3987	1046	-1047	1072	-1073	301	TMP=2.8027e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1159)
2160	4	-1.4005	1047	-1048	1072	-1073	301	TMP=2.7669e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1160)
2161	4	-1.4048	1048	-1049	1072	-1073	301	TMP=2.6719e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1161)
2162	4	-1.3989	1072	-1073	-302			TMP=2.8005e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1162)
2163	4	-1.3990	-1000	1073	-1074			TMP=2.7985e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1163)
2164	4	-1.3989	1000	-1001	1073	-1074	301	TMP=2.7993e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1164)
2165	4	-1.3989	1001	-1002	1073	-1074	301	TMP=2.7997e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1165)
2166	4	-1.3989	1002	-1003	1073	-1074	301	TMP=2.8000e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1166)
2167	4	-1.3989	1003	-1004	1073	-1074	301	TMP=2.8001e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1167)
2168	4	-1.3989	1004	-1005	1073	-1074	301	TMP=2.8001e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1168)
2169	4	-1.3989	1005	-1006	1073	-1074	301	TMP=2.8000e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1169)
2170	4	-1.3989	1006	-1007	1073	-1074	301	TMP=2.8000e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1170)
2171	4	-1.3989	1007	-1008	1073	-1074	301	TMP=2.8005e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1171)
2172	4	-1.3988	1008	-1009	1073	-1074	301	TMP=2.8007e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1172)
2173	4	-1.3988	1009	-1010	1073	-1074	301	TMP=2.8008e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1173)
2174	4	-1.3988	1010	-1011	1073	-1074	301	TMP=2.8008e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1174)
2175	4	-1.3989	1011	-1012	1073	-1074	301	TMP=2.8005e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1175)

2176	4	-1.3989	1012	-1013	1073	-1074	301	TMP=2.8001e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1176)
2177	4	-1.3989	1013	-1014	1073	-1074	301	TMP=2.7999e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1177)
2178	4	-1.3989	1014	-1015	1073	-1074	301	TMP=2.8004e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1178)
2179	4	-1.3988	1015	-1016	1073	-1074	301	TMP=2.8009e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1179)
2180	4	-1.3988	1016	-1017	1073	-1074	301	TMP=2.8011e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1180)
2181	4	-1.3988	1017	-1018	1073	-1074	301	TMP=2.8011e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1181)
2182	4	-1.3988	1018	-1019	1073	-1074	301	TMP=2.8007e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1182)
2183	4	-1.3989	1019	-1020	1073	-1074	301	TMP=2.8002e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1183)
2184	4	-1.3988	1020	-1021	1073	-1074	301	TMP=2.8007e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1184)
2185	4	-1.3988	1021	-1022	1073	-1074	301	TMP=2.8011e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1185)
2186	4	-1.3988	1022	-1023	1073	-1074	301	TMP=2.8011e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1186)
2187	4	-1.3988	1023	-1024	1073	-1074	301	TMP=2.8010e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1187)
2188	4	-1.3988	1024	-1025	1073	-1074	301	TMP=2.8006e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1188)
2189	4	-1.3989	1025	-1026	1073	-1074	301	TMP=2.8003e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1189)
2190	4	-1.3988	1026	-1027	1073	-1074	301	TMP=2.8007e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1190)
2191	4	-1.3988	1027	-1028	1073	-1074	301	TMP=2.8009e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1191)
2192	4	-1.3988	1028	-1029	1073	-1074	301	TMP=2.8009e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1192)
2193	4	-1.3988	1029	-1030	1073	-1074	301	TMP=2.8007e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1193)
2194	4	-1.3989	1030	-1031	1073	-1074	301	TMP=2.8005e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1194)
2195	4	-1.3988	1031	-1032	1073	-1074	301	TMP=2.8006e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1195)
2196	4	-1.3988	1032	-1033	1073	-1074	301	TMP=2.8006e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1196)
2197	4	-1.3989	1033	-1034	1073	-1074	301	TMP=2.8002e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1197)
2198	4	-1.3989	1034	-1035	1073	-1074	301	TMP=2.8003e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1198)
2199	4	-1.3989	1035	-1036	1073	-1074	301	TMP=2.8005e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1199)
2200	4	-1.3989	1036	-1037	1073	-1074	301	TMP=2.8004e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1200)
2201	4	-1.3989	1037	-1038	1073	-1074	301	TMP=2.8004e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1201)
2202	4	-1.3988	1038	-1039	1073	-1074	301	TMP=2.8008e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1202)
2203	4	-1.3989	1039	-1040	1073	-1074	301	TMP=2.8006e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1203)
2204	4	-1.3989	1040	-1041	1073	-1074	301	TMP=2.7997e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1204)
2205	4	-1.3989	1041	-1042	1073	-1074	301	TMP=2.7989e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1205)
2206	4	-1.3989	1042	-1043	1073	-1074	301	TMP=2.7991e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1206)
2207	4	-1.3988	1043	-1044	1073	-1074	301	TMP=2.8025e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1207)
2208	4	-1.3984	1044	-1045	1073	-1074	301	TMP=2.8089e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1208)
2209	4	-1.3982	1045	-1046	1073	-1074	301	TMP=2.8134e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1209)
2210	4	-1.3985	1046	-1047	1073	-1074	301	TMP=2.8070e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1210)
2211	4	-1.4003	1047	-1048	1073	-1074	301	TMP=2.7712e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1211)
2212	4	-1.4047	1048	-1049	1073	-1074	301	TMP=2.6746e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1212)
2213	4	-1.3986	1073	-1074	-302			TMP=2.8057e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1213)
2214	4	-1.3987	-1000	1074	-1075			TMP=2.8036e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1214)
2215	4	-1.3986	1000	-1001	1074	-1075	301	TMP=2.8053e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1215)
2216	4	-1.3986	1001	-1002	1074	-1075	301	TMP=2.8063e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1216)
2217	4	-1.3985	1002	-1003	1074	-1075	301	TMP=2.8072e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1217)
2218	4	-1.3985	1003	-1004	1074	-1075	301	TMP=2.8067e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1218)
2219	4	-1.3986	1004	-1005	1074	-1075	301	TMP=2.8061e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1219)
2220	4	-1.3986	1005	-1006	1074	-1075	301	TMP=2.8054e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1220)
2221	4	-1.3986	1006	-1007	1074	-1075	301	TMP=2.8047e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1221)
2222	4	-1.3986	1007	-1008	1074	-1075	301	TMP=2.8046e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1222)
2223	4	-1.3986	1008	-1009	1074	-1075	301	TMP=2.8051e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1223)
2224	4	-1.3986	1009	-1010	1074	-1075	301	TMP=2.8054e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1224)
2225	4	-1.3986	1010	-1011	1074	-1075	301	TMP=2.8056e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1225)
2226	4	-1.3986	1011	-1012	1074	-1075	301	TMP=2.8055e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1226)
2227	4	-1.3986	1012	-1013	1074	-1075	301	TMP=2.8053e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1227)
2228	4	-1.3986	1013	-1014	1074	-1075	301	TMP=2.8049e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1228)
2229	4	-1.3986	1014	-1015	1074	-1075	301	TMP=2.8053e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1229)
2230	4	-1.3986	1015	-1016	1074	-1075	301	TMP=2.8059e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1230)
2231	4	-1.3986	1016	-1017	1074	-1075	301	TMP=2.8061e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1231)
2232	4	-1.3986	1017	-1018	1074	-1075	301	TMP=2.8059e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1232)
2233	4	-1.3986	1018	-1019	1074	-1075	301	TMP=2.8054e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1233)
2234	4	-1.3986	1019	-1020	1074	-1075	301	TMP=2.8046e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1234)
2235	4	-1.3986	1020	-1021	1074	-1075	301	TMP=2.8047e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1235)

2236	4	-1.3986	1021	-1022	1074	-1075	301	TMP=2.8046e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1236)
2237	4	-1.3986	1022	-1023	1074	-1075	301	TMP=2.8047e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1237)
2238	4	-1.3986	1023	-1024	1074	-1075	301	TMP=2.8050e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1238)
2239	4	-1.3986	1024	-1025	1074	-1075	301	TMP=2.8051e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1239)
2240	4	-1.3986	1025	-1026	1074	-1075	301	TMP=2.8051e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1240)
2241	4	-1.3986	1026	-1027	1074	-1075	301	TMP=2.8052e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1241)
2242	4	-1.3986	1027	-1028	1074	-1075	301	TMP=2.8052e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1242)
2243	4	-1.3986	1028	-1029	1074	-1075	301	TMP=2.8051e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1243)
2244	4	-1.3986	1029	-1030	1074	-1075	301	TMP=2.8047e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1244)
2245	4	-1.3987	1030	-1031	1074	-1075	301	TMP=2.8045e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1245)
2246	4	-1.3987	1031	-1032	1074	-1075	301	TMP=2.8045e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1246)
2247	4	-1.3986	1032	-1033	1074	-1075	301	TMP=2.8047e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1247)
2248	4	-1.3986	1033	-1034	1074	-1075	301	TMP=2.8049e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1248)
2249	4	-1.3986	1034	-1035	1074	-1075	301	TMP=2.8052e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1249)
2250	4	-1.3986	1035	-1036	1074	-1075	301	TMP=2.8052e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1250)
2251	4	-1.3986	1036	-1037	1074	-1075	301	TMP=2.8059e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1251)
2252	4	-1.3986	1037	-1038	1074	-1075	301	TMP=2.8054e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1252)
2253	4	-1.3986	1038	-1039	1074	-1075	301	TMP=2.8051e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1253)
2254	4	-1.3986	1039	-1040	1074	-1075	301	TMP=2.8050e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1254)
2255	4	-1.3987	1040	-1041	1074	-1075	301	TMP=2.8042e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1255)
2256	4	-1.3987	1041	-1042	1074	-1075	301	TMP=2.8032e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1256)
2257	4	-1.3987	1042	-1043	1074	-1075	301	TMP=2.8037e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1257)
2258	4	-1.3985	1043	-1044	1074	-1075	301	TMP=2.8073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1258)
2259	4	-1.3982	1044	-1045	1074	-1075	301	TMP=2.8135e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1259)
2260	4	-1.3979	1045	-1046	1074	-1075	301	TMP=2.8180e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1260)
2261	4	-1.3983	1046	-1047	1074	-1075	301	TMP=2.8112e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1261)
2262	4	-1.4001	1047	-1048	1074	-1075	301	TMP=2.7754e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1262)
2263	4	-1.4046	1048	-1049	1074	-1075	301	TMP=2.6774e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1263)
2264	4	-1.3983	1074	-1075	-302	TMP=2.8104e-8	IMP:n=1			\$ Fuel Mesh Cell (FoT) (Cell# 1264)
2265	4	-1.3984	-1000	1075	-1076	TMP=2.8095e-8	IMP:n=1			\$ Fuel Mesh Cell(Centerline) (Cell# 1265)
2266	4	-1.3984	1000	-1001	1075	-1076	301	TMP=2.8094e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1266)
2267	4	-1.3984	1001	-1002	1075	-1076	301	TMP=2.8095e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1267)
2268	4	-1.3984	1002	-1003	1075	-1076	301	TMP=2.8095e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1268)
2269	4	-1.3984	1003	-1004	1075	-1076	301	TMP=2.8094e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1269)
2270	4	-1.3984	1004	-1005	1075	-1076	301	TMP=2.8093e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1270)
2271	4	-1.3984	1005	-1006	1075	-1076	301	TMP=2.8092e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1271)
2272	4	-1.3984	1006	-1007	1075	-1076	301	TMP=2.8089e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1272)
2273	4	-1.3984	1007	-1008	1075	-1076	301	TMP=2.8088e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1273)
2274	4	-1.3984	1008	-1009	1075	-1076	301	TMP=2.8095e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1274)
2275	4	-1.3984	1009	-1010	1075	-1076	301	TMP=2.8100e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1275)
2276	4	-1.3983	1010	-1011	1075	-1076	301	TMP=2.8103e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1276)
2277	4	-1.3984	1011	-1012	1075	-1076	301	TMP=2.8103e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1277)
2278	4	-1.3984	1012	-1013	1075	-1076	301	TMP=2.8100e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1278)
2279	4	-1.3984	1013	-1014	1075	-1076	301	TMP=2.8096e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1279)
2280	4	-1.3984	1014	-1015	1075	-1076	301	TMP=2.8094e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1280)
2281	4	-1.3984	1015	-1016	1075	-1076	301	TMP=2.8096e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1281)
2282	4	-1.3984	1016	-1017	1075	-1076	301	TMP=2.8096e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1282)
2283	4	-1.3984	1017	-1018	1075	-1076	301	TMP=2.8094e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1283)
2284	4	-1.3984	1018	-1019	1075	-1076	301	TMP=2.8090e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1284)
2285	4	-1.3984	1019	-1020	1075	-1076	301	TMP=2.8088e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1285)
2286	4	-1.3984	1020	-1021	1075	-1076	301	TMP=2.8094e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1286)
2287	4	-1.3984	1021	-1022	1075	-1076	301	TMP=2.8097e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1287)
2288	4	-1.3984	1022	-1023	1075	-1076	301	TMP=2.8098e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1288)
2289	4	-1.3984	1023	-1024	1075	-1076	301	TMP=2.8096e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1289)
2290	4	-1.3984	1024	-1025	1075	-1076	301	TMP=2.8092e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1290)
2291	4	-1.3984	1025	-1026	1075	-1076	301	TMP=2.8093e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1291)
2292	4	-1.3984	1026	-1027	1075	-1076	301	TMP=2.8093e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1292)
2293	4	-1.3984	1027	-1028	1075	-1076	301	TMP=2.8091e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1293)
2294	4	-1.3984	1028	-1029	1075	-1076	301	TMP=2.8088e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1294)
2295	4	-1.3984	1029	-1030	1075	-1076	301	TMP=2.8089e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1295)

2296	4	-1.3984	1030	-1031	1075	-1076	301	TMP=2.8091e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1296)
2297	4	-1.3984	1031	-1032	1075	-1076	301	TMP=2.8093e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1297)
2298	4	-1.3984	1032	-1033	1075	-1076	301	TMP=2.8095e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1298)
2299	4	-1.3984	1033	-1034	1075	-1076	301	TMP=2.8094e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1299)
2300	4	-1.3984	1034	-1035	1075	-1076	301	TMP=2.8094e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1300)
2301	4	-1.3984	1035	-1036	1075	-1076	301	TMP=2.8095e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1301)
2302	4	-1.3984	1036	-1037	1075	-1076	301	TMP=2.8094e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1302)
2303	4	-1.3984	1037	-1038	1075	-1076	301	TMP=2.8094e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1303)
2304	4	-1.3984	1038	-1039	1075	-1076	301	TMP=2.8097e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1304)
2305	4	-1.3984	1039	-1040	1075	-1076	301	TMP=2.8093e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1305)
2306	4	-1.3984	1040	-1041	1075	-1076	301	TMP=2.8084e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1306)
2307	4	-1.3985	1041	-1042	1075	-1076	301	TMP=2.8077e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1307)
2308	4	-1.3985	1042	-1043	1075	-1076	301	TMP=2.8081e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1308)
2309	4	-1.3983	1043	-1044	1075	-1076	301	TMP=2.8116e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1309)
2310	4	-1.3979	1044	-1045	1075	-1076	301	TMP=2.8182e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1310)
2311	4	-1.3977	1045	-1046	1075	-1076	301	TMP=2.8220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1311)
2312	4	-1.3981	1046	-1047	1075	-1076	301	TMP=2.8159e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1312)
2313	4	-1.3999	1047	-1048	1075	-1076	301	TMP=2.7795e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1313)
2314	4	-1.4045	1048	-1049	1075	-1076	301	TMP=2.6803e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1314)
2315	4	-1.3981	1075	-1076	-302			TMP=2.8148e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1315)
2316	4	-1.3983	-1000	1076	-1077			TMP=2.8120e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1316)
2317	4	-1.3982	1000	-1001	1076	-1077	301	TMP=2.8125e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1317)
2318	4	-1.3982	1001	-1002	1076	-1077	301	TMP=2.8128e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1318)
2319	4	-1.3982	1002	-1003	1076	-1077	301	TMP=2.8129e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1319)
2320	4	-1.3982	1003	-1004	1076	-1077	301	TMP=2.8130e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1320)
2321	4	-1.3982	1004	-1005	1076	-1077	301	TMP=2.8130e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1321)
2322	4	-1.3982	1005	-1006	1076	-1077	301	TMP=2.8129e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1322)
2323	4	-1.3982	1006	-1007	1076	-1077	301	TMP=2.8130e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1323)
2324	4	-1.3982	1007	-1008	1076	-1077	301	TMP=2.8133e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1324)
2325	4	-1.3982	1008	-1009	1076	-1077	301	TMP=2.8140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1325)
2326	4	-1.3982	1009	-1010	1076	-1077	301	TMP=2.8142e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1326)
2327	4	-1.3982	1010	-1011	1076	-1077	301	TMP=2.8142e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1327)
2328	4	-1.3982	1011	-1012	1076	-1077	301	TMP=2.8141e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1328)
2329	4	-1.3982	1012	-1013	1076	-1077	301	TMP=2.8141e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1329)
2330	4	-1.3982	1013	-1014	1076	-1077	301	TMP=2.8139e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1330)
2331	4	-1.3982	1014	-1015	1076	-1077	301	TMP=2.8138e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1331)
2332	4	-1.3982	1015	-1016	1076	-1077	301	TMP=2.8135e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1332)
2333	4	-1.3982	1016	-1017	1076	-1077	301	TMP=2.8130e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1333)
2334	4	-1.3983	1017	-1018	1076	-1077	301	TMP=2.8123e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1334)
2335	4	-1.3982	1018	-1019	1076	-1077	301	TMP=2.8125e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1335)
2336	4	-1.3982	1019	-1020	1076	-1077	301	TMP=2.8130e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1336)
2337	4	-1.3982	1020	-1021	1076	-1077	301	TMP=2.8136e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1337)
2338	4	-1.3982	1021	-1022	1076	-1077	301	TMP=2.8140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1338)
2339	4	-1.3982	1022	-1023	1076	-1077	301	TMP=2.8137e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1339)
2340	4	-1.3982	1023	-1024	1076	-1077	301	TMP=2.8133e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1340)
2341	4	-1.3982	1024	-1025	1076	-1077	301	TMP=2.8133e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1341)
2342	4	-1.3982	1025	-1026	1076	-1077	301	TMP=2.8134e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1342)
2343	4	-1.3982	1026	-1027	1076	-1077	301	TMP=2.8136e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1343)
2344	4	-1.3982	1027	-1028	1076	-1077	301	TMP=2.8137e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1344)
2345	4	-1.3982	1028	-1029	1076	-1077	301	TMP=2.8137e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1345)
2346	4	-1.3982	1029	-1030	1076	-1077	301	TMP=2.8136e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1346)
2347	4	-1.3982	1030	-1031	1076	-1077	301	TMP=2.8136e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1347)
2348	4	-1.3982	1031	-1032	1076	-1077	301	TMP=2.8136e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1348)
2349	4	-1.3982	1032	-1033	1076	-1077	301	TMP=2.8137e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1349)
2350	4	-1.3982	1033	-1034	1076	-1077	301	TMP=2.8135e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1350)
2351	4	-1.3982	1034	-1035	1076	-1077	301	TMP=2.8135e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1351)
2352	4	-1.3982	1035	-1036	1076	-1077	301	TMP=2.8136e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1352)
2353	4	-1.3982	1036	-1037	1076	-1077	301	TMP=2.8139e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1353)
2354	4	-1.3982	1037	-1038	1076	-1077	301	TMP=2.8140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1354)
2355	4	-1.3982	1038	-1039	1076	-1077	301	TMP=2.8136e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1355)

2356	4	-1.3982	1039	-1040	1076	-1077	301	TMP=2.8132e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1356)
2357	4	-1.3982	1040	-1041	1076	-1077	301	TMP=2.8126e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1357)
2358	4	-1.3983	1041	-1042	1076	-1077	301	TMP=2.8118e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1358)
2359	4	-1.3982	1042	-1043	1076	-1077	301	TMP=2.8124e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1359)
2360	4	-1.3980	1043	-1044	1076	-1077	301	TMP=2.8163e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1360)
2361	4	-1.3977	1044	-1045	1076	-1077	301	TMP=2.8221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1361)
2362	4	-1.3975	1045	-1046	1076	-1077	301	TMP=2.8265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1362)
2363	4	-1.3978	1046	-1047	1076	-1077	301	TMP=2.8202e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1363)
2364	4	-1.3997	1047	-1048	1076	-1077	301	TMP=2.7831e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1364)
2365	4	-1.4043	1048	-1049	1076	-1077	301	TMP=2.6831e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1365)
2366	4	-1.3979	1076	-1077	-302			TMP=2.8193e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1366)
2367	4	-1.3981	-1000	1077	-1078			TMP=2.8159e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1367)
2368	4	-1.3980	1000	-1001	1077	-1078	301	TMP=2.8171e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1368)
2369	4	-1.3980	1001	-1002	1077	-1078	301	TMP=2.8178e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1369)
2370	4	-1.3979	1002	-1003	1077	-1078	301	TMP=2.8184e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1370)
2371	4	-1.3979	1003	-1004	1077	-1078	301	TMP=2.8189e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1371)
2372	4	-1.3979	1004	-1005	1077	-1078	301	TMP=2.8194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1372)
2373	4	-1.3979	1005	-1006	1077	-1078	301	TMP=2.8193e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1373)
2374	4	-1.3979	1006	-1007	1077	-1078	301	TMP=2.8185e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1374)
2375	4	-1.3980	1007	-1008	1077	-1078	301	TMP=2.8175e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1375)
2376	4	-1.3980	1008	-1009	1077	-1078	301	TMP=2.8174e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1376)
2377	4	-1.3980	1009	-1010	1077	-1078	301	TMP=2.8176e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1377)
2378	4	-1.3980	1010	-1011	1077	-1078	301	TMP=2.8177e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1378)
2379	4	-1.3980	1011	-1012	1077	-1078	301	TMP=2.8177e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1379)
2380	4	-1.3980	1012	-1013	1077	-1078	301	TMP=2.8177e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1380)
2381	4	-1.3980	1013	-1014	1077	-1078	301	TMP=2.8178e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1381)
2382	4	-1.3980	1014	-1015	1077	-1078	301	TMP=2.8179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1382)
2383	4	-1.3980	1015	-1016	1077	-1078	301	TMP=2.8176e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1383)
2384	4	-1.3980	1016	-1017	1077	-1078	301	TMP=2.8171e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1384)
2385	4	-1.3980	1017	-1018	1077	-1078	301	TMP=2.8171e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1385)
2386	4	-1.3980	1018	-1019	1077	-1078	301	TMP=2.8172e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1386)
2387	4	-1.3980	1019	-1020	1077	-1078	301	TMP=2.8173e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1387)
2388	4	-1.3980	1020	-1021	1077	-1078	301	TMP=2.8175e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1388)
2389	4	-1.3980	1021	-1022	1077	-1078	301	TMP=2.8178e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1389)
2390	4	-1.3979	1022	-1023	1077	-1078	301	TMP=2.8181e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1390)
2391	4	-1.3979	1023	-1024	1077	-1078	301	TMP=2.8186e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1391)
2392	4	-1.3979	1024	-1025	1077	-1078	301	TMP=2.8184e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1392)
2393	4	-1.3979	1025	-1026	1077	-1078	301	TMP=2.8182e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1393)
2394	4	-1.3980	1026	-1027	1077	-1078	301	TMP=2.8179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1394)
2395	4	-1.3980	1027	-1028	1077	-1078	301	TMP=2.8176e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1395)
2396	4	-1.3980	1028	-1029	1077	-1078	301	TMP=2.8178e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1396)
2397	4	-1.3980	1029	-1030	1077	-1078	301	TMP=2.8179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1397)
2398	4	-1.3979	1030	-1031	1077	-1078	301	TMP=2.8181e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1398)
2399	4	-1.3979	1031	-1032	1077	-1078	301	TMP=2.8181e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1399)
2400	4	-1.3979	1032	-1033	1077	-1078	301	TMP=2.8182e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1400)
2401	4	-1.3979	1033	-1034	1077	-1078	301	TMP=2.8181e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1401)
2402	4	-1.3979	1034	-1035	1077	-1078	301	TMP=2.8180e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1402)
2403	4	-1.3980	1035	-1036	1077	-1078	301	TMP=2.8178e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1403)
2404	4	-1.3980	1036	-1037	1077	-1078	301	TMP=2.8176e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1404)
2405	4	-1.3980	1037	-1038	1077	-1078	301	TMP=2.8179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1405)
2406	4	-1.3980	1038	-1039	1077	-1078	301	TMP=2.8179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1406)
2407	4	-1.3980	1039	-1040	1077	-1078	301	TMP=2.8176e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1407)
2408	4	-1.3980	1040	-1041	1077	-1078	301	TMP=2.8165e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1408)
2409	4	-1.3981	1041	-1042	1077	-1078	301	TMP=2.8159e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1409)
2410	4	-1.3980	1042	-1043	1077	-1078	301	TMP=2.8168e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1410)
2411	4	-1.3978	1043	-1044	1077	-1078	301	TMP=2.8206e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1411)
2412	4	-1.3975	1044	-1045	1077	-1078	301	TMP=2.8267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1412)
2413	4	-1.3973	1045	-1046	1077	-1078	301	TMP=2.8309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1413)
2414	4	-1.3976	1046	-1047	1077	-1078	301	TMP=2.8242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1414)
2415	4	-1.3995	1047	-1048	1077	-1078	301	TMP=2.7870e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1415)

2416 4 -1.4042 1048 -1049 1077 -1078 301 TMP=2.6855e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1416)
2417 4 -1.3976 1077 -1078 -302 TMP=2.8238e-8 IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1417)
2418 4 -1.3978 -1000 1078 -1079 TMP=2.8211e-8 IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1418)
2419 4 -1.3977 1000 -1001 1078 -1079 301 TMP=2.8230e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1419)
2420 4 -1.3977 1001 -1002 1078 -1079 301 TMP=2.8235e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1420)
2421 4 -1.3977 1002 -1003 1078 -1079 301 TMP=2.8233e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1421)
2422 4 -1.3977 1003 -1004 1078 -1079 301 TMP=2.8230e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1422)
2423 4 -1.3977 1004 -1005 1078 -1079 301 TMP=2.8226e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1423)
2424 4 -1.3977 1005 -1006 1078 -1079 301 TMP=2.8222e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1424)
2425 4 -1.3978 1006 -1007 1078 -1079 301 TMP=2.8217e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1425)
2426 4 -1.3978 1007 -1008 1078 -1079 301 TMP=2.8211e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1426)
2427 4 -1.3978 1008 -1009 1078 -1079 301 TMP=2.8212e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1427)
2428 4 -1.3978 1009 -1010 1078 -1079 301 TMP=2.8218e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1428)
2429 4 -1.3977 1010 -1011 1078 -1079 301 TMP=2.8222e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1429)
2430 4 -1.3977 1011 -1012 1078 -1079 301 TMP=2.8225e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1430)
2431 4 -1.3977 1012 -1013 1078 -1079 301 TMP=2.8228e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1431)
2432 4 -1.3977 1013 -1014 1078 -1079 301 TMP=2.8230e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1432)
2433 4 -1.3977 1014 -1015 1078 -1079 301 TMP=2.8226e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1433)
2434 4 -1.3977 1015 -1016 1078 -1079 301 TMP=2.8223e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1434)
2435 4 -1.3977 1016 -1017 1078 -1079 301 TMP=2.8233e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1435)
2436 4 -1.3977 1017 -1018 1078 -1079 301 TMP=2.8235e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1436)
2437 4 -1.3977 1018 -1019 1078 -1079 301 TMP=2.8230e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1437)
2438 4 -1.3977 1019 -1020 1078 -1079 301 TMP=2.8224e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1438)
2439 4 -1.3978 1020 -1021 1078 -1079 301 TMP=2.8218e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1439)
2440 4 -1.3978 1021 -1022 1078 -1079 301 TMP=2.8212e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1440)
2441 4 -1.3978 1022 -1023 1078 -1079 301 TMP=2.8216e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1441)
2442 4 -1.3978 1023 -1024 1078 -1079 301 TMP=2.8218e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1442)
2443 4 -1.3977 1024 -1025 1078 -1079 301 TMP=2.8219e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1443)
2444 4 -1.3978 1025 -1026 1078 -1079 301 TMP=2.8218e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1444)
2445 4 -1.3977 1026 -1027 1078 -1079 301 TMP=2.8219e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1445)
2446 4 -1.3977 1027 -1028 1078 -1079 301 TMP=2.8221e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1446)
2447 4 -1.3977 1028 -1029 1078 -1079 301 TMP=2.8223e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1447)
2448 4 -1.3977 1029 -1030 1078 -1079 301 TMP=2.8224e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1448)
2449 4 -1.3977 1030 -1031 1078 -1079 301 TMP=2.8224e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1449)
2450 4 -1.3977 1031 -1032 1078 -1079 301 TMP=2.8220e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1450)
2451 4 -1.3977 1032 -1033 1078 -1079 301 TMP=2.8220e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1451)
2452 4 -1.3977 1033 -1034 1078 -1079 301 TMP=2.8219e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1452)
2453 4 -1.3978 1034 -1035 1078 -1079 301 TMP=2.8217e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1453)
2454 4 -1.3977 1035 -1036 1078 -1079 301 TMP=2.8219e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1454)
2455 4 -1.3977 1036 -1037 1078 -1079 301 TMP=2.8222e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1455)
2456 4 -1.3977 1037 -1038 1078 -1079 301 TMP=2.8222e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1456)
2457 4 -1.3977 1038 -1039 1078 -1079 301 TMP=2.8220e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1457)
2458 4 -1.3978 1039 -1040 1078 -1079 301 TMP=2.8215e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1458)
2459 4 -1.3978 1040 -1041 1078 -1079 301 TMP=2.8205e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1459)
2460 4 -1.3978 1041 -1042 1078 -1079 301 TMP=2.8200e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1460)
2461 4 -1.3978 1042 -1043 1078 -1079 301 TMP=2.8211e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1461)
2462 4 -1.3976 1043 -1044 1078 -1079 301 TMP=2.8247e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1462)
2463 4 -1.3973 1044 -1045 1078 -1079 301 TMP=2.8311e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1463)
2464 4 -1.3970 1045 -1046 1078 -1079 301 TMP=2.8352e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1464)
2465 4 -1.3974 1046 -1047 1078 -1079 301 TMP=2.8277e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1465)
2466 4 -1.3994 1047 -1048 1078 -1079 301 TMP=2.7903e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1466)
2467 4 -1.4041 1048 -1049 1078 -1079 301 TMP=2.6878e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1467)
2468 4 -1.3974 1078 -1079 -302 TMP=2.8277e-8 IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1468)
2469 4 -1.3976 -1000 1079 -1080 TMP=2.8251e-8 IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1469)
2470 4 -1.3976 1000 -1001 1079 -1080 301 TMP=2.8253e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1470)
2471 4 -1.3976 1001 -1002 1079 -1080 301 TMP=2.8253e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1471)
2472 4 -1.3976 1002 -1003 1079 -1080 301 TMP=2.8254e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1472)
2473 4 -1.3976 1003 -1004 1079 -1080 301 TMP=2.8254e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1473)
2474 4 -1.3976 1004 -1005 1079 -1080 301 TMP=2.8254e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1474)
2475 4 -1.3976 1005 -1006 1079 -1080 301 TMP=2.8254e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 1475)

2476	4	-1.3976	1006	-1007	1079	-1080	301	TMP=2.8252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1476)
2477	4	-1.3976	1007	-1008	1079	-1080	301	TMP=2.8250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1477)
2478	4	-1.3976	1008	-1009	1079	-1080	301	TMP=2.8255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1478)
2479	4	-1.3975	1009	-1010	1079	-1080	301	TMP=2.8263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1479)
2480	4	-1.3975	1010	-1011	1079	-1080	301	TMP=2.8271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1480)
2481	4	-1.3975	1011	-1012	1079	-1080	301	TMP=2.8273e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1481)
2482	4	-1.3975	1012	-1013	1079	-1080	301	TMP=2.8271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1482)
2483	4	-1.3975	1013	-1014	1079	-1080	301	TMP=2.8269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1483)
2484	4	-1.3975	1014	-1015	1079	-1080	301	TMP=2.8266e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1484)
2485	4	-1.3975	1015	-1016	1079	-1080	301	TMP=2.8262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1485)
2486	4	-1.3975	1016	-1017	1079	-1080	301	TMP=2.8267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1486)
2487	4	-1.3975	1017	-1018	1079	-1080	301	TMP=2.8270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1487)
2488	4	-1.3975	1018	-1019	1079	-1080	301	TMP=2.8271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1488)
2489	4	-1.3975	1019	-1020	1079	-1080	301	TMP=2.8270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1489)
2490	4	-1.3975	1020	-1021	1079	-1080	301	TMP=2.8263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1490)
2491	4	-1.3975	1021	-1022	1079	-1080	301	TMP=2.8259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1491)
2492	4	-1.3975	1022	-1023	1079	-1080	301	TMP=2.8262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1492)
2493	4	-1.3975	1023	-1024	1079	-1080	301	TMP=2.8263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1493)
2494	4	-1.3975	1024	-1025	1079	-1080	301	TMP=2.8263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1494)
2495	4	-1.3975	1025	-1026	1079	-1080	301	TMP=2.8260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1495)
2496	4	-1.3975	1026	-1027	1079	-1080	301	TMP=2.8259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1496)
2497	4	-1.3975	1027	-1028	1079	-1080	301	TMP=2.8262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1497)
2498	4	-1.3975	1028	-1029	1079	-1080	301	TMP=2.8263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1498)
2499	4	-1.3975	1029	-1030	1079	-1080	301	TMP=2.8263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1499)
2500	4	-1.3975	1030	-1031	1079	-1080	301	TMP=2.8261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1500)
2501	4	-1.3975	1031	-1032	1079	-1080	301	TMP=2.8258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1501)
2502	4	-1.3976	1032	-1033	1079	-1080	301	TMP=2.8255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1502)
2503	4	-1.3976	1033	-1034	1079	-1080	301	TMP=2.8256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1503)
2504	4	-1.3975	1034	-1035	1079	-1080	301	TMP=2.8257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1504)
2505	4	-1.3975	1035	-1036	1079	-1080	301	TMP=2.8260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1505)
2506	4	-1.3975	1036	-1037	1079	-1080	301	TMP=2.8261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1506)
2507	4	-1.3975	1037	-1038	1079	-1080	301	TMP=2.8265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1507)
2508	4	-1.3975	1038	-1039	1079	-1080	301	TMP=2.8262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1508)
2509	4	-1.3976	1039	-1040	1079	-1080	301	TMP=2.8255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1509)
2510	4	-1.3976	1040	-1041	1079	-1080	301	TMP=2.8247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1510)
2511	4	-1.3976	1041	-1042	1079	-1080	301	TMP=2.8239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1511)
2512	4	-1.3976	1042	-1043	1079	-1080	301	TMP=2.8253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1512)
2513	4	-1.3974	1043	-1044	1079	-1080	301	TMP=2.8293e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1513)
2514	4	-1.3970	1044	-1045	1079	-1080	301	TMP=2.8354e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1514)
2515	4	-1.3968	1045	-1046	1079	-1080	301	TMP=2.8391e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1515)
2516	4	-1.3973	1046	-1047	1079	-1080	301	TMP=2.8311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1516)
2517	4	-1.3992	1047	-1048	1079	-1080	301	TMP=2.7935e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1517)
2518	4	-1.4040	1048	-1049	1079	-1080	301	TMP=2.6900e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1518)
2519	4	-1.3972	1079	-1080	-302			TMP=2.8323e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1519)
2520	4	-1.3974	-1000	1080	-1081			TMP=2.8279e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1520)
2521	4	-1.3974	1000	-1001	1080	-1081	301	TMP=2.8286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1521)
2522	4	-1.3974	1001	-1002	1080	-1081	301	TMP=2.8290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1522)
2523	4	-1.3974	1002	-1003	1080	-1081	301	TMP=2.8292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1523)
2524	4	-1.3974	1003	-1004	1080	-1081	301	TMP=2.8294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1524)
2525	4	-1.3974	1004	-1005	1080	-1081	301	TMP=2.8294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1525)
2526	4	-1.3974	1005	-1006	1080	-1081	301	TMP=2.8294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1526)
2527	4	-1.3974	1006	-1007	1080	-1081	301	TMP=2.8292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1527)
2528	4	-1.3974	1007	-1008	1080	-1081	301	TMP=2.8292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1528)
2529	4	-1.3973	1008	-1009	1080	-1081	301	TMP=2.8298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1529)
2530	4	-1.3973	1009	-1010	1080	-1081	301	TMP=2.8301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1530)
2531	4	-1.3973	1010	-1011	1080	-1081	301	TMP=2.8302e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1531)
2532	4	-1.3973	1011	-1012	1080	-1081	301	TMP=2.8303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1532)
2533	4	-1.3973	1012	-1013	1080	-1081	301	TMP=2.8304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1533)
2534	4	-1.3973	1013	-1014	1080	-1081	301	TMP=2.8303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1534)
2535	4	-1.3973	1014	-1015	1080	-1081	301	TMP=2.8302e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1535)

2536	4	-1.3973	1015	-1016	1080	-1081	301	TMP=2.8300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1536)
2537	4	-1.3973	1016	-1017	1080	-1081	301	TMP=2.8299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1537)
2538	4	-1.3973	1017	-1018	1080	-1081	301	TMP=2.8298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1538)
2539	4	-1.3974	1018	-1019	1080	-1081	301	TMP=2.8294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1539)
2540	4	-1.3974	1019	-1020	1080	-1081	301	TMP=2.8291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1540)
2541	4	-1.3973	1020	-1021	1080	-1081	301	TMP=2.8298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1541)
2542	4	-1.3973	1021	-1022	1080	-1081	301	TMP=2.8306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1542)
2543	4	-1.3973	1022	-1023	1080	-1081	301	TMP=2.8306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1543)
2544	4	-1.3973	1023	-1024	1080	-1081	301	TMP=2.8304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1544)
2545	4	-1.3973	1024	-1025	1080	-1081	301	TMP=2.8300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1545)
2546	4	-1.3973	1025	-1026	1080	-1081	301	TMP=2.8296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1546)
2547	4	-1.3973	1026	-1027	1080	-1081	301	TMP=2.8297e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1547)
2548	4	-1.3973	1027	-1028	1080	-1081	301	TMP=2.8297e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1548)
2549	4	-1.3973	1028	-1029	1080	-1081	301	TMP=2.8299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1549)
2550	4	-1.3973	1029	-1030	1080	-1081	301	TMP=2.8300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1550)
2551	4	-1.3973	1030	-1031	1080	-1081	301	TMP=2.8299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1551)
2552	4	-1.3973	1031	-1032	1080	-1081	301	TMP=2.8299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1552)
2553	4	-1.3973	1032	-1033	1080	-1081	301	TMP=2.8299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1553)
2554	4	-1.3973	1033	-1034	1080	-1081	301	TMP=2.8300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1554)
2555	4	-1.3973	1034	-1035	1080	-1081	301	TMP=2.8304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1555)
2556	4	-1.3973	1035	-1036	1080	-1081	301	TMP=2.8303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1556)
2557	4	-1.3973	1036	-1037	1080	-1081	301	TMP=2.8300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1557)
2558	4	-1.3973	1037	-1038	1080	-1081	301	TMP=2.8301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1558)
2559	4	-1.3973	1038	-1039	1080	-1081	301	TMP=2.8301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1559)
2560	4	-1.3973	1039	-1040	1080	-1081	301	TMP=2.8295e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1560)
2561	4	-1.3974	1040	-1041	1080	-1081	301	TMP=2.8286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1561)
2562	4	-1.3974	1041	-1042	1080	-1081	301	TMP=2.8280e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1562)
2563	4	-1.3974	1042	-1043	1080	-1081	301	TMP=2.8292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1563)
2564	4	-1.3971	1043	-1044	1080	-1081	301	TMP=2.8337e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1564)
2565	4	-1.3968	1044	-1045	1080	-1081	301	TMP=2.8399e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1565)
2566	4	-1.3966	1045	-1046	1080	-1081	301	TMP=2.8430e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1566)
2567	4	-1.3971	1046	-1047	1080	-1081	301	TMP=2.8342e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1567)
2568	4	-1.3991	1047	-1048	1080	-1081	301	TMP=2.7966e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1568)
2569	4	-1.4039	1048	-1049	1080	-1081	301	TMP=2.6924e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1569)
2570	4	-1.3969	1080	-1081	-302			TMP=2.8370e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1570)
2571	4	-1.3972	-1000	1081	-1082			TMP=2.8318e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1571)
2572	4	-1.3972	1000	-1001	1081	-1082	301	TMP=2.8330e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1572)
2573	4	-1.3971	1001	-1002	1081	-1082	301	TMP=2.8337e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1573)
2574	4	-1.3971	1002	-1003	1081	-1082	301	TMP=2.8343e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1574)
2575	4	-1.3971	1003	-1004	1081	-1082	301	TMP=2.8348e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1575)
2576	4	-1.3970	1004	-1005	1081	-1082	301	TMP=2.8352e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1576)
2577	4	-1.3971	1005	-1006	1081	-1082	301	TMP=2.8345e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1577)
2578	4	-1.3971	1006	-1007	1081	-1082	301	TMP=2.8339e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1578)
2579	4	-1.3971	1007	-1008	1081	-1082	301	TMP=2.8332e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1579)
2580	4	-1.3972	1008	-1009	1081	-1082	301	TMP=2.8329e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1580)
2581	4	-1.3972	1009	-1010	1081	-1082	301	TMP=2.8330e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1581)
2582	4	-1.3972	1010	-1011	1081	-1082	301	TMP=2.8331e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1582)
2583	4	-1.3972	1011	-1012	1081	-1082	301	TMP=2.8331e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1583)
2584	4	-1.3971	1012	-1013	1081	-1082	301	TMP=2.8332e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1584)
2585	4	-1.3971	1013	-1014	1081	-1082	301	TMP=2.8334e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1585)
2586	4	-1.3971	1014	-1015	1081	-1082	301	TMP=2.8335e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1586)
2587	4	-1.3971	1015	-1016	1081	-1082	301	TMP=2.8335e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1587)
2588	4	-1.3972	1016	-1017	1081	-1082	301	TMP=2.8332e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1588)
2589	4	-1.3972	1017	-1018	1081	-1082	301	TMP=2.8325e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1589)
2590	4	-1.3972	1018	-1019	1081	-1082	301	TMP=2.8327e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1590)
2591	4	-1.3972	1019	-1020	1081	-1082	301	TMP=2.8331e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1591)
2592	4	-1.3971	1020	-1021	1081	-1082	301	TMP=2.8335e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1592)
2593	4	-1.3971	1021	-1022	1081	-1082	301	TMP=2.8338e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1593)
2594	4	-1.3971	1022	-1023	1081	-1082	301	TMP=2.8342e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1594)
2595	4	-1.3971	1023	-1024	1081	-1082	301	TMP=2.8336e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1595)

2596	4	-1.3971	1024	-1025	1081	-1082	301	TMP=2.8332e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1596)
2597	4	-1.3971	1025	-1026	1081	-1082	301	TMP=2.8334e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1597)
2598	4	-1.3971	1026	-1027	1081	-1082	301	TMP=2.8337e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1598)
2599	4	-1.3971	1027	-1028	1081	-1082	301	TMP=2.8338e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1599)
2600	4	-1.3971	1028	-1029	1081	-1082	301	TMP=2.8338e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1600)
2601	4	-1.3971	1029	-1030	1081	-1082	301	TMP=2.8339e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1601)
2602	4	-1.3971	1030	-1031	1081	-1082	301	TMP=2.8341e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1602)
2603	4	-1.3971	1031	-1032	1081	-1082	301	TMP=2.8339e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1603)
2604	4	-1.3971	1032	-1033	1081	-1082	301	TMP=2.8337e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1604)
2605	4	-1.3971	1033	-1034	1081	-1082	301	TMP=2.8336e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1605)
2606	4	-1.3971	1034	-1035	1081	-1082	301	TMP=2.8336e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1606)
2607	4	-1.3971	1035	-1036	1081	-1082	301	TMP=2.8335e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1607)
2608	4	-1.3971	1036	-1037	1081	-1082	301	TMP=2.8339e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1608)
2609	4	-1.3971	1037	-1038	1081	-1082	301	TMP=2.8341e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1609)
2610	4	-1.3971	1038	-1039	1081	-1082	301	TMP=2.8339e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1610)
2611	4	-1.3972	1039	-1040	1081	-1082	301	TMP=2.8332e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1611)
2612	4	-1.3972	1040	-1041	1081	-1082	301	TMP=2.8322e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1612)
2613	4	-1.3972	1041	-1042	1081	-1082	301	TMP=2.8317e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1613)
2614	4	-1.3971	1042	-1043	1081	-1082	301	TMP=2.8332e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1614)
2615	4	-1.3969	1043	-1044	1081	-1082	301	TMP=2.8380e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1615)
2616	4	-1.3966	1044	-1045	1081	-1082	301	TMP=2.8436e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1616)
2617	4	-1.3964	1045	-1046	1081	-1082	301	TMP=2.8469e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1617)
2618	4	-1.3969	1046	-1047	1081	-1082	301	TMP=2.8375e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1618)
2619	4	-1.3989	1047	-1048	1081	-1082	301	TMP=2.7992e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1619)
2620	4	-1.4038	1048	-1049	1081	-1082	301	TMP=2.6949e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1620)
2621	4	-1.3967	1081	-1082	-302			TMP=2.8410e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1621)
2622	4	-1.3970	-1000	1082	-1083			TMP=2.8367e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1622)
2623	4	-1.3969	1000	-1001	1082	-1083	301	TMP=2.8384e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1623)
2624	4	-1.3969	1001	-1002	1082	-1083	301	TMP=2.8383e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1624)
2625	4	-1.3969	1002	-1003	1082	-1083	301	TMP=2.8380e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1625)
2626	4	-1.3969	1003	-1004	1082	-1083	301	TMP=2.8378e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1626)
2627	4	-1.3969	1004	-1005	1082	-1083	301	TMP=2.8375e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1627)
2628	4	-1.3969	1005	-1006	1082	-1083	301	TMP=2.8373e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1628)
2629	4	-1.3969	1006	-1007	1082	-1083	301	TMP=2.8370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1629)
2630	4	-1.3970	1007	-1008	1082	-1083	301	TMP=2.8367e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1630)
2631	4	-1.3970	1008	-1009	1082	-1083	301	TMP=2.8365e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1631)
2632	4	-1.3970	1009	-1010	1082	-1083	301	TMP=2.8367e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1632)
2633	4	-1.3970	1010	-1011	1082	-1083	301	TMP=2.8368e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1633)
2634	4	-1.3970	1011	-1012	1082	-1083	301	TMP=2.8369e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1634)
2635	4	-1.3969	1012	-1013	1082	-1083	301	TMP=2.8370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1635)
2636	4	-1.3969	1013	-1014	1082	-1083	301	TMP=2.8370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1636)
2637	4	-1.3969	1014	-1015	1082	-1083	301	TMP=2.8370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1637)
2638	4	-1.3970	1015	-1016	1082	-1083	301	TMP=2.8369e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1638)
2639	4	-1.3969	1016	-1017	1082	-1083	301	TMP=2.8371e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1639)
2640	4	-1.3969	1017	-1018	1082	-1083	301	TMP=2.8371e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1640)
2641	4	-1.3969	1018	-1019	1082	-1083	301	TMP=2.8371e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1641)
2642	4	-1.3969	1019	-1020	1082	-1083	301	TMP=2.8371e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1642)
2643	4	-1.3969	1020	-1021	1082	-1083	301	TMP=2.8370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1643)
2644	4	-1.3969	1021	-1022	1082	-1083	301	TMP=2.8369e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1644)
2645	4	-1.3970	1022	-1023	1082	-1083	301	TMP=2.8369e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1645)
2646	4	-1.3969	1023	-1024	1082	-1083	301	TMP=2.8370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1646)
2647	4	-1.3969	1024	-1025	1082	-1083	301	TMP=2.8374e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1647)
2648	4	-1.3969	1025	-1026	1082	-1083	301	TMP=2.8375e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1648)
2649	4	-1.3969	1026	-1027	1082	-1083	301	TMP=2.8374e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1649)
2650	4	-1.3969	1027	-1028	1082	-1083	301	TMP=2.8372e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1650)
2651	4	-1.3969	1028	-1029	1082	-1083	301	TMP=2.8371e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1651)
2652	4	-1.3969	1029	-1030	1082	-1083	301	TMP=2.8372e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1652)
2653	4	-1.3969	1030	-1031	1082	-1083	301	TMP=2.8373e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1653)
2654	4	-1.3969	1031	-1032	1082	-1083	301	TMP=2.8373e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1654)
2655	4	-1.3969	1032	-1033	1082	-1083	301	TMP=2.8372e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1655)

2656	4	-1.3969	1033	-1034	1082	-1083	301	TMP=2.8372e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1656)
2657	4	-1.3969	1034	-1035	1082	-1083	301	TMP=2.8374e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1657)
2658	4	-1.3969	1035	-1036	1082	-1083	301	TMP=2.8373e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1658)
2659	4	-1.3969	1036	-1037	1082	-1083	301	TMP=2.8375e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1659)
2660	4	-1.3969	1037	-1038	1082	-1083	301	TMP=2.8377e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1660)
2661	4	-1.3969	1038	-1039	1082	-1083	301	TMP=2.8375e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1661)
2662	4	-1.3970	1039	-1040	1082	-1083	301	TMP=2.8368e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1662)
2663	4	-1.3970	1040	-1041	1082	-1083	301	TMP=2.8358e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1663)
2664	4	-1.3970	1041	-1042	1082	-1083	301	TMP=2.8354e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1664)
2665	4	-1.3969	1042	-1043	1082	-1083	301	TMP=2.8370e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1665)
2666	4	-1.3967	1043	-1044	1082	-1083	301	TMP=2.8421e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1666)
2667	4	-1.3964	1044	-1045	1082	-1083	301	TMP=2.8478e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1667)
2668	4	-1.3962	1045	-1046	1082	-1083	301	TMP=2.8501e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1668)
2669	4	-1.3968	1046	-1047	1082	-1083	301	TMP=2.8406e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1669)
2670	4	-1.3988	1047	-1048	1082	-1083	301	TMP=2.8021e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1670)
2671	4	-1.4037	1048	-1049	1082	-1083	301	TMP=2.6970e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1671)
2672	4	-1.3965	1082	-1083	-302			TMP=2.8450e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1672)
2673	4	-1.3968	-1000	1083	-1084			TMP=2.8396e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1673)
2674	4	-1.3968	1000	-1001	1083	-1084	301	TMP=2.8396e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1674)
2675	4	-1.3968	1001	-1002	1083	-1084	301	TMP=2.8396e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1675)
2676	4	-1.3968	1002	-1003	1083	-1084	301	TMP=2.8396e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1676)
2677	4	-1.3968	1003	-1004	1083	-1084	301	TMP=2.8397e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1677)
2678	4	-1.3968	1004	-1005	1083	-1084	301	TMP=2.8398e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1678)
2679	4	-1.3968	1005	-1006	1083	-1084	301	TMP=2.8399e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1679)
2680	4	-1.3968	1006	-1007	1083	-1084	301	TMP=2.8400e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1680)
2681	4	-1.3968	1007	-1008	1083	-1084	301	TMP=2.8400e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1681)
2682	4	-1.3968	1008	-1009	1083	-1084	301	TMP=2.8401e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1682)
2683	4	-1.3968	1009	-1010	1083	-1084	301	TMP=2.8404e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1683)
2684	4	-1.3968	1010	-1011	1083	-1084	301	TMP=2.8406e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1684)
2685	4	-1.3967	1011	-1012	1083	-1084	301	TMP=2.8408e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1685)
2686	4	-1.3967	1012	-1013	1083	-1084	301	TMP=2.8409e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1686)
2687	4	-1.3967	1013	-1014	1083	-1084	301	TMP=2.8408e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1687)
2688	4	-1.3968	1014	-1015	1083	-1084	301	TMP=2.8405e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1688)
2689	4	-1.3968	1015	-1016	1083	-1084	301	TMP=2.8402e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1689)
2690	4	-1.3968	1016	-1017	1083	-1084	301	TMP=2.8401e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1690)
2691	4	-1.3967	1017	-1018	1083	-1084	301	TMP=2.8408e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1691)
2692	4	-1.3967	1018	-1019	1083	-1084	301	TMP=2.8414e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1692)
2693	4	-1.3967	1019	-1020	1083	-1084	301	TMP=2.8419e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1693)
2694	4	-1.3967	1020	-1021	1083	-1084	301	TMP=2.8415e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1694)
2695	4	-1.3967	1021	-1022	1083	-1084	301	TMP=2.8408e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1695)
2696	4	-1.3968	1022	-1023	1083	-1084	301	TMP=2.8401e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1696)
2697	4	-1.3968	1023	-1024	1083	-1084	301	TMP=2.8400e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1697)
2698	4	-1.3968	1024	-1025	1083	-1084	301	TMP=2.8402e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1698)
2699	4	-1.3968	1025	-1026	1083	-1084	301	TMP=2.8404e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1699)
2700	4	-1.3968	1026	-1027	1083	-1084	301	TMP=2.8405e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1700)
2701	4	-1.3968	1027	-1028	1083	-1084	301	TMP=2.8405e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1701)
2702	4	-1.3968	1028	-1029	1083	-1084	301	TMP=2.8405e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1702)
2703	4	-1.3967	1029	-1030	1083	-1084	301	TMP=2.8407e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1703)
2704	4	-1.3967	1030	-1031	1083	-1084	301	TMP=2.8408e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1704)
2705	4	-1.3967	1031	-1032	1083	-1084	301	TMP=2.8409e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1705)
2706	4	-1.3967	1032	-1033	1083	-1084	301	TMP=2.8409e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1706)
2707	4	-1.3967	1033	-1034	1083	-1084	301	TMP=2.8409e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1707)
2708	4	-1.3967	1034	-1035	1083	-1084	301	TMP=2.8411e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1708)
2709	4	-1.3967	1035	-1036	1083	-1084	301	TMP=2.8412e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1709)
2710	4	-1.3967	1036	-1037	1083	-1084	301	TMP=2.8413e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1710)
2711	4	-1.3967	1037	-1038	1083	-1084	301	TMP=2.8411e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1711)
2712	4	-1.3967	1038	-1039	1083	-1084	301	TMP=2.8409e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1712)
2713	4	-1.3968	1039	-1040	1083	-1084	301	TMP=2.8404e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1713)
2714	4	-1.3968	1040	-1041	1083	-1084	301	TMP=2.8394e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1714)
2715	4	-1.3968	1041	-1042	1083	-1084	301	TMP=2.8390e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1715)

2716	4	-1.3967	1042	-1043	1083	-1084	301	TMP=2.8408e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1716)
2717	4	-1.3965	1043	-1044	1083	-1084	301	TMP=2.8460e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1717)
2718	4	-1.3962	1044	-1045	1083	-1084	301	TMP=2.8516e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1718)
2719	4	-1.3961	1045	-1046	1083	-1084	301	TMP=2.8534e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1719)
2720	4	-1.3966	1046	-1047	1083	-1084	301	TMP=2.8432e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1720)
2721	4	-1.3986	1047	-1048	1083	-1084	301	TMP=2.8049e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1721)
2722	4	-1.4036	1048	-1049	1083	-1084	301	TMP=2.6992e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1722)
2723	4	-1.3963	1083	-1084	-302			TMP=2.8492e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1723)
2724	4	-1.3967	-1000	1084	-1085			TMP=2.8416e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1724)
2725	4	-1.3967	1000	-1001	1084	-1085	301	TMP=2.8422e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1725)
2726	4	-1.3967	1001	-1002	1084	-1085	301	TMP=2.8425e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1726)
2727	4	-1.3966	1002	-1003	1084	-1085	301	TMP=2.8428e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1727)
2728	4	-1.3966	1003	-1004	1084	-1085	301	TMP=2.8430e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1728)
2729	4	-1.3966	1004	-1005	1084	-1085	301	TMP=2.8431e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1729)
2730	4	-1.3966	1005	-1006	1084	-1085	301	TMP=2.8432e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1730)
2731	4	-1.3966	1006	-1007	1084	-1085	301	TMP=2.8432e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1731)
2732	4	-1.3966	1007	-1008	1084	-1085	301	TMP=2.8433e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1732)
2733	4	-1.3966	1008	-1009	1084	-1085	301	TMP=2.8437e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1733)
2734	4	-1.3966	1009	-1010	1084	-1085	301	TMP=2.8441e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1734)
2735	4	-1.3966	1010	-1011	1084	-1085	301	TMP=2.8442e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1735)
2736	4	-1.3966	1011	-1012	1084	-1085	301	TMP=2.8441e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1736)
2737	4	-1.3966	1012	-1013	1084	-1085	301	TMP=2.8440e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1737)
2738	4	-1.3966	1013	-1014	1084	-1085	301	TMP=2.8439e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1738)
2739	4	-1.3966	1014	-1015	1084	-1085	301	TMP=2.8437e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1739)
2740	4	-1.3966	1015	-1016	1084	-1085	301	TMP=2.8434e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1740)
2741	4	-1.3966	1016	-1017	1084	-1085	301	TMP=2.8431e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1741)
2742	4	-1.3966	1017	-1018	1084	-1085	301	TMP=2.8435e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1742)
2743	4	-1.3966	1018	-1019	1084	-1085	301	TMP=2.8438e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1743)
2744	4	-1.3966	1019	-1020	1084	-1085	301	TMP=2.8440e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1744)
2745	4	-1.3966	1020	-1021	1084	-1085	301	TMP=2.8440e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1745)
2746	4	-1.3966	1021	-1022	1084	-1085	301	TMP=2.8440e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1746)
2747	4	-1.3966	1022	-1023	1084	-1085	301	TMP=2.8439e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1747)
2748	4	-1.3966	1023	-1024	1084	-1085	301	TMP=2.8440e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1748)
2749	4	-1.3966	1024	-1025	1084	-1085	301	TMP=2.8439e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1749)
2750	4	-1.3966	1025	-1026	1084	-1085	301	TMP=2.8438e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1750)
2751	4	-1.3966	1026	-1027	1084	-1085	301	TMP=2.8438e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1751)
2752	4	-1.3966	1027	-1028	1084	-1085	301	TMP=2.8439e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1752)
2753	4	-1.3966	1028	-1029	1084	-1085	301	TMP=2.8439e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1753)
2754	4	-1.3966	1029	-1030	1084	-1085	301	TMP=2.8440e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1754)
2755	4	-1.3966	1030	-1031	1084	-1085	301	TMP=2.8442e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1755)
2756	4	-1.3966	1031	-1032	1084	-1085	301	TMP=2.8442e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1756)
2757	4	-1.3966	1032	-1033	1084	-1085	301	TMP=2.8441e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1757)
2758	4	-1.3966	1033	-1034	1084	-1085	301	TMP=2.8441e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1758)
2759	4	-1.3966	1034	-1035	1084	-1085	301	TMP=2.8443e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1759)
2760	4	-1.3965	1035	-1036	1084	-1085	301	TMP=2.8444e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1760)
2761	4	-1.3966	1036	-1037	1084	-1085	301	TMP=2.8444e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1761)
2762	4	-1.3966	1037	-1038	1084	-1085	301	TMP=2.8443e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1762)
2763	4	-1.3966	1038	-1039	1084	-1085	301	TMP=2.8442e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1763)
2764	4	-1.3966	1039	-1040	1084	-1085	301	TMP=2.8434e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1764)
2765	4	-1.3967	1040	-1041	1084	-1085	301	TMP=2.8424e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1765)
2766	4	-1.3967	1041	-1042	1084	-1085	301	TMP=2.8423e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1766)
2767	4	-1.3965	1042	-1043	1084	-1085	301	TMP=2.8446e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1767)
2768	4	-1.3963	1043	-1044	1084	-1085	301	TMP=2.8497e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1768)
2769	4	-1.3960	1044	-1045	1084	-1085	301	TMP=2.8550e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1769)
2770	4	-1.3959	1045	-1046	1084	-1085	301	TMP=2.8563e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1770)
2771	4	-1.3965	1046	-1047	1084	-1085	301	TMP=2.8457e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1771)
2772	4	-1.3985	1047	-1048	1084	-1085	301	TMP=2.8073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1772)
2773	4	-1.4036	1048	-1049	1084	-1085	301	TMP=2.7011e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1773)
2774	4	-1.3961	1084	-1085	-302			TMP=2.8527e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1774)
2775	4	-1.3965	-1000	1085	-1086			TMP=2.8448e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1775)

2776	4	-1.3965	1000	-1001	1085	-1086	301	TMP=2.8459e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1776)
2777	4	-1.3964	1001	-1002	1085	-1086	301	TMP=2.8466e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1777)
2778	4	-1.3964	1002	-1003	1085	-1086	301	TMP=2.8472e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1778)
2779	4	-1.3964	1003	-1004	1085	-1086	301	TMP=2.8478e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1779)
2780	4	-1.3963	1004	-1005	1085	-1086	301	TMP=2.8483e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1780)
2781	4	-1.3963	1005	-1006	1085	-1086	301	TMP=2.8487e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1781)
2782	4	-1.3963	1006	-1007	1085	-1086	301	TMP=2.8485e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1782)
2783	4	-1.3964	1007	-1008	1085	-1086	301	TMP=2.8477e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1783)
2784	4	-1.3964	1008	-1009	1085	-1086	301	TMP=2.8470e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1784)
2785	4	-1.3964	1009	-1010	1085	-1086	301	TMP=2.8469e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1785)
2786	4	-1.3964	1010	-1011	1085	-1086	301	TMP=2.8471e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1786)
2787	4	-1.3964	1011	-1012	1085	-1086	301	TMP=2.8472e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1787)
2788	4	-1.3964	1012	-1013	1085	-1086	301	TMP=2.8471e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1788)
2789	4	-1.3964	1013	-1014	1085	-1086	301	TMP=2.8471e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1789)
2790	4	-1.3964	1014	-1015	1085	-1086	301	TMP=2.8469e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1790)
2791	4	-1.3964	1015	-1016	1085	-1086	301	TMP=2.8467e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1791)
2792	4	-1.3964	1016	-1017	1085	-1086	301	TMP=2.8464e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1792)
2793	4	-1.3964	1017	-1018	1085	-1086	301	TMP=2.8465e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1793)
2794	4	-1.3964	1018	-1019	1085	-1086	301	TMP=2.8464e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1794)
2795	4	-1.3964	1019	-1020	1085	-1086	301	TMP=2.8462e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1795)
2796	4	-1.3964	1020	-1021	1085	-1086	301	TMP=2.8465e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1796)
2797	4	-1.3964	1021	-1022	1085	-1086	301	TMP=2.8468e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1797)
2798	4	-1.3964	1022	-1023	1085	-1086	301	TMP=2.8472e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1798)
2799	4	-1.3964	1023	-1024	1085	-1086	301	TMP=2.8474e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1799)
2800	4	-1.3964	1024	-1025	1085	-1086	301	TMP=2.8473e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1800)
2801	4	-1.3964	1025	-1026	1085	-1086	301	TMP=2.8472e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1801)
2802	4	-1.3964	1026	-1027	1085	-1086	301	TMP=2.8472e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1802)
2803	4	-1.3964	1027	-1028	1085	-1086	301	TMP=2.8472e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1803)
2804	4	-1.3964	1028	-1029	1085	-1086	301	TMP=2.8473e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1804)
2805	4	-1.3964	1029	-1030	1085	-1086	301	TMP=2.8474e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1805)
2806	4	-1.3964	1030	-1031	1085	-1086	301	TMP=2.8475e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1806)
2807	4	-1.3964	1031	-1032	1085	-1086	301	TMP=2.8474e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1807)
2808	4	-1.3964	1032	-1033	1085	-1086	301	TMP=2.8472e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1808)
2809	4	-1.3964	1033	-1034	1085	-1086	301	TMP=2.8473e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1809)
2810	4	-1.3964	1034	-1035	1085	-1086	301	TMP=2.8476e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1810)
2811	4	-1.3964	1035	-1036	1085	-1086	301	TMP=2.8476e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1811)
2812	4	-1.3964	1036	-1037	1085	-1086	301	TMP=2.8474e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1812)
2813	4	-1.3964	1037	-1038	1085	-1086	301	TMP=2.8474e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1813)
2814	4	-1.3964	1038	-1039	1085	-1086	301	TMP=2.8471e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1814)
2815	4	-1.3964	1039	-1040	1085	-1086	301	TMP=2.8466e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1815)
2816	4	-1.3965	1040	-1041	1085	-1086	301	TMP=2.8457e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1816)
2817	4	-1.3965	1041	-1042	1085	-1086	301	TMP=2.8459e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1817)
2818	4	-1.3963	1042	-1043	1085	-1086	301	TMP=2.8483e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1818)
2819	4	-1.3961	1043	-1044	1085	-1086	301	TMP=2.8530e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1819)
2820	4	-1.3958	1044	-1045	1085	-1086	301	TMP=2.8582e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1820)
2821	4	-1.3957	1045	-1046	1085	-1086	301	TMP=2.8596e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1821)
2822	4	-1.3963	1046	-1047	1085	-1086	301	TMP=2.8483e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1822)
2823	4	-1.3983	1047	-1048	1085	-1086	301	TMP=2.8104e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1823)
2824	4	-1.4035	1048	-1049	1085	-1086	301	TMP=2.7030e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1824)
2825	4	-1.3959	1085	-1086	-302			TMP=2.8559e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1825)
2826	4	-1.3963	-1000	1086	-1087			TMP=2.8491e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1826)
2827	4	-1.3962	1000	-1001	1086	-1087	301	TMP=2.8508e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1827)
2828	4	-1.3961	1001	-1002	1086	-1087	301	TMP=2.8518e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1828)
2829	4	-1.3961	1002	-1003	1086	-1087	301	TMP=2.8519e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1829)
2830	4	-1.3962	1003	-1004	1086	-1087	301	TMP=2.8517e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1830)
2831	4	-1.3962	1004	-1005	1086	-1087	301	TMP=2.8514e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1831)
2832	4	-1.3962	1005	-1006	1086	-1087	301	TMP=2.8510e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1832)
2833	4	-1.3962	1006	-1007	1086	-1087	301	TMP=2.8506e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1833)
2834	4	-1.3962	1007	-1008	1086	-1087	301	TMP=2.8501e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1834)
2835	4	-1.3963	1008	-1009	1086	-1087	301	TMP=2.8496e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1835)

2836	4	-1.3963	1009	-1010	1086	-1087	301	TMP=2.8496e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1836)
2837	4	-1.3962	1010	-1011	1086	-1087	301	TMP=2.8499e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1837)
2838	4	-1.3962	1011	-1012	1086	-1087	301	TMP=2.8501e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1838)
2839	4	-1.3962	1012	-1013	1086	-1087	301	TMP=2.8503e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1839)
2840	4	-1.3962	1013	-1014	1086	-1087	301	TMP=2.8503e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1840)
2841	4	-1.3962	1014	-1015	1086	-1087	301	TMP=2.8502e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1841)
2842	4	-1.3962	1015	-1016	1086	-1087	301	TMP=2.8501e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1842)
2843	4	-1.3963	1016	-1017	1086	-1087	301	TMP=2.8498e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1843)
2844	4	-1.3963	1017	-1018	1086	-1087	301	TMP=2.8497e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1844)
2845	4	-1.3963	1018	-1019	1086	-1087	301	TMP=2.8498e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1845)
2846	4	-1.3963	1019	-1020	1086	-1087	301	TMP=2.8499e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1846)
2847	4	-1.3962	1020	-1021	1086	-1087	301	TMP=2.8500e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1847)
2848	4	-1.3962	1021	-1022	1086	-1087	301	TMP=2.8501e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1848)
2849	4	-1.3962	1022	-1023	1086	-1087	301	TMP=2.8502e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1849)
2850	4	-1.3962	1023	-1024	1086	-1087	301	TMP=2.8504e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1850)
2851	4	-1.3962	1024	-1025	1086	-1087	301	TMP=2.8504e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1851)
2852	4	-1.3962	1025	-1026	1086	-1087	301	TMP=2.8504e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1852)
2853	4	-1.3962	1026	-1027	1086	-1087	301	TMP=2.8505e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1853)
2854	4	-1.3962	1027	-1028	1086	-1087	301	TMP=2.8505e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1854)
2855	4	-1.3962	1028	-1029	1086	-1087	301	TMP=2.8504e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1855)
2856	4	-1.3962	1029	-1030	1086	-1087	301	TMP=2.8504e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1856)
2857	4	-1.3962	1030	-1031	1086	-1087	301	TMP=2.8503e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1857)
2858	4	-1.3962	1031	-1032	1086	-1087	301	TMP=2.8502e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1858)
2859	4	-1.3962	1032	-1033	1086	-1087	301	TMP=2.8501e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1859)
2860	4	-1.3962	1033	-1034	1086	-1087	301	TMP=2.8501e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1860)
2861	4	-1.3962	1034	-1035	1086	-1087	301	TMP=2.8504e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1861)
2862	4	-1.3962	1035	-1036	1086	-1087	301	TMP=2.8506e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1862)
2863	4	-1.3962	1036	-1037	1086	-1087	301	TMP=2.8508e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1863)
2864	4	-1.3962	1037	-1038	1086	-1087	301	TMP=2.8508e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1864)
2865	4	-1.3962	1038	-1039	1086	-1087	301	TMP=2.8503e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1865)
2866	4	-1.3963	1039	-1040	1086	-1087	301	TMP=2.8495e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1866)
2867	4	-1.3963	1040	-1041	1086	-1087	301	TMP=2.8487e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1867)
2868	4	-1.3963	1041	-1042	1086	-1087	301	TMP=2.8490e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1868)
2869	4	-1.3962	1042	-1043	1086	-1087	301	TMP=2.8516e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1869)
2870	4	-1.3959	1043	-1044	1086	-1087	301	TMP=2.8565e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1870)
2871	4	-1.3956	1044	-1045	1086	-1087	301	TMP=2.8616e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1871)
2872	4	-1.3956	1045	-1046	1086	-1087	301	TMP=2.8626e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1872)
2873	4	-1.3962	1046	-1047	1086	-1087	301	TMP=2.8505e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1873)
2874	4	-1.3982	1047	-1048	1086	-1087	301	TMP=2.8124e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1874)
2875	4	-1.4034	1048	-1049	1086	-1087	301	TMP=2.7051e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1875)
2876	4	-1.3957	1086	-1087	-302			TMP=2.8593e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1876)
2877	4	-1.3961	-1000	1087	-1088			TMP=2.8529e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1877)
2878	4	-1.3961	1000	-1001	1087	-1088	301	TMP=2.8531e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1878)
2879	4	-1.3961	1001	-1002	1087	-1088	301	TMP=2.8532e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1879)
2880	4	-1.3961	1002	-1003	1087	-1088	301	TMP=2.8533e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1880)
2881	4	-1.3961	1003	-1004	1087	-1088	301	TMP=2.8533e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1881)
2882	4	-1.3961	1004	-1005	1087	-1088	301	TMP=2.8533e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1882)
2883	4	-1.3961	1005	-1006	1087	-1088	301	TMP=2.8531e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1883)
2884	4	-1.3961	1006	-1007	1087	-1088	301	TMP=2.8529e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1884)
2885	4	-1.3961	1007	-1008	1087	-1088	301	TMP=2.8527e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1885)
2886	4	-1.3961	1008	-1009	1087	-1088	301	TMP=2.8524e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1886)
2887	4	-1.3961	1009	-1010	1087	-1088	301	TMP=2.8526e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1887)
2888	4	-1.3961	1010	-1011	1087	-1088	301	TMP=2.8530e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1888)
2889	4	-1.3961	1011	-1012	1087	-1088	301	TMP=2.8533e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1889)
2890	4	-1.3961	1012	-1013	1087	-1088	301	TMP=2.8535e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1890)
2891	4	-1.3960	1013	-1014	1087	-1088	301	TMP=2.8537e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1891)
2892	4	-1.3960	1014	-1015	1087	-1088	301	TMP=2.8537e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1892)
2893	4	-1.3961	1015	-1016	1087	-1088	301	TMP=2.8535e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1893)
2894	4	-1.3961	1016	-1017	1087	-1088	301	TMP=2.8532e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1894)
2895	4	-1.3960	1017	-1018	1087	-1088	301	TMP=2.8538e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1895)

2896	4	-1.3960	1018	-1019	1087	-1088	301	TMP=2.8546e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1896)
2897	4	-1.3960	1019	-1020	1087	-1088	301	TMP=2.8550e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1897)
2898	4	-1.3960	1020	-1021	1087	-1088	301	TMP=2.8543e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1898)
2899	4	-1.3960	1021	-1022	1087	-1088	301	TMP=2.8536e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1899)
2900	4	-1.3961	1022	-1023	1087	-1088	301	TMP=2.8529e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1900)
2901	4	-1.3961	1023	-1024	1087	-1088	301	TMP=2.8527e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1901)
2902	4	-1.3961	1024	-1025	1087	-1088	301	TMP=2.8530e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1902)
2903	4	-1.3961	1025	-1026	1087	-1088	301	TMP=2.8532e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1903)
2904	4	-1.3961	1026	-1027	1087	-1088	301	TMP=2.8534e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1904)
2905	4	-1.3960	1027	-1028	1087	-1088	301	TMP=2.8536e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1905)
2906	4	-1.3960	1028	-1029	1087	-1088	301	TMP=2.8537e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1906)
2907	4	-1.3960	1029	-1030	1087	-1088	301	TMP=2.8537e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1907)
2908	4	-1.3960	1030	-1031	1087	-1088	301	TMP=2.8536e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1908)
2909	4	-1.3961	1031	-1032	1087	-1088	301	TMP=2.8535e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1909)
2910	4	-1.3961	1032	-1033	1087	-1088	301	TMP=2.8534e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1910)
2911	4	-1.3961	1033	-1034	1087	-1088	301	TMP=2.8535e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1911)
2912	4	-1.3960	1034	-1035	1087	-1088	301	TMP=2.8538e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1912)
2913	4	-1.3960	1035	-1036	1087	-1088	301	TMP=2.8538e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1913)
2914	4	-1.3960	1036	-1037	1087	-1088	301	TMP=2.8536e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1914)
2915	4	-1.3960	1037	-1038	1087	-1088	301	TMP=2.8536e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1915)
2916	4	-1.3961	1038	-1039	1087	-1088	301	TMP=2.8532e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1916)
2917	4	-1.3961	1039	-1040	1087	-1088	301	TMP=2.8524e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1917)
2918	4	-1.3961	1040	-1041	1087	-1088	301	TMP=2.8518e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1918)
2919	4	-1.3961	1041	-1042	1087	-1088	301	TMP=2.8523e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1919)
2920	4	-1.3960	1042	-1043	1087	-1088	301	TMP=2.8548e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1920)
2921	4	-1.3957	1043	-1044	1087	-1088	301	TMP=2.8598e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1921)
2922	4	-1.3954	1044	-1045	1087	-1088	301	TMP=2.8650e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1922)
2923	4	-1.3954	1045	-1046	1087	-1088	301	TMP=2.8656e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1923)
2924	4	-1.3961	1046	-1047	1087	-1088	301	TMP=2.8531e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1924)
2925	4	-1.3981	1047	-1048	1087	-1088	301	TMP=2.8143e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1925)
2926	4	-1.4033	1048	-1049	1087	-1088	301	TMP=2.7068e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1926)
2927	4	-1.3955	1087	-1088	-302			TMP=2.8629e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 1927)
2928	4	-1.3960	-1000	1088	-1089			TMP=2.8547e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 1928)
2929	4	-1.3960	1000	-1001	1088	-1089	301	TMP=2.8551e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1929)
2930	4	-1.3960	1001	-1002	1088	-1089	301	TMP=2.8553e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1930)
2931	4	-1.3960	1002	-1003	1088	-1089	301	TMP=2.8554e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1931)
2932	4	-1.3959	1003	-1004	1088	-1089	301	TMP=2.8554e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1932)
2933	4	-1.3960	1004	-1005	1088	-1089	301	TMP=2.8554e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1933)
2934	4	-1.3959	1005	-1006	1088	-1089	301	TMP=2.8554e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1934)
2935	4	-1.3959	1006	-1007	1088	-1089	301	TMP=2.8555e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1935)
2936	4	-1.3959	1007	-1008	1088	-1089	301	TMP=2.8555e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1936)
2937	4	-1.3960	1008	-1009	1088	-1089	301	TMP=2.8554e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1937)
2938	4	-1.3959	1009	-1010	1088	-1089	301	TMP=2.8557e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1938)
2939	4	-1.3959	1010	-1011	1088	-1089	301	TMP=2.8562e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1939)
2940	4	-1.3959	1011	-1012	1088	-1089	301	TMP=2.8567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1940)
2941	4	-1.3959	1012	-1013	1088	-1089	301	TMP=2.8568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1941)
2942	4	-1.3959	1013	-1014	1088	-1089	301	TMP=2.8568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1942)
2943	4	-1.3959	1014	-1015	1088	-1089	301	TMP=2.8567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1943)
2944	4	-1.3959	1015	-1016	1088	-1089	301	TMP=2.8565e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1944)
2945	4	-1.3959	1016	-1017	1088	-1089	301	TMP=2.8562e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1945)
2946	4	-1.3959	1017	-1018	1088	-1089	301	TMP=2.8564e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1946)
2947	4	-1.3959	1018	-1019	1088	-1089	301	TMP=2.8569e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1947)
2948	4	-1.3959	1019	-1020	1088	-1089	301	TMP=2.8571e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1948)
2949	4	-1.3959	1020	-1021	1088	-1089	301	TMP=2.8570e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1949)
2950	4	-1.3959	1021	-1022	1088	-1089	301	TMP=2.8568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1950)
2951	4	-1.3959	1022	-1023	1088	-1089	301	TMP=2.8563e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1951)
2952	4	-1.3959	1023	-1024	1088	-1089	301	TMP=2.8566e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1952)
2953	4	-1.3959	1024	-1025	1088	-1089	301	TMP=2.8567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1953)
2954	4	-1.3959	1025	-1026	1088	-1089	301	TMP=2.8567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1954)
2955	4	-1.3959	1026	-1027	1088	-1089	301	TMP=2.8566e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1955)

2956	4	-1.3959	1027	-1028	1088	-1089	301	TMP=2.8565e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1956)
2957	4	-1.3959	1028	-1029	1088	-1089	301	TMP=2.8566e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1957)
2958	4	-1.3959	1029	-1030	1088	-1089	301	TMP=2.8567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1958)
2959	4	-1.3959	1030	-1031	1088	-1089	301	TMP=2.8565e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1959)
2960	4	-1.3959	1031	-1032	1088	-1089	301	TMP=2.8563e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1960)
2961	4	-1.3959	1032	-1033	1088	-1089	301	TMP=2.8562e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1961)
2962	4	-1.3959	1033	-1034	1088	-1089	301	TMP=2.8564e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1962)
2963	4	-1.3959	1034	-1035	1088	-1089	301	TMP=2.8566e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1963)
2964	4	-1.3959	1035	-1036	1088	-1089	301	TMP=2.8567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1964)
2965	4	-1.3959	1036	-1037	1088	-1089	301	TMP=2.8567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1965)
2966	4	-1.3959	1037	-1038	1088	-1089	301	TMP=2.8568e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1966)
2967	4	-1.3959	1038	-1039	1088	-1089	301	TMP=2.8563e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1967)
2968	4	-1.3960	1039	-1040	1088	-1089	301	TMP=2.8552e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1968)
2969	4	-1.3960	1040	-1041	1088	-1089	301	TMP=2.8546e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1969)
2970	4	-1.3960	1041	-1042	1088	-1089	301	TMP=2.8553e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1970)
2971	4	-1.3958	1042	-1043	1088	-1089	301	TMP=2.8583e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1971)
2972	4	-1.3955	1043	-1044	1088	-1089	301	TMP=2.8630e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1972)
2973	4	-1.3952	1044	-1045	1088	-1089	301	TMP=2.8681e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1973)
2974	4	-1.3952	1045	-1046	1088	-1089	301	TMP=2.8683e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1974)
2975	4	-1.3959	1046	-1047	1088	-1089	301	TMP=2.8554e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1975)
2976	4	-1.3980	1047	-1048	1088	-1089	301	TMP=2.8166e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1976)
2977	4	-1.4032	1048	-1049	1088	-1089	301	TMP=2.7087e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1977)
2978	4	-1.3954	1088	-1089	-302	TMP=2.8659e-8	IMP:n=1			\$ Fuel Mesh Cell (FoT) (Cell# 1978)
2979	4	-1.3958	-1000	1089	-1090	TMP=2.8574e-8	IMP:n=1			\$ Fuel Mesh Cell(Centerline) (Cell# 1979)
2980	4	-1.3958	1000	-1001	1089	-1090	301	TMP=2.8580e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1980)
2981	4	-1.3958	1001	-1002	1089	-1090	301	TMP=2.8584e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1981)
2982	4	-1.3958	1002	-1003	1089	-1090	301	TMP=2.8586e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1982)
2983	4	-1.3958	1003	-1004	1089	-1090	301	TMP=2.8588e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1983)
2984	4	-1.3958	1004	-1005	1089	-1090	301	TMP=2.8589e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1984)
2985	4	-1.3958	1005	-1006	1089	-1090	301	TMP=2.8589e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1985)
2986	4	-1.3958	1006	-1007	1089	-1090	301	TMP=2.8589e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1986)
2987	4	-1.3958	1007	-1008	1089	-1090	301	TMP=2.8588e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1987)
2988	4	-1.3958	1008	-1009	1089	-1090	301	TMP=2.8587e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1988)
2989	4	-1.3958	1009	-1010	1089	-1090	301	TMP=2.8589e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1989)
2990	4	-1.3957	1010	-1011	1089	-1090	301	TMP=2.8592e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1990)
2991	4	-1.3957	1011	-1012	1089	-1090	301	TMP=2.8594e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1991)
2992	4	-1.3957	1012	-1013	1089	-1090	301	TMP=2.8596e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1992)
2993	4	-1.3957	1013	-1014	1089	-1090	301	TMP=2.8596e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1993)
2994	4	-1.3957	1014	-1015	1089	-1090	301	TMP=2.8596e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1994)
2995	4	-1.3957	1015	-1016	1089	-1090	301	TMP=2.8594e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1995)
2996	4	-1.3957	1016	-1017	1089	-1090	301	TMP=2.8592e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1996)
2997	4	-1.3957	1017	-1018	1089	-1090	301	TMP=2.8591e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1997)
2998	4	-1.3957	1018	-1019	1089	-1090	301	TMP=2.8591e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1998)
2999	4	-1.3958	1019	-1020	1089	-1090	301	TMP=2.8589e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 1999)
3000	4	-1.3958	1020	-1021	1089	-1090	301	TMP=2.8585e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2000)
3001	4	-1.3958	1021	-1022	1089	-1090	301	TMP=2.8590e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2001)
3002	4	-1.3957	1022	-1023	1089	-1090	301	TMP=2.8594e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2002)
3003	4	-1.3957	1023	-1024	1089	-1090	301	TMP=2.8597e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2003)
3004	4	-1.3957	1024	-1025	1089	-1090	301	TMP=2.8595e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2004)
3005	4	-1.3957	1025	-1026	1089	-1090	301	TMP=2.8592e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2005)
3006	4	-1.3958	1026	-1027	1089	-1090	301	TMP=2.8588e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2006)
3007	4	-1.3958	1027	-1028	1089	-1090	301	TMP=2.8589e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2007)
3008	4	-1.3957	1028	-1029	1089	-1090	301	TMP=2.8591e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2008)
3009	4	-1.3957	1029	-1030	1089	-1090	301	TMP=2.8593e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2009)
3010	4	-1.3957	1030	-1031	1089	-1090	301	TMP=2.8594e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2010)
3011	4	-1.3957	1031	-1032	1089	-1090	301	TMP=2.8596e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2011)
3012	4	-1.3957	1032	-1033	1089	-1090	301	TMP=2.8596e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2012)
3013	4	-1.3957	1033	-1034	1089	-1090	301	TMP=2.8595e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2013)
3014	4	-1.3957	1034	-1035	1089	-1090	301	TMP=2.8596e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2014)
3015	4	-1.3957	1035	-1036	1089	-1090	301	TMP=2.8600e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2015)

3016	4	-1.3957	1036	-1037	1089	-1090	301	TMP=2.8601e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2016)
3017	4	-1.3957	1037	-1038	1089	-1090	301	TMP=2.8593e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2017)
3018	4	-1.3958	1038	-1039	1089	-1090	301	TMP=2.8589e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2018)
3019	4	-1.3958	1039	-1040	1089	-1090	301	TMP=2.8582e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2019)
3020	4	-1.3958	1040	-1041	1089	-1090	301	TMP=2.8575e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2020)
3021	4	-1.3958	1041	-1042	1089	-1090	301	TMP=2.8581e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2021)
3022	4	-1.3956	1042	-1043	1089	-1090	301	TMP=2.8612e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2022)
3023	4	-1.3954	1043	-1044	1089	-1090	301	TMP=2.8662e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2023)
3024	4	-1.3951	1044	-1045	1089	-1090	301	TMP=2.8713e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2024)
3025	4	-1.3951	1045	-1046	1089	-1090	301	TMP=2.8710e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2025)
3026	4	-1.3958	1046	-1047	1089	-1090	301	TMP=2.8580e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2026)
3027	4	-1.3979	1047	-1048	1089	-1090	301	TMP=2.8189e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2027)
3028	4	-1.4031	1048	-1049	1089	-1090	301	TMP=2.7106e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2028)
3029	4	-1.3952	1089	-1090	-302			TMP=2.8692e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2029)
3030	4	-1.3956	-1000	1090	-1091			TMP=2.8611e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2030)
3031	4	-1.3956	1000	-1001	1090	-1091	301	TMP=2.8619e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2031)
3032	4	-1.3956	1001	-1002	1090	-1091	301	TMP=2.8624e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2032)
3033	4	-1.3955	1002	-1003	1090	-1091	301	TMP=2.8628e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2033)
3034	4	-1.3955	1003	-1004	1090	-1091	301	TMP=2.8631e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2034)
3035	4	-1.3955	1004	-1005	1090	-1091	301	TMP=2.8628e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2035)
3036	4	-1.3956	1005	-1006	1090	-1091	301	TMP=2.8624e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2036)
3037	4	-1.3956	1006	-1007	1090	-1091	301	TMP=2.8620e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2037)
3038	4	-1.3956	1007	-1008	1090	-1091	301	TMP=2.8615e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2038)
3039	4	-1.3956	1008	-1009	1090	-1091	301	TMP=2.8610e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2039)
3040	4	-1.3956	1009	-1010	1090	-1091	301	TMP=2.8610e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2040)
3041	4	-1.3956	1010	-1011	1090	-1091	301	TMP=2.8614e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2041)
3042	4	-1.3956	1011	-1012	1090	-1091	301	TMP=2.8618e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2042)
3043	4	-1.3956	1012	-1013	1090	-1091	301	TMP=2.8620e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2043)
3044	4	-1.3956	1013	-1014	1090	-1091	301	TMP=2.8622e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2044)
3045	4	-1.3956	1014	-1015	1090	-1091	301	TMP=2.8623e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2045)
3046	4	-1.3956	1015	-1016	1090	-1091	301	TMP=2.8621e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2046)
3047	4	-1.3956	1016	-1017	1090	-1091	301	TMP=2.8619e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2047)
3048	4	-1.3956	1017	-1018	1090	-1091	301	TMP=2.8616e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2048)
3049	4	-1.3956	1018	-1019	1090	-1091	301	TMP=2.8613e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2049)
3050	4	-1.3956	1019	-1020	1090	-1091	301	TMP=2.8616e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2050)
3051	4	-1.3956	1020	-1021	1090	-1091	301	TMP=2.8619e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2051)
3052	4	-1.3956	1021	-1022	1090	-1091	301	TMP=2.8620e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2052)
3053	4	-1.3956	1022	-1023	1090	-1091	301	TMP=2.8622e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2053)
3054	4	-1.3956	1023	-1024	1090	-1091	301	TMP=2.8622e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2054)
3055	4	-1.3956	1024	-1025	1090	-1091	301	TMP=2.8623e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2055)
3056	4	-1.3956	1025	-1026	1090	-1091	301	TMP=2.8620e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2056)
3057	4	-1.3956	1026	-1027	1090	-1091	301	TMP=2.8622e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2057)
3058	4	-1.3956	1027	-1028	1090	-1091	301	TMP=2.8622e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2058)
3059	4	-1.3956	1028	-1029	1090	-1091	301	TMP=2.8622e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2059)
3060	4	-1.3956	1029	-1030	1090	-1091	301	TMP=2.8622e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2060)
3061	4	-1.3956	1030	-1031	1090	-1091	301	TMP=2.8621e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2061)
3062	4	-1.3956	1031	-1032	1090	-1091	301	TMP=2.8623e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2062)
3063	4	-1.3956	1032	-1033	1090	-1091	301	TMP=2.8623e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2063)
3064	4	-1.3956	1033	-1034	1090	-1091	301	TMP=2.8621e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2064)
3065	4	-1.3956	1034	-1035	1090	-1091	301	TMP=2.8620e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2065)
3066	4	-1.3956	1035	-1036	1090	-1091	301	TMP=2.8619e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2066)
3067	4	-1.3956	1036	-1037	1090	-1091	301	TMP=2.8622e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2067)
3068	4	-1.3956	1037	-1038	1090	-1091	301	TMP=2.8623e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2068)
3069	4	-1.3956	1038	-1039	1090	-1091	301	TMP=2.8619e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2069)
3070	4	-1.3956	1039	-1040	1090	-1091	301	TMP=2.8611e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2070)
3071	4	-1.3957	1040	-1041	1090	-1091	301	TMP=2.8602e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2071)
3072	4	-1.3956	1041	-1042	1090	-1091	301	TMP=2.8609e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2072)
3073	4	-1.3955	1042	-1043	1090	-1091	301	TMP=2.8640e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2073)
3074	4	-1.3952	1043	-1044	1090	-1091	301	TMP=2.8692e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2074)
3075	4	-1.3949	1044	-1045	1090	-1091	301	TMP=2.8740e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2075)

3076	4	-1.3950	1045	-1046	1090	-1091	301	TMP=2.8732e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2076)
3077	4	-1.3957	1046	-1047	1090	-1091	301	TMP=2.8605e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2077)
3078	4	-1.3978	1047	-1048	1090	-1091	301	TMP=2.8214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2078)
3079	4	-1.4031	1048	-1049	1090	-1091	301	TMP=2.7123e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2079)
3080	4	-1.3950	1090	-1091	-302			TMP=2.8722e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2080)
3081	4	-1.3954	-1000	1091	-1092			TMP=2.8652e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2081)
3082	4	-1.3954	1000	-1001	1091	-1092	301	TMP=2.8653e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2082)
3083	4	-1.3954	1001	-1002	1091	-1092	301	TMP=2.8652e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2083)
3084	4	-1.3954	1002	-1003	1091	-1092	301	TMP=2.8651e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2084)
3085	4	-1.3954	1003	-1004	1091	-1092	301	TMP=2.8650e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2085)
3086	4	-1.3954	1004	-1005	1091	-1092	301	TMP=2.8648e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2086)
3087	4	-1.3954	1005	-1006	1091	-1092	301	TMP=2.8645e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2087)
3088	4	-1.3955	1006	-1007	1091	-1092	301	TMP=2.8642e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2088)
3089	4	-1.3955	1007	-1008	1091	-1092	301	TMP=2.8639e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2089)
3090	4	-1.3955	1008	-1009	1091	-1092	301	TMP=2.8636e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2090)
3091	4	-1.3955	1009	-1010	1091	-1092	301	TMP=2.8634e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2091)
3092	4	-1.3955	1010	-1011	1091	-1092	301	TMP=2.8638e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2092)
3093	4	-1.3955	1011	-1012	1091	-1092	301	TMP=2.8641e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2093)
3094	4	-1.3955	1012	-1013	1091	-1092	301	TMP=2.8644e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2094)
3095	4	-1.3954	1013	-1014	1091	-1092	301	TMP=2.8645e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2095)
3096	4	-1.3954	1014	-1015	1091	-1092	301	TMP=2.8646e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2096)
3097	4	-1.3954	1015	-1016	1091	-1092	301	TMP=2.8645e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2097)
3098	4	-1.3955	1016	-1017	1091	-1092	301	TMP=2.8644e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2098)
3099	4	-1.3955	1017	-1018	1091	-1092	301	TMP=2.8644e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2099)
3100	4	-1.3954	1018	-1019	1091	-1092	301	TMP=2.8652e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2100)
3101	4	-1.3954	1019	-1020	1091	-1092	301	TMP=2.8652e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2101)
3102	4	-1.3954	1020	-1021	1091	-1092	301	TMP=2.8651e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2102)
3103	4	-1.3954	1021	-1022	1091	-1092	301	TMP=2.8649e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2103)
3104	4	-1.3954	1022	-1023	1091	-1092	301	TMP=2.8647e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2104)
3105	4	-1.3955	1023	-1024	1091	-1092	301	TMP=2.8644e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2105)
3106	4	-1.3955	1024	-1025	1091	-1092	301	TMP=2.8642e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2106)
3107	4	-1.3954	1025	-1026	1091	-1092	301	TMP=2.8645e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2107)
3108	4	-1.3954	1026	-1027	1091	-1092	301	TMP=2.8648e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2108)
3109	4	-1.3954	1027	-1028	1091	-1092	301	TMP=2.8651e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2109)
3110	4	-1.3954	1028	-1029	1091	-1092	301	TMP=2.8651e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2110)
3111	4	-1.3954	1029	-1030	1091	-1092	301	TMP=2.8648e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2111)
3112	4	-1.3954	1030	-1031	1091	-1092	301	TMP=2.8646e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2112)
3113	4	-1.3954	1031	-1032	1091	-1092	301	TMP=2.8645e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2113)
3114	4	-1.3955	1032	-1033	1091	-1092	301	TMP=2.8644e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2114)
3115	4	-1.3954	1033	-1034	1091	-1092	301	TMP=2.8645e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2115)
3116	4	-1.3954	1034	-1035	1091	-1092	301	TMP=2.8648e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2116)
3117	4	-1.3954	1035	-1036	1091	-1092	301	TMP=2.8649e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2117)
3118	4	-1.3954	1036	-1037	1091	-1092	301	TMP=2.8649e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2118)
3119	4	-1.3954	1037	-1038	1091	-1092	301	TMP=2.8648e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2119)
3120	4	-1.3954	1038	-1039	1091	-1092	301	TMP=2.8645e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2120)
3121	4	-1.3955	1039	-1040	1091	-1092	301	TMP=2.8635e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2121)
3122	4	-1.3955	1040	-1041	1091	-1092	301	TMP=2.8629e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2122)
3123	4	-1.3955	1041	-1042	1091	-1092	301	TMP=2.8635e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2123)
3124	4	-1.3953	1042	-1043	1091	-1092	301	TMP=2.8669e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2124)
3125	4	-1.3950	1043	-1044	1091	-1092	301	TMP=2.8725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2125)
3126	4	-1.3947	1044	-1045	1091	-1092	301	TMP=2.8770e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2126)
3127	4	-1.3948	1045	-1046	1091	-1092	301	TMP=2.8755e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2127)
3128	4	-1.3955	1046	-1047	1091	-1092	301	TMP=2.8628e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2128)
3129	4	-1.3976	1047	-1048	1091	-1092	301	TMP=2.8242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2129)
3130	4	-1.4030	1048	-1049	1091	-1092	301	TMP=2.7140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2130)
3131	4	-1.3948	1091	-1092	-302			TMP=2.8753e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2131)
3132	4	-1.3953	-1000	1092	-1093			TMP=2.8665e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2132)
3133	4	-1.3953	1000	-1001	1092	-1093	301	TMP=2.8668e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2133)
3134	4	-1.3953	1001	-1002	1092	-1093	301	TMP=2.8670e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2134)
3135	4	-1.3953	1002	-1003	1092	-1093	301	TMP=2.8671e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2135)

3136	4	-1.3953	1003	-1004	1092	-1093	301	TMP=2.8671e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2136)
3137	4	-1.3953	1004	-1005	1092	-1093	301	TMP=2.8670e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2137)
3138	4	-1.3953	1005	-1006	1092	-1093	301	TMP=2.8670e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2138)
3139	4	-1.3953	1006	-1007	1092	-1093	301	TMP=2.8668e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2139)
3140	4	-1.3953	1007	-1008	1092	-1093	301	TMP=2.8667e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2140)
3141	4	-1.3953	1008	-1009	1092	-1093	301	TMP=2.8664e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2141)
3142	4	-1.3954	1009	-1010	1092	-1093	301	TMP=2.8662e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2142)
3143	4	-1.3953	1010	-1011	1092	-1093	301	TMP=2.8666e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2143)
3144	4	-1.3953	1011	-1012	1092	-1093	301	TMP=2.8669e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2144)
3145	4	-1.3953	1012	-1013	1092	-1093	301	TMP=2.8671e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2145)
3146	4	-1.3953	1013	-1014	1092	-1093	301	TMP=2.8672e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2146)
3147	4	-1.3953	1014	-1015	1092	-1093	301	TMP=2.8671e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2147)
3148	4	-1.3953	1015	-1016	1092	-1093	301	TMP=2.8670e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2148)
3149	4	-1.3953	1016	-1017	1092	-1093	301	TMP=2.8668e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2149)
3150	4	-1.3953	1017	-1018	1092	-1093	301	TMP=2.8668e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2150)
3151	4	-1.3953	1018	-1019	1092	-1093	301	TMP=2.8672e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2151)
3152	4	-1.3953	1019	-1020	1092	-1093	301	TMP=2.8676e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2152)
3153	4	-1.3953	1020	-1021	1092	-1093	301	TMP=2.8679e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2153)
3154	4	-1.3952	1021	-1022	1092	-1093	301	TMP=2.8681e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2154)
3155	4	-1.3953	1022	-1023	1092	-1093	301	TMP=2.8677e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2155)
3156	4	-1.3953	1023	-1024	1092	-1093	301	TMP=2.8670e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2156)
3157	4	-1.3953	1024	-1025	1092	-1093	301	TMP=2.8670e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2157)
3158	4	-1.3953	1025	-1026	1092	-1093	301	TMP=2.8671e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2158)
3159	4	-1.3953	1026	-1027	1092	-1093	301	TMP=2.8671e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2159)
3160	4	-1.3953	1027	-1028	1092	-1093	301	TMP=2.8671e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2160)
3161	4	-1.3953	1028	-1029	1092	-1093	301	TMP=2.8673e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2161)
3162	4	-1.3953	1029	-1030	1092	-1093	301	TMP=2.8673e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2162)
3163	4	-1.3953	1030	-1031	1092	-1093	301	TMP=2.8673e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2163)
3164	4	-1.3953	1031	-1032	1092	-1093	301	TMP=2.8673e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2164)
3165	4	-1.3953	1032	-1033	1092	-1093	301	TMP=2.8673e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2165)
3166	4	-1.3953	1033	-1034	1092	-1093	301	TMP=2.8673e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2166)
3167	4	-1.3953	1034	-1035	1092	-1093	301	TMP=2.8674e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2167)
3168	4	-1.3953	1035	-1036	1092	-1093	301	TMP=2.8674e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2168)
3169	4	-1.3953	1036	-1037	1092	-1093	301	TMP=2.8675e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2169)
3170	4	-1.3953	1037	-1038	1092	-1093	301	TMP=2.8676e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2170)
3171	4	-1.3953	1038	-1039	1092	-1093	301	TMP=2.8669e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2171)
3172	4	-1.3954	1039	-1040	1092	-1093	301	TMP=2.8661e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2172)
3173	4	-1.3954	1040	-1041	1092	-1093	301	TMP=2.8654e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2173)
3174	4	-1.3954	1041	-1042	1092	-1093	301	TMP=2.8663e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2174)
3175	4	-1.3952	1042	-1043	1092	-1093	301	TMP=2.8698e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2175)
3176	4	-1.3948	1043	-1044	1092	-1093	301	TMP=2.8755e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2176)
3177	4	-1.3946	1044	-1045	1092	-1093	301	TMP=2.8796e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2177)
3178	4	-1.3947	1045	-1046	1092	-1093	301	TMP=2.8780e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2178)
3179	4	-1.3954	1046	-1047	1092	-1093	301	TMP=2.8658e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2179)
3180	4	-1.3975	1047	-1048	1092	-1093	301	TMP=2.8268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2180)
3181	4	-1.4029	1048	-1049	1092	-1093	301	TMP=2.7157e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2181)
3182	4	-1.3947	1092	-1093	-302			TMP=2.8779e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2182)
3183	4	-1.3952	-1000	1093	-1094			TMP=2.8685e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2183)
3184	4	-1.3952	1000	-1001	1093	-1094	301	TMP=2.8691e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2184)
3185	4	-1.3952	1001	-1002	1093	-1094	301	TMP=2.8694e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2185)
3186	4	-1.3952	1002	-1003	1093	-1094	301	TMP=2.8696e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2186)
3187	4	-1.3952	1003	-1004	1093	-1094	301	TMP=2.8698e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2187)
3188	4	-1.3951	1004	-1005	1093	-1094	301	TMP=2.8699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2188)
3189	4	-1.3951	1005	-1006	1093	-1094	301	TMP=2.8699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2189)
3190	4	-1.3951	1006	-1007	1093	-1094	301	TMP=2.8699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2190)
3191	4	-1.3952	1007	-1008	1093	-1094	301	TMP=2.8698e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2191)
3192	4	-1.3952	1008	-1009	1093	-1094	301	TMP=2.8697e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2192)
3193	4	-1.3952	1009	-1010	1093	-1094	301	TMP=2.8695e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2193)
3194	4	-1.3952	1010	-1011	1093	-1094	301	TMP=2.8697e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2194)
3195	4	-1.3951	1011	-1012	1093	-1094	301	TMP=2.8699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2195)

3196	4	-1.3951	1012	-1013	1093	-1094	301	TMP=2.8700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2196)
3197	4	-1.3951	1013	-1014	1093	-1094	301	TMP=2.8699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2197)
3198	4	-1.3951	1014	-1015	1093	-1094	301	TMP=2.8699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2198)
3199	4	-1.3952	1015	-1016	1093	-1094	301	TMP=2.8697e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2199)
3200	4	-1.3952	1016	-1017	1093	-1094	301	TMP=2.8695e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2200)
3201	4	-1.3952	1017	-1018	1093	-1094	301	TMP=2.8693e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2201)
3202	4	-1.3952	1018	-1019	1093	-1094	301	TMP=2.8694e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2202)
3203	4	-1.3952	1019	-1020	1093	-1094	301	TMP=2.8695e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2203)
3204	4	-1.3952	1020	-1021	1093	-1094	301	TMP=2.8695e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2204)
3205	4	-1.3952	1021	-1022	1093	-1094	301	TMP=2.8694e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2205)
3206	4	-1.3952	1022	-1023	1093	-1094	301	TMP=2.8697e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2206)
3207	4	-1.3951	1023	-1024	1093	-1094	301	TMP=2.8700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2207)
3208	4	-1.3951	1024	-1025	1093	-1094	301	TMP=2.8699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2208)
3209	4	-1.3951	1025	-1026	1093	-1094	301	TMP=2.8699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2209)
3210	4	-1.3952	1026	-1027	1093	-1094	301	TMP=2.8698e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2210)
3211	4	-1.3952	1027	-1028	1093	-1094	301	TMP=2.8698e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2211)
3212	4	-1.3952	1028	-1029	1093	-1094	301	TMP=2.8698e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2212)
3213	4	-1.3951	1029	-1030	1093	-1094	301	TMP=2.8699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2213)
3214	4	-1.3951	1030	-1031	1093	-1094	301	TMP=2.8700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2214)
3215	4	-1.3951	1031	-1032	1093	-1094	301	TMP=2.8700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2215)
3216	4	-1.3951	1032	-1033	1093	-1094	301	TMP=2.8699e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2216)
3217	4	-1.3951	1033	-1034	1093	-1094	301	TMP=2.8700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2217)
3218	4	-1.3951	1034	-1035	1093	-1094	301	TMP=2.8703e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2218)
3219	4	-1.3951	1035	-1036	1093	-1094	301	TMP=2.8704e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2219)
3220	4	-1.3951	1036	-1037	1093	-1094	301	TMP=2.8700e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2220)
3221	4	-1.3952	1037	-1038	1093	-1094	301	TMP=2.8698e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2221)
3222	4	-1.3952	1038	-1039	1093	-1094	301	TMP=2.8693e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2222)
3223	4	-1.3952	1039	-1040	1093	-1094	301	TMP=2.8686e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2223)
3224	4	-1.3953	1040	-1041	1093	-1094	301	TMP=2.8680e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2224)
3225	4	-1.3952	1041	-1042	1093	-1094	301	TMP=2.8690e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2225)
3226	4	-1.3950	1042	-1043	1093	-1094	301	TMP=2.8727e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2226)
3227	4	-1.3947	1043	-1044	1093	-1094	301	TMP=2.8783e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2227)
3228	4	-1.3945	1044	-1045	1093	-1094	301	TMP=2.8819e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2228)
3229	4	-1.3946	1045	-1046	1093	-1094	301	TMP=2.8801e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2229)
3230	4	-1.3952	1046	-1047	1093	-1094	301	TMP=2.8684e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2230)
3231	4	-1.3973	1047	-1048	1093	-1094	301	TMP=2.8298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2231)
3232	4	-1.4028	1048	-1049	1093	-1094	301	TMP=2.7176e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2232)
3233	4	-1.3946	1093	-1094	-302			TMP=2.8805e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2233)
3234	4	-1.3951	-1000	1094	-1095			TMP=2.8712e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2234)
3235	4	-1.3950	1000	-1001	1094	-1095	301	TMP=2.8720e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2235)
3236	4	-1.3950	1001	-1002	1094	-1095	301	TMP=2.8724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2236)
3237	4	-1.3950	1002	-1003	1094	-1095	301	TMP=2.8728e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2237)
3238	4	-1.3950	1003	-1004	1094	-1095	301	TMP=2.8732e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2238)
3239	4	-1.3949	1004	-1005	1094	-1095	301	TMP=2.8734e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2239)
3240	4	-1.3949	1005	-1006	1094	-1095	301	TMP=2.8734e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2240)
3241	4	-1.3950	1006	-1007	1094	-1095	301	TMP=2.8731e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2241)
3242	4	-1.3950	1007	-1008	1094	-1095	301	TMP=2.8727e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2242)
3243	4	-1.3950	1008	-1009	1094	-1095	301	TMP=2.8722e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2243)
3244	4	-1.3950	1009	-1010	1094	-1095	301	TMP=2.8719e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2244)
3245	4	-1.3950	1010	-1011	1094	-1095	301	TMP=2.8722e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2245)
3246	4	-1.3950	1011	-1012	1094	-1095	301	TMP=2.8725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2246)
3247	4	-1.3950	1012	-1013	1094	-1095	301	TMP=2.8727e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2247)
3248	4	-1.3950	1013	-1014	1094	-1095	301	TMP=2.8728e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2248)
3249	4	-1.3950	1014	-1015	1094	-1095	301	TMP=2.8727e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2249)
3250	4	-1.3950	1015	-1016	1094	-1095	301	TMP=2.8725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2250)
3251	4	-1.3950	1016	-1017	1094	-1095	301	TMP=2.8722e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2251)
3252	4	-1.3950	1017	-1018	1094	-1095	301	TMP=2.8720e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2252)
3253	4	-1.3950	1018	-1019	1094	-1095	301	TMP=2.8718e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2253)
3254	4	-1.3950	1019	-1020	1094	-1095	301	TMP=2.8717e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2254)
3255	4	-1.3950	1020	-1021	1094	-1095	301	TMP=2.8720e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2255)

3256	4	-1.3950	1021	-1022	1094	-1095	301	TMP=2.8722e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2256)
3257	4	-1.3950	1022	-1023	1094	-1095	301	TMP=2.8724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2257)
3258	4	-1.3950	1023	-1024	1094	-1095	301	TMP=2.8725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2258)
3259	4	-1.3950	1024	-1025	1094	-1095	301	TMP=2.8725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2259)
3260	4	-1.3950	1025	-1026	1094	-1095	301	TMP=2.8724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2260)
3261	4	-1.3950	1026	-1027	1094	-1095	301	TMP=2.8724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2261)
3262	4	-1.3950	1027	-1028	1094	-1095	301	TMP=2.8724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2262)
3263	4	-1.3950	1028	-1029	1094	-1095	301	TMP=2.8724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2263)
3264	4	-1.3950	1029	-1030	1094	-1095	301	TMP=2.8727e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2264)
3265	4	-1.3950	1030	-1031	1094	-1095	301	TMP=2.8729e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2265)
3266	4	-1.3950	1031	-1032	1094	-1095	301	TMP=2.8727e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2266)
3267	4	-1.3950	1032	-1033	1094	-1095	301	TMP=2.8723e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2267)
3268	4	-1.3950	1033	-1034	1094	-1095	301	TMP=2.8722e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2268)
3269	4	-1.3950	1034	-1035	1094	-1095	301	TMP=2.8721e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2269)
3270	4	-1.3950	1035	-1036	1094	-1095	301	TMP=2.8723e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2270)
3271	4	-1.3950	1036	-1037	1094	-1095	301	TMP=2.8725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2271)
3272	4	-1.3950	1037	-1038	1094	-1095	301	TMP=2.8722e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2272)
3273	4	-1.3950	1038	-1039	1094	-1095	301	TMP=2.8717e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2273)
3274	4	-1.3951	1039	-1040	1094	-1095	301	TMP=2.8710e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2274)
3275	4	-1.3951	1040	-1041	1094	-1095	301	TMP=2.8706e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2275)
3276	4	-1.3950	1041	-1042	1094	-1095	301	TMP=2.8718e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2276)
3277	4	-1.3948	1042	-1043	1094	-1095	301	TMP=2.8754e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2277)
3278	4	-1.3945	1043	-1044	1094	-1095	301	TMP=2.8807e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2278)
3279	4	-1.3943	1044	-1045	1094	-1095	301	TMP=2.8842e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2279)
3280	4	-1.3945	1045	-1046	1094	-1095	301	TMP=2.8822e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2280)
3281	4	-1.3951	1046	-1047	1094	-1095	301	TMP=2.8709e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2281)
3282	4	-1.3972	1047	-1048	1094	-1095	301	TMP=2.8331e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2282)
3283	4	-1.4027	1048	-1049	1094	-1095	301	TMP=2.7195e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2283)
3284	4	-1.3944	1094	-1095	-302	TMP=2.8831e-8	IMP:n=1			\$ Fuel Mesh Cell (FoT) (Cell# 2284)
3285	4	-1.3949	-1000	1095	-1096	TMP=2.8745e-8	IMP:n=1			\$ Fuel Mesh Cell(Centerline) (Cell# 2285)
3286	4	-1.3948	1000	-1001	1095	-1096	301	TMP=2.8752e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2286)
3287	4	-1.3948	1001	-1002	1095	-1096	301	TMP=2.8753e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2287)
3288	4	-1.3948	1002	-1003	1095	-1096	301	TMP=2.8754e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2288)
3289	4	-1.3948	1003	-1004	1095	-1096	301	TMP=2.8754e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2289)
3290	4	-1.3948	1004	-1005	1095	-1096	301	TMP=2.8753e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2290)
3291	4	-1.3949	1005	-1006	1095	-1096	301	TMP=2.8751e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2291)
3292	4	-1.3949	1006	-1007	1095	-1096	301	TMP=2.8749e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2292)
3293	4	-1.3949	1007	-1008	1095	-1096	301	TMP=2.8746e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2293)
3294	4	-1.3949	1008	-1009	1095	-1096	301	TMP=2.8742e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2294)
3295	4	-1.3949	1009	-1010	1095	-1096	301	TMP=2.8742e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2295)
3296	4	-1.3949	1010	-1011	1095	-1096	301	TMP=2.8745e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2296)
3297	4	-1.3949	1011	-1012	1095	-1096	301	TMP=2.8747e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2297)
3298	4	-1.3949	1012	-1013	1095	-1096	301	TMP=2.8749e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2298)
3299	4	-1.3949	1013	-1014	1095	-1096	301	TMP=2.8750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2299)
3300	4	-1.3949	1014	-1015	1095	-1096	301	TMP=2.8750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2300)
3301	4	-1.3949	1015	-1016	1095	-1096	301	TMP=2.8749e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2301)
3302	4	-1.3949	1016	-1017	1095	-1096	301	TMP=2.8748e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2302)
3303	4	-1.3949	1017	-1018	1095	-1096	301	TMP=2.8749e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2303)
3304	4	-1.3949	1018	-1019	1095	-1096	301	TMP=2.8751e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2304)
3305	4	-1.3949	1019	-1020	1095	-1096	301	TMP=2.8750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2305)
3306	4	-1.3949	1020	-1021	1095	-1096	301	TMP=2.8749e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2306)
3307	4	-1.3949	1021	-1022	1095	-1096	301	TMP=2.8748e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2307)
3308	4	-1.3949	1022	-1023	1095	-1096	301	TMP=2.8748e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2308)
3309	4	-1.3949	1023	-1024	1095	-1096	301	TMP=2.8749e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2309)
3310	4	-1.3949	1024	-1025	1095	-1096	301	TMP=2.8749e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2310)
3311	4	-1.3949	1025	-1026	1095	-1096	301	TMP=2.8749e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2311)
3312	4	-1.3949	1026	-1027	1095	-1096	301	TMP=2.8748e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2312)
3313	4	-1.3949	1027	-1028	1095	-1096	301	TMP=2.8747e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2313)
3314	4	-1.3949	1028	-1029	1095	-1096	301	TMP=2.8746e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2314)
3315	4	-1.3949	1029	-1030	1095	-1096	301	TMP=2.8747e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2315)

3316	4	-1.3949	1030	-1031	1095	-1096	301	TMP=2.8746e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2316)
3317	4	-1.3949	1031	-1032	1095	-1096	301	TMP=2.8745e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2317)
3318	4	-1.3949	1032	-1033	1095	-1096	301	TMP=2.8747e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2318)
3319	4	-1.3949	1033	-1034	1095	-1096	301	TMP=2.8749e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2319)
3320	4	-1.3949	1034	-1035	1095	-1096	301	TMP=2.8750e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2320)
3321	4	-1.3949	1035	-1036	1095	-1096	301	TMP=2.8748e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2321)
3322	4	-1.3949	1036	-1037	1095	-1096	301	TMP=2.8747e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2322)
3323	4	-1.3949	1037	-1038	1095	-1096	301	TMP=2.8745e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2323)
3324	4	-1.3949	1038	-1039	1095	-1096	301	TMP=2.8740e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2324)
3325	4	-1.3950	1039	-1040	1095	-1096	301	TMP=2.8732e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2325)
3326	4	-1.3950	1040	-1041	1095	-1096	301	TMP=2.8728e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2326)
3327	4	-1.3949	1041	-1042	1095	-1096	301	TMP=2.8741e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2327)
3328	4	-1.3947	1042	-1043	1095	-1096	301	TMP=2.8779e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2328)
3329	4	-1.3944	1043	-1044	1095	-1096	301	TMP=2.8831e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2329)
3330	4	-1.3942	1044	-1045	1095	-1096	301	TMP=2.8866e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2330)
3331	4	-1.3943	1045	-1046	1095	-1096	301	TMP=2.8846e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2331)
3332	4	-1.3949	1046	-1047	1095	-1096	301	TMP=2.8737e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2332)
3333	4	-1.3970	1047	-1048	1095	-1096	301	TMP=2.8363e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2333)
3334	4	-1.4027	1048	-1049	1095	-1096	301	TMP=2.7216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2334)
3335	4	-1.3943	1095	-1096	-302	TMP=2.8855e-8	IMP:n=1			\$ Fuel Mesh Cell (FoT) (Cell# 2335)
3336	4	-1.3948	-1000	1096	-1097	TMP=2.8759e-8	IMP:n=1			\$ Fuel Mesh Cell(Centerline) (Cell# 2336)
3337	4	-1.3948	1000	-1001	1096	-1097	301	TMP=2.8765e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2337)
3338	4	-1.3948	1001	-1002	1096	-1097	301	TMP=2.8769e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2338)
3339	4	-1.3947	1002	-1003	1096	-1097	301	TMP=2.8771e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2339)
3340	4	-1.3947	1003	-1004	1096	-1097	301	TMP=2.8771e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2340)
3341	4	-1.3947	1004	-1005	1096	-1097	301	TMP=2.8771e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2341)
3342	4	-1.3947	1005	-1006	1096	-1097	301	TMP=2.8770e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2342)
3343	4	-1.3948	1006	-1007	1096	-1097	301	TMP=2.8768e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2343)
3344	4	-1.3948	1007	-1008	1096	-1097	301	TMP=2.8766e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2344)
3345	4	-1.3948	1008	-1009	1096	-1097	301	TMP=2.8763e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2345)
3346	4	-1.3948	1009	-1010	1096	-1097	301	TMP=2.8766e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2346)
3347	4	-1.3948	1010	-1011	1096	-1097	301	TMP=2.8769e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2347)
3348	4	-1.3947	1011	-1012	1096	-1097	301	TMP=2.8771e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2348)
3349	4	-1.3947	1012	-1013	1096	-1097	301	TMP=2.8772e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2349)
3350	4	-1.3947	1013	-1014	1096	-1097	301	TMP=2.8772e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2350)
3351	4	-1.3947	1014	-1015	1096	-1097	301	TMP=2.8771e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2351)
3352	4	-1.3947	1015	-1016	1096	-1097	301	TMP=2.8770e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2352)
3353	4	-1.3948	1016	-1017	1096	-1097	301	TMP=2.8768e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2353)
3354	4	-1.3947	1017	-1018	1096	-1097	301	TMP=2.8771e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2354)
3355	4	-1.3947	1018	-1019	1096	-1097	301	TMP=2.8776e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2355)
3356	4	-1.3947	1019	-1020	1096	-1097	301	TMP=2.8780e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2356)
3357	4	-1.3947	1020	-1021	1096	-1097	301	TMP=2.8779e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2357)
3358	4	-1.3947	1021	-1022	1096	-1097	301	TMP=2.8773e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2358)
3359	4	-1.3948	1022	-1023	1096	-1097	301	TMP=2.8766e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2359)
3360	4	-1.3948	1023	-1024	1096	-1097	301	TMP=2.8767e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2360)
3361	4	-1.3948	1024	-1025	1096	-1097	301	TMP=2.8769e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2361)
3362	4	-1.3948	1025	-1026	1096	-1097	301	TMP=2.8769e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2362)
3363	4	-1.3948	1026	-1027	1096	-1097	301	TMP=2.8769e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2363)
3364	4	-1.3948	1027	-1028	1096	-1097	301	TMP=2.8769e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2364)
3365	4	-1.3948	1028	-1029	1096	-1097	301	TMP=2.8769e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2365)
3366	4	-1.3947	1029	-1030	1096	-1097	301	TMP=2.8770e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2366)
3367	4	-1.3947	1030	-1031	1096	-1097	301	TMP=2.8771e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2367)
3368	4	-1.3947	1031	-1032	1096	-1097	301	TMP=2.8771e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2368)
3369	4	-1.3947	1032	-1033	1096	-1097	301	TMP=2.8770e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2369)
3370	4	-1.3947	1033	-1034	1096	-1097	301	TMP=2.8770e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2370)
3371	4	-1.3947	1034	-1035	1096	-1097	301	TMP=2.8771e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2371)
3372	4	-1.3947	1035	-1036	1096	-1097	301	TMP=2.8770e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2372)
3373	4	-1.3947	1036	-1037	1096	-1097	301	TMP=2.8770e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2373)
3374	4	-1.3948	1037	-1038	1096	-1097	301	TMP=2.8768e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2374)
3375	4	-1.3948	1038	-1039	1096	-1097	301	TMP=2.8762e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2375)

3376	4	-1.3948	1039	-1040	1096	-1097	301	TMP=2.8755e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2376)
3377	4	-1.3949	1040	-1041	1096	-1097	301	TMP=2.8751e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2377)
3378	4	-1.3948	1041	-1042	1096	-1097	301	TMP=2.8765e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2378)
3379	4	-1.3946	1042	-1043	1096	-1097	301	TMP=2.8804e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2379)
3380	4	-1.3943	1043	-1044	1096	-1097	301	TMP=2.8858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2380)
3381	4	-1.3941	1044	-1045	1096	-1097	301	TMP=2.8887e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2381)
3382	4	-1.3942	1045	-1046	1096	-1097	301	TMP=2.8867e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2382)
3383	4	-1.3948	1046	-1047	1096	-1097	301	TMP=2.8767e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2383)
3384	4	-1.3968	1047	-1048	1096	-1097	301	TMP=2.8389e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2384)
3385	4	-1.4026	1048	-1049	1096	-1097	301	TMP=2.7231e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2385)
3386	4	-1.3941	1096	-1097	-302			TMP=2.8878e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2386)
3387	4	-1.3947	-1000	1097	-1098			TMP=2.8776e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2387)
3388	4	-1.3947	1000	-1001	1097	-1098	301	TMP=2.8783e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2388)
3389	4	-1.3947	1001	-1002	1097	-1098	301	TMP=2.8787e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2389)
3390	4	-1.3946	1002	-1003	1097	-1098	301	TMP=2.8789e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2390)
3391	4	-1.3946	1003	-1004	1097	-1098	301	TMP=2.8791e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2391)
3392	4	-1.3946	1004	-1005	1097	-1098	301	TMP=2.8792e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2392)
3393	4	-1.3946	1005	-1006	1097	-1098	301	TMP=2.8791e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2393)
3394	4	-1.3946	1006	-1007	1097	-1098	301	TMP=2.8790e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2394)
3395	4	-1.3946	1007	-1008	1097	-1098	301	TMP=2.8788e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2395)
3396	4	-1.3946	1008	-1009	1097	-1098	301	TMP=2.8788e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2396)
3397	4	-1.3946	1009	-1010	1097	-1098	301	TMP=2.8790e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2397)
3398	4	-1.3946	1010	-1011	1097	-1098	301	TMP=2.8792e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2398)
3399	4	-1.3946	1011	-1012	1097	-1098	301	TMP=2.8792e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2399)
3400	4	-1.3946	1012	-1013	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2400)
3401	4	-1.3946	1013	-1014	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2401)
3402	4	-1.3946	1014	-1015	1097	-1098	301	TMP=2.8792e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2402)
3403	4	-1.3946	1015	-1016	1097	-1098	301	TMP=2.8791e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2403)
3404	4	-1.3946	1016	-1017	1097	-1098	301	TMP=2.8789e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2404)
3405	4	-1.3946	1017	-1018	1097	-1098	301	TMP=2.8791e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2405)
3406	4	-1.3946	1018	-1019	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2406)
3407	4	-1.3946	1019	-1020	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2407)
3408	4	-1.3946	1020	-1021	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2408)
3409	4	-1.3946	1021	-1022	1097	-1098	301	TMP=2.8792e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2409)
3410	4	-1.3946	1022	-1023	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2410)
3411	4	-1.3946	1023	-1024	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2411)
3412	4	-1.3946	1024	-1025	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2412)
3413	4	-1.3946	1025	-1026	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2413)
3414	4	-1.3946	1026	-1027	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2414)
3415	4	-1.3946	1027	-1028	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2415)
3416	4	-1.3946	1028	-1029	1097	-1098	301	TMP=2.8794e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2416)
3417	4	-1.3946	1029	-1030	1097	-1098	301	TMP=2.8794e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2417)
3418	4	-1.3946	1030	-1031	1097	-1098	301	TMP=2.8794e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2418)
3419	4	-1.3946	1031	-1032	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2419)
3420	4	-1.3946	1032	-1033	1097	-1098	301	TMP=2.8792e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2420)
3421	4	-1.3946	1033	-1034	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2421)
3422	4	-1.3946	1034	-1035	1097	-1098	301	TMP=2.8794e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2422)
3423	4	-1.3946	1035	-1036	1097	-1098	301	TMP=2.8795e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2423)
3424	4	-1.3946	1036	-1037	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2424)
3425	4	-1.3946	1037	-1038	1097	-1098	301	TMP=2.8790e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2425)
3426	4	-1.3947	1038	-1039	1097	-1098	301	TMP=2.8784e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2426)
3427	4	-1.3947	1039	-1040	1097	-1098	301	TMP=2.8777e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2427)
3428	4	-1.3947	1040	-1041	1097	-1098	301	TMP=2.8775e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2428)
3429	4	-1.3946	1041	-1042	1097	-1098	301	TMP=2.8789e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2429)
3430	4	-1.3944	1042	-1043	1097	-1098	301	TMP=2.8830e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2430)
3431	4	-1.3941	1043	-1044	1097	-1098	301	TMP=2.8879e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2431)
3432	4	-1.3939	1044	-1045	1097	-1098	301	TMP=2.8912e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2432)
3433	4	-1.3941	1045	-1046	1097	-1098	301	TMP=2.8893e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2433)
3434	4	-1.3946	1046	-1047	1097	-1098	301	TMP=2.8793e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2434)
3435	4	-1.3967	1047	-1048	1097	-1098	301	TMP=2.8422e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2435)

3436	4	-1.4025	1048	-1049	1097	-1098	301	TMP=2.7252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2436)
3437	4	-1.3940	1097	-1098	-302			TMP=2.8899e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2437)
3438	4	-1.3946	-1000	1098	-1099			TMP=2.8800e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2438)
3439	4	-1.3945	1000	-1001	1098	-1099	301	TMP=2.8808e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2439)
3440	4	-1.3945	1001	-1002	1098	-1099	301	TMP=2.8812e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2440)
3441	4	-1.3945	1002	-1003	1098	-1099	301	TMP=2.8815e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2441)
3442	4	-1.3945	1003	-1004	1098	-1099	301	TMP=2.8817e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2442)
3443	4	-1.3945	1004	-1005	1098	-1099	301	TMP=2.8818e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2443)
3444	4	-1.3945	1005	-1006	1098	-1099	301	TMP=2.8816e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2444)
3445	4	-1.3945	1006	-1007	1098	-1099	301	TMP=2.8813e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2445)
3446	4	-1.3945	1007	-1008	1098	-1099	301	TMP=2.8809e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2446)
3447	4	-1.3945	1008	-1009	1098	-1099	301	TMP=2.8809e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2447)
3448	4	-1.3945	1009	-1010	1098	-1099	301	TMP=2.8811e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2448)
3449	4	-1.3945	1010	-1011	1098	-1099	301	TMP=2.8813e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2449)
3450	4	-1.3945	1011	-1012	1098	-1099	301	TMP=2.8814e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2450)
3451	4	-1.3945	1012	-1013	1098	-1099	301	TMP=2.8814e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2451)
3452	4	-1.3945	1013	-1014	1098	-1099	301	TMP=2.8814e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2452)
3453	4	-1.3945	1014	-1015	1098	-1099	301	TMP=2.8813e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2453)
3454	4	-1.3945	1015	-1016	1098	-1099	301	TMP=2.8812e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2454)
3455	4	-1.3945	1016	-1017	1098	-1099	301	TMP=2.8810e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2455)
3456	4	-1.3945	1017	-1018	1098	-1099	301	TMP=2.8810e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2456)
3457	4	-1.3945	1018	-1019	1098	-1099	301	TMP=2.8808e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2457)
3458	4	-1.3945	1019	-1020	1098	-1099	301	TMP=2.8810e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2458)
3459	4	-1.3945	1020	-1021	1098	-1099	301	TMP=2.8812e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2459)
3460	4	-1.3945	1021	-1022	1098	-1099	301	TMP=2.8815e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2460)
3461	4	-1.3945	1022	-1023	1098	-1099	301	TMP=2.8816e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2461)
3462	4	-1.3945	1023	-1024	1098	-1099	301	TMP=2.8816e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2462)
3463	4	-1.3945	1024	-1025	1098	-1099	301	TMP=2.8816e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2463)
3464	4	-1.3945	1025	-1026	1098	-1099	301	TMP=2.8817e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2464)
3465	4	-1.3945	1026	-1027	1098	-1099	301	TMP=2.8818e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2465)
3466	4	-1.3945	1027	-1028	1098	-1099	301	TMP=2.8818e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2466)
3467	4	-1.3945	1028	-1029	1098	-1099	301	TMP=2.8818e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2467)
3468	4	-1.3945	1029	-1030	1098	-1099	301	TMP=2.8817e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2468)
3469	4	-1.3945	1030	-1031	1098	-1099	301	TMP=2.8815e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2469)
3470	4	-1.3945	1031	-1032	1098	-1099	301	TMP=2.8813e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2470)
3471	4	-1.3945	1032	-1033	1098	-1099	301	TMP=2.8815e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2471)
3472	4	-1.3945	1033	-1034	1098	-1099	301	TMP=2.8816e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2472)
3473	4	-1.3945	1034	-1035	1098	-1099	301	TMP=2.8815e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2473)
3474	4	-1.3945	1035	-1036	1098	-1099	301	TMP=2.8815e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2474)
3475	4	-1.3945	1036	-1037	1098	-1099	301	TMP=2.8816e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2475)
3476	4	-1.3945	1037	-1038	1098	-1099	301	TMP=2.8814e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2476)
3477	4	-1.3945	1038	-1039	1098	-1099	301	TMP=2.8808e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2477)
3478	4	-1.3946	1039	-1040	1098	-1099	301	TMP=2.8799e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2478)
3479	4	-1.3946	1040	-1041	1098	-1099	301	TMP=2.8798e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2479)
3480	4	-1.3945	1041	-1042	1098	-1099	301	TMP=2.8813e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2480)
3481	4	-1.3943	1042	-1043	1098	-1099	301	TMP=2.8854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2481)
3482	4	-1.3940	1043	-1044	1098	-1099	301	TMP=2.8905e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2482)
3483	4	-1.3938	1044	-1045	1098	-1099	301	TMP=2.8934e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2483)
3484	4	-1.3939	1045	-1046	1098	-1099	301	TMP=2.8913e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2484)
3485	4	-1.3945	1046	-1047	1098	-1099	301	TMP=2.8820e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2485)
3486	4	-1.3965	1047	-1048	1098	-1099	301	TMP=2.8452e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2486)
3487	4	-1.4024	1048	-1049	1098	-1099	301	TMP=2.7269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2487)
3488	4	-1.3939	1098	-1099	-302			TMP=2.8923e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2488)
3489	4	-1.3944	-1000	1099	-1100			TMP=2.8831e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2489)
3490	4	-1.3944	1000	-1001	1099	-1100	301	TMP=2.8839e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2490)
3491	4	-1.3944	1001	-1002	1099	-1100	301	TMP=2.8839e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2491)
3492	4	-1.3944	1002	-1003	1099	-1100	301	TMP=2.8839e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2492)
3493	4	-1.3944	1003	-1004	1099	-1100	301	TMP=2.8838e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2493)
3494	4	-1.3944	1004	-1005	1099	-1100	301	TMP=2.8837e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2494)
3495	4	-1.3944	1005	-1006	1099	-1100	301	TMP=2.8835e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2495)

3496	4	-1.3944	1006	-1007	1099	-1100	301	TMP=2.8832e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2496)
3497	4	-1.3944	1007	-1008	1099	-1100	301	TMP=2.8830e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2497)
3498	4	-1.3944	1008	-1009	1099	-1100	301	TMP=2.8829e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2498)
3499	4	-1.3944	1009	-1010	1099	-1100	301	TMP=2.8832e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2499)
3500	4	-1.3944	1010	-1011	1099	-1100	301	TMP=2.8833e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2500)
3501	4	-1.3944	1011	-1012	1099	-1100	301	TMP=2.8835e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2501)
3502	4	-1.3944	1012	-1013	1099	-1100	301	TMP=2.8835e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2502)
3503	4	-1.3944	1013	-1014	1099	-1100	301	TMP=2.8835e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2503)
3504	4	-1.3944	1014	-1015	1099	-1100	301	TMP=2.8834e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2504)
3505	4	-1.3944	1015	-1016	1099	-1100	301	TMP=2.8833e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2505)
3506	4	-1.3944	1016	-1017	1099	-1100	301	TMP=2.8833e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2506)
3507	4	-1.3944	1017	-1018	1099	-1100	301	TMP=2.8834e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2507)
3508	4	-1.3944	1018	-1019	1099	-1100	301	TMP=2.8835e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2508)
3509	4	-1.3944	1019	-1020	1099	-1100	301	TMP=2.8836e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2509)
3510	4	-1.3944	1020	-1021	1099	-1100	301	TMP=2.8837e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2510)
3511	4	-1.3944	1021	-1022	1099	-1100	301	TMP=2.8838e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2511)
3512	4	-1.3944	1022	-1023	1099	-1100	301	TMP=2.8838e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2512)
3513	4	-1.3944	1023	-1024	1099	-1100	301	TMP=2.8838e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2513)
3514	4	-1.3944	1024	-1025	1099	-1100	301	TMP=2.8838e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2514)
3515	4	-1.3944	1025	-1026	1099	-1100	301	TMP=2.8837e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2515)
3516	4	-1.3944	1026	-1027	1099	-1100	301	TMP=2.8836e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2516)
3517	4	-1.3944	1027	-1028	1099	-1100	301	TMP=2.8834e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2517)
3518	4	-1.3944	1028	-1029	1099	-1100	301	TMP=2.8835e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2518)
3519	4	-1.3944	1029	-1030	1099	-1100	301	TMP=2.8836e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2519)
3520	4	-1.3944	1030	-1031	1099	-1100	301	TMP=2.8837e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2520)
3521	4	-1.3944	1031	-1032	1099	-1100	301	TMP=2.8837e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2521)
3522	4	-1.3944	1032	-1033	1099	-1100	301	TMP=2.8838e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2522)
3523	4	-1.3944	1033	-1034	1099	-1100	301	TMP=2.8837e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2523)
3524	4	-1.3944	1034	-1035	1099	-1100	301	TMP=2.8836e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2524)
3525	4	-1.3944	1035	-1036	1099	-1100	301	TMP=2.8838e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2525)
3526	4	-1.3944	1036	-1037	1099	-1100	301	TMP=2.8838e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2526)
3527	4	-1.3944	1037	-1038	1099	-1100	301	TMP=2.8834e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2527)
3528	4	-1.3944	1038	-1039	1099	-1100	301	TMP=2.8825e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2528)
3529	4	-1.3945	1039	-1040	1099	-1100	301	TMP=2.8820e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2529)
3530	4	-1.3945	1040	-1041	1099	-1100	301	TMP=2.8821e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2530)
3531	4	-1.3944	1041	-1042	1099	-1100	301	TMP=2.8839e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2531)
3532	4	-1.3941	1042	-1043	1099	-1100	301	TMP=2.8879e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2532)
3533	4	-1.3939	1043	-1044	1099	-1100	301	TMP=2.8926e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2533)
3534	4	-1.3937	1044	-1045	1099	-1100	301	TMP=2.8953e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2534)
3535	4	-1.3938	1045	-1046	1099	-1100	301	TMP=2.8933e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2535)
3536	4	-1.3943	1046	-1047	1099	-1100	301	TMP=2.8847e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2536)
3537	4	-1.3964	1047	-1048	1099	-1100	301	TMP=2.8475e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2537)
3538	4	-1.4023	1048	-1049	1099	-1100	301	TMP=2.7287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2538)
3539	4	-1.3937	1099	-1100	-302			TMP=2.8946e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2539)
3540	4	-1.3943	-1000	1100	-1101			TMP=2.8846e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2540)
3541	4	-1.3943	1000	-1001	1100	-1101	301	TMP=2.8851e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2541)
3542	4	-1.3943	1001	-1002	1100	-1101	301	TMP=2.8854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2542)
3543	4	-1.3943	1002	-1003	1100	-1101	301	TMP=2.8856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2543)
3544	4	-1.3943	1003	-1004	1100	-1101	301	TMP=2.8856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2544)
3545	4	-1.3943	1004	-1005	1100	-1101	301	TMP=2.8855e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2545)
3546	4	-1.3943	1005	-1006	1100	-1101	301	TMP=2.8854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2546)
3547	4	-1.3943	1006	-1007	1100	-1101	301	TMP=2.8853e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2547)
3548	4	-1.3943	1007	-1008	1100	-1101	301	TMP=2.8850e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2548)
3549	4	-1.3943	1008	-1009	1100	-1101	301	TMP=2.8850e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2549)
3550	4	-1.3943	1009	-1010	1100	-1101	301	TMP=2.8852e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2550)
3551	4	-1.3943	1010	-1011	1100	-1101	301	TMP=2.8854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2551)
3552	4	-1.3943	1011	-1012	1100	-1101	301	TMP=2.8856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2552)
3553	4	-1.3943	1012	-1013	1100	-1101	301	TMP=2.8856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2553)
3554	4	-1.3943	1013	-1014	1100	-1101	301	TMP=2.8854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2554)
3555	4	-1.3943	1014	-1015	1100	-1101	301	TMP=2.8852e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2555)

3556	4	-1.3943	1015	-1016	1100	-1101	301	TMP=2.8848e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2556)
3557	4	-1.3943	1016	-1017	1100	-1101	301	TMP=2.8849e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2557)
3558	4	-1.3943	1017	-1018	1100	-1101	301	TMP=2.8855e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2558)
3559	4	-1.3942	1018	-1019	1100	-1101	301	TMP=2.8860e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2559)
3560	4	-1.3942	1019	-1020	1100	-1101	301	TMP=2.8862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2560)
3561	4	-1.3942	1020	-1021	1100	-1101	301	TMP=2.8859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2561)
3562	4	-1.3943	1021	-1022	1100	-1101	301	TMP=2.8856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2562)
3563	4	-1.3943	1022	-1023	1100	-1101	301	TMP=2.8855e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2563)
3564	4	-1.3943	1023	-1024	1100	-1101	301	TMP=2.8857e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2564)
3565	4	-1.3943	1024	-1025	1100	-1101	301	TMP=2.8858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2565)
3566	4	-1.3942	1025	-1026	1100	-1101	301	TMP=2.8858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2566)
3567	4	-1.3943	1026	-1027	1100	-1101	301	TMP=2.8857e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2567)
3568	4	-1.3943	1027	-1028	1100	-1101	301	TMP=2.8856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2568)
3569	4	-1.3943	1028	-1029	1100	-1101	301	TMP=2.8854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2569)
3570	4	-1.3943	1029	-1030	1100	-1101	301	TMP=2.8855e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2570)
3571	4	-1.3943	1030	-1031	1100	-1101	301	TMP=2.8856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2571)
3572	4	-1.3943	1031	-1032	1100	-1101	301	TMP=2.8857e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2572)
3573	4	-1.3943	1032	-1033	1100	-1101	301	TMP=2.8857e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2573)
3574	4	-1.3943	1033	-1034	1100	-1101	301	TMP=2.8856e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2574)
3575	4	-1.3942	1034	-1035	1100	-1101	301	TMP=2.8858e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2575)
3576	4	-1.3942	1035	-1036	1100	-1101	301	TMP=2.8859e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2576)
3577	4	-1.3943	1036	-1037	1100	-1101	301	TMP=2.8857e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2577)
3578	4	-1.3943	1037	-1038	1100	-1101	301	TMP=2.8852e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2578)
3579	4	-1.3943	1038	-1039	1100	-1101	301	TMP=2.8846e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2579)
3580	4	-1.3943	1039	-1040	1100	-1101	301	TMP=2.8842e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2580)
3581	4	-1.3943	1040	-1041	1100	-1101	301	TMP=2.8844e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2581)
3582	4	-1.3942	1041	-1042	1100	-1101	301	TMP=2.8862e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2582)
3583	4	-1.3940	1042	-1043	1100	-1101	301	TMP=2.8903e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2583)
3584	4	-1.3937	1043	-1044	1100	-1101	301	TMP=2.8947e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2584)
3585	4	-1.3936	1044	-1045	1100	-1101	301	TMP=2.8974e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2585)
3586	4	-1.3937	1045	-1046	1100	-1101	301	TMP=2.8953e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2586)
3587	4	-1.3942	1046	-1047	1100	-1101	301	TMP=2.8873e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2587)
3588	4	-1.3962	1047	-1048	1100	-1101	301	TMP=2.8501e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2588)
3589	4	-1.4022	1048	-1049	1100	-1101	301	TMP=2.7308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2589)
3590	4	-1.3936	1100	-1101	-302			TMP=2.8967e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2590)
3591	4	-1.3943	-1000	1101	-1102			TMP=2.8857e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2591)
3592	4	-1.3942	1000	-1001	1101	-1102	301	TMP=2.8864e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2592)
3593	4	-1.3942	1001	-1002	1101	-1102	301	TMP=2.8867e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2593)
3594	4	-1.3942	1002	-1003	1101	-1102	301	TMP=2.8870e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2594)
3595	4	-1.3942	1003	-1004	1101	-1102	301	TMP=2.8872e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2595)
3596	4	-1.3942	1004	-1005	1101	-1102	301	TMP=2.8873e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2596)
3597	4	-1.3942	1005	-1006	1101	-1102	301	TMP=2.8873e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2597)
3598	4	-1.3942	1006	-1007	1101	-1102	301	TMP=2.8873e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2598)
3599	4	-1.3942	1007	-1008	1101	-1102	301	TMP=2.8872e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2599)
3600	4	-1.3942	1008	-1009	1101	-1102	301	TMP=2.8871e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2600)
3601	4	-1.3942	1009	-1010	1101	-1102	301	TMP=2.8875e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2601)
3602	4	-1.3941	1010	-1011	1101	-1102	301	TMP=2.8877e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2602)
3603	4	-1.3941	1011	-1012	1101	-1102	301	TMP=2.8877e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2603)
3604	4	-1.3941	1012	-1013	1101	-1102	301	TMP=2.8877e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2604)
3605	4	-1.3942	1013	-1014	1101	-1102	301	TMP=2.8874e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2605)
3606	4	-1.3942	1014	-1015	1101	-1102	301	TMP=2.8871e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2606)
3607	4	-1.3942	1015	-1016	1101	-1102	301	TMP=2.8866e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2607)
3608	4	-1.3942	1016	-1017	1101	-1102	301	TMP=2.8868e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2608)
3609	4	-1.3942	1017	-1018	1101	-1102	301	TMP=2.8871e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2609)
3610	4	-1.3942	1018	-1019	1101	-1102	301	TMP=2.8873e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2610)
3611	4	-1.3942	1019	-1020	1101	-1102	301	TMP=2.8875e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2611)
3612	4	-1.3941	1020	-1021	1101	-1102	301	TMP=2.8876e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2612)
3613	4	-1.3941	1021	-1022	1101	-1102	301	TMP=2.8876e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2613)
3614	4	-1.3941	1022	-1023	1101	-1102	301	TMP=2.8876e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2614)
3615	4	-1.3941	1023	-1024	1101	-1102	301	TMP=2.8876e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2615)

3616	4	-1.3941	1024	-1025	1101	-1102	301	TMP=2.8876e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2616)
3617	4	-1.3941	1025	-1026	1101	-1102	301	TMP=2.8876e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2617)
3618	4	-1.3941	1026	-1027	1101	-1102	301	TMP=2.8876e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2618)
3619	4	-1.3941	1027	-1028	1101	-1102	301	TMP=2.8876e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2619)
3620	4	-1.3942	1028	-1029	1101	-1102	301	TMP=2.8875e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2620)
3621	4	-1.3941	1029	-1030	1101	-1102	301	TMP=2.8877e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2621)
3622	4	-1.3941	1030	-1031	1101	-1102	301	TMP=2.8879e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2622)
3623	4	-1.3941	1031	-1032	1101	-1102	301	TMP=2.8880e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2623)
3624	4	-1.3941	1032	-1033	1101	-1102	301	TMP=2.8879e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2624)
3625	4	-1.3941	1033	-1034	1101	-1102	301	TMP=2.8880e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2625)
3626	4	-1.3941	1034	-1035	1101	-1102	301	TMP=2.8880e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2626)
3627	4	-1.3941	1035	-1036	1101	-1102	301	TMP=2.8879e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2627)
3628	4	-1.3941	1036	-1037	1101	-1102	301	TMP=2.8877e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2628)
3629	4	-1.3942	1037	-1038	1101	-1102	301	TMP=2.8874e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2629)
3630	4	-1.3942	1038	-1039	1101	-1102	301	TMP=2.8867e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2630)
3631	4	-1.3942	1039	-1040	1101	-1102	301	TMP=2.8863e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2631)
3632	4	-1.3942	1040	-1041	1101	-1102	301	TMP=2.8865e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2632)
3633	4	-1.3941	1041	-1042	1101	-1102	301	TMP=2.8883e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2633)
3634	4	-1.3939	1042	-1043	1101	-1102	301	TMP=2.8927e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2634)
3635	4	-1.3936	1043	-1044	1101	-1102	301	TMP=2.8970e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2635)
3636	4	-1.3935	1044	-1045	1101	-1102	301	TMP=2.8993e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2636)
3637	4	-1.3936	1045	-1046	1101	-1102	301	TMP=2.8975e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2637)
3638	4	-1.3940	1046	-1047	1101	-1102	301	TMP=2.8896e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2638)
3639	4	-1.3961	1047	-1048	1101	-1102	301	TMP=2.8528e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2639)
3640	4	-1.4021	1048	-1049	1101	-1102	301	TMP=2.7327e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2640)
3641	4	-1.3935	1101	-1102	-302			TMP=2.8987e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2641)
3642	4	-1.3941	-1000	1102	-1103			TMP=2.8878e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2642)
3643	4	-1.3941	1000	-1001	1102	-1103	301	TMP=2.8886e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2643)
3644	4	-1.3941	1001	-1002	1102	-1103	301	TMP=2.8890e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2644)
3645	4	-1.3940	1002	-1003	1102	-1103	301	TMP=2.8893e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2645)
3646	4	-1.3940	1003	-1004	1102	-1103	301	TMP=2.8896e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2646)
3647	4	-1.3940	1004	-1005	1102	-1103	301	TMP=2.8898e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2647)
3648	4	-1.3940	1005	-1006	1102	-1103	301	TMP=2.8897e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2648)
3649	4	-1.3940	1006	-1007	1102	-1103	301	TMP=2.8894e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2649)
3650	4	-1.3941	1007	-1008	1102	-1103	301	TMP=2.8891e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2650)
3651	4	-1.3941	1008	-1009	1102	-1103	301	TMP=2.8886e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2651)
3652	4	-1.3941	1009	-1010	1102	-1103	301	TMP=2.8890e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2652)
3653	4	-1.3940	1010	-1011	1102	-1103	301	TMP=2.8894e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2653)
3654	4	-1.3940	1011	-1012	1102	-1103	301	TMP=2.8897e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2654)
3655	4	-1.3940	1012	-1013	1102	-1103	301	TMP=2.8899e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2655)
3656	4	-1.3940	1013	-1014	1102	-1103	301	TMP=2.8898e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2656)
3657	4	-1.3940	1014	-1015	1102	-1103	301	TMP=2.8894e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2657)
3658	4	-1.3941	1015	-1016	1102	-1103	301	TMP=2.8889e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2658)
3659	4	-1.3941	1016	-1017	1102	-1103	301	TMP=2.8889e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2659)
3660	4	-1.3941	1017	-1018	1102	-1103	301	TMP=2.8889e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2660)
3661	4	-1.3941	1018	-1019	1102	-1103	301	TMP=2.8890e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2661)
3662	4	-1.3941	1019	-1020	1102	-1103	301	TMP=2.8891e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2662)
3663	4	-1.3941	1020	-1021	1102	-1103	301	TMP=2.8893e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2663)
3664	4	-1.3940	1021	-1022	1102	-1103	301	TMP=2.8895e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2664)
3665	4	-1.3940	1022	-1023	1102	-1103	301	TMP=2.8896e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2665)
3666	4	-1.3940	1023	-1024	1102	-1103	301	TMP=2.8896e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2666)
3667	4	-1.3940	1024	-1025	1102	-1103	301	TMP=2.8896e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2667)
3668	4	-1.3940	1025	-1026	1102	-1103	301	TMP=2.8896e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2668)
3669	4	-1.3940	1026	-1027	1102	-1103	301	TMP=2.8896e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2669)
3670	4	-1.3940	1027	-1028	1102	-1103	301	TMP=2.8897e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2670)
3671	4	-1.3940	1028	-1029	1102	-1103	301	TMP=2.8898e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2671)
3672	4	-1.3940	1029	-1030	1102	-1103	301	TMP=2.8899e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2672)
3673	4	-1.3940	1030	-1031	1102	-1103	301	TMP=2.8900e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2673)
3674	4	-1.3940	1031	-1032	1102	-1103	301	TMP=2.8900e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2674)
3675	4	-1.3940	1032	-1033	1102	-1103	301	TMP=2.8899e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2675)

3676	4	-1.3940	1033	-1034	1102	-1103	301	TMP=2.8900e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2676)
3677	4	-1.3940	1034	-1035	1102	-1103	301	TMP=2.8900e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2677)
3678	4	-1.3940	1035	-1036	1102	-1103	301	TMP=2.8899e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2678)
3679	4	-1.3940	1036	-1037	1102	-1103	301	TMP=2.8896e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2679)
3680	4	-1.3940	1037	-1038	1102	-1103	301	TMP=2.8893e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2680)
3681	4	-1.3941	1038	-1039	1102	-1103	301	TMP=2.8887e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2681)
3682	4	-1.3941	1039	-1040	1102	-1103	301	TMP=2.8883e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2682)
3683	4	-1.3941	1040	-1041	1102	-1103	301	TMP=2.8886e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2683)
3684	4	-1.3940	1041	-1042	1102	-1103	301	TMP=2.8906e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2684)
3685	4	-1.3937	1042	-1043	1102	-1103	301	TMP=2.8948e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2685)
3686	4	-1.3935	1043	-1044	1102	-1103	301	TMP=2.8991e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2686)
3687	4	-1.3934	1044	-1045	1102	-1103	301	TMP=2.9013e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2687)
3688	4	-1.3935	1045	-1046	1102	-1103	301	TMP=2.8997e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2688)
3689	4	-1.3939	1046	-1047	1102	-1103	301	TMP=2.8918e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2689)
3690	4	-1.3960	1047	-1048	1102	-1103	301	TMP=2.8549e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2690)
3691	4	-1.4021	1048	-1049	1102	-1103	301	TMP=2.7347e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2691)
3692	4	-1.3934	1102	-1103	-302			TMP=2.9007e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2692)
3693	4	-1.3940	-1000	1103	-1104			TMP=2.8908e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2693)
3694	4	-1.3939	1000	-1001	1103	-1104	301	TMP=2.8917e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2694)
3695	4	-1.3939	1001	-1002	1103	-1104	301	TMP=2.8921e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2695)
3696	4	-1.3939	1002	-1003	1103	-1104	301	TMP=2.8922e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2696)
3697	4	-1.3939	1003	-1004	1103	-1104	301	TMP=2.8923e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2697)
3698	4	-1.3939	1004	-1005	1103	-1104	301	TMP=2.8922e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2698)
3699	4	-1.3939	1005	-1006	1103	-1104	301	TMP=2.8920e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2699)
3700	4	-1.3939	1006	-1007	1103	-1104	301	TMP=2.8916e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2700)
3701	4	-1.3939	1007	-1008	1103	-1104	301	TMP=2.8912e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2701)
3702	4	-1.3940	1008	-1009	1103	-1104	301	TMP=2.8906e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2702)
3703	4	-1.3940	1009	-1010	1103	-1104	301	TMP=2.8906e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2703)
3704	4	-1.3940	1010	-1011	1103	-1104	301	TMP=2.8907e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2704)
3705	4	-1.3940	1011	-1012	1103	-1104	301	TMP=2.8907e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2705)
3706	4	-1.3940	1012	-1013	1103	-1104	301	TMP=2.8907e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2706)
3707	4	-1.3940	1013	-1014	1103	-1104	301	TMP=2.8906e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2707)
3708	4	-1.3940	1014	-1015	1103	-1104	301	TMP=2.8906e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2708)
3709	4	-1.3939	1015	-1016	1103	-1104	301	TMP=2.8913e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2709)
3710	4	-1.3939	1016	-1017	1103	-1104	301	TMP=2.8913e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2710)
3711	4	-1.3939	1017	-1018	1103	-1104	301	TMP=2.8913e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2711)
3712	4	-1.3939	1018	-1019	1103	-1104	301	TMP=2.8913e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2712)
3713	4	-1.3939	1019	-1020	1103	-1104	301	TMP=2.8914e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2713)
3714	4	-1.3939	1020	-1021	1103	-1104	301	TMP=2.8915e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2714)
3715	4	-1.3939	1021	-1022	1103	-1104	301	TMP=2.8916e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2715)
3716	4	-1.3939	1022	-1023	1103	-1104	301	TMP=2.8918e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2716)
3717	4	-1.3939	1023	-1024	1103	-1104	301	TMP=2.8918e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2717)
3718	4	-1.3939	1024	-1025	1103	-1104	301	TMP=2.8917e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2718)
3719	4	-1.3939	1025	-1026	1103	-1104	301	TMP=2.8917e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2719)
3720	4	-1.3939	1026	-1027	1103	-1104	301	TMP=2.8917e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2720)
3721	4	-1.3939	1027	-1028	1103	-1104	301	TMP=2.8916e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2721)
3722	4	-1.3939	1028	-1029	1103	-1104	301	TMP=2.8916e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2722)
3723	4	-1.3939	1029	-1030	1103	-1104	301	TMP=2.8917e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2723)
3724	4	-1.3939	1030	-1031	1103	-1104	301	TMP=2.8918e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2724)
3725	4	-1.3939	1031	-1032	1103	-1104	301	TMP=2.8918e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2725)
3726	4	-1.3939	1032	-1033	1103	-1104	301	TMP=2.8916e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2726)
3727	4	-1.3939	1033	-1034	1103	-1104	301	TMP=2.8918e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2727)
3728	4	-1.3939	1034	-1035	1103	-1104	301	TMP=2.8919e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2728)
3729	4	-1.3939	1035	-1036	1103	-1104	301	TMP=2.8919e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2729)
3730	4	-1.3939	1036	-1037	1103	-1104	301	TMP=2.8918e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2730)
3731	4	-1.3939	1037	-1038	1103	-1104	301	TMP=2.8913e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2731)
3732	4	-1.3940	1038	-1039	1103	-1104	301	TMP=2.8906e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2732)
3733	4	-1.3940	1039	-1040	1103	-1104	301	TMP=2.8903e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2733)
3734	4	-1.3940	1040	-1041	1103	-1104	301	TMP=2.8906e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2734)
3735	4	-1.3938	1041	-1042	1103	-1104	301	TMP=2.8928e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2735)

3736	4	-1.3936	1042	-1043	1103	-1104	301	TMP=2.8969e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2736)
3737	4	-1.3934	1043	-1044	1103	-1104	301	TMP=2.9009e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2737)
3738	4	-1.3932	1044	-1045	1103	-1104	301	TMP=2.9033e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2738)
3739	4	-1.3933	1045	-1046	1103	-1104	301	TMP=2.9017e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2739)
3740	4	-1.3938	1046	-1047	1103	-1104	301	TMP=2.8942e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2740)
3741	4	-1.3959	1047	-1048	1103	-1104	301	TMP=2.8569e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2741)
3742	4	-1.4020	1048	-1049	1103	-1104	301	TMP=2.7364e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2742)
3743	4	-1.3933	1103	-1104	-302			TMP=2.9025e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2743)
3744	4	-1.3937	-1000	1104	-1105			TMP=2.8960e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2744)
3745	4	-1.3937	1000	-1001	1104	-1105	301	TMP=2.8952e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2745)
3746	4	-1.3937	1001	-1002	1104	-1105	301	TMP=2.8950e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2746)
3747	4	-1.3937	1002	-1003	1104	-1105	301	TMP=2.8951e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2747)
3748	4	-1.3937	1003	-1004	1104	-1105	301	TMP=2.8950e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2748)
3749	4	-1.3937	1004	-1005	1104	-1105	301	TMP=2.8948e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2749)
3750	4	-1.3937	1005	-1006	1104	-1105	301	TMP=2.8945e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2750)
3751	4	-1.3938	1006	-1007	1104	-1105	301	TMP=2.8941e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2751)
3752	4	-1.3938	1007	-1008	1104	-1105	301	TMP=2.8936e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2752)
3753	4	-1.3938	1008	-1009	1104	-1105	301	TMP=2.8930e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2753)
3754	4	-1.3939	1009	-1010	1104	-1105	301	TMP=2.8925e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2754)
3755	4	-1.3939	1010	-1011	1104	-1105	301	TMP=2.8924e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2755)
3756	4	-1.3939	1011	-1012	1104	-1105	301	TMP=2.8922e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2756)
3757	4	-1.3939	1012	-1013	1104	-1105	301	TMP=2.8919e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2757)
3758	4	-1.3939	1013	-1014	1104	-1105	301	TMP=2.8922e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2758)
3759	4	-1.3939	1014	-1015	1104	-1105	301	TMP=2.8926e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2759)
3760	4	-1.3938	1015	-1016	1104	-1105	301	TMP=2.8930e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2760)
3761	4	-1.3938	1016	-1017	1104	-1105	301	TMP=2.8934e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2761)
3762	4	-1.3938	1017	-1018	1104	-1105	301	TMP=2.8933e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2762)
3763	4	-1.3938	1018	-1019	1104	-1105	301	TMP=2.8933e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2763)
3764	4	-1.3938	1019	-1020	1104	-1105	301	TMP=2.8933e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2764)
3765	4	-1.3938	1020	-1021	1104	-1105	301	TMP=2.8933e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2765)
3766	4	-1.3938	1021	-1022	1104	-1105	301	TMP=2.8933e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2766)
3767	4	-1.3938	1022	-1023	1104	-1105	301	TMP=2.8932e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2767)
3768	4	-1.3938	1023	-1024	1104	-1105	301	TMP=2.8933e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2768)
3769	4	-1.3938	1024	-1025	1104	-1105	301	TMP=2.8934e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2769)
3770	4	-1.3938	1025	-1026	1104	-1105	301	TMP=2.8935e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2770)
3771	4	-1.3938	1026	-1027	1104	-1105	301	TMP=2.8935e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2771)
3772	4	-1.3938	1027	-1028	1104	-1105	301	TMP=2.8936e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2772)
3773	4	-1.3938	1028	-1029	1104	-1105	301	TMP=2.8935e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2773)
3774	4	-1.3938	1029	-1030	1104	-1105	301	TMP=2.8934e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2774)
3775	4	-1.3938	1030	-1031	1104	-1105	301	TMP=2.8934e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2775)
3776	4	-1.3938	1031	-1032	1104	-1105	301	TMP=2.8935e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2776)
3777	4	-1.3938	1032	-1033	1104	-1105	301	TMP=2.8936e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2777)
3778	4	-1.3938	1033	-1034	1104	-1105	301	TMP=2.8938e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2778)
3779	4	-1.3938	1034	-1035	1104	-1105	301	TMP=2.8940e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2779)
3780	4	-1.3938	1035	-1036	1104	-1105	301	TMP=2.8938e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2780)
3781	4	-1.3938	1036	-1037	1104	-1105	301	TMP=2.8935e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2781)
3782	4	-1.3938	1037	-1038	1104	-1105	301	TMP=2.8931e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2782)
3783	4	-1.3939	1038	-1039	1104	-1105	301	TMP=2.8926e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2783)
3784	4	-1.3939	1039	-1040	1104	-1105	301	TMP=2.8923e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2784)
3785	4	-1.3938	1040	-1041	1104	-1105	301	TMP=2.8928e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2785)
3786	4	-1.3937	1041	-1042	1104	-1105	301	TMP=2.8951e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2786)
3787	4	-1.3935	1042	-1043	1104	-1105	301	TMP=2.8991e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2787)
3788	4	-1.3933	1043	-1044	1104	-1105	301	TMP=2.9029e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2788)
3789	4	-1.3931	1044	-1045	1104	-1105	301	TMP=2.9049e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2789)
3790	4	-1.3932	1045	-1046	1104	-1105	301	TMP=2.9037e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2790)
3791	4	-1.3937	1046	-1047	1104	-1105	301	TMP=2.8961e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2791)
3792	4	-1.3958	1047	-1048	1104	-1105	301	TMP=2.8586e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2792)
3793	4	-1.4019	1048	-1049	1104	-1105	301	TMP=2.7380e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2793)
3794	4	-1.3932	1104	-1105	-302			TMP=2.9043e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2794)
3795	4	-1.3933	-1000	1105	-1106			TMP=2.9026e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2795)

3796	4	-1.3933	1000	-1001	1105	-1106	301	TMP=2.9023e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2796)
3797	4	-1.3933	1001	-1002	1105	-1106	301	TMP=2.9019e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2797)
3798	4	-1.3934	1002	-1003	1105	-1106	301	TMP=2.9012e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2798)
3799	4	-1.3934	1003	-1004	1105	-1106	301	TMP=2.9002e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2799)
3800	4	-1.3935	1004	-1005	1105	-1106	301	TMP=2.8990e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2800)
3801	4	-1.3936	1005	-1006	1105	-1106	301	TMP=2.8976e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2801)
3802	4	-1.3936	1006	-1007	1105	-1106	301	TMP=2.8969e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2802)
3803	4	-1.3936	1007	-1008	1105	-1106	301	TMP=2.8963e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2803)
3804	4	-1.3937	1008	-1009	1105	-1106	301	TMP=2.8956e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2804)
3805	4	-1.3937	1009	-1010	1105	-1106	301	TMP=2.8948e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2805)
3806	4	-1.3938	1010	-1011	1105	-1106	301	TMP=2.8944e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2806)
3807	4	-1.3938	1011	-1012	1105	-1106	301	TMP=2.8943e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2807)
3808	4	-1.3937	1012	-1013	1105	-1106	301	TMP=2.8945e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2808)
3809	4	-1.3937	1013	-1014	1105	-1106	301	TMP=2.8947e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2809)
3810	4	-1.3937	1014	-1015	1105	-1106	301	TMP=2.8948e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2810)
3811	4	-1.3937	1015	-1016	1105	-1106	301	TMP=2.8949e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2811)
3812	4	-1.3937	1016	-1017	1105	-1106	301	TMP=2.8948e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2812)
3813	4	-1.3937	1017	-1018	1105	-1106	301	TMP=2.8949e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2813)
3814	4	-1.3937	1018	-1019	1105	-1106	301	TMP=2.8951e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2814)
3815	4	-1.3937	1019	-1020	1105	-1106	301	TMP=2.8953e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2815)
3816	4	-1.3937	1020	-1021	1105	-1106	301	TMP=2.8953e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2816)
3817	4	-1.3937	1021	-1022	1105	-1106	301	TMP=2.8953e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2817)
3818	4	-1.3937	1022	-1023	1105	-1106	301	TMP=2.8952e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2818)
3819	4	-1.3937	1023	-1024	1105	-1106	301	TMP=2.8952e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2819)
3820	4	-1.3937	1024	-1025	1105	-1106	301	TMP=2.8952e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2820)
3821	4	-1.3937	1025	-1026	1105	-1106	301	TMP=2.8952e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2821)
3822	4	-1.3937	1026	-1027	1105	-1106	301	TMP=2.8952e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2822)
3823	4	-1.3937	1027	-1028	1105	-1106	301	TMP=2.8953e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2823)
3824	4	-1.3937	1028	-1029	1105	-1106	301	TMP=2.8954e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2824)
3825	4	-1.3937	1029	-1030	1105	-1106	301	TMP=2.8954e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2825)
3826	4	-1.3937	1030	-1031	1105	-1106	301	TMP=2.8955e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2826)
3827	4	-1.3937	1031	-1032	1105	-1106	301	TMP=2.8957e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2827)
3828	4	-1.3937	1032	-1033	1105	-1106	301	TMP=2.8957e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2828)
3829	4	-1.3937	1033	-1034	1105	-1106	301	TMP=2.8957e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2829)
3830	4	-1.3937	1034	-1035	1105	-1106	301	TMP=2.8955e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2830)
3831	4	-1.3937	1035	-1036	1105	-1106	301	TMP=2.8954e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2831)
3832	4	-1.3937	1036	-1037	1105	-1106	301	TMP=2.8954e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2832)
3833	4	-1.3937	1037	-1038	1105	-1106	301	TMP=2.8952e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2833)
3834	4	-1.3937	1038	-1039	1105	-1106	301	TMP=2.8945e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2834)
3835	4	-1.3938	1039	-1040	1105	-1106	301	TMP=2.8944e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2835)
3836	4	-1.3937	1040	-1041	1105	-1106	301	TMP=2.8950e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2836)
3837	4	-1.3936	1041	-1042	1105	-1106	301	TMP=2.8974e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2837)
3838	4	-1.3934	1042	-1043	1105	-1106	301	TMP=2.9010e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2838)
3839	4	-1.3932	1043	-1044	1105	-1106	301	TMP=2.9047e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2839)
3840	4	-1.3930	1044	-1045	1105	-1106	301	TMP=2.9070e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2840)
3841	4	-1.3931	1045	-1046	1105	-1106	301	TMP=2.9056e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2841)
3842	4	-1.3936	1046	-1047	1105	-1106	301	TMP=2.8977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2842)
3843	4	-1.3956	1047	-1048	1105	-1106	301	TMP=2.8610e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2843)
3844	4	-1.4018	1048	-1049	1105	-1106	301	TMP=2.7398e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2844)
3845	4	-1.3931	1105	-1106	-302			TMP=2.9062e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2845)
3846	4	-1.3930	-1000	1106	-1107			TMP=2.9082e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2846)
3847	4	-1.3929	1000	-1001	1106	-1107	301	TMP=2.9084e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2847)
3848	4	-1.3929	1001	-1002	1106	-1107	301	TMP=2.9083e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2848)
3849	4	-1.3930	1002	-1003	1106	-1107	301	TMP=2.9079e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2849)
3850	4	-1.3930	1003	-1004	1106	-1107	301	TMP=2.9073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2850)
3851	4	-1.3931	1004	-1005	1106	-1107	301	TMP=2.9065e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2851)
3852	4	-1.3931	1005	-1006	1106	-1107	301	TMP=2.9054e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2852)
3853	4	-1.3932	1006	-1007	1106	-1107	301	TMP=2.9041e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2853)
3854	4	-1.3933	1007	-1008	1106	-1107	301	TMP=2.9026e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2854)
3855	4	-1.3934	1008	-1009	1106	-1107	301	TMP=2.9008e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2855)

3856	4	-1.3935	1009	-1010	1106	-1107	301	TMP=2.8986e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2856)
3857	4	-1.3936	1010	-1011	1106	-1107	301	TMP=2.8977e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2857)
3858	4	-1.3936	1011	-1012	1106	-1107	301	TMP=2.8975e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2858)
3859	4	-1.3936	1012	-1013	1106	-1107	301	TMP=2.8974e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2859)
3860	4	-1.3936	1013	-1014	1106	-1107	301	TMP=2.8971e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2860)
3861	4	-1.3936	1014	-1015	1106	-1107	301	TMP=2.8968e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2861)
3862	4	-1.3936	1015	-1016	1106	-1107	301	TMP=2.8965e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2862)
3863	4	-1.3937	1016	-1017	1106	-1107	301	TMP=2.8961e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2863)
3864	4	-1.3937	1017	-1018	1106	-1107	301	TMP=2.8958e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2864)
3865	4	-1.3937	1018	-1019	1106	-1107	301	TMP=2.8960e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2865)
3866	4	-1.3937	1019	-1020	1106	-1107	301	TMP=2.8962e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2866)
3867	4	-1.3936	1020	-1021	1106	-1107	301	TMP=2.8963e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2867)
3868	4	-1.3936	1021	-1022	1106	-1107	301	TMP=2.8965e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2868)
3869	4	-1.3936	1022	-1023	1106	-1107	301	TMP=2.8968e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2869)
3870	4	-1.3936	1023	-1024	1106	-1107	301	TMP=2.8969e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2870)
3871	4	-1.3936	1024	-1025	1106	-1107	301	TMP=2.8970e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2871)
3872	4	-1.3936	1025	-1026	1106	-1107	301	TMP=2.8970e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2872)
3873	4	-1.3936	1026	-1027	1106	-1107	301	TMP=2.8971e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2873)
3874	4	-1.3936	1027	-1028	1106	-1107	301	TMP=2.8973e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2874)
3875	4	-1.3936	1028	-1029	1106	-1107	301	TMP=2.8974e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2875)
3876	4	-1.3936	1029	-1030	1106	-1107	301	TMP=2.8973e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2876)
3877	4	-1.3936	1030	-1031	1106	-1107	301	TMP=2.8973e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2877)
3878	4	-1.3936	1031	-1032	1106	-1107	301	TMP=2.8972e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2878)
3879	4	-1.3936	1032	-1033	1106	-1107	301	TMP=2.8973e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2879)
3880	4	-1.3936	1033	-1034	1106	-1107	301	TMP=2.8974e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2880)
3881	4	-1.3936	1034	-1035	1106	-1107	301	TMP=2.8974e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2881)
3882	4	-1.3936	1035	-1036	1106	-1107	301	TMP=2.8973e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2882)
3883	4	-1.3936	1036	-1037	1106	-1107	301	TMP=2.8972e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2883)
3884	4	-1.3936	1037	-1038	1106	-1107	301	TMP=2.8969e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2884)
3885	4	-1.3936	1038	-1039	1106	-1107	301	TMP=2.8964e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2885)
3886	4	-1.3937	1039	-1040	1106	-1107	301	TMP=2.8961e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2886)
3887	4	-1.3936	1040	-1041	1106	-1107	301	TMP=2.8968e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2887)
3888	4	-1.3935	1041	-1042	1106	-1107	301	TMP=2.8994e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2888)
3889	4	-1.3933	1042	-1043	1106	-1107	301	TMP=2.9030e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2889)
3890	4	-1.3930	1043	-1044	1106	-1107	301	TMP=2.9069e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2890)
3891	4	-1.3929	1044	-1045	1106	-1107	301	TMP=2.9087e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2891)
3892	4	-1.3930	1045	-1046	1106	-1107	301	TMP=2.9076e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2892)
3893	4	-1.3935	1046	-1047	1106	-1107	301	TMP=2.8988e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2893)
3894	4	-1.3955	1047	-1048	1106	-1107	301	TMP=2.8631e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2894)
3895	4	-1.4017	1048	-1049	1106	-1107	301	TMP=2.7413e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2895)
3896	4	-1.3930	1106	-1107	-302			TMP=2.9081e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2896)
3897	4	-1.3927	-1000	1107	-1108			TMP=2.9127e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2897)
3898	4	-1.3926	1000	-1001	1107	-1108	301	TMP=2.9134e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2898)
3899	4	-1.3926	1001	-1002	1107	-1108	301	TMP=2.9136e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2899)
3900	4	-1.3926	1002	-1003	1107	-1108	301	TMP=2.9136e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2900)
3901	4	-1.3927	1003	-1004	1107	-1108	301	TMP=2.9133e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2901)
3902	4	-1.3927	1004	-1005	1107	-1108	301	TMP=2.9125e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2902)
3903	4	-1.3928	1005	-1006	1107	-1108	301	TMP=2.9115e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2903)
3904	4	-1.3928	1006	-1007	1107	-1108	301	TMP=2.9103e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2904)
3905	4	-1.3929	1007	-1008	1107	-1108	301	TMP=2.9089e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2905)
3906	4	-1.3930	1008	-1009	1107	-1108	301	TMP=2.9072e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2906)
3907	4	-1.3931	1009	-1010	1107	-1108	301	TMP=2.9053e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2907)
3908	4	-1.3932	1010	-1011	1107	-1108	301	TMP=2.9043e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2908)
3909	4	-1.3932	1011	-1012	1107	-1108	301	TMP=2.9034e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2909)
3910	4	-1.3933	1012	-1013	1107	-1108	301	TMP=2.9024e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2910)
3911	4	-1.3934	1013	-1014	1107	-1108	301	TMP=2.9012e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2911)
3912	4	-1.3934	1014	-1015	1107	-1108	301	TMP=2.9000e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2912)
3913	4	-1.3935	1015	-1016	1107	-1108	301	TMP=2.8990e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2913)
3914	4	-1.3935	1016	-1017	1107	-1108	301	TMP=2.8983e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2914)
3915	4	-1.3936	1017	-1018	1107	-1108	301	TMP=2.8976e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2915)

3916 4 -1.3936 1018 -1019 1107 -1108 301 TMP=2.8978e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2916)
3917 4 -1.3936 1019 -1020 1107 -1108 301 TMP=2.8980e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2917)
3918 4 -1.3935 1020 -1021 1107 -1108 301 TMP=2.8981e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2918)
3919 4 -1.3935 1021 -1022 1107 -1108 301 TMP=2.8983e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2919)
3920 4 -1.3935 1022 -1023 1107 -1108 301 TMP=2.8985e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2920)
3921 4 -1.3935 1023 -1024 1107 -1108 301 TMP=2.8986e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2921)
3922 4 -1.3935 1024 -1025 1107 -1108 301 TMP=2.8987e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2922)
3923 4 -1.3935 1025 -1026 1107 -1108 301 TMP=2.8988e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2923)
3924 4 -1.3935 1026 -1027 1107 -1108 301 TMP=2.8988e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2924)
3925 4 -1.3935 1027 -1028 1107 -1108 301 TMP=2.8987e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2925)
3926 4 -1.3935 1028 -1029 1107 -1108 301 TMP=2.8988e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2926)
3927 4 -1.3935 1029 -1030 1107 -1108 301 TMP=2.8989e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2927)
3928 4 -1.3935 1030 -1031 1107 -1108 301 TMP=2.8990e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2928)
3929 4 -1.3935 1031 -1032 1107 -1108 301 TMP=2.8990e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2929)
3930 4 -1.3935 1032 -1033 1107 -1108 301 TMP=2.8989e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2930)
3931 4 -1.3935 1033 -1034 1107 -1108 301 TMP=2.8989e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2931)
3932 4 -1.3935 1034 -1035 1107 -1108 301 TMP=2.8990e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2932)
3933 4 -1.3935 1035 -1036 1107 -1108 301 TMP=2.8990e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2933)
3934 4 -1.3935 1036 -1037 1107 -1108 301 TMP=2.8990e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2934)
3935 4 -1.3935 1037 -1038 1107 -1108 301 TMP=2.8984e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2935)
3936 4 -1.3935 1038 -1039 1107 -1108 301 TMP=2.8981e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2936)
3937 4 -1.3935 1039 -1040 1107 -1108 301 TMP=2.8981e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2937)
3938 4 -1.3935 1040 -1041 1107 -1108 301 TMP=2.8988e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2938)
3939 4 -1.3934 1041 -1042 1107 -1108 301 TMP=2.9011e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2939)
3940 4 -1.3932 1042 -1043 1107 -1108 301 TMP=2.9048e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2940)
3941 4 -1.3929 1043 -1044 1107 -1108 301 TMP=2.9083e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2941)
3942 4 -1.3928 1044 -1045 1107 -1108 301 TMP=2.9106e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2942)
3943 4 -1.3929 1045 -1046 1107 -1108 301 TMP=2.9093e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2943)
3944 4 -1.3934 1046 -1047 1107 -1108 301 TMP=2.9006e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2944)
3945 4 -1.3954 1047 -1048 1107 -1108 301 TMP=2.8654e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2945)
3946 4 -1.4017 1048 -1049 1107 -1108 301 TMP=2.7426e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2946)
3947 4 -1.3929 1107 -1108 -302 TMP=2.9098e-8 IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2947)
3948 4 -1.3925 -1000 1108 -1109 TMP=2.9160e-8 IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2948)
3949 4 -1.3925 1000 -1001 1108 -1109 301 TMP=2.9166e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2949)
3950 4 -1.3924 1001 -1002 1108 -1109 301 TMP=2.9169e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2950)
3951 4 -1.3924 1002 -1003 1108 -1109 301 TMP=2.9169e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2951)
3952 4 -1.3925 1003 -1004 1108 -1109 301 TMP=2.9167e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2952)
3953 4 -1.3925 1004 -1005 1108 -1109 301 TMP=2.9162e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2953)
3954 4 -1.3925 1005 -1006 1108 -1109 301 TMP=2.9156e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2954)
3955 4 -1.3926 1006 -1007 1108 -1109 301 TMP=2.9147e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2955)
3956 4 -1.3926 1007 -1008 1108 -1109 301 TMP=2.9136e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2956)
3957 4 -1.3927 1008 -1009 1108 -1109 301 TMP=2.9123e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2957)
3958 4 -1.3928 1009 -1010 1108 -1109 301 TMP=2.9108e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2958)
3959 4 -1.3929 1010 -1011 1108 -1109 301 TMP=2.9097e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2959)
3960 4 -1.3929 1011 -1012 1108 -1109 301 TMP=2.9089e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2960)
3961 4 -1.3930 1012 -1013 1108 -1109 301 TMP=2.9079e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2961)
3962 4 -1.3930 1013 -1014 1108 -1109 301 TMP=2.9068e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2962)
3963 4 -1.3931 1014 -1015 1108 -1109 301 TMP=2.9056e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2963)
3964 4 -1.3932 1015 -1016 1108 -1109 301 TMP=2.9042e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2964)
3965 4 -1.3933 1016 -1017 1108 -1109 301 TMP=2.9026e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2965)
3966 4 -1.3934 1017 -1018 1108 -1109 301 TMP=2.9006e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2966)
3967 4 -1.3934 1018 -1019 1108 -1109 301 TMP=2.9006e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2967)
3968 4 -1.3934 1019 -1020 1108 -1109 301 TMP=2.9005e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2968)
3969 4 -1.3934 1020 -1021 1108 -1109 301 TMP=2.9002e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2969)
3970 4 -1.3934 1021 -1022 1108 -1109 301 TMP=2.8999e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2970)
3971 4 -1.3935 1022 -1023 1108 -1109 301 TMP=2.8997e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2971)
3972 4 -1.3935 1023 -1024 1108 -1109 301 TMP=2.8996e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2972)
3973 4 -1.3934 1024 -1025 1108 -1109 301 TMP=2.8999e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2973)
3974 4 -1.3934 1025 -1026 1108 -1109 301 TMP=2.9002e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2974)
3975 4 -1.3934 1026 -1027 1108 -1109 301 TMP=2.9001e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 2975)

3976	4	-1.3934	1027	-1028	1108	-1109	301	TMP=2.9001e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2976)
3977	4	-1.3934	1028	-1029	1108	-1109	301	TMP=2.9003e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2977)
3978	4	-1.3934	1029	-1030	1108	-1109	301	TMP=2.9003e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2978)
3979	4	-1.3934	1030	-1031	1108	-1109	301	TMP=2.9003e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2979)
3980	4	-1.3934	1031	-1032	1108	-1109	301	TMP=2.9004e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2980)
3981	4	-1.3934	1032	-1033	1108	-1109	301	TMP=2.9005e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2981)
3982	4	-1.3934	1033	-1034	1108	-1109	301	TMP=2.9008e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2982)
3983	4	-1.3934	1034	-1035	1108	-1109	301	TMP=2.9009e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2983)
3984	4	-1.3934	1035	-1036	1108	-1109	301	TMP=2.9007e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2984)
3985	4	-1.3934	1036	-1037	1108	-1109	301	TMP=2.9004e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2985)
3986	4	-1.3934	1037	-1038	1108	-1109	301	TMP=2.9001e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2986)
3987	4	-1.3934	1038	-1039	1108	-1109	301	TMP=2.9000e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2987)
3988	4	-1.3934	1039	-1040	1108	-1109	301	TMP=2.8998e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2988)
3989	4	-1.3934	1040	-1041	1108	-1109	301	TMP=2.9005e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2989)
3990	4	-1.3933	1041	-1042	1108	-1109	301	TMP=2.9026e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2990)
3991	4	-1.3931	1042	-1043	1108	-1109	301	TMP=2.9062e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2991)
3992	4	-1.3928	1043	-1044	1108	-1109	301	TMP=2.9102e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2992)
3993	4	-1.3927	1044	-1045	1108	-1109	301	TMP=2.9122e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2993)
3994	4	-1.3928	1045	-1046	1108	-1109	301	TMP=2.9106e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2994)
3995	4	-1.3933	1046	-1047	1108	-1109	301	TMP=2.9023e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2995)
3996	4	-1.3953	1047	-1048	1108	-1109	301	TMP=2.8677e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2996)
3997	4	-1.4016	1048	-1049	1108	-1109	301	TMP=2.7444e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 2997)
3998	4	-1.3928	1108	-1109	-302			TMP=2.9115e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 2998)
3999	4	-1.3924	-1000	1109	-1110			TMP=2.9182e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 2999)
4000	4	-1.3923	1000	-1001	1109	-1110	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3000)
4001	4	-1.3923	1001	-1002	1109	-1110	301	TMP=2.9189e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3001)
4002	4	-1.3923	1002	-1003	1109	-1110	301	TMP=2.9189e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3002)
4003	4	-1.3923	1003	-1004	1109	-1110	301	TMP=2.9189e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3003)
4004	4	-1.3923	1004	-1005	1109	-1110	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3004)
4005	4	-1.3924	1005	-1006	1109	-1110	301	TMP=2.9184e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3005)
4006	4	-1.3924	1006	-1007	1109	-1110	301	TMP=2.9179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3006)
4007	4	-1.3924	1007	-1008	1109	-1110	301	TMP=2.9172e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3007)
4008	4	-1.3925	1008	-1009	1109	-1110	301	TMP=2.9162e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3008)
4009	4	-1.3926	1009	-1010	1109	-1110	301	TMP=2.9150e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3009)
4010	4	-1.3926	1010	-1011	1109	-1110	301	TMP=2.9140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3010)
4011	4	-1.3927	1011	-1012	1109	-1110	301	TMP=2.9132e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3011)
4012	4	-1.3927	1012	-1013	1109	-1110	301	TMP=2.9122e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3012)
4013	4	-1.3928	1013	-1014	1109	-1110	301	TMP=2.9112e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3013)
4014	4	-1.3929	1014	-1015	1109	-1110	301	TMP=2.9099e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3014)
4015	4	-1.3929	1015	-1016	1109	-1110	301	TMP=2.9083e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3015)
4016	4	-1.3931	1016	-1017	1109	-1110	301	TMP=2.9064e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3016)
4017	4	-1.3932	1017	-1018	1109	-1110	301	TMP=2.9042e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3017)
4018	4	-1.3932	1018	-1019	1109	-1110	301	TMP=2.9035e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3018)
4019	4	-1.3933	1019	-1020	1109	-1110	301	TMP=2.9028e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3019)
4020	4	-1.3933	1020	-1021	1109	-1110	301	TMP=2.9024e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3020)
4021	4	-1.3933	1021	-1022	1109	-1110	301	TMP=2.9021e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3021)
4022	4	-1.3933	1022	-1023	1109	-1110	301	TMP=2.9014e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3022)
4023	4	-1.3934	1023	-1024	1109	-1110	301	TMP=2.9011e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3023)
4024	4	-1.3934	1024	-1025	1109	-1110	301	TMP=2.9011e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3024)
4025	4	-1.3934	1025	-1026	1109	-1110	301	TMP=2.9011e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3025)
4026	4	-1.3934	1026	-1027	1109	-1110	301	TMP=2.9012e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3026)
4027	4	-1.3934	1027	-1028	1109	-1110	301	TMP=2.9013e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3027)
4028	4	-1.3933	1028	-1029	1109	-1110	301	TMP=2.9014e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3028)
4029	4	-1.3933	1029	-1030	1109	-1110	301	TMP=2.9016e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3029)
4030	4	-1.3933	1030	-1031	1109	-1110	301	TMP=2.9017e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3030)
4031	4	-1.3933	1031	-1032	1109	-1110	301	TMP=2.9019e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3031)
4032	4	-1.3933	1032	-1033	1109	-1110	301	TMP=2.9020e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3032)
4033	4	-1.3933	1033	-1034	1109	-1110	301	TMP=2.9021e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3033)
4034	4	-1.3933	1034	-1035	1109	-1110	301	TMP=2.9021e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3034)
4035	4	-1.3933	1035	-1036	1109	-1110	301	TMP=2.9022e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3035)

4036	4	-1.3933	1036	-1037	1109	-1110	301	TMP=2.9022e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3036)
4037	4	-1.3933	1037	-1038	1109	-1110	301	TMP=2.9021e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3037)
4038	4	-1.3933	1038	-1039	1109	-1110	301	TMP=2.9017e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3038)
4039	4	-1.3933	1039	-1040	1109	-1110	301	TMP=2.9016e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3039)
4040	4	-1.3933	1040	-1041	1109	-1110	301	TMP=2.9021e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3040)
4041	4	-1.3932	1041	-1042	1109	-1110	301	TMP=2.9039e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3041)
4042	4	-1.3930	1042	-1043	1109	-1110	301	TMP=2.9077e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3042)
4043	4	-1.3927	1043	-1044	1109	-1110	301	TMP=2.9117e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3043)
4044	4	-1.3926	1044	-1045	1109	-1110	301	TMP=2.9135e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3044)
4045	4	-1.3927	1045	-1046	1109	-1110	301	TMP=2.9119e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3045)
4046	4	-1.3932	1046	-1047	1109	-1110	301	TMP=2.9041e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3046)
4047	4	-1.3951	1047	-1048	1109	-1110	301	TMP=2.8702e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3047)
4048	4	-1.4015	1048	-1049	1109	-1110	301	TMP=2.7466e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3048)
4049	4	-1.3927	1109	-1110	-302			TMP=2.9130e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3049)
4050	4	-1.3923	-1000	1110	-1111			TMP=2.9197e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3050)
4051	4	-1.3922	1000	-1001	1110	-1111	301	TMP=2.9202e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3051)
4052	4	-1.3922	1001	-1002	1110	-1111	301	TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3052)
4053	4	-1.3922	1002	-1003	1110	-1111	301	TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3053)
4054	4	-1.3922	1003	-1004	1110	-1111	301	TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3054)
4055	4	-1.3922	1004	-1005	1110	-1111	301	TMP=2.9202e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3055)
4056	4	-1.3923	1005	-1006	1110	-1111	301	TMP=2.9200e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3056)
4057	4	-1.3923	1006	-1007	1110	-1111	301	TMP=2.9196e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3057)
4058	4	-1.3923	1007	-1008	1110	-1111	301	TMP=2.9191e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3058)
4059	4	-1.3923	1008	-1009	1110	-1111	301	TMP=2.9185e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3059)
4060	4	-1.3924	1009	-1010	1110	-1111	301	TMP=2.9177e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3060)
4061	4	-1.3924	1010	-1011	1110	-1111	301	TMP=2.9175e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3061)
4062	4	-1.3924	1011	-1012	1110	-1111	301	TMP=2.9171e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3062)
4063	4	-1.3925	1012	-1013	1110	-1111	301	TMP=2.9164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3063)
4064	4	-1.3925	1013	-1014	1110	-1111	301	TMP=2.9154e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3064)
4065	4	-1.3926	1014	-1015	1110	-1111	301	TMP=2.9140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3065)
4066	4	-1.3927	1015	-1016	1110	-1111	301	TMP=2.9124e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3066)
4067	4	-1.3928	1016	-1017	1110	-1111	301	TMP=2.9105e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3067)
4068	4	-1.3930	1017	-1018	1110	-1111	301	TMP=2.9082e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3068)
4069	4	-1.3930	1018	-1019	1110	-1111	301	TMP=2.9066e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3069)
4070	4	-1.3931	1019	-1020	1110	-1111	301	TMP=2.9051e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3070)
4071	4	-1.3932	1020	-1021	1110	-1111	301	TMP=2.9039e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3071)
4072	4	-1.3933	1021	-1022	1110	-1111	301	TMP=2.9031e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3072)
4073	4	-1.3933	1022	-1023	1110	-1111	301	TMP=2.9031e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3073)
4074	4	-1.3933	1023	-1024	1110	-1111	301	TMP=2.9031e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3074)
4075	4	-1.3933	1024	-1025	1110	-1111	301	TMP=2.9027e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3075)
4076	4	-1.3933	1025	-1026	1110	-1111	301	TMP=2.9025e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3076)
4077	4	-1.3933	1026	-1027	1110	-1111	301	TMP=2.9025e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3077)
4078	4	-1.3933	1027	-1028	1110	-1111	301	TMP=2.9026e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3078)
4079	4	-1.3933	1028	-1029	1110	-1111	301	TMP=2.9028e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3079)
4080	4	-1.3933	1029	-1030	1110	-1111	301	TMP=2.9030e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3080)
4081	4	-1.3932	1030	-1031	1110	-1111	301	TMP=2.9032e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3081)
4082	4	-1.3932	1031	-1032	1110	-1111	301	TMP=2.9033e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3082)
4083	4	-1.3932	1032	-1033	1110	-1111	301	TMP=2.9035e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3083)
4084	4	-1.3932	1033	-1034	1110	-1111	301	TMP=2.9037e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3084)
4085	4	-1.3932	1034	-1035	1110	-1111	301	TMP=2.9037e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3085)
4086	4	-1.3932	1035	-1036	1110	-1111	301	TMP=2.9036e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3086)
4087	4	-1.3932	1036	-1037	1110	-1111	301	TMP=2.9035e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3087)
4088	4	-1.3932	1037	-1038	1110	-1111	301	TMP=2.9034e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3088)
4089	4	-1.3932	1038	-1039	1110	-1111	301	TMP=2.9033e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3089)
4090	4	-1.3933	1039	-1040	1110	-1111	301	TMP=2.9030e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3090)
4091	4	-1.3932	1040	-1041	1110	-1111	301	TMP=2.9034e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3091)
4092	4	-1.3931	1041	-1042	1110	-1111	301	TMP=2.9052e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3092)
4093	4	-1.3929	1042	-1043	1110	-1111	301	TMP=2.9090e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3093)
4094	4	-1.3927	1043	-1044	1110	-1111	301	TMP=2.9131e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3094)
4095	4	-1.3926	1044	-1045	1110	-1111	301	TMP=2.9150e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3095)

4096	4	-1.3927	1045	-1046	1110	-1111	301	TMP=2.9132e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3096)
4097	4	-1.3931	1046	-1047	1110	-1111	301	TMP=2.9057e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3097)
4098	4	-1.3950	1047	-1048	1110	-1111	301	TMP=2.8725e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3098)
4099	4	-1.4014	1048	-1049	1110	-1111	301	TMP=2.7481e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3099)
4100	4	-1.3926	1110	-1111	-302			TMP=2.9145e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3100)
4101	4	-1.3922	-1000	1111	-1112			TMP=2.9203e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3101)
4102	4	-1.3922	1000	-1001	1111	-1112	301	TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3102)
4103	4	-1.3922	1001	-1002	1111	-1112	301	TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3103)
4104	4	-1.3922	1002	-1003	1111	-1112	301	TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3104)
4105	4	-1.3922	1003	-1004	1111	-1112	301	TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3105)
4106	4	-1.3922	1004	-1005	1111	-1112	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3106)
4107	4	-1.3922	1005	-1006	1111	-1112	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3107)
4108	4	-1.3922	1006	-1007	1111	-1112	301	TMP=2.9205e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3108)
4109	4	-1.3922	1007	-1008	1111	-1112	301	TMP=2.9202e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3109)
4110	4	-1.3923	1008	-1009	1111	-1112	301	TMP=2.9198e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3110)
4111	4	-1.3923	1009	-1010	1111	-1112	301	TMP=2.9193e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3111)
4112	4	-1.3923	1010	-1011	1111	-1112	301	TMP=2.9193e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3112)
4113	4	-1.3923	1011	-1012	1111	-1112	301	TMP=2.9193e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3113)
4114	4	-1.3923	1012	-1013	1111	-1112	301	TMP=2.9190e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3114)
4115	4	-1.3923	1013	-1014	1111	-1112	301	TMP=2.9185e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3115)
4116	4	-1.3924	1014	-1015	1111	-1112	301	TMP=2.9177e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3116)
4117	4	-1.3925	1015	-1016	1111	-1112	301	TMP=2.9165e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3117)
4118	4	-1.3926	1016	-1017	1111	-1112	301	TMP=2.9147e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3118)
4119	4	-1.3927	1017	-1018	1111	-1112	301	TMP=2.9125e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3119)
4120	4	-1.3928	1018	-1019	1111	-1112	301	TMP=2.9100e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3120)
4121	4	-1.3930	1019	-1020	1111	-1112	301	TMP=2.9080e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3121)
4122	4	-1.3931	1020	-1021	1111	-1112	301	TMP=2.9065e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3122)
4123	4	-1.3931	1021	-1022	1111	-1112	301	TMP=2.9054e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3123)
4124	4	-1.3931	1022	-1023	1111	-1112	301	TMP=2.9049e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3124)
4125	4	-1.3932	1023	-1024	1111	-1112	301	TMP=2.9046e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3125)
4126	4	-1.3932	1024	-1025	1111	-1112	301	TMP=2.9038e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3126)
4127	4	-1.3932	1025	-1026	1111	-1112	301	TMP=2.9036e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3127)
4128	4	-1.3932	1026	-1027	1111	-1112	301	TMP=2.9036e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3128)
4129	4	-1.3932	1027	-1028	1111	-1112	301	TMP=2.9038e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3129)
4130	4	-1.3932	1028	-1029	1111	-1112	301	TMP=2.9041e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3130)
4131	4	-1.3932	1029	-1030	1111	-1112	301	TMP=2.9042e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3131)
4132	4	-1.3932	1030	-1031	1111	-1112	301	TMP=2.9044e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3132)
4133	4	-1.3932	1031	-1032	1111	-1112	301	TMP=2.9045e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3133)
4134	4	-1.3932	1032	-1033	1111	-1112	301	TMP=2.9047e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3134)
4135	4	-1.3932	1033	-1034	1111	-1112	301	TMP=2.9047e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3135)
4136	4	-1.3932	1034	-1035	1111	-1112	301	TMP=2.9048e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3136)
4137	4	-1.3931	1035	-1036	1111	-1112	301	TMP=2.9049e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3137)
4138	4	-1.3931	1036	-1037	1111	-1112	301	TMP=2.9050e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3138)
4139	4	-1.3931	1037	-1038	1111	-1112	301	TMP=2.9051e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3139)
4140	4	-1.3932	1038	-1039	1111	-1112	301	TMP=2.9047e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3140)
4141	4	-1.3932	1039	-1040	1111	-1112	301	TMP=2.9044e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3141)
4142	4	-1.3932	1040	-1041	1111	-1112	301	TMP=2.9048e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3142)
4143	4	-1.3931	1041	-1042	1111	-1112	301	TMP=2.9064e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3143)
4144	4	-1.3928	1042	-1043	1111	-1112	301	TMP=2.9100e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3144)
4145	4	-1.3926	1043	-1044	1111	-1112	301	TMP=2.9142e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3145)
4146	4	-1.3925	1044	-1045	1111	-1112	301	TMP=2.9161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3146)
4147	4	-1.3926	1045	-1046	1111	-1112	301	TMP=2.9146e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3147)
4148	4	-1.3930	1046	-1047	1111	-1112	301	TMP=2.9074e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3148)
4149	4	-1.3948	1047	-1048	1111	-1112	301	TMP=2.8752e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3149)
4150	4	-1.4013	1048	-1049	1111	-1112	301	TMP=2.7499e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3150)
4151	4	-1.3925	1111	-1112	-302			TMP=2.9155e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3151)
4152	4	-1.3922	-1000	1112	-1113			TMP=2.9202e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3152)
4153	4	-1.3922	1000	-1001	1112	-1113	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3153)
4154	4	-1.3922	1001	-1002	1112	-1113	301	TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3154)
4155	4	-1.3922	1002	-1003	1112	-1113	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3155)

4156	4	-1.3922	1003	-1004	1112	-1113	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3156)
4157	4	-1.3922	1004	-1005	1112	-1113	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3157)
4158	4	-1.3922	1005	-1006	1112	-1113	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3158)
4159	4	-1.3922	1006	-1007	1112	-1113	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3159)
4160	4	-1.3922	1007	-1008	1112	-1113	301	TMP=2.9212e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3160)
4161	4	-1.3922	1008	-1009	1112	-1113	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3161)
4162	4	-1.3922	1009	-1010	1112	-1113	301	TMP=2.9207e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3162)
4163	4	-1.3922	1010	-1011	1112	-1113	301	TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3163)
4164	4	-1.3922	1011	-1012	1112	-1113	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3164)
4165	4	-1.3922	1012	-1013	1112	-1113	301	TMP=2.9205e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3165)
4166	4	-1.3923	1013	-1014	1112	-1113	301	TMP=2.9199e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3166)
4167	4	-1.3923	1014	-1015	1112	-1113	301	TMP=2.9190e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3167)
4168	4	-1.3924	1015	-1016	1112	-1113	301	TMP=2.9179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3168)
4169	4	-1.3924	1016	-1017	1112	-1113	301	TMP=2.9169e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3169)
4170	4	-1.3925	1017	-1018	1112	-1113	301	TMP=2.9156e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3170)
4171	4	-1.3926	1018	-1019	1112	-1113	301	TMP=2.9139e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3171)
4172	4	-1.3927	1019	-1020	1112	-1113	301	TMP=2.9121e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3172)
4173	4	-1.3929	1020	-1021	1112	-1113	301	TMP=2.9098e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3173)
4174	4	-1.3930	1021	-1022	1112	-1113	301	TMP=2.9080e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3174)
4175	4	-1.3930	1022	-1023	1112	-1113	301	TMP=2.9067e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3175)
4176	4	-1.3931	1023	-1024	1112	-1113	301	TMP=2.9058e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3176)
4177	4	-1.3931	1024	-1025	1112	-1113	301	TMP=2.9054e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3177)
4178	4	-1.3931	1025	-1026	1112	-1113	301	TMP=2.9052e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3178)
4179	4	-1.3931	1026	-1027	1112	-1113	301	TMP=2.9053e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3179)
4180	4	-1.3931	1027	-1028	1112	-1113	301	TMP=2.9050e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3180)
4181	4	-1.3931	1028	-1029	1112	-1113	301	TMP=2.9052e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3181)
4182	4	-1.3931	1029	-1030	1112	-1113	301	TMP=2.9055e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3182)
4183	4	-1.3931	1030	-1031	1112	-1113	301	TMP=2.9056e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3183)
4184	4	-1.3931	1031	-1032	1112	-1113	301	TMP=2.9058e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3184)
4185	4	-1.3931	1032	-1033	1112	-1113	301	TMP=2.9059e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3185)
4186	4	-1.3931	1033	-1034	1112	-1113	301	TMP=2.9062e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3186)
4187	4	-1.3931	1034	-1035	1112	-1113	301	TMP=2.9063e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3187)
4188	4	-1.3931	1035	-1036	1112	-1113	301	TMP=2.9064e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3188)
4189	4	-1.3931	1036	-1037	1112	-1113	301	TMP=2.9063e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3189)
4190	4	-1.3931	1037	-1038	1112	-1113	301	TMP=2.9062e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3190)
4191	4	-1.3931	1038	-1039	1112	-1113	301	TMP=2.9061e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3191)
4192	4	-1.3931	1039	-1040	1112	-1113	301	TMP=2.9059e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3192)
4193	4	-1.3931	1040	-1041	1112	-1113	301	TMP=2.9063e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3193)
4194	4	-1.3930	1041	-1042	1112	-1113	301	TMP=2.9077e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3194)
4195	4	-1.3928	1042	-1043	1112	-1113	301	TMP=2.9109e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3195)
4196	4	-1.3926	1043	-1044	1112	-1113	301	TMP=2.9151e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3196)
4197	4	-1.3924	1044	-1045	1112	-1113	301	TMP=2.9175e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3197)
4198	4	-1.3925	1045	-1046	1112	-1113	301	TMP=2.9158e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3198)
4199	4	-1.3929	1046	-1047	1112	-1113	301	TMP=2.9090e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3199)
4200	4	-1.3947	1047	-1048	1112	-1113	301	TMP=2.8775e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3200)
4201	4	-1.4013	1048	-1049	1112	-1113	301	TMP=2.7514e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3201)
4202	4	-1.3925	1112	-1113	-302			TMP=2.9167e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3202)
4203	4	-1.3922	-1000	1113	-1114			TMP=2.9205e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3203)
4204	4	-1.3922	1000	-1001	1113	-1114	301	TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3204)
4205	4	-1.3922	1001	-1002	1113	-1114	301	TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3205)
4206	4	-1.3922	1002	-1003	1113	-1114	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3206)
4207	4	-1.3922	1003	-1004	1113	-1114	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3207)
4208	4	-1.3922	1004	-1005	1113	-1114	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3208)
4209	4	-1.3921	1005	-1006	1113	-1114	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3209)
4210	4	-1.3921	1006	-1007	1113	-1114	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3210)
4211	4	-1.3921	1007	-1008	1113	-1114	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3211)
4212	4	-1.3921	1008	-1009	1113	-1114	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3212)
4213	4	-1.3921	1009	-1010	1113	-1114	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3213)
4214	4	-1.3921	1010	-1011	1113	-1114	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3214)
4215	4	-1.3921	1011	-1012	1113	-1114	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3215)

4216	4	-1.3921	1012	-1013	1113	-1114	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3216)
4217	4	-1.3922	1013	-1014	1113	-1114	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3217)
4218	4	-1.3922	1014	-1015	1113	-1114	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3218)
4219	4	-1.3922	1015	-1016	1113	-1114	301	TMP=2.9202e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3219)
4220	4	-1.3923	1016	-1017	1113	-1114	301	TMP=2.9191e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3220)
4221	4	-1.3924	1017	-1018	1113	-1114	301	TMP=2.9178e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3221)
4222	4	-1.3925	1018	-1019	1113	-1114	301	TMP=2.9160e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3222)
4223	4	-1.3926	1019	-1020	1113	-1114	301	TMP=2.9143e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3223)
4224	4	-1.3927	1020	-1021	1113	-1114	301	TMP=2.9127e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3224)
4225	4	-1.3928	1021	-1022	1113	-1114	301	TMP=2.9111e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3225)
4226	4	-1.3929	1022	-1023	1113	-1114	301	TMP=2.9093e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3226)
4227	4	-1.3930	1023	-1024	1113	-1114	301	TMP=2.9079e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3227)
4228	4	-1.3930	1024	-1025	1113	-1114	301	TMP=2.9070e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3228)
4229	4	-1.3931	1025	-1026	1113	-1114	301	TMP=2.9064e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3229)
4230	4	-1.3931	1026	-1027	1113	-1114	301	TMP=2.9062e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3230)
4231	4	-1.3931	1027	-1028	1113	-1114	301	TMP=2.9063e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3231)
4232	4	-1.3931	1028	-1029	1113	-1114	301	TMP=2.9065e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3232)
4233	4	-1.3930	1029	-1030	1113	-1114	301	TMP=2.9066e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3233)
4234	4	-1.3930	1030	-1031	1113	-1114	301	TMP=2.9068e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3234)
4235	4	-1.3930	1031	-1032	1113	-1114	301	TMP=2.9068e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3235)
4236	4	-1.3930	1032	-1033	1113	-1114	301	TMP=2.9069e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3236)
4237	4	-1.3930	1033	-1034	1113	-1114	301	TMP=2.9071e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3237)
4238	4	-1.3930	1034	-1035	1113	-1114	301	TMP=2.9072e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3238)
4239	4	-1.3930	1035	-1036	1113	-1114	301	TMP=2.9074e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3239)
4240	4	-1.3930	1036	-1037	1113	-1114	301	TMP=2.9076e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3240)
4241	4	-1.3930	1037	-1038	1113	-1114	301	TMP=2.9076e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3241)
4242	4	-1.3930	1038	-1039	1113	-1114	301	TMP=2.9075e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3242)
4243	4	-1.3930	1039	-1040	1113	-1114	301	TMP=2.9073e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3243)
4244	4	-1.3930	1040	-1041	1113	-1114	301	TMP=2.9076e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3244)
4245	4	-1.3929	1041	-1042	1113	-1114	301	TMP=2.9086e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3245)
4246	4	-1.3928	1042	-1043	1113	-1114	301	TMP=2.9116e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3246)
4247	4	-1.3925	1043	-1044	1113	-1114	301	TMP=2.9161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3247)
4248	4	-1.3923	1044	-1045	1113	-1114	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3248)
4249	4	-1.3924	1045	-1046	1113	-1114	301	TMP=2.9169e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3249)
4250	4	-1.3928	1046	-1047	1113	-1114	301	TMP=2.9105e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3250)
4251	4	-1.3946	1047	-1048	1113	-1114	301	TMP=2.8790e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3251)
4252	4	-1.4012	1048	-1049	1113	-1114	301	TMP=2.7530e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3252)
4253	4	-1.3924	1113	-1114	-302			TMP=2.9180e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3253)
4254	4	-1.3922	-1000	1114	-1115			TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3254)
4255	4	-1.3922	1000	-1001	1114	-1115	301	TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3255)
4256	4	-1.3922	1001	-1002	1114	-1115	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3256)
4257	4	-1.3922	1002	-1003	1114	-1115	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3257)
4258	4	-1.3922	1003	-1004	1114	-1115	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3258)
4259	4	-1.3921	1004	-1005	1114	-1115	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3259)
4260	4	-1.3921	1005	-1006	1114	-1115	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3260)
4261	4	-1.3921	1006	-1007	1114	-1115	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3261)
4262	4	-1.3921	1007	-1008	1114	-1115	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3262)
4263	4	-1.3921	1008	-1009	1114	-1115	301	TMP=2.9227e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3263)
4264	4	-1.3921	1009	-1010	1114	-1115	301	TMP=2.9231e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3264)
4265	4	-1.3920	1010	-1011	1114	-1115	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3265)
4266	4	-1.3920	1011	-1012	1114	-1115	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3266)
4267	4	-1.3920	1012	-1013	1114	-1115	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3267)
4268	4	-1.3921	1013	-1014	1114	-1115	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3268)
4269	4	-1.3921	1014	-1015	1114	-1115	301	TMP=2.9227e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3269)
4270	4	-1.3921	1015	-1016	1114	-1115	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3270)
4271	4	-1.3922	1016	-1017	1114	-1115	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3271)
4272	4	-1.3923	1017	-1018	1114	-1115	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3272)
4273	4	-1.3924	1018	-1019	1114	-1115	301	TMP=2.9175e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3273)
4274	4	-1.3925	1019	-1020	1114	-1115	301	TMP=2.9157e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3274)
4275	4	-1.3926	1020	-1021	1114	-1115	301	TMP=2.9140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3275)

4276	4	-1.3927	1021	-1022	1114	-1115	301	TMP=2.9126e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3276)
4277	4	-1.3927	1022	-1023	1114	-1115	301	TMP=2.9118e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3277)
4278	4	-1.3928	1023	-1024	1114	-1115	301	TMP=2.9109e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3278)
4279	4	-1.3929	1024	-1025	1114	-1115	301	TMP=2.9090e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3279)
4280	4	-1.3930	1025	-1026	1114	-1115	301	TMP=2.9079e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3280)
4281	4	-1.3930	1026	-1027	1114	-1115	301	TMP=2.9075e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3281)
4282	4	-1.3930	1027	-1028	1114	-1115	301	TMP=2.9075e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3282)
4283	4	-1.3930	1028	-1029	1114	-1115	301	TMP=2.9074e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3283)
4284	4	-1.3930	1029	-1030	1114	-1115	301	TMP=2.9074e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3284)
4285	4	-1.3930	1030	-1031	1114	-1115	301	TMP=2.9076e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3285)
4286	4	-1.3930	1031	-1032	1114	-1115	301	TMP=2.9078e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3286)
4287	4	-1.3930	1032	-1033	1114	-1115	301	TMP=2.9081e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3287)
4288	4	-1.3930	1033	-1034	1114	-1115	301	TMP=2.9082e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3288)
4289	4	-1.3929	1034	-1035	1114	-1115	301	TMP=2.9084e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3289)
4290	4	-1.3929	1035	-1036	1114	-1115	301	TMP=2.9086e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3290)
4291	4	-1.3929	1036	-1037	1114	-1115	301	TMP=2.9087e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3291)
4292	4	-1.3929	1037	-1038	1114	-1115	301	TMP=2.9087e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3292)
4293	4	-1.3929	1038	-1039	1114	-1115	301	TMP=2.9088e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3293)
4294	4	-1.3929	1039	-1040	1114	-1115	301	TMP=2.9087e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3294)
4295	4	-1.3929	1040	-1041	1114	-1115	301	TMP=2.9087e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3295)
4296	4	-1.3929	1041	-1042	1114	-1115	301	TMP=2.9096e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3296)
4297	4	-1.3927	1042	-1043	1114	-1115	301	TMP=2.9124e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3297)
4298	4	-1.3924	1043	-1044	1114	-1115	301	TMP=2.9172e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3298)
4299	4	-1.3923	1044	-1045	1114	-1115	301	TMP=2.9195e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3299)
4300	4	-1.3924	1045	-1046	1114	-1115	301	TMP=2.9180e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3300)
4301	4	-1.3927	1046	-1047	1114	-1115	301	TMP=2.9120e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3301)
4302	4	-1.3945	1047	-1048	1114	-1115	301	TMP=2.8807e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3302)
4303	4	-1.4011	1048	-1049	1114	-1115	301	TMP=2.7542e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3303)
4304	4	-1.3923	1114	-1115	-302			TMP=2.9188e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3304)
4305	4	-1.3922	-1000	1115	-1116			TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3305)
4306	4	-1.3922	1000	-1001	1115	-1116	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3306)
4307	4	-1.3922	1001	-1002	1115	-1116	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3307)
4308	4	-1.3922	1002	-1003	1115	-1116	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3308)
4309	4	-1.3921	1003	-1004	1115	-1116	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3309)
4310	4	-1.3921	1004	-1005	1115	-1116	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3310)
4311	4	-1.3921	1005	-1006	1115	-1116	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3311)
4312	4	-1.3921	1006	-1007	1115	-1116	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3312)
4313	4	-1.3921	1007	-1008	1115	-1116	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3313)
4314	4	-1.3921	1008	-1009	1115	-1116	301	TMP=2.9233e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3314)
4315	4	-1.3920	1009	-1010	1115	-1116	301	TMP=2.9238e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3315)
4316	4	-1.3920	1010	-1011	1115	-1116	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3316)
4317	4	-1.3920	1011	-1012	1115	-1116	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3317)
4318	4	-1.3920	1012	-1013	1115	-1116	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3318)
4319	4	-1.3920	1013	-1014	1115	-1116	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3319)
4320	4	-1.3920	1014	-1015	1115	-1116	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3320)
4321	4	-1.3921	1015	-1016	1115	-1116	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3321)
4322	4	-1.3922	1016	-1017	1115	-1116	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3322)
4323	4	-1.3922	1017	-1018	1115	-1116	301	TMP=2.9203e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3323)
4324	4	-1.3924	1018	-1019	1115	-1116	301	TMP=2.9183e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3324)
4325	4	-1.3925	1019	-1020	1115	-1116	301	TMP=2.9167e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3325)
4326	4	-1.3925	1020	-1021	1115	-1116	301	TMP=2.9153e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3326)
4327	4	-1.3926	1021	-1022	1115	-1116	301	TMP=2.9142e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3327)
4328	4	-1.3927	1022	-1023	1115	-1116	301	TMP=2.9132e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3328)
4329	4	-1.3927	1023	-1024	1115	-1116	301	TMP=2.9125e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3329)
4330	4	-1.3928	1024	-1025	1115	-1116	301	TMP=2.9112e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3330)
4331	4	-1.3929	1025	-1026	1115	-1116	301	TMP=2.9092e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3331)
4332	4	-1.3929	1026	-1027	1115	-1116	301	TMP=2.9087e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3332)
4333	4	-1.3929	1027	-1028	1115	-1116	301	TMP=2.9084e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3333)
4334	4	-1.3929	1028	-1029	1115	-1116	301	TMP=2.9083e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3334)
4335	4	-1.3929	1029	-1030	1115	-1116	301	TMP=2.9085e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3335)

4336	4	-1.3929	1030	-1031	1115	-1116	301	TMP=2.9088e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3336)
4337	4	-1.3929	1031	-1032	1115	-1116	301	TMP=2.9090e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3337)
4338	4	-1.3929	1032	-1033	1115	-1116	301	TMP=2.9091e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3338)
4339	4	-1.3929	1033	-1034	1115	-1116	301	TMP=2.9092e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3339)
4340	4	-1.3929	1034	-1035	1115	-1116	301	TMP=2.9093e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3340)
4341	4	-1.3929	1035	-1036	1115	-1116	301	TMP=2.9095e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3341)
4342	4	-1.3929	1036	-1037	1115	-1116	301	TMP=2.9097e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3342)
4343	4	-1.3929	1037	-1038	1115	-1116	301	TMP=2.9099e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3343)
4344	4	-1.3929	1038	-1039	1115	-1116	301	TMP=2.9099e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3344)
4345	4	-1.3929	1039	-1040	1115	-1116	301	TMP=2.9099e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3345)
4346	4	-1.3929	1040	-1041	1115	-1116	301	TMP=2.9098e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3346)
4347	4	-1.3928	1041	-1042	1115	-1116	301	TMP=2.9107e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3347)
4348	4	-1.3927	1042	-1043	1115	-1116	301	TMP=2.9132e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3348)
4349	4	-1.3924	1043	-1044	1115	-1116	301	TMP=2.9178e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3349)
4350	4	-1.3922	1044	-1045	1115	-1116	301	TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3350)
4351	4	-1.3923	1045	-1046	1115	-1116	301	TMP=2.9190e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3351)
4352	4	-1.3926	1046	-1047	1115	-1116	301	TMP=2.9135e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3352)
4353	4	-1.3945	1047	-1048	1115	-1116	301	TMP=2.8816e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3353)
4354	4	-1.4011	1048	-1049	1115	-1116	301	TMP=2.7557e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3354)
4355	4	-1.3923	1115	-1116	-302			TMP=2.9196e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3355)
4356	4	-1.3922	-1000	1116	-1117			TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3356)
4357	4	-1.3922	1000	-1001	1116	-1117	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3357)
4358	4	-1.3922	1001	-1002	1116	-1117	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3358)
4359	4	-1.3922	1002	-1003	1116	-1117	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3359)
4360	4	-1.3921	1003	-1004	1116	-1117	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3360)
4361	4	-1.3921	1004	-1005	1116	-1117	301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3361)
4362	4	-1.3921	1005	-1006	1116	-1117	301	TMP=2.9225e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3362)
4363	4	-1.3921	1006	-1007	1116	-1117	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3363)
4364	4	-1.3921	1007	-1008	1116	-1117	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3364)
4365	4	-1.3920	1008	-1009	1116	-1117	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3365)
4366	4	-1.3920	1009	-1010	1116	-1117	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3366)
4367	4	-1.3920	1010	-1011	1116	-1117	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3367)
4368	4	-1.3920	1011	-1012	1116	-1117	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3368)
4369	4	-1.3920	1012	-1013	1116	-1117	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3369)
4370	4	-1.3920	1013	-1014	1116	-1117	301	TMP=2.9246e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3370)
4371	4	-1.3920	1014	-1015	1116	-1117	301	TMP=2.9240e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3371)
4372	4	-1.3921	1015	-1016	1116	-1117	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3372)
4373	4	-1.3921	1016	-1017	1116	-1117	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3373)
4374	4	-1.3922	1017	-1018	1116	-1117	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3374)
4375	4	-1.3923	1018	-1019	1116	-1117	301	TMP=2.9192e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3375)
4376	4	-1.3924	1019	-1020	1116	-1117	301	TMP=2.9175e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3376)
4377	4	-1.3925	1020	-1021	1116	-1117	301	TMP=2.9162e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3377)
4378	4	-1.3926	1021	-1022	1116	-1117	301	TMP=2.9150e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3378)
4379	4	-1.3926	1022	-1023	1116	-1117	301	TMP=2.9140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3379)
4380	4	-1.3927	1023	-1024	1116	-1117	301	TMP=2.9133e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3380)
4381	4	-1.3927	1024	-1025	1116	-1117	301	TMP=2.9125e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3381)
4382	4	-1.3928	1025	-1026	1116	-1117	301	TMP=2.9116e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3382)
4383	4	-1.3928	1026	-1027	1116	-1117	301	TMP=2.9107e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3383)
4384	4	-1.3928	1027	-1028	1116	-1117	301	TMP=2.9100e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3384)
4385	4	-1.3929	1028	-1029	1116	-1117	301	TMP=2.9096e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3385)
4386	4	-1.3929	1029	-1030	1116	-1117	301	TMP=2.9095e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3386)
4387	4	-1.3929	1030	-1031	1116	-1117	301	TMP=2.9096e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3387)
4388	4	-1.3929	1031	-1032	1116	-1117	301	TMP=2.9098e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3388)
4389	4	-1.3929	1032	-1033	1116	-1117	301	TMP=2.9100e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3389)
4390	4	-1.3928	1033	-1034	1116	-1117	301	TMP=2.9102e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3390)
4391	4	-1.3928	1034	-1035	1116	-1117	301	TMP=2.9105e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3391)
4392	4	-1.3928	1035	-1036	1116	-1117	301	TMP=2.9106e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3392)
4393	4	-1.3928	1036	-1037	1116	-1117	301	TMP=2.9107e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3393)
4394	4	-1.3928	1037	-1038	1116	-1117	301	TMP=2.9109e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3394)
4395	4	-1.3928	1038	-1039	1116	-1117	301	TMP=2.9110e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3395)

4396	4	-1.3928	1039	-1040	1116	-1117	301	TMP=2.9110e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3396)
4397	4	-1.3928	1040	-1041	1116	-1117	301	TMP=2.9111e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3397)
4398	4	-1.3927	1041	-1042	1116	-1117	301	TMP=2.9117e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3398)
4399	4	-1.3926	1042	-1043	1116	-1117	301	TMP=2.9141e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3399)
4400	4	-1.3923	1043	-1044	1116	-1117	301	TMP=2.9186e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3400)
4401	4	-1.3922	1044	-1045	1116	-1117	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3401)
4402	4	-1.3923	1045	-1046	1116	-1117	301	TMP=2.9200e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3402)
4403	4	-1.3926	1046	-1047	1116	-1117	301	TMP=2.9148e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3403)
4404	4	-1.3944	1047	-1048	1116	-1117	301	TMP=2.8828e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3404)
4405	4	-1.4010	1048	-1049	1116	-1117	301	TMP=2.7567e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3405)
4406	4	-1.3922	1116	-1117	-302			TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3406)
4407	4	-1.3922	-1000	1117	-1118			TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3407)
4408	4	-1.3922	1000	-1001	1117	-1118	301	TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3408)
4409	4	-1.3922	1001	-1002	1117	-1118	301	TMP=2.9212e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3409)
4410	4	-1.3922	1002	-1003	1117	-1118	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3410)
4411	4	-1.3921	1003	-1004	1117	-1118	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3411)
4412	4	-1.3921	1004	-1005	1117	-1118	301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3412)
4413	4	-1.3921	1005	-1006	1117	-1118	301	TMP=2.9227e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3413)
4414	4	-1.3921	1006	-1007	1117	-1118	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3414)
4415	4	-1.3920	1007	-1008	1117	-1118	301	TMP=2.9238e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3415)
4416	4	-1.3920	1008	-1009	1117	-1118	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3416)
4417	4	-1.3920	1009	-1010	1117	-1118	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3417)
4418	4	-1.3919	1010	-1011	1117	-1118	301	TMP=2.9253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3418)
4419	4	-1.3919	1011	-1012	1117	-1118	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3419)
4420	4	-1.3919	1012	-1013	1117	-1118	301	TMP=2.9253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3420)
4421	4	-1.3920	1013	-1014	1117	-1118	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3421)
4422	4	-1.3920	1014	-1015	1117	-1118	301	TMP=2.9247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3422)
4423	4	-1.3920	1015	-1016	1117	-1118	301	TMP=2.9241e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3423)
4424	4	-1.3921	1016	-1017	1117	-1118	301	TMP=2.9233e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3424)
4425	4	-1.3921	1017	-1018	1117	-1118	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3425)
4426	4	-1.3922	1018	-1019	1117	-1118	301	TMP=2.9203e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3426)
4427	4	-1.3923	1019	-1020	1117	-1118	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3427)
4428	4	-1.3924	1020	-1021	1117	-1118	301	TMP=2.9171e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3428)
4429	4	-1.3925	1021	-1022	1117	-1118	301	TMP=2.9160e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3429)
4430	4	-1.3925	1022	-1023	1117	-1118	301	TMP=2.9151e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3430)
4431	4	-1.3926	1023	-1024	1117	-1118	301	TMP=2.9142e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3431)
4432	4	-1.3927	1024	-1025	1117	-1118	301	TMP=2.9134e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3432)
4433	4	-1.3927	1025	-1026	1117	-1118	301	TMP=2.9126e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3433)
4434	4	-1.3927	1026	-1027	1117	-1118	301	TMP=2.9120e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3434)
4435	4	-1.3928	1027	-1028	1117	-1118	301	TMP=2.9116e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3435)
4436	4	-1.3928	1028	-1029	1117	-1118	301	TMP=2.9112e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3436)
4437	4	-1.3928	1029	-1030	1117	-1118	301	TMP=2.9110e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3437)
4438	4	-1.3928	1030	-1031	1117	-1118	301	TMP=2.9109e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3438)
4439	4	-1.3928	1031	-1032	1117	-1118	301	TMP=2.9109e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3439)
4440	4	-1.3928	1032	-1033	1117	-1118	301	TMP=2.9110e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3440)
4441	4	-1.3928	1033	-1034	1117	-1118	301	TMP=2.9113e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3441)
4442	4	-1.3928	1034	-1035	1117	-1118	301	TMP=2.9115e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3442)
4443	4	-1.3928	1035	-1036	1117	-1118	301	TMP=2.9116e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3443)
4444	4	-1.3928	1036	-1037	1117	-1118	301	TMP=2.9116e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3444)
4445	4	-1.3927	1037	-1038	1117	-1118	301	TMP=2.9118e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3445)
4446	4	-1.3927	1038	-1039	1117	-1118	301	TMP=2.9120e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3446)
4447	4	-1.3927	1039	-1040	1117	-1118	301	TMP=2.9120e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3447)
4448	4	-1.3927	1040	-1041	1117	-1118	301	TMP=2.9120e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3448)
4449	4	-1.3927	1041	-1042	1117	-1118	301	TMP=2.9125e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3449)
4450	4	-1.3926	1042	-1043	1117	-1118	301	TMP=2.9150e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3450)
4451	4	-1.3923	1043	-1044	1117	-1118	301	TMP=2.9189e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3451)
4452	4	-1.3922	1044	-1045	1117	-1118	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3452)
4453	4	-1.3922	1045	-1046	1117	-1118	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3453)
4454	4	-1.3925	1046	-1047	1117	-1118	301	TMP=2.9158e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3454)
4455	4	-1.3944	1047	-1048	1117	-1118	301	TMP=2.8836e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3455)

4456 4 -1.4010 1048 -1049 1117 -1118 301 TMP=2.7578e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3456)
4457 4 -1.3922 1117 -1118 -302 TMP=2.9208e-8 IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3457)
4458 4 -1.3922 -1000 1118 -1119 TMP=2.9212e-8 IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3458)
4459 4 -1.3922 1000 -1001 1118 -1119 301 TMP=2.9212e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3459)
4460 4 -1.3922 1001 -1002 1118 -1119 301 TMP=2.9214e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3460)
4461 4 -1.3922 1002 -1003 1118 -1119 301 TMP=2.9216e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3461)
4462 4 -1.3921 1003 -1004 1118 -1119 301 TMP=2.9219e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3462)
4463 4 -1.3921 1004 -1005 1118 -1119 301 TMP=2.9223e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3463)
4464 4 -1.3921 1005 -1006 1118 -1119 301 TMP=2.9228e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3464)
4465 4 -1.3921 1006 -1007 1118 -1119 301 TMP=2.9234e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3465)
4466 4 -1.3920 1007 -1008 1118 -1119 301 TMP=2.9241e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3466)
4467 4 -1.3920 1008 -1009 1118 -1119 301 TMP=2.9248e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3467)
4468 4 -1.3919 1009 -1010 1118 -1119 301 TMP=2.9253e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3468)
4469 4 -1.3919 1010 -1011 1118 -1119 301 TMP=2.9257e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3469)
4470 4 -1.3919 1011 -1012 1118 -1119 301 TMP=2.9258e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3470)
4471 4 -1.3919 1012 -1013 1118 -1119 301 TMP=2.9258e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3471)
4472 4 -1.3919 1013 -1014 1118 -1119 301 TMP=2.9256e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3472)
4473 4 -1.3919 1014 -1015 1118 -1119 301 TMP=2.9252e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3473)
4474 4 -1.3920 1015 -1016 1118 -1119 301 TMP=2.9247e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3474)
4475 4 -1.3920 1016 -1017 1118 -1119 301 TMP=2.9239e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3475)
4476 4 -1.3921 1017 -1018 1118 -1119 301 TMP=2.9227e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3476)
4477 4 -1.3922 1018 -1019 1118 -1119 301 TMP=2.9213e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3477)
4478 4 -1.3923 1019 -1020 1118 -1119 301 TMP=2.9199e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3478)
4479 4 -1.3923 1020 -1021 1118 -1119 301 TMP=2.9186e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3479)
4480 4 -1.3924 1021 -1022 1118 -1119 301 TMP=2.9172e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3480)
4481 4 -1.3925 1022 -1023 1118 -1119 301 TMP=2.9158e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3481)
4482 4 -1.3926 1023 -1024 1118 -1119 301 TMP=2.9150e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3482)
4483 4 -1.3926 1024 -1025 1118 -1119 301 TMP=2.9143e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3483)
4484 4 -1.3926 1025 -1026 1118 -1119 301 TMP=2.9137e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3484)
4485 4 -1.3927 1026 -1027 1118 -1119 301 TMP=2.9133e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3485)
4486 4 -1.3927 1027 -1028 1118 -1119 301 TMP=2.9130e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3486)
4487 4 -1.3927 1028 -1029 1118 -1119 301 TMP=2.9127e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3487)
4488 4 -1.3927 1029 -1030 1118 -1119 301 TMP=2.9124e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3488)
4489 4 -1.3927 1030 -1031 1118 -1119 301 TMP=2.9121e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3489)
4490 4 -1.3927 1031 -1032 1118 -1119 301 TMP=2.9120e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3490)
4491 4 -1.3927 1032 -1033 1118 -1119 301 TMP=2.9119e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3491)
4492 4 -1.3927 1033 -1034 1118 -1119 301 TMP=2.9120e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3492)
4493 4 -1.3927 1034 -1035 1118 -1119 301 TMP=2.9122e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3493)
4494 4 -1.3927 1035 -1036 1118 -1119 301 TMP=2.9124e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3494)
4495 4 -1.3927 1036 -1037 1118 -1119 301 TMP=2.9126e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3495)
4496 4 -1.3927 1037 -1038 1118 -1119 301 TMP=2.9128e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3496)
4497 4 -1.3927 1038 -1039 1118 -1119 301 TMP=2.9129e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3497)
4498 4 -1.3927 1039 -1040 1118 -1119 301 TMP=2.9130e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3498)
4499 4 -1.3927 1040 -1041 1118 -1119 301 TMP=2.9130e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3499)
4500 4 -1.3926 1041 -1042 1118 -1119 301 TMP=2.9134e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3500)
4501 4 -1.3925 1042 -1043 1118 -1119 301 TMP=2.9154e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3501)
4502 4 -1.3923 1043 -1044 1118 -1119 301 TMP=2.9196e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3502)
4503 4 -1.3921 1044 -1045 1118 -1119 301 TMP=2.9223e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3503)
4504 4 -1.3921 1045 -1046 1118 -1119 301 TMP=2.9219e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3504)
4505 4 -1.3925 1046 -1047 1118 -1119 301 TMP=2.9165e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3505)
4506 4 -1.3943 1047 -1048 1118 -1119 301 TMP=2.8843e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3506)
4507 4 -1.4009 1048 -1049 1118 -1119 301 TMP=2.7590e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3507)
4508 4 -1.3922 1118 -1119 -302 TMP=2.9215e-8 IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3508)
4509 4 -1.3922 -1000 1119 -1120 TMP=2.9213e-8 IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3509)
4510 4 -1.3922 1000 -1001 1119 -1120 301 TMP=2.9214e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3510)
4511 4 -1.3922 1001 -1002 1119 -1120 301 TMP=2.9215e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3511)
4512 4 -1.3922 1002 -1003 1119 -1120 301 TMP=2.9217e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3512)
4513 4 -1.3921 1003 -1004 1119 -1120 301 TMP=2.9221e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3513)
4514 4 -1.3921 1004 -1005 1119 -1120 301 TMP=2.9225e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3514)
4515 4 -1.3921 1005 -1006 1119 -1120 301 TMP=2.9229e-8 IMP:n=1	\$ Fuel Mesh Cell (Cell# 3515)

4516	4	-1.3921	1006	-1007	1119	-1120	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3516)
4517	4	-1.3920	1007	-1008	1119	-1120	301	TMP=2.9241e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3517)
4518	4	-1.3920	1008	-1009	1119	-1120	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3518)
4519	4	-1.3919	1009	-1010	1119	-1120	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3519)
4520	4	-1.3919	1010	-1011	1119	-1120	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3520)
4521	4	-1.3919	1011	-1012	1119	-1120	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3521)
4522	4	-1.3919	1012	-1013	1119	-1120	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3522)
4523	4	-1.3919	1013	-1014	1119	-1120	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3523)
4524	4	-1.3919	1014	-1015	1119	-1120	301	TMP=2.9255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3524)
4525	4	-1.3920	1015	-1016	1119	-1120	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3525)
4526	4	-1.3920	1016	-1017	1119	-1120	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3526)
4527	4	-1.3921	1017	-1018	1119	-1120	301	TMP=2.9231e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3527)
4528	4	-1.3921	1018	-1019	1119	-1120	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3528)
4529	4	-1.3922	1019	-1020	1119	-1120	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3529)
4530	4	-1.3923	1020	-1021	1119	-1120	301	TMP=2.9196e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3530)
4531	4	-1.3924	1021	-1022	1119	-1120	301	TMP=2.9184e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3531)
4532	4	-1.3924	1022	-1023	1119	-1120	301	TMP=2.9170e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3532)
4533	4	-1.3925	1023	-1024	1119	-1120	301	TMP=2.9161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3533)
4534	4	-1.3925	1024	-1025	1119	-1120	301	TMP=2.9154e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3534)
4535	4	-1.3926	1025	-1026	1119	-1120	301	TMP=2.9148e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3535)
4536	4	-1.3926	1026	-1027	1119	-1120	301	TMP=2.9144e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3536)
4537	4	-1.3926	1027	-1028	1119	-1120	301	TMP=2.9140e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3537)
4538	4	-1.3926	1028	-1029	1119	-1120	301	TMP=2.9138e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3538)
4539	4	-1.3926	1029	-1030	1119	-1120	301	TMP=2.9135e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3539)
4540	4	-1.3927	1030	-1031	1119	-1120	301	TMP=2.9133e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3540)
4541	4	-1.3927	1031	-1032	1119	-1120	301	TMP=2.9133e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3541)
4542	4	-1.3927	1032	-1033	1119	-1120	301	TMP=2.9133e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3542)
4543	4	-1.3927	1033	-1034	1119	-1120	301	TMP=2.9132e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3543)
4544	4	-1.3927	1034	-1035	1119	-1120	301	TMP=2.9132e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3544)
4545	4	-1.3927	1035	-1036	1119	-1120	301	TMP=2.9132e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3545)
4546	4	-1.3927	1036	-1037	1119	-1120	301	TMP=2.9133e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3546)
4547	4	-1.3926	1037	-1038	1119	-1120	301	TMP=2.9135e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3547)
4548	4	-1.3926	1038	-1039	1119	-1120	301	TMP=2.9137e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3548)
4549	4	-1.3926	1039	-1040	1119	-1120	301	TMP=2.9138e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3549)
4550	4	-1.3926	1040	-1041	1119	-1120	301	TMP=2.9139e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3550)
4551	4	-1.3926	1041	-1042	1119	-1120	301	TMP=2.9143e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3551)
4552	4	-1.3925	1042	-1043	1119	-1120	301	TMP=2.9160e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3552)
4553	4	-1.3923	1043	-1044	1119	-1120	301	TMP=2.9199e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3553)
4554	4	-1.3921	1044	-1045	1119	-1120	301	TMP=2.9230e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3554)
4555	4	-1.3921	1045	-1046	1119	-1120	301	TMP=2.9228e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3555)
4556	4	-1.3924	1046	-1047	1119	-1120	301	TMP=2.9169e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3556)
4557	4	-1.3943	1047	-1048	1119	-1120	301	TMP=2.8848e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3557)
4558	4	-1.4009	1048	-1049	1119	-1120	301	TMP=2.7599e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3558)
4559	4	-1.3921	1119	-1120	-302			TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3559)
4560	4	-1.3922	-1000	1120	-1121			TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3560)
4561	4	-1.3922	1000	-1001	1120	-1121	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3561)
4562	4	-1.3922	1001	-1002	1120	-1121	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3562)
4563	4	-1.3922	1002	-1003	1120	-1121	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3563)
4564	4	-1.3921	1003	-1004	1120	-1121	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3564)
4565	4	-1.3921	1004	-1005	1120	-1121	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3565)
4566	4	-1.3921	1005	-1006	1120	-1121	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3566)
4567	4	-1.3921	1006	-1007	1120	-1121	301	TMP=2.9235e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3567)
4568	4	-1.3920	1007	-1008	1120	-1121	301	TMP=2.9241e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3568)
4569	4	-1.3920	1008	-1009	1120	-1121	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3569)
4570	4	-1.3919	1009	-1010	1120	-1121	301	TMP=2.9255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3570)
4571	4	-1.3919	1010	-1011	1120	-1121	301	TMP=2.9259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3571)
4572	4	-1.3919	1011	-1012	1120	-1121	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3572)
4573	4	-1.3919	1012	-1013	1120	-1121	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3573)
4574	4	-1.3919	1013	-1014	1120	-1121	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3574)
4575	4	-1.3919	1014	-1015	1120	-1121	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3575)

4576	4	-1.3920	1015	-1016	1120	-1121	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3576)
4577	4	-1.3920	1016	-1017	1120	-1121	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3577)
4578	4	-1.3920	1017	-1018	1120	-1121	301	TMP=2.9235e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3578)
4579	4	-1.3921	1018	-1019	1120	-1121	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3579)
4580	4	-1.3922	1019	-1020	1120	-1121	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3580)
4581	4	-1.3922	1020	-1021	1120	-1121	301	TMP=2.9205e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3581)
4582	4	-1.3923	1021	-1022	1120	-1121	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3582)
4583	4	-1.3924	1022	-1023	1120	-1121	301	TMP=2.9182e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3583)
4584	4	-1.3924	1023	-1024	1120	-1121	301	TMP=2.9171e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3584)
4585	4	-1.3925	1024	-1025	1120	-1121	301	TMP=2.9164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3585)
4586	4	-1.3925	1025	-1026	1120	-1121	301	TMP=2.9159e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3586)
4587	4	-1.3925	1026	-1027	1120	-1121	301	TMP=2.9154e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3587)
4588	4	-1.3925	1027	-1028	1120	-1121	301	TMP=2.9151e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3588)
4589	4	-1.3926	1028	-1029	1120	-1121	301	TMP=2.9149e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3589)
4590	4	-1.3926	1029	-1030	1120	-1121	301	TMP=2.9144e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3590)
4591	4	-1.3926	1030	-1031	1120	-1121	301	TMP=2.9141e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3591)
4592	4	-1.3926	1031	-1032	1120	-1121	301	TMP=2.9138e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3592)
4593	4	-1.3926	1032	-1033	1120	-1121	301	TMP=2.9138e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3593)
4594	4	-1.3926	1033	-1034	1120	-1121	301	TMP=2.9138e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3594)
4595	4	-1.3926	1034	-1035	1120	-1121	301	TMP=2.9139e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3595)
4596	4	-1.3926	1035	-1036	1120	-1121	301	TMP=2.9141e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3596)
4597	4	-1.3926	1036	-1037	1120	-1121	301	TMP=2.9142e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3597)
4598	4	-1.3926	1037	-1038	1120	-1121	301	TMP=2.9144e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3598)
4599	4	-1.3926	1038	-1039	1120	-1121	301	TMP=2.9145e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3599)
4600	4	-1.3926	1039	-1040	1120	-1121	301	TMP=2.9146e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3600)
4601	4	-1.3926	1040	-1041	1120	-1121	301	TMP=2.9147e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3601)
4602	4	-1.3926	1041	-1042	1120	-1121	301	TMP=2.9151e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3602)
4603	4	-1.3925	1042	-1043	1120	-1121	301	TMP=2.9166e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3603)
4604	4	-1.3922	1043	-1044	1120	-1121	301	TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3604)
4605	4	-1.3920	1044	-1045	1120	-1121	301	TMP=2.9235e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3605)
4606	4	-1.3920	1045	-1046	1120	-1121	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3606)
4607	4	-1.3924	1046	-1047	1120	-1121	301	TMP=2.9174e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3607)
4608	4	-1.3943	1047	-1048	1120	-1121	301	TMP=2.8851e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3608)
4609	4	-1.4008	1048	-1049	1120	-1121	301	TMP=2.7611e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3609)
4610	4	-1.3921	1120	-1121	-302			TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3610)
4611	4	-1.3922	-1000	1121	-1122			TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3611)
4612	4	-1.3922	1000	-1001	1121	-1122	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3612)
4613	4	-1.3922	1001	-1002	1121	-1122	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3613)
4614	4	-1.3922	1002	-1003	1121	-1122	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3614)
4615	4	-1.3921	1003	-1004	1121	-1122	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3615)
4616	4	-1.3921	1004	-1005	1121	-1122	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3616)
4617	4	-1.3921	1005	-1006	1121	-1122	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3617)
4618	4	-1.3920	1006	-1007	1121	-1122	301	TMP=2.9235e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3618)
4619	4	-1.3920	1007	-1008	1121	-1122	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3619)
4620	4	-1.3920	1008	-1009	1121	-1122	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3620)
4621	4	-1.3919	1009	-1010	1121	-1122	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3621)
4622	4	-1.3919	1010	-1011	1121	-1122	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3622)
4623	4	-1.3919	1011	-1012	1121	-1122	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3623)
4624	4	-1.3919	1012	-1013	1121	-1122	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3624)
4625	4	-1.3919	1013	-1014	1121	-1122	301	TMP=2.9262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3625)
4626	4	-1.3919	1014	-1015	1121	-1122	301	TMP=2.9259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3626)
4627	4	-1.3919	1015	-1016	1121	-1122	301	TMP=2.9255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3627)
4628	4	-1.3920	1016	-1017	1121	-1122	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3628)
4629	4	-1.3920	1017	-1018	1121	-1122	301	TMP=2.9240e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3629)
4630	4	-1.3921	1018	-1019	1121	-1122	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3630)
4631	4	-1.3921	1019	-1020	1121	-1122	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3631)
4632	4	-1.3922	1020	-1021	1121	-1122	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3632)
4633	4	-1.3922	1021	-1022	1121	-1122	301	TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3633)
4634	4	-1.3923	1022	-1023	1121	-1122	301	TMP=2.9193e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3634)
4635	4	-1.3924	1023	-1024	1121	-1122	301	TMP=2.9183e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3635)

4636	4	-1.3924	1024	-1025	1121	-1122	301	TMP=2.9175e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3636)
4637	4	-1.3924	1025	-1026	1121	-1122	301	TMP=2.9168e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3637)
4638	4	-1.3925	1026	-1027	1121	-1122	301	TMP=2.9164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3638)
4639	4	-1.3925	1027	-1028	1121	-1122	301	TMP=2.9161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3639)
4640	4	-1.3925	1028	-1029	1121	-1122	301	TMP=2.9161e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3640)
4641	4	-1.3925	1029	-1030	1121	-1122	301	TMP=2.9158e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3641)
4642	4	-1.3925	1030	-1031	1121	-1122	301	TMP=2.9152e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3642)
4643	4	-1.3926	1031	-1032	1121	-1122	301	TMP=2.9148e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3643)
4644	4	-1.3926	1032	-1033	1121	-1122	301	TMP=2.9147e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3644)
4645	4	-1.3926	1033	-1034	1121	-1122	301	TMP=2.9147e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3645)
4646	4	-1.3926	1034	-1035	1121	-1122	301	TMP=2.9147e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3646)
4647	4	-1.3926	1035	-1036	1121	-1122	301	TMP=2.9148e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3647)
4648	4	-1.3926	1036	-1037	1121	-1122	301	TMP=2.9150e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3648)
4649	4	-1.3925	1037	-1038	1121	-1122	301	TMP=2.9151e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3649)
4650	4	-1.3925	1038	-1039	1121	-1122	301	TMP=2.9152e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3650)
4651	4	-1.3925	1039	-1040	1121	-1122	301	TMP=2.9153e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3651)
4652	4	-1.3925	1040	-1041	1121	-1122	301	TMP=2.9154e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3652)
4653	4	-1.3925	1041	-1042	1121	-1122	301	TMP=2.9158e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3653)
4654	4	-1.3924	1042	-1043	1121	-1122	301	TMP=2.9173e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3654)
4655	4	-1.3922	1043	-1044	1121	-1122	301	TMP=2.9206e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3655)
4656	4	-1.3920	1044	-1045	1121	-1122	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3656)
4657	4	-1.3920	1045	-1046	1121	-1122	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3657)
4658	4	-1.3924	1046	-1047	1121	-1122	301	TMP=2.9180e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3658)
4659	4	-1.3943	1047	-1048	1121	-1122	301	TMP=2.8852e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3659)
4660	4	-1.4008	1048	-1049	1121	-1122	301	TMP=2.7616e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3660)
4661	4	-1.3921	1121	-1122	-302			TMP=2.9228e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3661)
4662	4	-1.3922	-1000	1122	-1123			TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3662)
4663	4	-1.3922	1000	-1001	1122	-1123	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3663)
4664	4	-1.3922	1001	-1002	1122	-1123	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3664)
4665	4	-1.3921	1002	-1003	1122	-1123	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3665)
4666	4	-1.3921	1003	-1004	1122	-1123	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3666)
4667	4	-1.3921	1004	-1005	1122	-1123	301	TMP=2.9225e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3667)
4668	4	-1.3921	1005	-1006	1122	-1123	301	TMP=2.9230e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3668)
4669	4	-1.3920	1006	-1007	1122	-1123	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3669)
4670	4	-1.3920	1007	-1008	1122	-1123	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3670)
4671	4	-1.3920	1008	-1009	1122	-1123	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3671)
4672	4	-1.3919	1009	-1010	1122	-1123	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3672)
4673	4	-1.3919	1010	-1011	1122	-1123	301	TMP=2.9262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3673)
4674	4	-1.3919	1011	-1012	1122	-1123	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3674)
4675	4	-1.3919	1012	-1013	1122	-1123	301	TMP=2.9266e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3675)
4676	4	-1.3919	1013	-1014	1122	-1123	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3676)
4677	4	-1.3919	1014	-1015	1122	-1123	301	TMP=2.9262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3677)
4678	4	-1.3919	1015	-1016	1122	-1123	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3678)
4679	4	-1.3920	1016	-1017	1122	-1123	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3679)
4680	4	-1.3920	1017	-1018	1122	-1123	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3680)
4681	4	-1.3920	1018	-1019	1122	-1123	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3681)
4682	4	-1.3921	1019	-1020	1122	-1123	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3682)
4683	4	-1.3921	1020	-1021	1122	-1123	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3683)
4684	4	-1.3922	1021	-1022	1122	-1123	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3684)
4685	4	-1.3922	1022	-1023	1122	-1123	301	TMP=2.9203e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3685)
4686	4	-1.3923	1023	-1024	1122	-1123	301	TMP=2.9192e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3686)
4687	4	-1.3924	1024	-1025	1122	-1123	301	TMP=2.9184e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3687)
4688	4	-1.3924	1025	-1026	1122	-1123	301	TMP=2.9178e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3688)
4689	4	-1.3924	1026	-1027	1122	-1123	301	TMP=2.9174e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3689)
4690	4	-1.3924	1027	-1028	1122	-1123	301	TMP=2.9172e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3690)
4691	4	-1.3924	1028	-1029	1122	-1123	301	TMP=2.9170e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3691)
4692	4	-1.3925	1029	-1030	1122	-1123	301	TMP=2.9167e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3692)
4693	4	-1.3925	1030	-1031	1122	-1123	301	TMP=2.9164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3693)
4694	4	-1.3925	1031	-1032	1122	-1123	301	TMP=2.9160e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3694)
4695	4	-1.3925	1032	-1033	1122	-1123	301	TMP=2.9156e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3695)

4696	4	-1.3925	1033	-1034	1122	-1123	301	TMP=2.9155e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3696)
4697	4	-1.3925	1034	-1035	1122	-1123	301	TMP=2.9155e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3697)
4698	4	-1.3925	1035	-1036	1122	-1123	301	TMP=2.9156e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3698)
4699	4	-1.3925	1036	-1037	1122	-1123	301	TMP=2.9157e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3699)
4700	4	-1.3925	1037	-1038	1122	-1123	301	TMP=2.9159e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3700)
4701	4	-1.3925	1038	-1039	1122	-1123	301	TMP=2.9159e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3701)
4702	4	-1.3925	1039	-1040	1122	-1123	301	TMP=2.9160e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3702)
4703	4	-1.3925	1040	-1041	1122	-1123	301	TMP=2.9162e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3703)
4704	4	-1.3925	1041	-1042	1122	-1123	301	TMP=2.9166e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3704)
4705	4	-1.3924	1042	-1043	1122	-1123	301	TMP=2.9180e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3705)
4706	4	-1.3922	1043	-1044	1122	-1123	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3706)
4707	4	-1.3919	1044	-1045	1122	-1123	301	TMP=2.9252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3707)
4708	4	-1.3920	1045	-1046	1122	-1123	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3708)
4709	4	-1.3923	1046	-1047	1122	-1123	301	TMP=2.9184e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3709)
4710	4	-1.3943	1047	-1048	1122	-1123	301	TMP=2.8852e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3710)
4711	4	-1.4008	1048	-1049	1122	-1123	301	TMP=2.7623e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3711)
4712	4	-1.3920	1122	-1123	-302			TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3712)
4713	4	-1.3922	-1000	1123	-1124			TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3713)
4714	4	-1.3922	1000	-1001	1123	-1124	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3714)
4715	4	-1.3922	1001	-1002	1123	-1124	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3715)
4716	4	-1.3921	1002	-1003	1123	-1124	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3716)
4717	4	-1.3921	1003	-1004	1123	-1124	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3717)
4718	4	-1.3921	1004	-1005	1123	-1124	301	TMP=2.9228e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3718)
4719	4	-1.3921	1005	-1006	1123	-1124	301	TMP=2.9233e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3719)
4720	4	-1.3920	1006	-1007	1123	-1124	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3720)
4721	4	-1.3920	1007	-1008	1123	-1124	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3721)
4722	4	-1.3920	1008	-1009	1123	-1124	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3722)
4723	4	-1.3919	1009	-1010	1123	-1124	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3723)
4724	4	-1.3919	1010	-1011	1123	-1124	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3724)
4725	4	-1.3919	1011	-1012	1123	-1124	301	TMP=2.9266e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3725)
4726	4	-1.3919	1012	-1013	1123	-1124	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3726)
4727	4	-1.3919	1013	-1014	1123	-1124	301	TMP=2.9266e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3727)
4728	4	-1.3919	1014	-1015	1123	-1124	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3728)
4729	4	-1.3919	1015	-1016	1123	-1124	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3729)
4730	4	-1.3919	1016	-1017	1123	-1124	301	TMP=2.9252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3730)
4731	4	-1.3920	1017	-1018	1123	-1124	301	TMP=2.9246e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3731)
4732	4	-1.3920	1018	-1019	1123	-1124	301	TMP=2.9240e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3732)
4733	4	-1.3921	1019	-1020	1123	-1124	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3733)
4734	4	-1.3921	1020	-1021	1123	-1124	301	TMP=2.9228e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3734)
4735	4	-1.3921	1021	-1022	1123	-1124	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3735)
4736	4	-1.3922	1022	-1023	1123	-1124	301	TMP=2.9212e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3736)
4737	4	-1.3922	1023	-1024	1123	-1124	301	TMP=2.9202e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3737)
4738	4	-1.3923	1024	-1025	1123	-1124	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3738)
4739	4	-1.3923	1025	-1026	1123	-1124	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3739)
4740	4	-1.3924	1026	-1027	1123	-1124	301	TMP=2.9183e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3740)
4741	4	-1.3924	1027	-1028	1123	-1124	301	TMP=2.9182e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3741)
4742	4	-1.3924	1028	-1029	1123	-1124	301	TMP=2.9178e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3742)
4743	4	-1.3924	1029	-1030	1123	-1124	301	TMP=2.9175e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3743)
4744	4	-1.3924	1030	-1031	1123	-1124	301	TMP=2.9172e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3744)
4745	4	-1.3924	1031	-1032	1123	-1124	301	TMP=2.9169e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3745)
4746	4	-1.3925	1032	-1033	1123	-1124	301	TMP=2.9166e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3746)
4747	4	-1.3925	1033	-1034	1123	-1124	301	TMP=2.9164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3747)
4748	4	-1.3925	1034	-1035	1123	-1124	301	TMP=2.9164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3748)
4749	4	-1.3925	1035	-1036	1123	-1124	301	TMP=2.9164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3749)
4750	4	-1.3925	1036	-1037	1123	-1124	301	TMP=2.9164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3750)
4751	4	-1.3925	1037	-1038	1123	-1124	301	TMP=2.9165e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3751)
4752	4	-1.3925	1038	-1039	1123	-1124	301	TMP=2.9167e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3752)
4753	4	-1.3925	1039	-1040	1123	-1124	301	TMP=2.9167e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3753)
4754	4	-1.3924	1040	-1041	1123	-1124	301	TMP=2.9169e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3754)
4755	4	-1.3924	1041	-1042	1123	-1124	301	TMP=2.9173e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3755)

4756	4	-1.3923	1042	-1043	1123	-1124	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3756)
4757	4	-1.3921	1043	-1044	1123	-1124	301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3757)
4758	4	-1.3919	1044	-1045	1123	-1124	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3758)
4759	4	-1.3919	1045	-1046	1123	-1124	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3759)
4760	4	-1.3923	1046	-1047	1123	-1124	301	TMP=2.9192e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3760)
4761	4	-1.3943	1047	-1048	1123	-1124	301	TMP=2.8855e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3761)
4762	4	-1.4007	1048	-1049	1123	-1124	301	TMP=2.7631e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3762)
4763	4	-1.3920	1123	-1124	-302			TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3763)
4764	4	-1.3922	-1000	1124	-1125			TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3764)
4765	4	-1.3922	1000	-1001	1124	-1125	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3765)
4766	4	-1.3922	1001	-1002	1124	-1125	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3766)
4767	4	-1.3921	1002	-1003	1124	-1125	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3767)
4768	4	-1.3921	1003	-1004	1124	-1125	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3768)
4769	4	-1.3921	1004	-1005	1124	-1125	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3769)
4770	4	-1.3921	1005	-1006	1124	-1125	301	TMP=2.9230e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3770)
4771	4	-1.3921	1006	-1007	1124	-1125	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3771)
4772	4	-1.3920	1007	-1008	1124	-1125	301	TMP=2.9240e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3772)
4773	4	-1.3920	1008	-1009	1124	-1125	301	TMP=2.9246e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3773)
4774	4	-1.3919	1009	-1010	1124	-1125	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3774)
4775	4	-1.3919	1010	-1011	1124	-1125	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3775)
4776	4	-1.3919	1011	-1012	1124	-1125	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3776)
4777	4	-1.3919	1012	-1013	1124	-1125	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3777)
4778	4	-1.3919	1013	-1014	1124	-1125	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3778)
4779	4	-1.3919	1014	-1015	1124	-1125	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3779)
4780	4	-1.3919	1015	-1016	1124	-1125	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3780)
4781	4	-1.3919	1016	-1017	1124	-1125	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3781)
4782	4	-1.3920	1017	-1018	1124	-1125	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3782)
4783	4	-1.3920	1018	-1019	1124	-1125	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3783)
4784	4	-1.3920	1019	-1020	1124	-1125	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3784)
4785	4	-1.3921	1020	-1021	1124	-1125	301	TMP=2.9233e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3785)
4786	4	-1.3921	1021	-1022	1124	-1125	301	TMP=2.9227e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3786)
4787	4	-1.3921	1022	-1023	1124	-1125	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3787)
4788	4	-1.3922	1023	-1024	1124	-1125	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3788)
4789	4	-1.3922	1024	-1025	1124	-1125	301	TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3789)
4790	4	-1.3923	1025	-1026	1124	-1125	301	TMP=2.9198e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3790)
4791	4	-1.3923	1026	-1027	1124	-1125	301	TMP=2.9193e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3791)
4792	4	-1.3923	1027	-1028	1124	-1125	301	TMP=2.9189e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3792)
4793	4	-1.3923	1028	-1029	1124	-1125	301	TMP=2.9186e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3793)
4794	4	-1.3924	1029	-1030	1124	-1125	301	TMP=2.9183e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3794)
4795	4	-1.3924	1030	-1031	1124	-1125	301	TMP=2.9181e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3795)
4796	4	-1.3924	1031	-1032	1124	-1125	301	TMP=2.9179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3796)
4797	4	-1.3924	1032	-1033	1124	-1125	301	TMP=2.9177e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3797)
4798	4	-1.3924	1033	-1034	1124	-1125	301	TMP=2.9174e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3798)
4799	4	-1.3924	1034	-1035	1124	-1125	301	TMP=2.9172e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3799)
4800	4	-1.3924	1035	-1036	1124	-1125	301	TMP=2.9171e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3800)
4801	4	-1.3924	1036	-1037	1124	-1125	301	TMP=2.9172e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3801)
4802	4	-1.3924	1037	-1038	1124	-1125	301	TMP=2.9172e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3802)
4803	4	-1.3924	1038	-1039	1124	-1125	301	TMP=2.9173e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3803)
4804	4	-1.3924	1039	-1040	1124	-1125	301	TMP=2.9174e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3804)
4805	4	-1.3924	1040	-1041	1124	-1125	301	TMP=2.9176e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3805)
4806	4	-1.3924	1041	-1042	1124	-1125	301	TMP=2.9180e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3806)
4807	4	-1.3923	1042	-1043	1124	-1125	301	TMP=2.9196e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3807)
4808	4	-1.3921	1043	-1044	1124	-1125	301	TMP=2.9231e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3808)
4809	4	-1.3919	1044	-1045	1124	-1125	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3809)
4810	4	-1.3919	1045	-1046	1124	-1125	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3810)
4811	4	-1.3923	1046	-1047	1124	-1125	301	TMP=2.9193e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3811)
4812	4	-1.3943	1047	-1048	1124	-1125	301	TMP=2.8857e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3812)
4813	4	-1.4007	1048	-1049	1124	-1125	301	TMP=2.7640e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3813)
4814	4	-1.3920	1124	-1125	-302			TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3814)
4815	4	-1.3922	-1000	1125	-1126			TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3815)

4816	4	-1.3922	1000	-1001	1125	-1126	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3816)
4817	4	-1.3922	1001	-1002	1125	-1126	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3817)
4818	4	-1.3922	1002	-1003	1125	-1126	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3818)
4819	4	-1.3921	1003	-1004	1125	-1126	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3819)
4820	4	-1.3921	1004	-1005	1125	-1126	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3820)
4821	4	-1.3921	1005	-1006	1125	-1126	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3821)
4822	4	-1.3921	1006	-1007	1125	-1126	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3822)
4823	4	-1.3920	1007	-1008	1125	-1126	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3823)
4824	4	-1.3920	1008	-1009	1125	-1126	301	TMP=2.9246e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3824)
4825	4	-1.3919	1009	-1010	1125	-1126	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3825)
4826	4	-1.3919	1010	-1011	1125	-1126	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3826)
4827	4	-1.3919	1011	-1012	1125	-1126	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3827)
4828	4	-1.3918	1012	-1013	1125	-1126	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3828)
4829	4	-1.3918	1013	-1014	1125	-1126	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3829)
4830	4	-1.3919	1014	-1015	1125	-1126	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3830)
4831	4	-1.3919	1015	-1016	1125	-1126	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3831)
4832	4	-1.3919	1016	-1017	1125	-1126	301	TMP=2.9259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3832)
4833	4	-1.3919	1017	-1018	1125	-1126	301	TMP=2.9253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3833)
4834	4	-1.3920	1018	-1019	1125	-1126	301	TMP=2.9247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3834)
4835	4	-1.3920	1019	-1020	1125	-1126	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3835)
4836	4	-1.3920	1020	-1021	1125	-1126	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3836)
4837	4	-1.3921	1021	-1022	1125	-1126	301	TMP=2.9230e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3837)
4838	4	-1.3921	1022	-1023	1125	-1126	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3838)
4839	4	-1.3922	1023	-1024	1125	-1126	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3839)
4840	4	-1.3922	1024	-1025	1125	-1126	301	TMP=2.9212e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3840)
4841	4	-1.3922	1025	-1026	1125	-1126	301	TMP=2.9207e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3841)
4842	4	-1.3922	1026	-1027	1125	-1126	301	TMP=2.9203e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3842)
4843	4	-1.3923	1027	-1028	1125	-1126	301	TMP=2.9199e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3843)
4844	4	-1.3923	1028	-1029	1125	-1126	301	TMP=2.9193e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3844)
4845	4	-1.3923	1029	-1030	1125	-1126	301	TMP=2.9188e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3845)
4846	4	-1.3923	1030	-1031	1125	-1126	301	TMP=2.9185e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3846)
4847	4	-1.3924	1031	-1032	1125	-1126	301	TMP=2.9183e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3847)
4848	4	-1.3924	1032	-1033	1125	-1126	301	TMP=2.9183e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3848)
4849	4	-1.3924	1033	-1034	1125	-1126	301	TMP=2.9182e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3849)
4850	4	-1.3924	1034	-1035	1125	-1126	301	TMP=2.9181e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3850)
4851	4	-1.3924	1035	-1036	1125	-1126	301	TMP=2.9179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3851)
4852	4	-1.3924	1036	-1037	1125	-1126	301	TMP=2.9179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3852)
4853	4	-1.3924	1037	-1038	1125	-1126	301	TMP=2.9180e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3853)
4854	4	-1.3924	1038	-1039	1125	-1126	301	TMP=2.9180e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3854)
4855	4	-1.3924	1039	-1040	1125	-1126	301	TMP=2.9181e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3855)
4856	4	-1.3924	1040	-1041	1125	-1126	301	TMP=2.9183e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3856)
4857	4	-1.3923	1041	-1042	1125	-1126	301	TMP=2.9189e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3857)
4858	4	-1.3922	1042	-1043	1125	-1126	301	TMP=2.9205e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3858)
4859	4	-1.3920	1043	-1044	1125	-1126	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3859)
4860	4	-1.3918	1044	-1045	1125	-1126	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3860)
4861	4	-1.3918	1045	-1046	1125	-1126	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3861)
4862	4	-1.3923	1046	-1047	1125	-1126	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3862)
4863	4	-1.3942	1047	-1048	1125	-1126	301	TMP=2.8861e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3863)
4864	4	-1.4006	1048	-1049	1125	-1126	301	TMP=2.7644e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3864)
4865	4	-1.3919	1125	-1126	-302			TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3865)
4866	4	-1.3922	-1000	1126	-1127			TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3866)
4867	4	-1.3922	1000	-1001	1126	-1127	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3867)
4868	4	-1.3922	1001	-1002	1126	-1127	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3868)
4869	4	-1.3922	1002	-1003	1126	-1127	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3869)
4870	4	-1.3921	1003	-1004	1126	-1127	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3870)
4871	4	-1.3921	1004	-1005	1126	-1127	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3871)
4872	4	-1.3921	1005	-1006	1126	-1127	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3872)
4873	4	-1.3921	1006	-1007	1126	-1127	301	TMP=2.9235e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3873)
4874	4	-1.3920	1007	-1008	1126	-1127	301	TMP=2.9241e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3874)
4875	4	-1.3920	1008	-1009	1126	-1127	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3875)

4876	4	-1.3919	1009	-1010	1126	-1127	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3876)
4877	4	-1.3919	1010	-1011	1126	-1127	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3877)
4878	4	-1.3918	1011	-1012	1126	-1127	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3878)
4879	4	-1.3918	1012	-1013	1126	-1127	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3879)
4880	4	-1.3918	1013	-1014	1126	-1127	301	TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3880)
4881	4	-1.3919	1014	-1015	1126	-1127	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3881)
4882	4	-1.3919	1015	-1016	1126	-1127	301	TMP=2.9262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3882)
4883	4	-1.3919	1016	-1017	1126	-1127	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3883)
4884	4	-1.3919	1017	-1018	1126	-1127	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3884)
4885	4	-1.3920	1018	-1019	1126	-1127	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3885)
4886	4	-1.3920	1019	-1020	1126	-1127	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3886)
4887	4	-1.3920	1020	-1021	1126	-1127	301	TMP=2.9238e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3887)
4888	4	-1.3921	1021	-1022	1126	-1127	301	TMP=2.9233e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3888)
4889	4	-1.3921	1022	-1023	1126	-1127	301	TMP=2.9227e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3889)
4890	4	-1.3921	1023	-1024	1126	-1127	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3890)
4891	4	-1.3922	1024	-1025	1126	-1127	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3891)
4892	4	-1.3922	1025	-1026	1126	-1127	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3892)
4893	4	-1.3922	1026	-1027	1126	-1127	301	TMP=2.9207e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3893)
4894	4	-1.3922	1027	-1028	1126	-1127	301	TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3894)
4895	4	-1.3923	1028	-1029	1126	-1127	301	TMP=2.9201e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3895)
4896	4	-1.3923	1029	-1030	1126	-1127	301	TMP=2.9195e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3896)
4897	4	-1.3923	1030	-1031	1126	-1127	301	TMP=2.9191e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3897)
4898	4	-1.3923	1031	-1032	1126	-1127	301	TMP=2.9189e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3898)
4899	4	-1.3923	1032	-1033	1126	-1127	301	TMP=2.9188e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3899)
4900	4	-1.3923	1033	-1034	1126	-1127	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3900)
4901	4	-1.3923	1034	-1035	1126	-1127	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3901)
4902	4	-1.3923	1035	-1036	1126	-1127	301	TMP=2.9186e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3902)
4903	4	-1.3923	1036	-1037	1126	-1127	301	TMP=2.9186e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3903)
4904	4	-1.3923	1037	-1038	1126	-1127	301	TMP=2.9186e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3904)
4905	4	-1.3923	1038	-1039	1126	-1127	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3905)
4906	4	-1.3923	1039	-1040	1126	-1127	301	TMP=2.9188e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3906)
4907	4	-1.3923	1040	-1041	1126	-1127	301	TMP=2.9190e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3907)
4908	4	-1.3923	1041	-1042	1126	-1127	301	TMP=2.9196e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3908)
4909	4	-1.3922	1042	-1043	1126	-1127	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3909)
4910	4	-1.3920	1043	-1044	1126	-1127	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3910)
4911	4	-1.3918	1044	-1045	1126	-1127	301	TMP=2.9279e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3911)
4912	4	-1.3918	1045	-1046	1126	-1127	301	TMP=2.9275e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3912)
4913	4	-1.3923	1046	-1047	1126	-1127	301	TMP=2.9199e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3913)
4914	4	-1.3942	1047	-1048	1126	-1127	301	TMP=2.8868e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3914)
4915	4	-1.4006	1048	-1049	1126	-1127	301	TMP=2.7654e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3915)
4916	4	-1.3919	1126	-1127	-302			TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3916)
4917	4	-1.3922	-1000	1127	-1128			TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3917)
4918	4	-1.3922	1000	-1001	1127	-1128	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3918)
4919	4	-1.3922	1001	-1002	1127	-1128	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3919)
4920	4	-1.3922	1002	-1003	1127	-1128	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3920)
4921	4	-1.3921	1003	-1004	1127	-1128	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3921)
4922	4	-1.3921	1004	-1005	1127	-1128	301	TMP=2.9225e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3922)
4923	4	-1.3921	1005	-1006	1127	-1128	301	TMP=2.9231e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3923)
4924	4	-1.3920	1006	-1007	1127	-1128	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3924)
4925	4	-1.3920	1007	-1008	1127	-1128	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3925)
4926	4	-1.3919	1008	-1009	1127	-1128	301	TMP=2.9252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3926)
4927	4	-1.3919	1009	-1010	1127	-1128	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3927)
4928	4	-1.3918	1010	-1011	1127	-1128	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3928)
4929	4	-1.3918	1011	-1012	1127	-1128	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3929)
4930	4	-1.3919	1012	-1013	1127	-1128	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3930)
4931	4	-1.3919	1013	-1014	1127	-1128	301	TMP=2.9266e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3931)
4932	4	-1.3919	1014	-1015	1127	-1128	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3932)
4933	4	-1.3919	1015	-1016	1127	-1128	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3933)
4934	4	-1.3919	1016	-1017	1127	-1128	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3934)
4935	4	-1.3920	1017	-1018	1127	-1128	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3935)

4936	4	-1.3920	1018	-1019	1127	-1128	301	TMP=2.9247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3936)
4937	4	-1.3920	1019	-1020	1127	-1128	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3937)
4938	4	-1.3920	1020	-1021	1127	-1128	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3938)
4939	4	-1.3921	1021	-1022	1127	-1128	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3939)
4940	4	-1.3921	1022	-1023	1127	-1128	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3940)
4941	4	-1.3921	1023	-1024	1127	-1128	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3941)
4942	4	-1.3922	1024	-1025	1127	-1128	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3942)
4943	4	-1.3922	1025	-1026	1127	-1128	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3943)
4944	4	-1.3922	1026	-1027	1127	-1128	301	TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3944)
4945	4	-1.3922	1027	-1028	1127	-1128	301	TMP=2.9207e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3945)
4946	4	-1.3922	1028	-1029	1127	-1128	301	TMP=2.9205e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3946)
4947	4	-1.3922	1029	-1030	1127	-1128	301	TMP=2.9202e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3947)
4948	4	-1.3923	1030	-1031	1127	-1128	301	TMP=2.9198e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3948)
4949	4	-1.3923	1031	-1032	1127	-1128	301	TMP=2.9196e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3949)
4950	4	-1.3923	1032	-1033	1127	-1128	301	TMP=2.9195e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3950)
4951	4	-1.3923	1033	-1034	1127	-1128	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3951)
4952	4	-1.3923	1034	-1035	1127	-1128	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3952)
4953	4	-1.3923	1035	-1036	1127	-1128	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3953)
4954	4	-1.3923	1036	-1037	1127	-1128	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3954)
4955	4	-1.3923	1037	-1038	1127	-1128	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3955)
4956	4	-1.3923	1038	-1039	1127	-1128	301	TMP=2.9195e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3956)
4957	4	-1.3923	1039	-1040	1127	-1128	301	TMP=2.9196e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3957)
4958	4	-1.3923	1040	-1041	1127	-1128	301	TMP=2.9198e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3958)
4959	4	-1.3922	1041	-1042	1127	-1128	301	TMP=2.9206e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3959)
4960	4	-1.3921	1042	-1043	1127	-1128	301	TMP=2.9225e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3960)
4961	4	-1.3919	1043	-1044	1127	-1128	301	TMP=2.9259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3961)
4962	4	-1.3917	1044	-1045	1127	-1128	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3962)
4963	4	-1.3918	1045	-1046	1127	-1128	301	TMP=2.9280e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3963)
4964	4	-1.3923	1046	-1047	1127	-1128	301	TMP=2.9200e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3964)
4965	4	-1.3941	1047	-1048	1127	-1128	301	TMP=2.8880e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3965)
4966	4	-1.4006	1048	-1049	1127	-1128	301	TMP=2.7659e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3966)
4967	4	-1.3918	1127	-1128	-302			TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 3967)
4968	4	-1.3922	-1000	1128	-1129			TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 3968)
4969	4	-1.3922	1000	-1001	1128	-1129	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3969)
4970	4	-1.3922	1001	-1002	1128	-1129	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3970)
4971	4	-1.3922	1002	-1003	1128	-1129	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3971)
4972	4	-1.3921	1003	-1004	1128	-1129	301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3972)
4973	4	-1.3921	1004	-1005	1128	-1129	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3973)
4974	4	-1.3921	1005	-1006	1128	-1129	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3974)
4975	4	-1.3920	1006	-1007	1128	-1129	301	TMP=2.9238e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3975)
4976	4	-1.3920	1007	-1008	1128	-1129	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3976)
4977	4	-1.3919	1008	-1009	1128	-1129	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3977)
4978	4	-1.3919	1009	-1010	1128	-1129	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3978)
4979	4	-1.3918	1010	-1011	1128	-1129	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3979)
4980	4	-1.3918	1011	-1012	1128	-1129	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3980)
4981	4	-1.3918	1012	-1013	1128	-1129	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3981)
4982	4	-1.3918	1013	-1014	1128	-1129	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3982)
4983	4	-1.3919	1014	-1015	1128	-1129	301	TMP=2.9266e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3983)
4984	4	-1.3919	1015	-1016	1128	-1129	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3984)
4985	4	-1.3919	1016	-1017	1128	-1129	301	TMP=2.9255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3985)
4986	4	-1.3920	1017	-1018	1128	-1129	301	TMP=2.9247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3986)
4987	4	-1.3920	1018	-1019	1128	-1129	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3987)
4988	4	-1.3920	1019	-1020	1128	-1129	301	TMP=2.9240e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3988)
4989	4	-1.3920	1020	-1021	1128	-1129	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3989)
4990	4	-1.3921	1021	-1022	1128	-1129	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3990)
4991	4	-1.3921	1022	-1023	1128	-1129	301	TMP=2.9228e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3991)
4992	4	-1.3921	1023	-1024	1128	-1129	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3992)
4993	4	-1.3921	1024	-1025	1128	-1129	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3993)
4994	4	-1.3922	1025	-1026	1128	-1129	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3994)
4995	4	-1.3922	1026	-1027	1128	-1129	301	TMP=2.9212e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3995)

4996	4	-1.3922	1027	-1028	1128	-1129	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3996)
4997	4	-1.3922	1028	-1029	1128	-1129	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3997)
4998	4	-1.3922	1029	-1030	1128	-1129	301	TMP=2.9206e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3998)
4999	4	-1.3922	1030	-1031	1128	-1129	301	TMP=2.9205e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 3999)
5000	4	-1.3922	1031	-1032	1128	-1129	301	TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4000)
5001	4	-1.3922	1032	-1033	1128	-1129	301	TMP=2.9202e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4001)
5002	4	-1.3923	1033	-1034	1128	-1129	301	TMP=2.9200e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4002)
5003	4	-1.3923	1034	-1035	1128	-1129	301	TMP=2.9200e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4003)
5004	4	-1.3923	1035	-1036	1128	-1129	301	TMP=2.9200e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4004)
5005	4	-1.3923	1036	-1037	1128	-1129	301	TMP=2.9200e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4005)
5006	4	-1.3923	1037	-1038	1128	-1129	301	TMP=2.9201e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4006)
5007	4	-1.3922	1038	-1039	1128	-1129	301	TMP=2.9201e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4007)
5008	4	-1.3922	1039	-1040	1128	-1129	301	TMP=2.9203e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4008)
5009	4	-1.3922	1040	-1041	1128	-1129	301	TMP=2.9207e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4009)
5010	4	-1.3922	1041	-1042	1128	-1129	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4010)
5011	4	-1.3921	1042	-1043	1128	-1129	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4011)
5012	4	-1.3918	1043	-1044	1128	-1129	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4012)
5013	4	-1.3917	1044	-1045	1128	-1129	301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4013)
5014	4	-1.3917	1045	-1046	1128	-1129	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4014)
5015	4	-1.3922	1046	-1047	1128	-1129	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4015)
5016	4	-1.3941	1047	-1048	1128	-1129	301	TMP=2.8882e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4016)
5017	4	-1.4005	1048	-1049	1128	-1129	301	TMP=2.7668e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4017)
5018	4	-1.3918	1128	-1129	-302			TMP=2.9285e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4018)
5019	4	-1.3922	-1000	1129	-1130			TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4019)
5020	4	-1.3922	1000	-1001	1129	-1130	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4020)
5021	4	-1.3922	1001	-1002	1129	-1130	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4021)
5022	4	-1.3922	1002	-1003	1129	-1130	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4022)
5023	4	-1.3921	1003	-1004	1129	-1130	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4023)
5024	4	-1.3921	1004	-1005	1129	-1130	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4024)
5025	4	-1.3921	1005	-1006	1129	-1130	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4025)
5026	4	-1.3920	1006	-1007	1129	-1130	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4026)
5027	4	-1.3920	1007	-1008	1129	-1130	301	TMP=2.9247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4027)
5028	4	-1.3919	1008	-1009	1129	-1130	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4028)
5029	4	-1.3919	1009	-1010	1129	-1130	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4029)
5030	4	-1.3918	1010	-1011	1129	-1130	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4030)
5031	4	-1.3918	1011	-1012	1129	-1130	301	TMP=2.9273e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4031)
5032	4	-1.3918	1012	-1013	1129	-1130	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4032)
5033	4	-1.3918	1013	-1014	1129	-1130	301	TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4033)
5034	4	-1.3919	1014	-1015	1129	-1130	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4034)
5035	4	-1.3919	1015	-1016	1129	-1130	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4035)
5036	4	-1.3919	1016	-1017	1129	-1130	301	TMP=2.9253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4036)
5037	4	-1.3920	1017	-1018	1129	-1130	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4037)
5038	4	-1.3920	1018	-1019	1129	-1130	301	TMP=2.9240e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4038)
5039	4	-1.3920	1019	-1020	1129	-1130	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4039)
5040	4	-1.3921	1020	-1021	1129	-1130	301	TMP=2.9233e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4040)
5041	4	-1.3921	1021	-1022	1129	-1130	301	TMP=2.9230e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4041)
5042	4	-1.3921	1022	-1023	1129	-1130	301	TMP=2.9227e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4042)
5043	4	-1.3921	1023	-1024	1129	-1130	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4043)
5044	4	-1.3921	1024	-1025	1129	-1130	301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4044)
5045	4	-1.3921	1025	-1026	1129	-1130	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4045)
5046	4	-1.3922	1026	-1027	1129	-1130	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4046)
5047	4	-1.3922	1027	-1028	1129	-1130	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4047)
5048	4	-1.3922	1028	-1029	1129	-1130	301	TMP=2.9212e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4048)
5049	4	-1.3922	1029	-1030	1129	-1130	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4049)
5050	4	-1.3922	1030	-1031	1129	-1130	301	TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4050)
5051	4	-1.3922	1031	-1032	1129	-1130	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4051)
5052	4	-1.3922	1032	-1033	1129	-1130	301	TMP=2.9207e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4052)
5053	4	-1.3922	1033	-1034	1129	-1130	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4053)
5054	4	-1.3922	1034	-1035	1129	-1130	301	TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4054)
5055	4	-1.3922	1035	-1036	1129	-1130	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4055)

5056	4	-1.3922	1036	-1037	1129	-1130	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4056)
5057	4	-1.3922	1037	-1038	1129	-1130	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4057)
5058	4	-1.3922	1038	-1039	1129	-1130	301	TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4058)
5059	4	-1.3922	1039	-1040	1129	-1130	301	TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4059)
5060	4	-1.3922	1040	-1041	1129	-1130	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4060)
5061	4	-1.3921	1041	-1042	1129	-1130	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4061)
5062	4	-1.3920	1042	-1043	1129	-1130	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4062)
5063	4	-1.3918	1043	-1044	1129	-1130	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4063)
5064	4	-1.3917	1044	-1045	1129	-1130	301	TMP=2.9299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4064)
5065	4	-1.3917	1045	-1046	1129	-1130	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4065)
5066	4	-1.3922	1046	-1047	1129	-1130	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4066)
5067	4	-1.3940	1047	-1048	1129	-1130	301	TMP=2.8901e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4067)
5068	4	-1.4005	1048	-1049	1129	-1130	301	TMP=2.7680e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4068)
5069	4	-1.3917	1129	-1130	-302			TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4069)
5070	4	-1.3922	-1000	1130	-1131			TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4070)
5071	4	-1.3922	1000	-1001	1130	-1131	301	TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4071)
5072	4	-1.3922	1001	-1002	1130	-1131	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4072)
5073	4	-1.3922	1002	-1003	1130	-1131	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4073)
5074	4	-1.3921	1003	-1004	1130	-1131	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4074)
5075	4	-1.3921	1004	-1005	1130	-1131	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4075)
5076	4	-1.3921	1005	-1006	1130	-1131	301	TMP=2.9233e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4076)
5077	4	-1.3920	1006	-1007	1130	-1131	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4077)
5078	4	-1.3920	1007	-1008	1130	-1131	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4078)
5079	4	-1.3919	1008	-1009	1130	-1131	301	TMP=2.9262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4079)
5080	4	-1.3918	1009	-1010	1130	-1131	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4080)
5081	4	-1.3918	1010	-1011	1130	-1131	301	TMP=2.9275e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4081)
5082	4	-1.3918	1011	-1012	1130	-1131	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4082)
5083	4	-1.3918	1012	-1013	1130	-1131	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4083)
5084	4	-1.3919	1013	-1014	1130	-1131	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4084)
5085	4	-1.3919	1014	-1015	1130	-1131	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4085)
5086	4	-1.3919	1015	-1016	1130	-1131	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4086)
5087	4	-1.3920	1016	-1017	1130	-1131	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4087)
5088	4	-1.3920	1017	-1018	1130	-1131	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4088)
5089	4	-1.3920	1018	-1019	1130	-1131	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4089)
5090	4	-1.3920	1019	-1020	1130	-1131	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4090)
5091	4	-1.3921	1020	-1021	1130	-1131	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4091)
5092	4	-1.3921	1021	-1022	1130	-1131	301	TMP=2.9231e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4092)
5093	4	-1.3921	1022	-1023	1130	-1131	301	TMP=2.9228e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4093)
5094	4	-1.3921	1023	-1024	1130	-1131	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4094)
5095	4	-1.3921	1024	-1025	1130	-1131	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4095)
5096	4	-1.3921	1025	-1026	1130	-1131	301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4096)
5097	4	-1.3921	1026	-1027	1130	-1131	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4097)
5098	4	-1.3921	1027	-1028	1130	-1131	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4098)
5099	4	-1.3921	1028	-1029	1130	-1131	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4099)
5100	4	-1.3922	1029	-1030	1130	-1131	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4100)
5101	4	-1.3922	1030	-1031	1130	-1131	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4101)
5102	4	-1.3922	1031	-1032	1130	-1131	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4102)
5103	4	-1.3922	1032	-1033	1130	-1131	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4103)
5104	4	-1.3922	1033	-1034	1130	-1131	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4104)
5105	4	-1.3922	1034	-1035	1130	-1131	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4105)
5106	4	-1.3922	1035	-1036	1130	-1131	301	TMP=2.9214e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4106)
5107	4	-1.3922	1036	-1037	1130	-1131	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4107)
5108	4	-1.3922	1037	-1038	1130	-1131	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4108)
5109	4	-1.3922	1038	-1039	1130	-1131	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4109)
5110	4	-1.3921	1039	-1040	1130	-1131	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4110)
5111	4	-1.3921	1040	-1041	1130	-1131	301	TMP=2.9225e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4111)
5112	4	-1.3920	1041	-1042	1130	-1131	301	TMP=2.9235e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4112)
5113	4	-1.3919	1042	-1043	1130	-1131	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4113)
5114	4	-1.3917	1043	-1044	1130	-1131	301	TMP=2.9288e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4114)
5115	4	-1.3916	1044	-1045	1130	-1131	301	TMP=2.9306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4115)

5116	4	-1.3917	1045	-1046	1130	-1131	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4116)
5117	4	-1.3921	1046	-1047	1130	-1131	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4117)
5118	4	-1.3939	1047	-1048	1130	-1131	301	TMP=2.8921e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4118)
5119	4	-1.4004	1048	-1049	1130	-1131	301	TMP=2.7692e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4119)
5120	4	-1.3917	1130	-1131	-302			TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4120)
5121	4	-1.3922	-1000	1131	-1132			TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4121)
5122	4	-1.3922	1000	-1001	1131	-1132	301	TMP=2.9211e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4122)
5123	4	-1.3922	1001	-1002	1131	-1132	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4123)
5124	4	-1.3922	1002	-1003	1131	-1132	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4124)
5125	4	-1.3921	1003	-1004	1131	-1132	301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4125)
5126	4	-1.3921	1004	-1005	1131	-1132	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4126)
5127	4	-1.3920	1005	-1006	1131	-1132	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4127)
5128	4	-1.3920	1006	-1007	1131	-1132	301	TMP=2.9246e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4128)
5129	4	-1.3919	1007	-1008	1131	-1132	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4129)
5130	4	-1.3918	1008	-1009	1131	-1132	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4130)
5131	4	-1.3918	1009	-1010	1131	-1132	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4131)
5132	4	-1.3918	1010	-1011	1131	-1132	301	TMP=2.9279e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4132)
5133	4	-1.3918	1011	-1012	1131	-1132	301	TMP=2.9277e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4133)
5134	4	-1.3918	1012	-1013	1131	-1132	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4134)
5135	4	-1.3918	1013	-1014	1131	-1132	301	TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4135)
5136	4	-1.3919	1014	-1015	1131	-1132	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4136)
5137	4	-1.3919	1015	-1016	1131	-1132	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4137)
5138	4	-1.3920	1016	-1017	1131	-1132	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4138)
5139	4	-1.3920	1017	-1018	1131	-1132	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4139)
5140	4	-1.3920	1018	-1019	1131	-1132	301	TMP=2.9240e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4140)
5141	4	-1.3920	1019	-1020	1131	-1132	301	TMP=2.9238e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4141)
5142	4	-1.3920	1020	-1021	1131	-1132	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4142)
5143	4	-1.3921	1021	-1022	1131	-1132	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4143)
5144	4	-1.3921	1022	-1023	1131	-1132	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4144)
5145	4	-1.3921	1023	-1024	1131	-1132	301	TMP=2.9230e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4145)
5146	4	-1.3921	1024	-1025	1131	-1132	301	TMP=2.9228e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4146)
5147	4	-1.3921	1025	-1026	1131	-1132	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4147)
5148	4	-1.3921	1026	-1027	1131	-1132	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4148)
5149	4	-1.3921	1027	-1028	1131	-1132	301	TMP=2.9225e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4149)
5150	4	-1.3921	1028	-1029	1131	-1132	301	TMP=2.9225e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4150)
5151	4	-1.3921	1029	-1030	1131	-1132	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4151)
5152	4	-1.3921	1030	-1031	1131	-1132	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4152)
5153	4	-1.3921	1031	-1032	1131	-1132	301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4153)
5154	4	-1.3921	1032	-1033	1131	-1132	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4154)
5155	4	-1.3921	1033	-1034	1131	-1132	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4155)
5156	4	-1.3921	1034	-1035	1131	-1132	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4156)
5157	4	-1.3921	1035	-1036	1131	-1132	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4157)
5158	4	-1.3921	1036	-1037	1131	-1132	301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4158)
5159	4	-1.3921	1037	-1038	1131	-1132	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4159)
5160	4	-1.3921	1038	-1039	1131	-1132	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4160)
5161	4	-1.3921	1039	-1040	1131	-1132	301	TMP=2.9228e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4161)
5162	4	-1.3921	1040	-1041	1131	-1132	301	TMP=2.9235e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4162)
5163	4	-1.3920	1041	-1042	1131	-1132	301	TMP=2.9247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4163)
5164	4	-1.3918	1042	-1043	1131	-1132	301	TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4164)
5165	4	-1.3917	1043	-1044	1131	-1132	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4165)
5166	4	-1.3916	1044	-1045	1131	-1132	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4166)
5167	4	-1.3917	1045	-1046	1131	-1132	301	TMP=2.9298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4167)
5168	4	-1.3921	1046	-1047	1131	-1132	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4168)
5169	4	-1.3938	1047	-1048	1131	-1132	301	TMP=2.8940e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4169)
5170	4	-1.4003	1048	-1049	1131	-1132	301	TMP=2.7706e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4170)
5171	4	-1.3916	1131	-1132	-302			TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4171)
5172	4	-1.3922	-1000	1132	-1133			TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4172)
5173	4	-1.3922	1000	-1001	1132	-1133	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4173)
5174	4	-1.3922	1001	-1002	1132	-1133	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4174)
5175	4	-1.3922	1002	-1003	1132	-1133	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4175)

5176	4	-1.3921	1003	-1004	1132	-1133	301	TMP=2.9224e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4176)
5177	4	-1.3921	1004	-1005	1132	-1133	301	TMP=2.9231e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4177)
5178	4	-1.3920	1005	-1006	1132	-1133	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4178)
5179	4	-1.3920	1006	-1007	1132	-1133	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4179)
5180	4	-1.3919	1007	-1008	1132	-1133	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4180)
5181	4	-1.3918	1008	-1009	1132	-1133	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4181)
5182	4	-1.3918	1009	-1010	1132	-1133	301	TMP=2.9279e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4182)
5183	4	-1.3918	1010	-1011	1132	-1133	301	TMP=2.9279e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4183)
5184	4	-1.3918	1011	-1012	1132	-1133	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4184)
5185	4	-1.3918	1012	-1013	1132	-1133	301	TMP=2.9275e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4185)
5186	4	-1.3918	1013	-1014	1132	-1133	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4186)
5187	4	-1.3919	1014	-1015	1132	-1133	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4187)
5188	4	-1.3919	1015	-1016	1132	-1133	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4188)
5189	4	-1.3920	1016	-1017	1132	-1133	301	TMP=2.9247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4189)
5190	4	-1.3920	1017	-1018	1132	-1133	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4190)
5191	4	-1.3920	1018	-1019	1132	-1133	301	TMP=2.9241e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4191)
5192	4	-1.3920	1019	-1020	1132	-1133	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4192)
5193	4	-1.3920	1020	-1021	1132	-1133	301	TMP=2.9238e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4193)
5194	4	-1.3920	1021	-1022	1132	-1133	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4194)
5195	4	-1.3920	1022	-1023	1132	-1133	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4195)
5196	4	-1.3920	1023	-1024	1132	-1133	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4196)
5197	4	-1.3921	1024	-1025	1132	-1133	301	TMP=2.9233e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4197)
5198	4	-1.3921	1025	-1026	1132	-1133	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4198)
5199	4	-1.3921	1026	-1027	1132	-1133	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4199)
5200	4	-1.3921	1027	-1028	1132	-1133	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4200)
5201	4	-1.3921	1028	-1029	1132	-1133	301	TMP=2.9231e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4201)
5202	4	-1.3921	1029	-1030	1132	-1133	301	TMP=2.9230e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4202)
5203	4	-1.3921	1030	-1031	1132	-1133	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4203)
5204	4	-1.3921	1031	-1032	1132	-1133	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4204)
5205	4	-1.3921	1032	-1033	1132	-1133	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4205)
5206	4	-1.3921	1033	-1034	1132	-1133	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4206)
5207	4	-1.3921	1034	-1035	1132	-1133	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4207)
5208	4	-1.3921	1035	-1036	1132	-1133	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4208)
5209	4	-1.3921	1036	-1037	1132	-1133	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4209)
5210	4	-1.3921	1037	-1038	1132	-1133	301	TMP=2.9231e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4210)
5211	4	-1.3921	1038	-1039	1132	-1133	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4211)
5212	4	-1.3920	1039	-1040	1132	-1133	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4212)
5213	4	-1.3920	1040	-1041	1132	-1133	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4213)
5214	4	-1.3919	1041	-1042	1132	-1133	301	TMP=2.9259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4214)
5215	4	-1.3918	1042	-1043	1132	-1133	301	TMP=2.9280e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4215)
5216	4	-1.3917	1043	-1044	1132	-1133	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4216)
5217	4	-1.3916	1044	-1045	1132	-1133	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4217)
5218	4	-1.3916	1045	-1046	1132	-1133	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4218)
5219	4	-1.3920	1046	-1047	1132	-1133	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4219)
5220	4	-1.3936	1047	-1048	1132	-1133	301	TMP=2.8966e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4220)
5221	4	-1.4003	1048	-1049	1132	-1133	301	TMP=2.7724e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4221)
5222	4	-1.3916	1132	-1133	-302			TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4222)
5223	4	-1.3922	-1000	1133	-1134			TMP=2.9206e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4223)
5224	4	-1.3922	1000	-1001	1133	-1134	301	TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4224)
5225	4	-1.3922	1001	-1002	1133	-1134	301	TMP=2.9213e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4225)
5226	4	-1.3922	1002	-1003	1133	-1134	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4226)
5227	4	-1.3921	1003	-1004	1133	-1134	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4227)
5228	4	-1.3921	1004	-1005	1133	-1134	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4228)
5229	4	-1.3920	1005	-1006	1133	-1134	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4229)
5230	4	-1.3919	1006	-1007	1133	-1134	301	TMP=2.9253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4230)
5231	4	-1.3919	1007	-1008	1133	-1134	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4231)
5232	4	-1.3918	1008	-1009	1133	-1134	301	TMP=2.9279e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4232)
5233	4	-1.3918	1009	-1010	1133	-1134	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4233)
5234	4	-1.3918	1010	-1011	1133	-1134	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4234)
5235	4	-1.3918	1011	-1012	1133	-1134	301	TMP=2.9279e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4235)

5236	4	-1.3918	1012	-1013	1133	-1134	301	TMP=2.9275e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4236)
5237	4	-1.3918	1013	-1014	1133	-1134	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4237)
5238	4	-1.3919	1014	-1015	1133	-1134	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4238)
5239	4	-1.3919	1015	-1016	1133	-1134	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4239)
5240	4	-1.3920	1016	-1017	1133	-1134	301	TMP=2.9246e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4240)
5241	4	-1.3920	1017	-1018	1133	-1134	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4241)
5242	4	-1.3920	1018	-1019	1133	-1134	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4242)
5243	4	-1.3920	1019	-1020	1133	-1134	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4243)
5244	4	-1.3920	1020	-1021	1133	-1134	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4244)
5245	4	-1.3920	1021	-1022	1133	-1134	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4245)
5246	4	-1.3920	1022	-1023	1133	-1134	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4246)
5247	4	-1.3920	1023	-1024	1133	-1134	301	TMP=2.9241e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4247)
5248	4	-1.3920	1024	-1025	1133	-1134	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4248)
5249	4	-1.3920	1025	-1026	1133	-1134	301	TMP=2.9239e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4249)
5250	4	-1.3920	1026	-1027	1133	-1134	301	TMP=2.9238e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4250)
5251	4	-1.3920	1027	-1028	1133	-1134	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4251)
5252	4	-1.3920	1028	-1029	1133	-1134	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4252)
5253	4	-1.3920	1029	-1030	1133	-1134	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4253)
5254	4	-1.3920	1030	-1031	1133	-1134	301	TMP=2.9237e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4254)
5255	4	-1.3920	1031	-1032	1133	-1134	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4255)
5256	4	-1.3920	1032	-1033	1133	-1134	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4256)
5257	4	-1.3920	1033	-1034	1133	-1134	301	TMP=2.9235e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4257)
5258	4	-1.3920	1034	-1035	1133	-1134	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4258)
5259	4	-1.3920	1035	-1036	1133	-1134	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4259)
5260	4	-1.3920	1036	-1037	1133	-1134	301	TMP=2.9238e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4260)
5261	4	-1.3920	1037	-1038	1133	-1134	301	TMP=2.9240e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4261)
5262	4	-1.3920	1038	-1039	1133	-1134	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4262)
5263	4	-1.3920	1039	-1040	1133	-1134	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4263)
5264	4	-1.3919	1040	-1041	1133	-1134	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4264)
5265	4	-1.3918	1041	-1042	1133	-1134	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4265)
5266	4	-1.3917	1042	-1043	1133	-1134	301	TMP=2.9288e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4266)
5267	4	-1.3916	1043	-1044	1133	-1134	301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4267)
5268	4	-1.3916	1044	-1045	1133	-1134	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4268)
5269	4	-1.3916	1045	-1046	1133	-1134	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4269)
5270	4	-1.3919	1046	-1047	1133	-1134	301	TMP=2.9252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4270)
5271	4	-1.3935	1047	-1048	1133	-1134	301	TMP=2.8989e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4271)
5272	4	-1.4002	1048	-1049	1133	-1134	301	TMP=2.7738e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4272)
5273	4	-1.3916	1133	-1134	-302			TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4273)
5274	4	-1.3922	-1000	1134	-1135			TMP=2.9203e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4274)
5275	4	-1.3922	1000	-1001	1134	-1135	301	TMP=2.9206e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4275)
5276	4	-1.3922	1001	-1002	1134	-1135	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4276)
5277	4	-1.3922	1002	-1003	1134	-1135	301	TMP=2.9216e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4277)
5278	4	-1.3921	1003	-1004	1134	-1135	301	TMP=2.9225e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4278)
5279	4	-1.3921	1004	-1005	1134	-1135	301	TMP=2.9235e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4279)
5280	4	-1.3920	1005	-1006	1134	-1135	301	TMP=2.9247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4280)
5281	4	-1.3919	1006	-1007	1134	-1135	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4281)
5282	4	-1.3918	1007	-1008	1134	-1135	301	TMP=2.9276e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4282)
5283	4	-1.3918	1008	-1009	1134	-1135	301	TMP=2.9282e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4283)
5284	4	-1.3918	1009	-1010	1134	-1135	301	TMP=2.9284e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4284)
5285	4	-1.3918	1010	-1011	1134	-1135	301	TMP=2.9283e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4285)
5286	4	-1.3918	1011	-1012	1134	-1135	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4286)
5287	4	-1.3918	1012	-1013	1134	-1135	301	TMP=2.9277e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4287)
5288	4	-1.3918	1013	-1014	1134	-1135	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4288)
5289	4	-1.3919	1014	-1015	1134	-1135	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4289)
5290	4	-1.3919	1015	-1016	1134	-1135	301	TMP=2.9255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4290)
5291	4	-1.3919	1016	-1017	1134	-1135	301	TMP=2.9252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4291)
5292	4	-1.3920	1017	-1018	1134	-1135	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4292)
5293	4	-1.3920	1018	-1019	1134	-1135	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4293)
5294	4	-1.3920	1019	-1020	1134	-1135	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4294)
5295	4	-1.3920	1020	-1021	1134	-1135	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4295)

5296	4	-1.3920	1021	-1022	1134	-1135	301	TMP=2.9247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4296)
5297	4	-1.3920	1022	-1023	1134	-1135	301	TMP=2.9246e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4297)
5298	4	-1.3920	1023	-1024	1134	-1135	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4298)
5299	4	-1.3920	1024	-1025	1134	-1135	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4299)
5300	4	-1.3920	1025	-1026	1134	-1135	301	TMP=2.9246e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4300)
5301	4	-1.3920	1026	-1027	1134	-1135	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4301)
5302	4	-1.3920	1027	-1028	1134	-1135	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4302)
5303	4	-1.3920	1028	-1029	1134	-1135	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4303)
5304	4	-1.3920	1029	-1030	1134	-1135	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4304)
5305	4	-1.3920	1030	-1031	1134	-1135	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4305)
5306	4	-1.3920	1031	-1032	1134	-1135	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4306)
5307	4	-1.3920	1032	-1033	1134	-1135	301	TMP=2.9242e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4307)
5308	4	-1.3920	1033	-1034	1134	-1135	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4308)
5309	4	-1.3920	1034	-1035	1134	-1135	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4309)
5310	4	-1.3920	1035	-1036	1134	-1135	301	TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4310)
5311	4	-1.3920	1036	-1037	1134	-1135	301	TMP=2.9246e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4311)
5312	4	-1.3920	1037	-1038	1134	-1135	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4312)
5313	4	-1.3919	1038	-1039	1134	-1135	301	TMP=2.9253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4313)
5314	4	-1.3919	1039	-1040	1134	-1135	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4314)
5315	4	-1.3919	1040	-1041	1134	-1135	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4315)
5316	4	-1.3918	1041	-1042	1134	-1135	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4316)
5317	4	-1.3917	1042	-1043	1134	-1135	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4317)
5318	4	-1.3916	1043	-1044	1134	-1135	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4318)
5319	4	-1.3916	1044	-1045	1134	-1135	301	TMP=2.9318e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4319)
5320	4	-1.3916	1045	-1046	1134	-1135	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4320)
5321	4	-1.3919	1046	-1047	1134	-1135	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4321)
5322	4	-1.3934	1047	-1048	1134	-1135	301	TMP=2.9012e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4322)
5323	4	-1.4001	1048	-1049	1134	-1135	301	TMP=2.7754e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4323)
5324	4	-1.3916	1134	-1135	-302			TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4324)
5325	4	-1.3923	-1000	1135	-1136			TMP=2.9199e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4325)
5326	4	-1.3922	1000	-1001	1135	-1136	301	TMP=2.9203e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4326)
5327	4	-1.3922	1001	-1002	1135	-1136	301	TMP=2.9209e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4327)
5328	4	-1.3922	1002	-1003	1135	-1136	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4328)
5329	4	-1.3921	1003	-1004	1135	-1136	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4329)
5330	4	-1.3920	1004	-1005	1135	-1136	301	TMP=2.9238e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4330)
5331	4	-1.3919	1005	-1006	1135	-1136	301	TMP=2.9252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4331)
5332	4	-1.3919	1006	-1007	1135	-1136	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4332)
5333	4	-1.3918	1007	-1008	1135	-1136	301	TMP=2.9284e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4333)
5334	4	-1.3917	1008	-1009	1135	-1136	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4334)
5335	4	-1.3917	1009	-1010	1135	-1136	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4335)
5336	4	-1.3917	1010	-1011	1135	-1136	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4336)
5337	4	-1.3918	1011	-1012	1135	-1136	301	TMP=2.9283e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4337)
5338	4	-1.3918	1012	-1013	1135	-1136	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4338)
5339	4	-1.3918	1013	-1014	1135	-1136	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4339)
5340	4	-1.3919	1014	-1015	1135	-1136	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4340)
5341	4	-1.3919	1015	-1016	1135	-1136	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4341)
5342	4	-1.3919	1016	-1017	1135	-1136	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4342)
5343	4	-1.3919	1017	-1018	1135	-1136	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4343)
5344	4	-1.3919	1018	-1019	1135	-1136	301	TMP=2.9255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4344)
5345	4	-1.3919	1019	-1020	1135	-1136	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4345)
5346	4	-1.3919	1020	-1021	1135	-1136	301	TMP=2.9253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4346)
5347	4	-1.3920	1021	-1022	1135	-1136	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4347)
5348	4	-1.3920	1022	-1023	1135	-1136	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4348)
5349	4	-1.3920	1023	-1024	1135	-1136	301	TMP=2.9250e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4349)
5350	4	-1.3920	1024	-1025	1135	-1136	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4350)
5351	4	-1.3920	1025	-1026	1135	-1136	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4351)
5352	4	-1.3920	1026	-1027	1135	-1136	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4352)
5353	4	-1.3920	1027	-1028	1135	-1136	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4353)
5354	4	-1.3920	1028	-1029	1135	-1136	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4354)
5355	4	-1.3920	1029	-1030	1135	-1136	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4355)

5356	4	-1.3920	1030	-1031	1135	-1136	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4356)
5357	4	-1.3920	1031	-1032	1135	-1136	301	TMP=2.9248e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4357)
5358	4	-1.3920	1032	-1033	1135	-1136	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4358)
5359	4	-1.3920	1033	-1034	1135	-1136	301	TMP=2.9249e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4359)
5360	4	-1.3920	1034	-1035	1135	-1136	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4360)
5361	4	-1.3919	1035	-1036	1135	-1136	301	TMP=2.9252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4361)
5362	4	-1.3919	1036	-1037	1135	-1136	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4362)
5363	4	-1.3919	1037	-1038	1135	-1136	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4363)
5364	4	-1.3919	1038	-1039	1135	-1136	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4364)
5365	4	-1.3919	1039	-1040	1135	-1136	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4365)
5366	4	-1.3918	1040	-1041	1135	-1136	301	TMP=2.9273e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4366)
5367	4	-1.3918	1041	-1042	1135	-1136	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4367)
5368	4	-1.3917	1042	-1043	1135	-1136	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4368)
5369	4	-1.3916	1043	-1044	1135	-1136	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4369)
5370	4	-1.3915	1044	-1045	1135	-1136	301	TMP=2.9320e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4370)
5371	4	-1.3916	1045	-1046	1135	-1136	301	TMP=2.9318e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4371)
5372	4	-1.3918	1046	-1047	1135	-1136	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4372)
5373	4	-1.3933	1047	-1048	1135	-1136	301	TMP=2.9030e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4373)
5374	4	-1.4000	1048	-1049	1135	-1136	301	TMP=2.7770e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4374)
5375	4	-1.3916	1135	-1136	-302			TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4375)
5376	4	-1.3923	-1000	1136	-1137			TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4376)
5377	4	-1.3923	1000	-1001	1136	-1137	301	TMP=2.9201e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4377)
5378	4	-1.3922	1001	-1002	1136	-1137	301	TMP=2.9208e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4378)
5379	4	-1.3922	1002	-1003	1136	-1137	301	TMP=2.9217e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4379)
5380	4	-1.3921	1003	-1004	1136	-1137	301	TMP=2.9227e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4380)
5381	4	-1.3920	1004	-1005	1136	-1137	301	TMP=2.9241e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4381)
5382	4	-1.3919	1005	-1006	1136	-1137	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4382)
5383	4	-1.3918	1006	-1007	1136	-1137	301	TMP=2.9279e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4383)
5384	4	-1.3917	1007	-1008	1136	-1137	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4384)
5385	4	-1.3917	1008	-1009	1136	-1137	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4385)
5386	4	-1.3917	1009	-1010	1136	-1137	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4386)
5387	4	-1.3917	1010	-1011	1136	-1137	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4387)
5388	4	-1.3918	1011	-1012	1136	-1137	301	TMP=2.9283e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4388)
5389	4	-1.3918	1012	-1013	1136	-1137	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4389)
5390	4	-1.3918	1013	-1014	1136	-1137	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4390)
5391	4	-1.3919	1014	-1015	1136	-1137	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4391)
5392	4	-1.3919	1015	-1016	1136	-1137	301	TMP=2.9262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4392)
5393	4	-1.3919	1016	-1017	1136	-1137	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4393)
5394	4	-1.3919	1017	-1018	1136	-1137	301	TMP=2.9259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4394)
5395	4	-1.3919	1018	-1019	1136	-1137	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4395)
5396	4	-1.3919	1019	-1020	1136	-1137	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4396)
5397	4	-1.3919	1020	-1021	1136	-1137	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4397)
5398	4	-1.3919	1021	-1022	1136	-1137	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4398)
5399	4	-1.3919	1022	-1023	1136	-1137	301	TMP=2.9255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4399)
5400	4	-1.3919	1023	-1024	1136	-1137	301	TMP=2.9255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4400)
5401	4	-1.3919	1024	-1025	1136	-1137	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4401)
5402	4	-1.3919	1025	-1026	1136	-1137	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4402)
5403	4	-1.3919	1026	-1027	1136	-1137	301	TMP=2.9253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4403)
5404	4	-1.3919	1027	-1028	1136	-1137	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4404)
5405	4	-1.3919	1028	-1029	1136	-1137	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4405)
5406	4	-1.3919	1029	-1030	1136	-1137	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4406)
5407	4	-1.3919	1030	-1031	1136	-1137	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4407)
5408	4	-1.3919	1031	-1032	1136	-1137	301	TMP=2.9253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4408)
5409	4	-1.3919	1032	-1033	1136	-1137	301	TMP=2.9255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4409)
5410	4	-1.3919	1033	-1034	1136	-1137	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4410)
5411	4	-1.3919	1034	-1035	1136	-1137	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4411)
5412	4	-1.3919	1035	-1036	1136	-1137	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4412)
5413	4	-1.3919	1036	-1037	1136	-1137	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4413)
5414	4	-1.3919	1037	-1038	1136	-1137	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4414)
5415	4	-1.3919	1038	-1039	1136	-1137	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4415)

5416	4	-1.3918	1039	-1040	1136	-1137	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4416)
5417	4	-1.3918	1040	-1041	1136	-1137	301	TMP=2.9276e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4417)
5418	4	-1.3918	1041	-1042	1136	-1137	301	TMP=2.9282e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4418)
5419	4	-1.3917	1042	-1043	1136	-1137	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4419)
5420	4	-1.3916	1043	-1044	1136	-1137	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4420)
5421	4	-1.3915	1044	-1045	1136	-1137	301	TMP=2.9323e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4421)
5422	4	-1.3915	1045	-1046	1136	-1137	301	TMP=2.9323e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4422)
5423	4	-1.3918	1046	-1047	1136	-1137	301	TMP=2.9273e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4423)
5424	4	-1.3932	1047	-1048	1136	-1137	301	TMP=2.9046e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4424)
5425	4	-1.3999	1048	-1049	1136	-1137	301	TMP=2.7791e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4425)
5426	4	-1.3916	1136	-1137	-302			TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4426)
5427	4	-1.3923	-1000	1137	-1138			TMP=2.9190e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4427)
5428	4	-1.3923	1000	-1001	1137	-1138	301	TMP=2.9196e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4428)
5429	4	-1.3922	1001	-1002	1137	-1138	301	TMP=2.9204e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4429)
5430	4	-1.3922	1002	-1003	1137	-1138	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4430)
5431	4	-1.3921	1003	-1004	1137	-1138	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4431)
5432	4	-1.3920	1004	-1005	1137	-1138	301	TMP=2.9247e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4432)
5433	4	-1.3918	1005	-1006	1137	-1138	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4433)
5434	4	-1.3918	1006	-1007	1137	-1138	301	TMP=2.9285e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4434)
5435	4	-1.3917	1007	-1008	1137	-1138	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4435)
5436	4	-1.3917	1008	-1009	1137	-1138	301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4436)
5437	4	-1.3917	1009	-1010	1137	-1138	301	TMP=2.9293e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4437)
5438	4	-1.3917	1010	-1011	1137	-1138	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4438)
5439	4	-1.3917	1011	-1012	1137	-1138	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4439)
5440	4	-1.3918	1012	-1013	1137	-1138	301	TMP=2.9279e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4440)
5441	4	-1.3918	1013	-1014	1137	-1138	301	TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4441)
5442	4	-1.3919	1014	-1015	1137	-1138	301	TMP=2.9266e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4442)
5443	4	-1.3919	1015	-1016	1137	-1138	301	TMP=2.9266e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4443)
5444	4	-1.3919	1016	-1017	1137	-1138	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4444)
5445	4	-1.3919	1017	-1018	1137	-1138	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4445)
5446	4	-1.3919	1018	-1019	1137	-1138	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4446)
5447	4	-1.3919	1019	-1020	1137	-1138	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4447)
5448	4	-1.3919	1020	-1021	1137	-1138	301	TMP=2.9262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4448)
5449	4	-1.3919	1021	-1022	1137	-1138	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4449)
5450	4	-1.3919	1022	-1023	1137	-1138	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4450)
5451	4	-1.3919	1023	-1024	1137	-1138	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4451)
5452	4	-1.3919	1024	-1025	1137	-1138	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4452)
5453	4	-1.3919	1025	-1026	1137	-1138	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4453)
5454	4	-1.3919	1026	-1027	1137	-1138	301	TMP=2.9259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4454)
5455	4	-1.3919	1027	-1028	1137	-1138	301	TMP=2.9259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4455)
5456	4	-1.3919	1028	-1029	1137	-1138	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4456)
5457	4	-1.3919	1029	-1030	1137	-1138	301	TMP=2.9258e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4457)
5458	4	-1.3919	1030	-1031	1137	-1138	301	TMP=2.9259e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4458)
5459	4	-1.3919	1031	-1032	1137	-1138	301	TMP=2.9260e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4459)
5460	4	-1.3919	1032	-1033	1137	-1138	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4460)
5461	4	-1.3919	1033	-1034	1137	-1138	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4461)
5462	4	-1.3919	1034	-1035	1137	-1138	301	TMP=2.9262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4462)
5463	4	-1.3919	1035	-1036	1137	-1138	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4463)
5464	4	-1.3919	1036	-1037	1137	-1138	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4464)
5465	4	-1.3919	1037	-1038	1137	-1138	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4465)
5466	4	-1.3918	1038	-1039	1137	-1138	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4466)
5467	4	-1.3918	1039	-1040	1137	-1138	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4467)
5468	4	-1.3918	1040	-1041	1137	-1138	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4468)
5469	4	-1.3918	1041	-1042	1137	-1138	301	TMP=2.9284e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4469)
5470	4	-1.3917	1042	-1043	1137	-1138	301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4470)
5471	4	-1.3916	1043	-1044	1137	-1138	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4471)
5472	4	-1.3915	1044	-1045	1137	-1138	301	TMP=2.9326e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4472)
5473	4	-1.3915	1045	-1046	1137	-1138	301	TMP=2.9326e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4473)
5474	4	-1.3918	1046	-1047	1137	-1138	301	TMP=2.9277e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4474)
5475	4	-1.3931	1047	-1048	1137	-1138	301	TMP=2.9062e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4475)

5476	4	-1.3999	1048	-1049	1137	-1138	301	TMP=2.7804e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4476)
5477	4	-1.3915	1137	-1138	-302			TMP=2.9319e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4477)
5478	4	-1.3924	-1000		1138	-1139		TMP=2.9184e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4478)
5479	4	-1.3923	1000	-1001	1138	-1139	301	TMP=2.9190e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4479)
5480	4	-1.3923	1001	-1002	1138	-1139	301	TMP=2.9200e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4480)
5481	4	-1.3922	1002	-1003	1138	-1139	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4481)
5482	4	-1.3921	1003	-1004	1138	-1139	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4482)
5483	4	-1.3919	1004	-1005	1138	-1139	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4483)
5484	4	-1.3918	1005	-1006	1138	-1139	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4484)
5485	4	-1.3917	1006	-1007	1138	-1139	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4485)
5486	4	-1.3917	1007	-1008	1138	-1139	301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4486)
5487	4	-1.3917	1008	-1009	1138	-1139	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4487)
5488	4	-1.3917	1009	-1010	1138	-1139	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4488)
5489	4	-1.3917	1010	-1011	1138	-1139	301	TMP=2.9293e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4489)
5490	4	-1.3917	1011	-1012	1138	-1139	301	TMP=2.9288e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4490)
5491	4	-1.3918	1012	-1013	1138	-1139	301	TMP=2.9279e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4491)
5492	4	-1.3918	1013	-1014	1138	-1139	301	TMP=2.9276e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4492)
5493	4	-1.3918	1014	-1015	1138	-1139	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4493)
5494	4	-1.3918	1015	-1016	1138	-1139	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4494)
5495	4	-1.3918	1016	-1017	1138	-1139	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4495)
5496	4	-1.3918	1017	-1018	1138	-1139	301	TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4496)
5497	4	-1.3918	1018	-1019	1138	-1139	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4497)
5498	4	-1.3919	1019	-1020	1138	-1139	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4498)
5499	4	-1.3919	1020	-1021	1138	-1139	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4499)
5500	4	-1.3919	1021	-1022	1138	-1139	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4500)
5501	4	-1.3919	1022	-1023	1138	-1139	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4501)
5502	4	-1.3919	1023	-1024	1138	-1139	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4502)
5503	4	-1.3919	1024	-1025	1138	-1139	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4503)
5504	4	-1.3919	1025	-1026	1138	-1139	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4504)
5505	4	-1.3919	1026	-1027	1138	-1139	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4505)
5506	4	-1.3919	1027	-1028	1138	-1139	301	TMP=2.9263e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4506)
5507	4	-1.3919	1028	-1029	1138	-1139	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4507)
5508	4	-1.3919	1029	-1030	1138	-1139	301	TMP=2.9264e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4508)
5509	4	-1.3919	1030	-1031	1138	-1139	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4509)
5510	4	-1.3919	1031	-1032	1138	-1139	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4510)
5511	4	-1.3919	1032	-1033	1138	-1139	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4511)
5512	4	-1.3919	1033	-1034	1138	-1139	301	TMP=2.9266e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4512)
5513	4	-1.3919	1034	-1035	1138	-1139	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4513)
5514	4	-1.3918	1035	-1036	1138	-1139	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4514)
5515	4	-1.3918	1036	-1037	1138	-1139	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4515)
5516	4	-1.3918	1037	-1038	1138	-1139	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4516)
5517	4	-1.3918	1038	-1039	1138	-1139	301	TMP=2.9275e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4517)
5518	4	-1.3918	1039	-1040	1138	-1139	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4518)
5519	4	-1.3918	1040	-1041	1138	-1139	301	TMP=2.9282e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4519)
5520	4	-1.3917	1041	-1042	1138	-1139	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4520)
5521	4	-1.3917	1042	-1043	1138	-1139	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4521)
5522	4	-1.3916	1043	-1044	1138	-1139	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4522)
5523	4	-1.3915	1044	-1045	1138	-1139	301	TMP=2.9333e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4523)
5524	4	-1.3915	1045	-1046	1138	-1139	301	TMP=2.9329e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4524)
5525	4	-1.3918	1046	-1047	1138	-1139	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4525)
5526	4	-1.3930	1047	-1048	1138	-1139	301	TMP=2.9080e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4526)
5527	4	-1.3998	1048	-1049	1138	-1139	301	TMP=2.7824e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4527)
5528	4	-1.3915	1138	-1139	-302			TMP=2.9323e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4528)
5529	4	-1.3924	-1000		1139	-1140		TMP=2.9178e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4529)
5530	4	-1.3923	1000	-1001	1139	-1140	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4530)
5531	4	-1.3923	1001	-1002	1139	-1140	301	TMP=2.9198e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4531)
5532	4	-1.3922	1002	-1003	1139	-1140	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4532)
5533	4	-1.3920	1003	-1004	1139	-1140	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4533)
5534	4	-1.3919	1004	-1005	1139	-1140	301	TMP=2.9265e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4534)
5535	4	-1.3917	1005	-1006	1139	-1140	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4535)

5536	4	-1.3917	1006	-1007	1139	-1140	301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4536)
5537	4	-1.3917	1007	-1008	1139	-1140	301	TMP=2.9298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4537)
5538	4	-1.3917	1008	-1009	1139	-1140	301	TMP=2.9299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4538)
5539	4	-1.3917	1009	-1010	1139	-1140	301	TMP=2.9298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4539)
5540	4	-1.3917	1010	-1011	1139	-1140	301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4540)
5541	4	-1.3917	1011	-1012	1139	-1140	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4541)
5542	4	-1.3918	1012	-1013	1139	-1140	301	TMP=2.9285e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4542)
5543	4	-1.3918	1013	-1014	1139	-1140	301	TMP=2.9283e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4543)
5544	4	-1.3918	1014	-1015	1139	-1140	301	TMP=2.9282e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4544)
5545	4	-1.3918	1015	-1016	1139	-1140	301	TMP=2.9280e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4545)
5546	4	-1.3918	1016	-1017	1139	-1140	301	TMP=2.9277e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4546)
5547	4	-1.3918	1017	-1018	1139	-1140	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4547)
5548	4	-1.3918	1018	-1019	1139	-1140	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4548)
5549	4	-1.3918	1019	-1020	1139	-1140	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4549)
5550	4	-1.3918	1020	-1021	1139	-1140	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4550)
5551	4	-1.3918	1021	-1022	1139	-1140	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4551)
5552	4	-1.3918	1022	-1023	1139	-1140	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4552)
5553	4	-1.3918	1023	-1024	1139	-1140	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4553)
5554	4	-1.3918	1024	-1025	1139	-1140	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4554)
5555	4	-1.3918	1025	-1026	1139	-1140	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4555)
5556	4	-1.3918	1026	-1027	1139	-1140	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4556)
5557	4	-1.3918	1027	-1028	1139	-1140	301	TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4557)
5558	4	-1.3918	1028	-1029	1139	-1140	301	TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4558)
5559	4	-1.3918	1029	-1030	1139	-1140	301	TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4559)
5560	4	-1.3918	1030	-1031	1139	-1140	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4560)
5561	4	-1.3918	1031	-1032	1139	-1140	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4561)
5562	4	-1.3918	1032	-1033	1139	-1140	301	TMP=2.9271e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4562)
5563	4	-1.3918	1033	-1034	1139	-1140	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4563)
5564	4	-1.3918	1034	-1035	1139	-1140	301	TMP=2.9272e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4564)
5565	4	-1.3918	1035	-1036	1139	-1140	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4565)
5566	4	-1.3918	1036	-1037	1139	-1140	301	TMP=2.9275e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4566)
5567	4	-1.3918	1037	-1038	1139	-1140	301	TMP=2.9277e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4567)
5568	4	-1.3918	1038	-1039	1139	-1140	301	TMP=2.9279e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4568)
5569	4	-1.3918	1039	-1040	1139	-1140	301	TMP=2.9282e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4569)
5570	4	-1.3917	1040	-1041	1139	-1140	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4570)
5571	4	-1.3917	1041	-1042	1139	-1140	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4571)
5572	4	-1.3917	1042	-1043	1139	-1140	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4572)
5573	4	-1.3915	1043	-1044	1139	-1140	301	TMP=2.9320e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4573)
5574	4	-1.3914	1044	-1045	1139	-1140	301	TMP=2.9336e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4574)
5575	4	-1.3915	1045	-1046	1139	-1140	301	TMP=2.9328e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4575)
5576	4	-1.3918	1046	-1047	1139	-1140	301	TMP=2.9276e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4576)
5577	4	-1.3929	1047	-1048	1139	-1140	301	TMP=2.9097e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4577)
5578	4	-1.3997	1048	-1049	1139	-1140	301	TMP=2.7841e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4578)
5579	4	-1.3915	1139	-1140	-302			TMP=2.9329e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4579)
5580	4	-1.3924	-1000	1140	-1141			TMP=2.9171e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4580)
5581	4	-1.3924	1000	-1001	1140	-1141	301	TMP=2.9181e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4581)
5582	4	-1.3923	1001	-1002	1140	-1141	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4582)
5583	4	-1.3922	1002	-1003	1140	-1141	301	TMP=2.9215e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4583)
5584	4	-1.3920	1003	-1004	1140	-1141	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4584)
5585	4	-1.3918	1004	-1005	1140	-1141	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4585)
5586	4	-1.3917	1005	-1006	1140	-1141	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4586)
5587	4	-1.3917	1006	-1007	1140	-1141	301	TMP=2.9299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4587)
5588	4	-1.3916	1007	-1008	1140	-1141	301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4588)
5589	4	-1.3916	1008	-1009	1140	-1141	301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4589)
5590	4	-1.3917	1009	-1010	1140	-1141	301	TMP=2.9299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4590)
5591	4	-1.3917	1010	-1011	1140	-1141	301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4591)
5592	4	-1.3917	1011	-1012	1140	-1141	301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4592)
5593	4	-1.3917	1012	-1013	1140	-1141	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4593)
5594	4	-1.3917	1013	-1014	1140	-1141	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4594)
5595	4	-1.3917	1014	-1015	1140	-1141	301	TMP=2.9288e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4595)

5596	4	-1.3917	1015	-1016	1140	-1141	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4596)
5597	4	-1.3918	1016	-1017	1140	-1141	301	TMP=2.9283e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4597)
5598	4	-1.3918	1017	-1018	1140	-1141	301	TMP=2.9280e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4598)
5599	4	-1.3918	1018	-1019	1140	-1141	301	TMP=2.9277e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4599)
5600	4	-1.3918	1019	-1020	1140	-1141	301	TMP=2.9277e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4600)
5601	4	-1.3918	1020	-1021	1140	-1141	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4601)
5602	4	-1.3918	1021	-1022	1140	-1141	301	TMP=2.9277e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4602)
5603	4	-1.3918	1022	-1023	1140	-1141	301	TMP=2.9277e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4603)
5604	4	-1.3918	1023	-1024	1140	-1141	301	TMP=2.9276e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4604)
5605	4	-1.3918	1024	-1025	1140	-1141	301	TMP=2.9275e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4605)
5606	4	-1.3918	1025	-1026	1140	-1141	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4606)
5607	4	-1.3918	1026	-1027	1140	-1141	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4607)
5608	4	-1.3918	1027	-1028	1140	-1141	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4608)
5609	4	-1.3918	1028	-1029	1140	-1141	301	TMP=2.9274e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4609)
5610	4	-1.3918	1029	-1030	1140	-1141	301	TMP=2.9275e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4610)
5611	4	-1.3918	1030	-1031	1140	-1141	301	TMP=2.9276e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4611)
5612	4	-1.3918	1031	-1032	1140	-1141	301	TMP=2.9276e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4612)
5613	4	-1.3918	1032	-1033	1140	-1141	301	TMP=2.9276e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4613)
5614	4	-1.3918	1033	-1034	1140	-1141	301	TMP=2.9277e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4614)
5615	4	-1.3918	1034	-1035	1140	-1141	301	TMP=2.9278e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4615)
5616	4	-1.3918	1035	-1036	1140	-1141	301	TMP=2.9280e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4616)
5617	4	-1.3918	1036	-1037	1140	-1141	301	TMP=2.9280e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4617)
5618	4	-1.3918	1037	-1038	1140	-1141	301	TMP=2.9282e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4618)
5619	4	-1.3918	1038	-1039	1140	-1141	301	TMP=2.9284e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4619)
5620	4	-1.3917	1039	-1040	1140	-1141	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4620)
5621	4	-1.3917	1040	-1041	1140	-1141	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4621)
5622	4	-1.3917	1041	-1042	1140	-1141	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4622)
5623	4	-1.3916	1042	-1043	1140	-1141	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4623)
5624	4	-1.3915	1043	-1044	1140	-1141	301	TMP=2.9327e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4624)
5625	4	-1.3914	1044	-1045	1140	-1141	301	TMP=2.9337e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4625)
5626	4	-1.3915	1045	-1046	1140	-1141	301	TMP=2.9324e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4626)
5627	4	-1.3918	1046	-1047	1140	-1141	301	TMP=2.9273e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4627)
5628	4	-1.3928	1047	-1048	1140	-1141	301	TMP=2.9113e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4628)
5629	4	-1.3996	1048	-1049	1140	-1141	301	TMP=2.7863e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4629)
5630	4	-1.3915	1140	-1141	-302			TMP=2.9334e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4630)
5631	4	-1.3925	-1000	1141	-1142			TMP=2.9165e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4631)
5632	4	-1.3924	1000	-1001	1141	-1142	301	TMP=2.9172e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4632)
5633	4	-1.3923	1001	-1002	1141	-1142	301	TMP=2.9190e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4633)
5634	4	-1.3922	1002	-1003	1141	-1142	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4634)
5635	4	-1.3919	1003	-1004	1141	-1142	301	TMP=2.9253e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4635)
5636	4	-1.3918	1004	-1005	1141	-1142	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4636)
5637	4	-1.3917	1005	-1006	1141	-1142	301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4637)
5638	4	-1.3916	1006	-1007	1141	-1142	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4638)
5639	4	-1.3916	1007	-1008	1141	-1142	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4639)
5640	4	-1.3916	1008	-1009	1141	-1142	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4640)
5641	4	-1.3916	1009	-1010	1141	-1142	301	TMP=2.9302e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4641)
5642	4	-1.3917	1010	-1011	1141	-1142	301	TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4642)
5643	4	-1.3917	1011	-1012	1141	-1142	301	TMP=2.9299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4643)
5644	4	-1.3917	1012	-1013	1141	-1142	301	TMP=2.9298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4644)
5645	4	-1.3917	1013	-1014	1141	-1142	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4645)
5646	4	-1.3917	1014	-1015	1141	-1142	301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4646)
5647	4	-1.3917	1015	-1016	1141	-1142	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4647)
5648	4	-1.3917	1016	-1017	1141	-1142	301	TMP=2.9288e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4648)
5649	4	-1.3917	1017	-1018	1141	-1142	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4649)
5650	4	-1.3917	1018	-1019	1141	-1142	301	TMP=2.9285e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4650)
5651	4	-1.3918	1019	-1020	1141	-1142	301	TMP=2.9285e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4651)
5652	4	-1.3918	1020	-1021	1141	-1142	301	TMP=2.9284e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4652)
5653	4	-1.3918	1021	-1022	1141	-1142	301	TMP=2.9283e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4653)
5654	4	-1.3918	1022	-1023	1141	-1142	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4654)
5655	4	-1.3918	1023	-1024	1141	-1142	301	TMP=2.9280e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4655)

5656	4	-1.3918	1024	-1025	1141	-1142	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4656)
5657	4	-1.3918	1025	-1026	1141	-1142	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4657)
5658	4	-1.3918	1026	-1027	1141	-1142	301	TMP=2.9280e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4658)
5659	4	-1.3918	1027	-1028	1141	-1142	301	TMP=2.9280e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4659)
5660	4	-1.3918	1028	-1029	1141	-1142	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4660)
5661	4	-1.3918	1029	-1030	1141	-1142	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4661)
5662	4	-1.3918	1030	-1031	1141	-1142	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4662)
5663	4	-1.3918	1031	-1032	1141	-1142	301	TMP=2.9281e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4663)
5664	4	-1.3918	1032	-1033	1141	-1142	301	TMP=2.9282e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4664)
5665	4	-1.3918	1033	-1034	1141	-1142	301	TMP=2.9282e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4665)
5666	4	-1.3918	1034	-1035	1141	-1142	301	TMP=2.9284e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4666)
5667	4	-1.3918	1035	-1036	1141	-1142	301	TMP=2.9285e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4667)
5668	4	-1.3917	1036	-1037	1141	-1142	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4668)
5669	4	-1.3917	1037	-1038	1141	-1142	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4669)
5670	4	-1.3917	1038	-1039	1141	-1142	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4670)
5671	4	-1.3917	1039	-1040	1141	-1142	301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4671)
5672	4	-1.3917	1040	-1041	1141	-1142	301	TMP=2.9295e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4672)
5673	4	-1.3916	1041	-1042	1141	-1142	301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4673)
5674	4	-1.3916	1042	-1043	1141	-1142	301	TMP=2.9316e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4674)
5675	4	-1.3915	1043	-1044	1141	-1142	301	TMP=2.9333e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4675)
5676	4	-1.3914	1044	-1045	1141	-1142	301	TMP=2.9336e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4676)
5677	4	-1.3916	1045	-1046	1141	-1142	301	TMP=2.9318e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4677)
5678	4	-1.3919	1046	-1047	1141	-1142	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4678)
5679	4	-1.3927	1047	-1048	1141	-1142	301	TMP=2.9129e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4679)
5680	4	-1.3994	1048	-1049	1141	-1142	301	TMP=2.7889e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4680)
5681	4	-1.3914	1141	-1142	-302			TMP=2.9337e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4681)
5682	4	-1.3925	-1000	1142	-1143			TMP=2.9162e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4682)
5683	4	-1.3924	1000	-1001	1142	-1143	301	TMP=2.9170e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4683)
5684	4	-1.3923	1001	-1002	1142	-1143	301	TMP=2.9189e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4684)
5685	4	-1.3921	1002	-1003	1142	-1143	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4685)
5686	4	-1.3919	1003	-1004	1142	-1143	301	TMP=2.9262e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4686)
5687	4	-1.3918	1004	-1005	1142	-1143	301	TMP=2.9285e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4687)
5688	4	-1.3917	1005	-1006	1142	-1143	301	TMP=2.9297e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4688)
5689	4	-1.3916	1006	-1007	1142	-1143	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4689)
5690	4	-1.3916	1007	-1008	1142	-1143	301	TMP=2.9309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4690)
5691	4	-1.3916	1008	-1009	1142	-1143	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4691)
5692	4	-1.3916	1009	-1010	1142	-1143	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4692)
5693	4	-1.3916	1010	-1011	1142	-1143	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4693)
5694	4	-1.3916	1011	-1012	1142	-1143	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4694)
5695	4	-1.3916	1012	-1013	1142	-1143	301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4695)
5696	4	-1.3917	1013	-1014	1142	-1143	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4696)
5697	4	-1.3917	1014	-1015	1142	-1143	301	TMP=2.9298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4697)
5698	4	-1.3917	1015	-1016	1142	-1143	301	TMP=2.9295e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4698)
5699	4	-1.3917	1016	-1017	1142	-1143	301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4699)
5700	4	-1.3917	1017	-1018	1142	-1143	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4700)
5701	4	-1.3917	1018	-1019	1142	-1143	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4701)
5702	4	-1.3917	1019	-1020	1142	-1143	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4702)
5703	4	-1.3917	1020	-1021	1142	-1143	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4703)
5704	4	-1.3917	1021	-1022	1142	-1143	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4704)
5705	4	-1.3917	1022	-1023	1142	-1143	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4705)
5706	4	-1.3917	1023	-1024	1142	-1143	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4706)
5707	4	-1.3917	1024	-1025	1142	-1143	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4707)
5708	4	-1.3917	1025	-1026	1142	-1143	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4708)
5709	4	-1.3917	1026	-1027	1142	-1143	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4709)
5710	4	-1.3917	1027	-1028	1142	-1143	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4710)
5711	4	-1.3917	1028	-1029	1142	-1143	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4711)
5712	4	-1.3917	1029	-1030	1142	-1143	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4712)
5713	4	-1.3917	1030	-1031	1142	-1143	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4713)
5714	4	-1.3917	1031	-1032	1142	-1143	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4714)
5715	4	-1.3917	1032	-1033	1142	-1143	301	TMP=2.9288e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4715)

5716	4	-1.3917	1033	-1034	1142	-1143	301	TMP=2.9288e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4716)
5717	4	-1.3917	1034	-1035	1142	-1143	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4717)
5718	4	-1.3917	1035	-1036	1142	-1143	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4718)
5719	4	-1.3917	1036	-1037	1142	-1143	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4719)
5720	4	-1.3917	1037	-1038	1142	-1143	301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4720)
5721	4	-1.3917	1038	-1039	1142	-1143	301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4721)
5722	4	-1.3917	1039	-1040	1142	-1143	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4722)
5723	4	-1.3917	1040	-1041	1142	-1143	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4723)
5724	4	-1.3916	1041	-1042	1142	-1143	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4724)
5725	4	-1.3915	1042	-1043	1142	-1143	301	TMP=2.9326e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4725)
5726	4	-1.3914	1043	-1044	1142	-1143	301	TMP=2.9336e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4726)
5727	4	-1.3915	1044	-1045	1142	-1143	301	TMP=2.9330e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4727)
5728	4	-1.3916	1045	-1046	1142	-1143	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4728)
5729	4	-1.3919	1046	-1047	1142	-1143	301	TMP=2.9261e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4729)
5730	4	-1.3926	1047	-1048	1142	-1143	301	TMP=2.9142e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4730)
5731	4	-1.3993	1048	-1049	1142	-1143	301	TMP=2.7915e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4731)
5732	4	-1.3914	1142	-1143	-302			TMP=2.9336e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4732)
5733	4	-1.3925	-1000	1143	-1144			TMP=2.9161e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4733)
5734	4	-1.3924	1000	-1001	1143	-1144	301	TMP=2.9168e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4734)
5735	4	-1.3923	1001	-1002	1143	-1144	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4735)
5736	4	-1.3921	1002	-1003	1143	-1144	301	TMP=2.9220e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4736)
5737	4	-1.3919	1003	-1004	1143	-1144	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4737)
5738	4	-1.3917	1004	-1005	1143	-1144	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4738)
5739	4	-1.3917	1005	-1006	1143	-1144	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4739)
5740	4	-1.3916	1006	-1007	1143	-1144	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4740)
5741	4	-1.3916	1007	-1008	1143	-1144	301	TMP=2.9309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4741)
5742	4	-1.3916	1008	-1009	1143	-1144	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4742)
5743	4	-1.3916	1009	-1010	1143	-1144	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4743)
5744	4	-1.3916	1010	-1011	1143	-1144	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4744)
5745	4	-1.3916	1011	-1012	1143	-1144	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4745)
5746	4	-1.3916	1012	-1013	1143	-1144	301	TMP=2.9306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4746)
5747	4	-1.3916	1013	-1014	1143	-1144	301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4747)
5748	4	-1.3917	1014	-1015	1143	-1144	301	TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4748)
5749	4	-1.3917	1015	-1016	1143	-1144	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4749)
5750	4	-1.3917	1016	-1017	1143	-1144	301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4750)
5751	4	-1.3917	1017	-1018	1143	-1144	301	TMP=2.9293e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4751)
5752	4	-1.3917	1018	-1019	1143	-1144	301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4752)
5753	4	-1.3917	1019	-1020	1143	-1144	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4753)
5754	4	-1.3917	1020	-1021	1143	-1144	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4754)
5755	4	-1.3917	1021	-1022	1143	-1144	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4755)
5756	4	-1.3917	1022	-1023	1143	-1144	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4756)
5757	4	-1.3917	1023	-1024	1143	-1144	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4757)
5758	4	-1.3917	1024	-1025	1143	-1144	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4758)
5759	4	-1.3917	1025	-1026	1143	-1144	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4759)
5760	4	-1.3917	1026	-1027	1143	-1144	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4760)
5761	4	-1.3917	1027	-1028	1143	-1144	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4761)
5762	4	-1.3917	1028	-1029	1143	-1144	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4762)
5763	4	-1.3917	1029	-1030	1143	-1144	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4763)
5764	4	-1.3917	1030	-1031	1143	-1144	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4764)
5765	4	-1.3917	1031	-1032	1143	-1144	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4765)
5766	4	-1.3917	1032	-1033	1143	-1144	301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4766)
5767	4	-1.3917	1033	-1034	1143	-1144	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4767)
5768	4	-1.3917	1034	-1035	1143	-1144	301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4768)
5769	4	-1.3917	1035	-1036	1143	-1144	301	TMP=2.9293e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4769)
5770	4	-1.3917	1036	-1037	1143	-1144	301	TMP=2.9293e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4770)
5771	4	-1.3917	1037	-1038	1143	-1144	301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4771)
5772	4	-1.3917	1038	-1039	1143	-1144	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4772)
5773	4	-1.3917	1039	-1040	1143	-1144	301	TMP=2.9299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4773)
5774	4	-1.3916	1040	-1041	1143	-1144	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4774)
5775	4	-1.3916	1041	-1042	1143	-1144	301	TMP=2.9316e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4775)

5776	4	-1.3915	1042	-1043	1143	-1144	301	TMP=2.9330e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4776)
5777	4	-1.3914	1043	-1044	1143	-1144	301	TMP=2.9335e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4777)
5778	4	-1.3915	1044	-1045	1143	-1144	301	TMP=2.9324e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4778)
5779	4	-1.3917	1045	-1046	1143	-1144	301	TMP=2.9298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4779)
5780	4	-1.3919	1046	-1047	1143	-1144	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4780)
5781	4	-1.3926	1047	-1048	1143	-1144	301	TMP=2.9150e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4781)
5782	4	-1.3992	1048	-1049	1143	-1144	301	TMP=2.7934e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4782)
5783	4	-1.3915	1143	-1144	-302			TMP=2.9332e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4783)
5784	4	-1.3925	-1000	1144	-1145			TMP=2.9162e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4784)
5785	4	-1.3925	1000	-1001	1144	-1145	401 301	TMP=2.9164e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4785)
5786	4	-1.3923	1001	-1002	1144	-1145	401 301	TMP=2.9186e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4786)
5787	4	-1.3921	1002	-1003	1144	-1145	401 301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4787)
5788	4	-1.3919	1003	-1004	1144	-1145	401 301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4788)
5789	4	-1.3917	1004	-1005	1144	-1145	401 301	TMP=2.9288e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4789)
5790	4	-1.3916	1005	-1006	1144	-1145	401 301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4790)
5791	4	-1.3916	1006	-1007	1144	-1145	401 301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4791)
5792	4	-1.3916	1007	-1008	1144	-1145	401 301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4792)
5793	4	-1.3916	1008	-1009	1144	-1145	401 301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4793)
5794	4	-1.3916	1009	-1010	1144	-1145	401 301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4794)
5795	4	-1.3916	1010	-1011	1144	-1145	401 301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4795)
5796	4	-1.3916	1011	-1012	1144	-1145	401 301	TMP=2.9309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4796)
5797	4	-1.3916	1012	-1013	1144	-1145	401 301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4797)
5798	4	-1.3916	1013	-1014	1144	-1145	401 301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4798)
5799	4	-1.3917	1014	-1015	1144	-1145	401 301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4799)
5800	4	-1.3917	1015	-1016	1144	-1145	401 301	TMP=2.9298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4800)
5801	4	-1.3917	1016	-1017	1144	-1145	401 301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4801)
5802	4	-1.3917	1017	-1018	1144	-1145	401 301	TMP=2.9295e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4802)
5803	4	-1.3917	1018	-1019	1144	-1145	401 301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4803)
5804	4	-1.3917	1019	-1020	1144	-1145	401 301	TMP=2.9293e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4804)
5805	4	-1.3917	1020	-1021	1144	-1145	401 301	TMP=2.9293e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4805)
5806	4	-1.3917	1021	-1022	1144	-1145	401 301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4806)
5807	4	-1.3917	1022	-1023	1144	-1145	401 301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4807)
5808	4	-1.3917	1023	-1024	1144	-1145	401 301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4808)
5809	4	-1.3917	1024	-1025	1144	-1145	401 301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4809)
5810	4	-1.3917	1025	-1026	1144	-1145	401 301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4810)
5811	4	-1.3917	1026	-1027	1144	-1145	401 301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4811)
5812	4	-1.3917	1027	-1028	1144	-1145	401 301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4812)
5813	4	-1.3917	1028	-1029	1144	-1145	401 301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4813)
5814	4	-1.3917	1029	-1030	1144	-1145	401 301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4814)
5815	4	-1.3917	1030	-1031	1144	-1145	401 301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4815)
5816	4	-1.3917	1031	-1032	1144	-1145	401 301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4816)
5817	4	-1.3917	1032	-1033	1144	-1145	401 301	TMP=2.9293e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4817)
5818	4	-1.3917	1033	-1034	1144	-1145	401 301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4818)
5819	4	-1.3917	1034	-1035	1144	-1145	401 301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4819)
5820	4	-1.3917	1035	-1036	1144	-1145	401 301	TMP=2.9294e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4820)
5821	4	-1.3917	1036	-1037	1144	-1145	401 301	TMP=2.9295e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4821)
5822	4	-1.3917	1037	-1038	1144	-1145	401 301	TMP=2.9297e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4822)
5823	4	-1.3917	1038	-1039	1144	-1145	401 301	TMP=2.9298e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4823)
5824	4	-1.3917	1039	-1040	1144	-1145	401 301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4824)
5825	4	-1.3916	1040	-1041	1144	-1145	401 301	TMP=2.9309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4825)
5826	4	-1.3915	1041	-1042	1144	-1145	401 301	TMP=2.9321e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4826)
5827	4	-1.3915	1042	-1043	1144	-1145	401 301	TMP=2.9333e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4827)
5828	4	-1.3915	1043	-1044	1144	-1145	401 301	TMP=2.9333e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4828)
5829	4	-1.3916	1044	-1045	1144	-1145	401 301	TMP=2.9318e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4829)
5830	4	-1.3917	1045	-1046	1144	-1145	401 301	TMP=2.9290e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4830)
5831	4	-1.3919	1046	-1047	1144	-1145	401 301	TMP=2.9252e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4831)
5832	4	-1.3925	1047	-1048	1144	-1145	401 301	TMP=2.9155e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4832)
5833	4	-1.3992	1048	-1049	1144	-1145	401 301	TMP=2.7944e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4833)
5834	4	-1.3915	1144	-1145	-402			TMP=2.9327e-8	IMP:n=1	\$ Fuel Mesh Cell (FiT) (Cell# 4834)
5835	4	-1.3915	1144	-1145	-302			TMP=2.9327e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4835)

5836	4	-1.3925	-1000	1145	-1146	TMP=2.9165e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4836)
5837	4	-1.3925	1000	-1001	1145	-1146	401 301 TMP=2.9167e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4837)
5838	4	-1.3923	1001	-1002	1145	-1146	401 301 TMP=2.9188e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4838)
5839	4	-1.3921	1002	-1003	1145	-1146	401 301 TMP=2.9224e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4839)
5840	4	-1.3918	1003	-1004	1145	-1146	401 301 TMP=2.9268e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4840)
5841	4	-1.3917	1004	-1005	1145	-1146	401 301 TMP=2.9291e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4841)
5842	4	-1.3916	1005	-1006	1145	-1146	401 301 TMP=2.9306e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4842)
5843	4	-1.3916	1006	-1007	1145	-1146	401 301 TMP=2.9312e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4843)
5844	4	-1.3916	1007	-1008	1145	-1146	401 301 TMP=2.9310e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4844)
5845	4	-1.3916	1008	-1009	1145	-1146	401 301 TMP=2.9312e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4845)
5846	4	-1.3916	1009	-1010	1145	-1146	401 301 TMP=2.9313e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4846)
5847	4	-1.3916	1010	-1011	1145	-1146	401 301 TMP=2.9312e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4847)
5848	4	-1.3916	1011	-1012	1145	-1146	401 301 TMP=2.9310e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4848)
5849	4	-1.3916	1012	-1013	1145	-1146	401 301 TMP=2.9308e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4849)
5850	4	-1.3916	1013	-1014	1145	-1146	401 301 TMP=2.9306e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4850)
5851	4	-1.3916	1014	-1015	1145	-1146	401 301 TMP=2.9303e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4851)
5852	4	-1.3917	1015	-1016	1145	-1146	401 301 TMP=2.9301e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4852)
5853	4	-1.3917	1016	-1017	1145	-1146	401 301 TMP=2.9300e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4853)
5854	4	-1.3917	1017	-1018	1145	-1146	401 301 TMP=2.9299e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4854)
5855	4	-1.3917	1018	-1019	1145	-1146	401 301 TMP=2.9298e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4855)
5856	4	-1.3917	1019	-1020	1145	-1146	401 301 TMP=2.9297e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4856)
5857	4	-1.3917	1020	-1021	1145	-1146	401 301 TMP=2.9296e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4857)
5858	4	-1.3917	1021	-1022	1145	-1146	401 301 TMP=2.9296e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4858)
5859	4	-1.3917	1022	-1023	1145	-1146	401 301 TMP=2.9296e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4859)
5860	4	-1.3917	1023	-1024	1145	-1146	401 301 TMP=2.9296e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4860)
5861	4	-1.3917	1024	-1025	1145	-1146	401 301 TMP=2.9296e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4861)
5862	4	-1.3917	1025	-1026	1145	-1146	401 301 TMP=2.9296e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4862)
5863	4	-1.3917	1026	-1027	1145	-1146	401 301 TMP=2.9296e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4863)
5864	4	-1.3917	1027	-1028	1145	-1146	401 301 TMP=2.9296e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4864)
5865	4	-1.3917	1028	-1029	1145	-1146	401 301 TMP=2.9296e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4865)
5866	4	-1.3917	1029	-1030	1145	-1146	401 301 TMP=2.9297e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4866)
5867	4	-1.3917	1030	-1031	1145	-1146	401 301 TMP=2.9297e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4867)
5868	4	-1.3917	1031	-1032	1145	-1146	401 301 TMP=2.9297e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4868)
5869	4	-1.3917	1032	-1033	1145	-1146	401 301 TMP=2.9297e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4869)
5870	4	-1.3917	1033	-1034	1145	-1146	401 301 TMP=2.9297e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4870)
5871	4	-1.3917	1034	-1035	1145	-1146	401 301 TMP=2.9298e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4871)
5872	4	-1.3917	1035	-1036	1145	-1146	401 301 TMP=2.9299e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4872)
5873	4	-1.3917	1036	-1037	1145	-1146	401 301 TMP=2.9299e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4873)
5874	4	-1.3917	1037	-1038	1145	-1146	401 301 TMP=2.9300e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4874)
5875	4	-1.3916	1038	-1039	1145	-1146	401 301 TMP=2.9302e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4875)
5876	4	-1.3916	1039	-1040	1145	-1146	401 301 TMP=2.9308e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4876)
5877	4	-1.3916	1040	-1041	1145	-1146	401 301 TMP=2.9317e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4877)
5878	4	-1.3915	1041	-1042	1145	-1146	401 301 TMP=2.9328e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4878)
5879	4	-1.3915	1042	-1043	1145	-1146	401 301 TMP=2.9334e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4879)
5880	4	-1.3915	1043	-1044	1145	-1146	401 301 TMP=2.9326e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4880)
5881	4	-1.3916	1044	-1045	1145	-1146	401 301 TMP=2.9304e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4881)
5882	4	-1.3918	1045	-1046	1145	-1146	401 301 TMP=2.9273e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4882)
5883	4	-1.3920	1046	-1047	1145	-1146	401 301 TMP=2.9243e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4883)
5884	4	-1.3925	1047	-1048	1145	-1146	401 301 TMP=2.9163e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4884)
5885	4	-1.3990	1048	-1049	1145	-1146	401 301 TMP=2.7974e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4885)
5886	4	-1.3916	1145	-1146	-402	TMP=2.9317e-8	IMP:n=1 \$ Fuel Mesh Cell (FiT) (Cell# 4886)	
5887	4	-1.3916	1145	-1146	-302	TMP=2.9317e-8	IMP:n=1 \$ Fuel Mesh Cell (FoT) (Cell# 4887)	
5888	4	-1.3924	-1000	1146	-1147	TMP=2.9171e-8	IMP:n=1 \$ Fuel Mesh Cell(Centerline) (Cell# 4888)	
5889	4	-1.3924	1000	-1001	1146	-1147	401 301 TMP=2.9173e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4889)
5890	4	-1.3923	1001	-1002	1146	-1147	401 301 TMP=2.9191e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4890)
5891	4	-1.3921	1002	-1003	1146	-1147	401 301 TMP=2.9223e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4891)
5892	4	-1.3919	1003	-1004	1146	-1147	401 301 TMP=2.9265e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4892)
5893	4	-1.3917	1004	-1005	1146	-1147	401 301 TMP=2.9293e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4893)
5894	4	-1.3916	1005	-1006	1146	-1147	401 301 TMP=2.9306e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4894)
5895	4	-1.3916	1006	-1007	1146	-1147	401 301 TMP=2.9308e-8	IMP:n=1 \$ Fuel Mesh Cell (Cell# 4895)

5896	4	-1.3916	1007	-1008	1146	-1147	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4896)
5897	4	-1.3916	1008	-1009	1146	-1147	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4897)
5898	4	-1.3916	1009	-1010	1146	-1147	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4898)
5899	4	-1.3916	1010	-1011	1146	-1147	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4899)
5900	4	-1.3916	1011	-1012	1146	-1147	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4900)
5901	4	-1.3916	1012	-1013	1146	-1147	401	301	TMP=2.9309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4901)
5902	4	-1.3916	1013	-1014	1146	-1147	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4902)
5903	4	-1.3916	1014	-1015	1146	-1147	401	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4903)
5904	4	-1.3916	1015	-1016	1146	-1147	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4904)
5905	4	-1.3916	1016	-1017	1146	-1147	401	301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4905)
5906	4	-1.3916	1017	-1018	1146	-1147	401	301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4906)
5907	4	-1.3916	1018	-1019	1146	-1147	401	301	TMP=2.9302e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4907)
5908	4	-1.3917	1019	-1020	1146	-1147	401	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4908)
5909	4	-1.3917	1020	-1021	1146	-1147	401	301	TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4909)
5910	4	-1.3917	1021	-1022	1146	-1147	401	301	TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4910)
5911	4	-1.3917	1022	-1023	1146	-1147	401	301	TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4911)
5912	4	-1.3917	1023	-1024	1146	-1147	401	301	TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4912)
5913	4	-1.3917	1024	-1025	1146	-1147	401	301	TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4913)
5914	4	-1.3917	1025	-1026	1146	-1147	401	301	TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4914)
5915	4	-1.3917	1026	-1027	1146	-1147	401	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4915)
5916	4	-1.3917	1027	-1028	1146	-1147	401	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4916)
5917	4	-1.3917	1028	-1029	1146	-1147	401	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4917)
5918	4	-1.3917	1029	-1030	1146	-1147	401	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4918)
5919	4	-1.3917	1030	-1031	1146	-1147	401	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4919)
5920	4	-1.3917	1031	-1032	1146	-1147	401	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4920)
5921	4	-1.3917	1032	-1033	1146	-1147	401	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4921)
5922	4	-1.3917	1033	-1034	1146	-1147	401	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4922)
5923	4	-1.3917	1034	-1035	1146	-1147	401	301	TMP=2.9301e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4923)
5924	4	-1.3916	1035	-1036	1146	-1147	401	301	TMP=2.9302e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4924)
5925	4	-1.3916	1036	-1037	1146	-1147	401	301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4925)
5926	4	-1.3916	1037	-1038	1146	-1147	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4926)
5927	4	-1.3916	1038	-1039	1146	-1147	401	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4927)
5928	4	-1.3916	1039	-1040	1146	-1147	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4928)
5929	4	-1.3915	1040	-1041	1146	-1147	401	301	TMP=2.9324e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4929)
5930	4	-1.3915	1041	-1042	1146	-1147	401	301	TMP=2.9332e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4930)
5931	4	-1.3915	1042	-1043	1146	-1147	401	301	TMP=2.9331e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4931)
5932	4	-1.3916	1043	-1044	1146	-1147	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4932)
5933	4	-1.3917	1044	-1045	1146	-1147	401	301	TMP=2.9286e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4933)
5934	4	-1.3919	1045	-1046	1146	-1147	401	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4934)
5935	4	-1.3920	1046	-1047	1146	-1147	401	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4935)
5936	4	-1.3924	1047	-1048	1146	-1147	401	301	TMP=2.9168e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4936)
5937	4	-1.3989	1048	-1049	1146	-1147	401	301	TMP=2.8002e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4937)
5938	4	-1.3917	1146	-1147	-402				TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (FiT) (Cell# 4938)
5939	4	-1.3917	1146	-1147	-302				TMP=2.9300e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4939)
5940	4	-1.3924	-1000	1147	-1148				TMP=2.9174e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4940)
5941	4	-1.3924	1000	-1001	1147	-1148	401	301	TMP=2.9179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4941)
5942	4	-1.3923	1001	-1002	1147	-1148	401	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4942)
5943	4	-1.3921	1002	-1003	1147	-1148	401	301	TMP=2.9226e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4943)
5944	4	-1.3918	1003	-1004	1147	-1148	401	301	TMP=2.9270e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4944)
5945	4	-1.3917	1004	-1005	1147	-1148	401	301	TMP=2.9297e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4945)
5946	4	-1.3916	1005	-1006	1147	-1148	401	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4946)
5947	4	-1.3916	1006	-1007	1147	-1148	401	301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4947)
5948	4	-1.3916	1007	-1008	1147	-1148	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4948)
5949	4	-1.3916	1008	-1009	1147	-1148	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4949)
5950	4	-1.3916	1009	-1010	1147	-1148	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4950)
5951	4	-1.3916	1010	-1011	1147	-1148	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4951)
5952	4	-1.3916	1011	-1012	1147	-1148	401	301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4952)
5953	4	-1.3916	1012	-1013	1147	-1148	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4953)
5954	4	-1.3916	1013	-1014	1147	-1148	401	301	TMP=2.9309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4954)
5955	4	-1.3916	1014	-1015	1147	-1148	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4955)

5956	4	-1.3916	1015	-1016	1147	-1148	401	301	TMP=2.9306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4956)
5957	4	-1.3916	1016	-1017	1147	-1148	401	301	TMP=2.9306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4957)
5958	4	-1.3916	1017	-1018	1147	-1148	401	301	TMP=2.9306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4958)
5959	4	-1.3916	1018	-1019	1147	-1148	401	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4959)
5960	4	-1.3916	1019	-1020	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4960)
5961	4	-1.3916	1020	-1021	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4961)
5962	4	-1.3916	1021	-1022	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4962)
5963	4	-1.3916	1022	-1023	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4963)
5964	4	-1.3916	1023	-1024	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4964)
5965	4	-1.3916	1024	-1025	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4965)
5966	4	-1.3916	1025	-1026	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4966)
5967	4	-1.3916	1026	-1027	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4967)
5968	4	-1.3916	1027	-1028	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4968)
5969	4	-1.3916	1028	-1029	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4969)
5970	4	-1.3916	1029	-1030	1147	-1148	401	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4970)
5971	4	-1.3916	1030	-1031	1147	-1148	401	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4971)
5972	4	-1.3916	1031	-1032	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4972)
5973	4	-1.3916	1032	-1033	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4973)
5974	4	-1.3916	1033	-1034	1147	-1148	401	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4974)
5975	4	-1.3916	1034	-1035	1147	-1148	401	301	TMP=2.9305e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4975)
5976	4	-1.3916	1035	-1036	1147	-1148	401	301	TMP=2.9306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4976)
5977	4	-1.3916	1036	-1037	1147	-1148	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4977)
5978	4	-1.3916	1037	-1038	1147	-1148	401	301	TMP=2.9309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4978)
5979	4	-1.3916	1038	-1039	1147	-1148	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4979)
5980	4	-1.3915	1039	-1040	1147	-1148	401	301	TMP=2.9322e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4980)
5981	4	-1.3915	1040	-1041	1147	-1148	401	301	TMP=2.9328e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4981)
5982	4	-1.3915	1041	-1042	1147	-1148	401	301	TMP=2.9331e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4982)
5983	4	-1.3915	1042	-1043	1147	-1148	401	301	TMP=2.9326e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4983)
5984	4	-1.3916	1043	-1044	1147	-1148	401	301	TMP=2.9304e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4984)
5985	4	-1.3919	1044	-1045	1147	-1148	401	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4985)
5986	4	-1.3920	1045	-1046	1147	-1148	401	301	TMP=2.9244e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4986)
5987	4	-1.3921	1046	-1047	1147	-1148	401	301	TMP=2.9230e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4987)
5988	4	-1.3924	1047	-1048	1147	-1148	401	301	TMP=2.9179e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4988)
5989	4	-1.3987	1048	-1049	1147	-1148	401	301	TMP=2.8031e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4989)
5990	4	-1.3917	1147	-1148	-402				TMP=2.9285e-8	IMP:n=1	\$ Fuel Mesh Cell (FiT) (Cell# 4990)
5991	4	-1.3917	1147	-1148	-302				TMP=2.9285e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 4991)
5992	4	-1.3924	-1000	1148	-1149				TMP=2.9179e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 4992)
5993	4	-1.3923	1000	-1001	1148	-1149	401	301	TMP=2.9185e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4993)
5994	4	-1.3923	1001	-1002	1148	-1149	401	301	TMP=2.9197e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4994)
5995	4	-1.3921	1002	-1003	1148	-1149	401	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4995)
5996	4	-1.3919	1003	-1004	1148	-1149	401	301	TMP=2.9267e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4996)
5997	4	-1.3917	1004	-1005	1148	-1149	401	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4997)
5998	4	-1.3916	1005	-1006	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4998)
5999	4	-1.3916	1006	-1007	1148	-1149	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 4999)
6000	4	-1.3916	1007	-1008	1148	-1149	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5000)
6001	4	-1.3916	1008	-1009	1148	-1149	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5001)
6002	4	-1.3916	1009	-1010	1148	-1149	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5002)
6003	4	-1.3916	1010	-1011	1148	-1149	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5003)
6004	4	-1.3916	1011	-1012	1148	-1149	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5004)
6005	4	-1.3916	1012	-1013	1148	-1149	401	301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5005)
6006	4	-1.3916	1013	-1014	1148	-1149	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5006)
6007	4	-1.3916	1014	-1015	1148	-1149	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5007)
6008	4	-1.3916	1015	-1016	1148	-1149	401	301	TMP=2.9309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5008)
6009	4	-1.3916	1016	-1017	1148	-1149	401	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5009)
6010	4	-1.3916	1017	-1018	1148	-1149	401	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5010)
6011	4	-1.3916	1018	-1019	1148	-1149	401	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5011)
6012	4	-1.3916	1019	-1020	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5012)
6013	4	-1.3916	1020	-1021	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5013)
6014	4	-1.3916	1021	-1022	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5014)
6015	4	-1.3916	1022	-1023	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5015)

6016	4	-1.3916	1023	-1024	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5016)
6017	4	-1.3916	1024	-1025	1148	-1149	401	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5017)
6018	4	-1.3916	1025	-1026	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5018)
6019	4	-1.3916	1026	-1027	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5019)
6020	4	-1.3916	1027	-1028	1148	-1149	401	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5020)
6021	4	-1.3916	1028	-1029	1148	-1149	401	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5021)
6022	4	-1.3916	1029	-1030	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5022)
6023	4	-1.3916	1030	-1031	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5023)
6024	4	-1.3916	1031	-1032	1148	-1149	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5024)
6025	4	-1.3916	1032	-1033	1148	-1149	401	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5025)
6026	4	-1.3916	1033	-1034	1148	-1149	401	301	TMP=2.9308e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5026)
6027	4	-1.3916	1034	-1035	1148	-1149	401	301	TMP=2.9309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5027)
6028	4	-1.3916	1035	-1036	1148	-1149	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5028)
6029	4	-1.3916	1036	-1037	1148	-1149	401	301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5029)
6030	4	-1.3916	1037	-1038	1148	-1149	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5030)
6031	4	-1.3915	1038	-1039	1148	-1149	401	301	TMP=2.9319e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5031)
6032	4	-1.3915	1039	-1040	1148	-1149	401	301	TMP=2.9324e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5032)
6033	4	-1.3915	1040	-1041	1148	-1149	401	301	TMP=2.9328e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5033)
6034	4	-1.3915	1041	-1042	1148	-1149	401	301	TMP=2.9330e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5034)
6035	4	-1.3915	1042	-1043	1148	-1149	401	301	TMP=2.9322e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5035)
6036	4	-1.3917	1043	-1044	1148	-1149	401	301	TMP=2.9291e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5036)
6037	4	-1.3919	1044	-1045	1148	-1149	401	301	TMP=2.9254e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5037)
6038	4	-1.3920	1045	-1046	1148	-1149	401	301	TMP=2.9236e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5038)
6039	4	-1.3921	1046	-1047	1148	-1149	401	301	TMP=2.9225e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5039)
6040	4	-1.3923	1047	-1048	1148	-1149	401	301	TMP=2.9187e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5040)
6041	4	-1.3986	1048	-1049	1148	-1149	401	301	TMP=2.8060e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5041)
6042	4	-1.3918	1148	-1149	-402				TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (FiT) (Cell# 5042)
6043	4	-1.3918	1148	-1149	-302				TMP=2.9269e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 5043)
6044	4	-1.3923	-1000	1149	-1150				TMP=2.9188e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 5044)
6045	4	-1.3923	1000	-1001	1149	-1150	401	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5045)
6046	4	-1.3922	1001	-1002	1149	-1150	401	301	TMP=2.9203e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5046)
6047	4	-1.3921	1002	-1003	1149	-1150	401	301	TMP=2.9232e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5047)
6048	4	-1.3918	1003	-1004	1149	-1150	401	301	TMP=2.9268e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5048)
6049	4	-1.3917	1004	-1005	1149	-1150	401	301	TMP=2.9292e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5049)
6050	4	-1.3916	1005	-1006	1149	-1150	401	301	TMP=2.9306e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5050)
6051	4	-1.3916	1006	-1007	1149	-1150	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5051)
6052	4	-1.3916	1007	-1008	1149	-1150	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5052)
6053	4	-1.3916	1008	-1009	1149	-1150	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5053)
6054	4	-1.3916	1009	-1010	1149	-1150	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5054)
6055	4	-1.3916	1010	-1011	1149	-1150	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5055)
6056	4	-1.3916	1011	-1012	1149	-1150	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5056)
6057	4	-1.3916	1012	-1013	1149	-1150	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5057)
6058	4	-1.3916	1013	-1014	1149	-1150	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5058)
6059	4	-1.3916	1014	-1015	1149	-1150	401	301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5059)
6060	4	-1.3916	1015	-1016	1149	-1150	401	301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5060)
6061	4	-1.3916	1016	-1017	1149	-1150	401	301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5061)
6062	4	-1.3916	1017	-1018	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5062)
6063	4	-1.3916	1018	-1019	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5063)
6064	4	-1.3916	1019	-1020	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5064)
6065	4	-1.3916	1020	-1021	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5065)
6066	4	-1.3916	1021	-1022	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5066)
6067	4	-1.3916	1022	-1023	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5067)
6068	4	-1.3916	1023	-1024	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5068)
6069	4	-1.3916	1024	-1025	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5069)
6070	4	-1.3916	1025	-1026	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5070)
6071	4	-1.3916	1026	-1027	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5071)
6072	4	-1.3916	1027	-1028	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5072)
6073	4	-1.3916	1028	-1029	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5073)
6074	4	-1.3916	1029	-1030	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5074)
6075	4	-1.3916	1030	-1031	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5075)

6076	4	-1.3916	1031	-1032	1149	-1150	401	301	TMP=2.9310e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5076)
6077	4	-1.3916	1032	-1033	1149	-1150	401	301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5077)
6078	4	-1.3916	1033	-1034	1149	-1150	401	301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5078)
6079	4	-1.3916	1034	-1035	1149	-1150	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5079)
6080	4	-1.3916	1035	-1036	1149	-1150	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5080)
6081	4	-1.3916	1036	-1037	1149	-1150	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5081)
6082	4	-1.3916	1037	-1038	1149	-1150	401	301	TMP=2.9318e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5082)
6083	4	-1.3915	1038	-1039	1149	-1150	401	301	TMP=2.9321e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5083)
6084	4	-1.3915	1039	-1040	1149	-1150	401	301	TMP=2.9324e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5084)
6085	4	-1.3915	1040	-1041	1149	-1150	401	301	TMP=2.9327e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5085)
6086	4	-1.3915	1041	-1042	1149	-1150	401	301	TMP=2.9328e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5086)
6087	4	-1.3916	1042	-1043	1149	-1150	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5087)
6088	4	-1.3918	1043	-1044	1149	-1150	401	301	TMP=2.9276e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5088)
6089	4	-1.3920	1044	-1045	1149	-1150	401	301	TMP=2.9243e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5089)
6090	4	-1.3921	1045	-1046	1149	-1150	401	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5090)
6091	4	-1.3921	1046	-1047	1149	-1150	401	301	TMP=2.9223e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5091)
6092	4	-1.3924	1047	-1048	1149	-1150	401	301	TMP=2.9183e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5092)
6093	4	-1.3985	1048	-1049	1149	-1150	401	301	TMP=2.8076e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5093)
6094	4	-1.3919	1149	-1150	-402	TMP=2.9255e-8	IMP:n=1				\$ Fuel Mesh Cell (FiT) (Cell# 5094)
6095	4	-1.3919	1149	-1150	-302	TMP=2.9255e-8	IMP:n=1				\$ Fuel Mesh Cell (FoT) (Cell# 5095)
6096	4	-1.3923	-1000	1150	-1151	TMP=2.9200e-8	IMP:n=1				\$ Fuel Mesh Cell(Centerline) (Cell# 5096)
6097	4	-1.3922	1000	-1001	1150	-1151	401	301	TMP=2.9207e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5097)
6098	4	-1.3922	1001	-1002	1150	-1151	401	301	TMP=2.9218e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5098)
6099	4	-1.3921	1002	-1003	1150	-1151	401	301	TMP=2.9229e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5099)
6100	4	-1.3919	1003	-1004	1150	-1151	401	301	TMP=2.9255e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5100)
6101	4	-1.3917	1004	-1005	1150	-1151	401	301	TMP=2.9299e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5101)
6102	4	-1.3916	1005	-1006	1150	-1151	401	301	TMP=2.9307e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5102)
6103	4	-1.3916	1006	-1007	1150	-1151	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5103)
6104	4	-1.3916	1007	-1008	1150	-1151	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5104)
6105	4	-1.3916	1008	-1009	1150	-1151	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5105)
6106	4	-1.3916	1009	-1010	1150	-1151	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5106)
6107	4	-1.3916	1010	-1011	1150	-1151	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5107)
6108	4	-1.3916	1011	-1012	1150	-1151	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5108)
6109	4	-1.3916	1012	-1013	1150	-1151	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5109)
6110	4	-1.3916	1013	-1014	1150	-1151	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5110)
6111	4	-1.3916	1014	-1015	1150	-1151	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5111)
6112	4	-1.3916	1015	-1016	1150	-1151	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5112)
6113	4	-1.3916	1016	-1017	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5113)
6114	4	-1.3916	1017	-1018	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5114)
6115	4	-1.3916	1018	-1019	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5115)
6116	4	-1.3916	1019	-1020	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5116)
6117	4	-1.3916	1020	-1021	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5117)
6118	4	-1.3916	1021	-1022	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5118)
6119	4	-1.3916	1022	-1023	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5119)
6120	4	-1.3916	1023	-1024	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5120)
6121	4	-1.3916	1024	-1025	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5121)
6122	4	-1.3916	1025	-1026	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5122)
6123	4	-1.3916	1026	-1027	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5123)
6124	4	-1.3916	1027	-1028	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5124)
6125	4	-1.3916	1028	-1029	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5125)
6126	4	-1.3916	1029	-1030	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5126)
6127	4	-1.3916	1030	-1031	1150	-1151	401	301	TMP=2.9312e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5127)
6128	4	-1.3916	1031	-1032	1150	-1151	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5128)
6129	4	-1.3916	1032	-1033	1150	-1151	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5129)
6130	4	-1.3916	1033	-1034	1150	-1151	401	301	TMP=2.9313e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5130)
6131	4	-1.3916	1034	-1035	1150	-1151	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5131)
6132	4	-1.3916	1035	-1036	1150	-1151	401	301	TMP=2.9315e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5132)
6133	4	-1.3916	1036	-1037	1150	-1151	401	301	TMP=2.9316e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5133)
6134	4	-1.3915	1037	-1038	1150	-1151	401	301	TMP=2.9318e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5134)
6135	4	-1.3915	1038	-1039	1150	-1151	401	301	TMP=2.9320e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5135)

6136	4	-1.3915	1039	-1040	1150	-1151	401	301	TMP=2.9321e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5136)
6137	4	-1.3915	1040	-1041	1150	-1151	401	301	TMP=2.9322e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5137)
6138	4	-1.3916	1041	-1042	1150	-1151	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5138)
6139	4	-1.3917	1042	-1043	1150	-1151	401	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5139)
6140	4	-1.3920	1043	-1044	1150	-1151	401	301	TMP=2.9251e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5140)
6141	4	-1.3920	1044	-1045	1150	-1151	401	301	TMP=2.9240e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5141)
6142	4	-1.3920	1045	-1046	1150	-1151	401	301	TMP=2.9235e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5142)
6143	4	-1.3921	1046	-1047	1150	-1151	401	301	TMP=2.9222e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5143)
6144	4	-1.3923	1047	-1048	1150	-1151	401	301	TMP=2.9190e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5144)
6145	4	-1.3988	1048	-1049	1150	-1151	401	301	TMP=2.8007e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5145)
6146	4	-1.3920	1150	-1151	-402				TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (FiT) (Cell# 5146)
6147	4	-1.3920	1150	-1151	-302				TMP=2.9245e-8	IMP:n=1	\$ Fuel Mesh Cell (FoT) (Cell# 5147)
6148	4	-1.3922	-1000	1151	-1152				TMP=2.9207e-8	IMP:n=1	\$ Fuel Mesh Cell(Centerline) (Cell# 5148)
6149	4	-1.3922	1000	-1001	1151	-1152	401	301	TMP=2.9210e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5149)
6150	4	-1.3921	1001	-1002	1151	-1152	401	301	TMP=2.9219e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5150)
6151	4	-1.3921	1002	-1003	1151	-1152	401	301	TMP=2.9231e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5151)
6152	4	-1.3921	1003	-1004	1151	-1152	401	301	TMP=2.9234e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5152)
6153	4	-1.3919	1004	-1005	1151	-1152	401	301	TMP=2.9256e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5153)
6154	4	-1.3917	1005	-1006	1151	-1152	401	301	TMP=2.9287e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5154)
6155	4	-1.3916	1006	-1007	1151	-1152	401	301	TMP=2.9303e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5155)
6156	4	-1.3916	1007	-1008	1151	-1152	401	301	TMP=2.9309e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5156)
6157	4	-1.3916	1008	-1009	1151	-1152	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5157)
6158	4	-1.3916	1009	-1010	1151	-1152	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5158)
6159	4	-1.3916	1010	-1011	1151	-1152	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5159)
6160	4	-1.3916	1011	-1012	1151	-1152	401	301	TMP=2.9314e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5160)
6161	4	-1.3916	1012	-1013	1151	-1152	401	301	TMP=2.9311e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5161)
6162	4	-1.3916	1013	-1014	1151	-1152	401	301	TMP=2.9302e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5162)
6163	4	-1.3917	1014	-1015	1151	-1152	401	301	TMP=2.9296e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5163)
6164	4	-1.3917	1015	-1016	1151	-1152	401	301	TMP=2.9289e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5164)
6165	4	-1.3919	1016	-1017	1151	-1152	401	301	TMP=2.9257e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5165)
6166	4	-1.3921	1017	-1018	1151	-1152	401	301	TMP=2.9221e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5166)
6167	4	-1.3923	1018	-1019	1151	-1152	401	301	TMP=2.9194e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5167)
6168	4	-1.3925	1019	-1020	1151	-1152	401	301	TMP=2.9167e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5168)
6169	4	-1.3926	1020	-1021	1151	-1152	401	301	TMP=2.9142e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5169)
6170	4	-1.3928	1021	-1022	1151	-1152	401	301	TMP=2.9117e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5170)
6171	4	-1.3929	1022	-1023	1151	-1152	401	301	TMP=2.9093e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5171)
6172	4	-1.3930	1023	-1024	1151	-1152	401	301	TMP=2.9070e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5172)
6173	4	-1.3931	1024	-1025	1151	-1152	401	301	TMP=2.9055e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5173)
6174	4	-1.3932	1025	-1026	1151	-1152	401	301	TMP=2.9042e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5174)
6175	4	-1.3934	1026	-1027	1151	-1152	401	301	TMP=2.9002e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5175)
6176	4	-1.3937	1027	-1028	1151	-1152	401	301	TMP=2.8955e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5176)
6177	4	-1.3939	1028	-1029	1151	-1152	401	301	TMP=2.8924e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5177)
6178	4	-1.3942	1029	-1030	1151	-1152	401	301	TMP=2.8870e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5178)
6179	4	-1.3949	1030	-1031	1151	-1152	401	301	TMP=2.8747e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5179)
6180	4	-1.3955	1031	-1032	1151	-1152	401	301	TMP=2.8630e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5180)
6181	4	-1.3961	1032	-1033	1151	-1152	401	301	TMP=2.8524e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5181)
6182	4	-1.3967	1033	-1034	1151	-1152	401	301	TMP=2.8413e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5182)
6183	4	-1.3973	1034	-1035	1151	-1152	401	301	TMP=2.8297e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5183)
6184	4	-1.3978	1035	-1036	1151	-1152	401	301	TMP=2.8202e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5184)
6185	4	-1.3984	1036	-1037	1151	-1152	401	301	TMP=2.8091e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5185)
6186	4	-1.3986	1037	-1038	1151	-1152	401	301	TMP=2.8064e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5186)
6187	4	-1.3987	1038	-1039	1151	-1152	401	301	TMP=2.8042e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5187)
6188	4	-1.3991	1039	-1040	1151	-1152	401	301	TMP=2.7966e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5188)
6189	4	-1.3993	1040	-1041	1151	-1152	401	301	TMP=2.7925e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5189)
6190	4	-1.3995	1041	-1042	1151	-1152	401	301	TMP=2.7878e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5190)
6191	4	-1.3996	1042	-1043	1151	-1152	401	301	TMP=2.7854e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5191)
6192	4	-1.3998	1043	-1044	1151	-1152	401	301	TMP=2.7817e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5192)
6193	4	-1.4000	1044	-1045	1151	-1152	401	301	TMP=2.7783e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5193)
6194	4	-1.4001	1045	-1046	1151	-1152	401	301	TMP=2.7753e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5194)
6195	4	-1.4006	1046	-1047	1151	-1152	401	301	TMP=2.7653e-8	IMP:n=1	\$ Fuel Mesh Cell (Cell# 5195)

6196 4 -1.4019 1047 -1048 1151 -1152 401 301 TMP=2.7389e-8 IMP:n=1 \$ Fuel Mesh Cell (Cell# 5196)
6197 4 -1.4043 1048 -1049 1151 -1152 401 301 TMP=2.6834e-8 IMP:n=1 \$ Fuel Mesh Cell (Cell# 5197)
6198 4 -1.3998 1151 -1152 -402 TMP=2.7819e-8 IMP:n=1 \$ Fuel Mesh Cell (FiT) (Cell# 5198)
6199 4 -1.3998 1151 -1152 -302 TMP=2.7819e-8 IMP:n=1 \$ Fuel Mesh Cell (FoT) (Cell# 5199)

c

c ===== User Generated Cell Cards=====

c Cell# Mat Density Surf Parameters Comments

c

c Core and Container(40 C)

1 1 -6.549 -61 60 51 -53 IMP:n=1 TMP=2.6984e-8 \$ fuel container cylinder
2 1 -6.549 53 -55 -61 301 401 501 IMP:n=1 TMP=2.6984e-8 \$ fuel container top plate
3 1 -6.549 50 -51 -61 IMP:n=1 TMP=2.6984e-8 \$ fuel container base plate
4 8 0.0010965 -60 52 -53 301 401 IMP:n=1 TMP=2.6984e-8 \$ air gap in container(moist air)

c

c Control Rods(x5)

130 7 -8.65 -221 205 -207 IMP:n=1 TMP=2.53e-8 \$ rod site 1
131 6 -2.7 -211 204 -206 (207 : -205 : 221) IMP:n=1 TMP=2.53e-8 \$ cladding site 1
230 7 -8.65 -222 205 -207 IMP:n=1 TMP=2.53e-8 \$ rod site 2
231 6 -2.7 -212 204 -206 (207 : -205 : 222) IMP:n=1 TMP=2.53e-8 \$ cladding Site 2
330 7 -8.65 -223 205 -207 IMP:n=1 TMP=2.53e-8 \$ rod site 3
331 6 -2.7 -213 204 -206 (207 : -205 : 223) IMP:n=1 TMP=2.53e-8 \$ cladding site 3
430 7 -8.65 -224 205 -207 IMP:n=1 TMP=2.53e-8 \$ rod site 4
431 6 -2.7 -214 204 -206 (207 : -205 : 224) IMP:n=1 TMP=2.53e-8 \$ cladding site 4
530 7 -8.65 -225 205 -207 IMP:n=1 TMP=2.53e-8 \$ rod site 5
531 6 -2.7 -215 204 -206 (207 : -205 : 225) IMP:n=1 TMP=2.53e-8 \$ cladding site 5

c

c Original Reflector Annulus

19 2 -1.85 3 -5 11 -12 IMP:n=1 TMP=2.53e-8 \$ lower reflector annulus(1 piece)
20 2 -1.85 5 -4 11 -12 600 604 14 IMP:n=1 TMP=2.53e-8 \$ region 1, 10h30 to 1330
21 2 -1.85 5 -4 11 -12 -600 601 13 IMP:n=1 TMP=2.53e-8 \$ region 2, 13h30 to 15h30
22 2 -1.85 5 -4 11 -12 602 -601 17 IMP:n=1 TMP=2.53e-8 \$ region 3, 03h30 to 06h00
23 2 -1.85 5 -4 11 -12 -603 -602 16 IMP:n=1 TMP=2.53e-8 \$ region 4, 06h00 to 08h30
24 2 -1.85 5 -4 11 -12 -604 603 15 IMP:n=1 TMP=2.53e-8 \$ region 5, 08h30 to 10h30

c

c Additional Reflector Annulus(above original annulus) GRAPHITE

25 3 -1.7 4 -56 11 -12 600 604 14 IMP:n=1 TMP=2.53e-8 \$ region 1, 10h30 to 133h30
26 3 -1.7 4 -56 11 -12 -600 601 13 IMP:n=1 TMP=2.53e-8 \$ region 2, 13h30 to 15h30
27 3 -1.7 4 -56 11 -12 602 -601 17 IMP:n=1 TMP=2.53e-8 \$ region 3, 03h30 to 06h00
28 3 -1.7 4 -56 11 -12 -603 -602 16 IMP:n=1 TMP=2.53e-8 \$ region 4, 06h00 to 08h30
29 3 -1.7 4 -56 11 -12 -604 603 15 IMP:n=1 TMP=2.53e-8 \$ region 5, 08h30 to 10h30

c

c Additional Top Reflector(above reactor container) GRAPHITE

120 3 -1.7 55 -56 -61 600 604 501 IMP:n=1 TMP=2.53e-8 \$ region 1, 10h30 to 13h30
121 3 -1.7 55 -56 -61 -600 601 401 IMP:n=1 TMP=2.53e-8 \$ region 2, 13h30 to 15h30
122 3 -1.7 55 -56 -61 602 -601 IMP:n=1 TMP=2.53e-8 \$ region 3, 03h30 to 06h00
123 3 -1.7 55 -56 -61 -603 -602 16 IMP:n=1 TMP=2.53e-8 \$ region 4, 06h00 to 08h30
124 3 -1.7 55 -56 -61 -604 603 301 IMP:n=1 TMP=2.53e-8 \$ region 5, 08h30 to 10h30

c

c Original Base Reflector BERYLLIUM

15 2 -1.85 1 -2 -10 IMP:n=1 TMP=2.53e-8 \$ base reflector

c

c Added Donut OD Base Reflector GRAPHITE

16 3 -1.7 1 -2 10 -12 IMP:n=1 TMP=2.53e-8 \$ donut reflector

c

c Inner irradiation sites

90 9 0.0011845 6 -113 -141 (206 :-204 : 211) IMP:n=1 TMP=2.53e-8 \$ site #1, rod + air
91 9 0.0011845 6 -113 -131 (206 :-204 : 212) IMP:n=1 TMP=2.53e-8 \$ site #2, rod + air
92 9 0.0011845 6 -113 -171 (206 :-204 : 213) IMP:n=1 TMP=2.53e-8 \$ site #3, rod + air
93 9 0.0011845 6 -113 -161 (206 :-204 : 214) IMP:n=1 TMP=2.53e-8 \$ site #4, rod + air
94 9 0.0011845 6 -113 -151 (206 :-204 : 215) IMP:n=1 TMP=2.53e-8 \$ site #5, rod + air

100 6 -2.7 6 -113 -14 141 IMP:n=1 TMP=2.53e-8	\$ site #1, Al shell
101 6 -2.7 6 -113 -13 131 IMP:n=1 TMP=2.53e-8	\$ site #2, Al shell
102 6 -2.7 6 -113 -17 171 IMP:n=1 TMP=2.53e-8	\$ site #3, Al shell
103 6 -2.7 6 -113 -16 161 IMP:n=1 TMP=2.53e-8	\$ site #4, Al shell
104 6 -2.7 6 -113 -15 151 IMP:n=1 TMP=2.53e-8	\$ site #5, Al shell
105 6 -2.7 5 -6 -14 IMP:n=1 TMP=2.53e-8	\$ site #1, Al bottom plate
106 6 -2.7 5 -6 -13 IMP:n=1 TMP=2.53e-8	\$ site #2, Al bottom plate
107 6 -2.7 5 -6 -17 IMP:n=1 TMP=2.53e-8	\$ site #3, Al bottom plate
108 6 -2.7 5 -6 -16 IMP:n=1 TMP=2.53e-8	\$ site #4, Al bottom plate
109 6 -2.7 5 -6 -15 IMP:n=1 TMP=2.53e-8	\$ site #5, Al bottom plate

c

c Outer irradiation Sites

190 9 0.0011854 7 -113 -163 IMP:n=1 TMP=2.53e-8	\$ site #1, dry air fill
191 9 0.0011854 7 -113 -154 IMP:n=1 TMP=2.53e-8	\$ site #2, dry air fill, Cd lined
192 9 0.0011854 7 -113 -143 IMP:n=1 TMP=2.53e-8	\$ site #3, dry air fill
193 9 0.0011854 7 -113 -133 IMP:n=1 TMP=2.53e-8	\$ site #4, dry air fill, large bore
194 9 0.0011854 7 -113 -173 IMP:n=1 TMP=2.53e-8	\$ site #5, dry air fill
200 6 -2.7 7 -113 -162 163 IMP:n=1 TMP=2.53e-8	\$ site #1, Al shell
201 6 -2.7 7 -113 -153 154 IMP:n=1 TMP=2.53e-8	\$ site #2, Al shell, Cd lined
202 6 -2.7 7 -113 -142 143 IMP:n=1 TMP=2.53e-8	\$ site #3, Al shell
203 6 -2.7 7 -113 -132 133 IMP:n=1 TMP=2.53e-8	\$ site #4, Al shell, large bore
204 6 -2.7 7 -113 -172 173 IMP:n=1 TMP=2.53e-8	\$ site #5, Al shell
205 6 -2.7 3 -7 -162 IMP:n=1 TMP=2.53e-8	\$ site #1, Al bottom plate
206 6 -2.7 3 -7 -153 IMP:n=1 TMP=2.53e-8	\$ site #2, Al bottom plate
207 6 -2.7 3 -7 -142 IMP:n=1 TMP=2.53e-8	\$ site #3, Al bottom plate
208 6 -2.7 3 -7 -132 IMP:n=1 TMP=2.53e-8	\$ site #4, Al bottom plate
209 6 -2.7 3 -7 -172 IMP:n=1 TMP=2.53e-8	\$ site #5, Al bottom plate
211 6 -8.65 3 -56 -152 153 IMP:n=1 TMP=2.53e-8	\$ site #2, Cd lining

c

c Fuel Inlet, Fuel Outlet & Gas Removal Tube(40 C)

300 1 -6.59 300 -301 302 -113 IMP:n=1 TMP=2.6984e-8	\$ Outlet tube
400 1 -6.59 400 -401 402 -113 IMP:n=1 TMP=2.6984e-8	\$ Inlet tube
500 1 -6.59 53 -501 502 -113 IMP:n=1 TMP=2.6984e-8	\$ gas removal tube
301 8 0.0010965 52 -113 -302 IMP:n=1 TMP=2.6984e-8	\$ moist air above FoT
401 8 0.0010965 52 -113 -402 IMP:n=1 TMP=2.6984e-8	\$ moist air above FiT
501 8 0.0010965 53 -502 -113 IMP:n=1 TMP=2.6984e-8	\$ moist air inside gas removal tube

c

c Water Above Entire Core(inside shell) (25 C)

45 5 -0.99658 56 -113 -100 600 604 501 14 162 IMP:n=1 TMP=2.5692e-8	\$ region 1, 10h30 -13h30
46 5 -0.99658 56 -113 -100 -600 601 401 13 153 IMP:n=1 TMP=2.5692e-8	\$ region 2, 13h30 -15h30
47 5 -0.99658 56 -113 -100 602 -601 17 142 IMP:n=1 TMP=2.5692e-8	\$ region 3, 03h30 -06h30
48 5 -0.99658 56 -113 -100 -603 -602 16 132 IMP:n=1 TMP=2.5692e-8	\$ region 4, 06h30 -08h30
49 5 -0.99658 56 -113 -100 -604 603 301 15 172 IMP:n=1 TMP=2.5692e-8	\$ region 5, 08h30-10h30

c

c Water OD Reflector Annulus(inside shell) (25 C)

55 5 -0.99180 -100 3 -56 12 600 604 162 IMP:n=1 TMP=2.5692e-8	\$ OD original region 1, 10h30 -13h30
56 5 -0.99180 -100 3 -56 12 -600 601 152 IMP:n=1 TMP=2.5692e-8	\$ OD original region 2, 10h30 -13h30
57 5 -0.99180 -100 3 -56 12 602 -601 142 IMP:n=1 TMP=2.5692e-8	\$ OD original region 3, 13h30 -15h30
58 5 -0.99180 -100 3 -56 12 -603 -602 132 IMP:n=1 TMP=2.5692e-8	\$ OD original region 4, 03h30 -06h30
59 5 -0.99180 -100 3 -56 12 -604 603 172 IMP:n=1 TMP=2.5692e-8	\$ OD original region 4, 06h30 -08h30

c

c Water Remainder(inside shell) (25 C)

40 5 -0.99180 61 -111 3 -56 IMP:n=1 TMP=2.5692e-8	\$ vertical cooling channel
---	-----------------------------

c

c Water Remainder(inside shell) (25 C)

41 5 -0.99658 2 -3 -100 61 IMP:n=1 TMP=2.5692e-8	\$ water above base below annulus
43 5 -0.99658 -2 1 12 -100 IMP:n=1 TMP=2.5692e-8	\$ water OD donut reflector
44 5 -0.99658 -1 110 -100 IMP:n=1 TMP=2.5692e-8	\$ water below base reflector

c

c Pool(outside reactor shell) (25 C)

60 5 -0.99778 -111 112 -101 IMP:n=1 TMP=2.5692e-8 \$ pool below reactor shell
 61 5 -0.99778 101 -102 112 -113 IMP:n=1 TMP=2.5692e-8 \$ pool OD reactor

c

c Reactor Shell

72 6 -2.7 100 -101 110 -113 IMP:n=1 TMP=2.53e-8 \$ shell cyclinder
 73 6 -2.7 -110 111 -101 IMP:n=1 TMP=2.53e-8 \$ shell base plate

c

c Outside Voids

70 0 (113 :-112 : 102) -999 IMP:n=1 \$ OD pool void
 999 0 999 IMP:n=0 \$ outside world

c

c ===== Code Generated Surface Cards=====

c Surface# Type Parameters

Comments

c Fuel Mesh Surfaces (1000+ Series)

1000	cx	0.200000	\$ Radial surfaces to divide fuel
1001	cx	0.400000	\$ Radial surfaces to divide fuel
1002	cx	0.600000	\$ Radial surfaces to divide fuel
1003	cx	0.800000	\$ Radial surfaces to divide fuel
1004	cx	1.000000	\$ Radial surfaces to divide fuel
1005	cx	1.200000	\$ Radial surfaces to divide fuel
1006	cx	1.400000	\$ Radial surfaces to divide fuel
1007	cx	1.600000	\$ Radial surfaces to divide fuel
1008	cx	1.800000	\$ Radial surfaces to divide fuel
1009	cx	2.000000	\$ Radial surfaces to divide fuel
1010	cx	2.200000	\$ Radial surfaces to divide fuel
1011	cx	2.400000	\$ Radial surfaces to divide fuel
1012	cx	2.600000	\$ Radial surfaces to divide fuel
1013	cx	2.800000	\$ Radial surfaces to divide fuel
1014	cx	3.000000	\$ Radial surfaces to divide fuel
1015	cx	3.200000	\$ Radial surfaces to divide fuel
1016	cx	3.400000	\$ Radial surfaces to divide fuel
1017	cx	3.600000	\$ Radial surfaces to divide fuel
1018	cx	3.800000	\$ Radial surfaces to divide fuel
1019	cx	4.000000	\$ Radial surfaces to divide fuel
1020	cx	4.200000	\$ Radial surfaces to divide fuel
1021	cx	4.400000	\$ Radial surfaces to divide fuel
1022	cx	4.600000	\$ Radial surfaces to divide fuel
1023	cx	4.800000	\$ Radial surfaces to divide fuel
1024	cx	5.000000	\$ Radial surfaces to divide fuel
1025	cx	5.200000	\$ Radial surfaces to divide fuel
1026	cx	5.400000	\$ Radial surfaces to divide fuel
1027	cx	5.600000	\$ Radial surfaces to divide fuel
1028	cx	5.800000	\$ Radial surfaces to divide fuel
1029	cx	6.000000	\$ Radial surfaces to divide fuel
1030	cx	6.200000	\$ Radial surfaces to divide fuel
1031	cx	6.400000	\$ Radial surfaces to divide fuel
1032	cx	6.600000	\$ Radial surfaces to divide fuel
1033	cx	6.800000	\$ Radial surfaces to divide fuel
1034	cx	7.000000	\$ Radial surfaces to divide fuel
1035	cx	7.200000	\$ Radial surfaces to divide fuel
1036	cx	7.400000	\$ Radial surfaces to divide fuel
1037	cx	7.600000	\$ Radial surfaces to divide fuel
1038	cx	7.800000	\$ Radial surfaces to divide fuel
1039	cx	8.000000	\$ Radial surfaces to divide fuel
1040	cx	8.200000	\$ Radial surfaces to divide fuel
1041	cx	8.400000	\$ Radial surfaces to divide fuel
1042	cx	8.600000	\$ Radial surfaces to divide fuel
1043	cx	8.800000	\$ Radial surfaces to divide fuel
1044	cx	9.000000	\$ Radial surfaces to divide fuel

1045	cx	9.200000	\$ Radial surfaces to divide fuel
1046	cx	9.400000	\$ Radial surfaces to divide fuel
1047	cx	9.600000	\$ Radial surfaces to divide fuel
1048	cx	9.800000	\$ Radial surfaces to divide fuel
1049	cx	10.000000	\$ Radial surfaces to divide fuel
1050	px	10.460000	\$ Horizontal surface to divide fuel
1051	px	10.943062	\$ Horizontal surface to divide fuel
1052	px	11.426124	\$ Horizontal surface to divide fuel
1053	px	11.909186	\$ Horizontal surface to divide fuel
1054	px	12.392248	\$ Horizontal surface to divide fuel
1055	px	12.875310	\$ Horizontal surface to divide fuel
1056	px	13.358372	\$ Horizontal surface to divide fuel
1057	px	13.841434	\$ Horizontal surface to divide fuel
1058	px	14.324496	\$ Horizontal surface to divide fuel
1059	px	14.807558	\$ Horizontal surface to divide fuel
1060	px	15.000000	\$ Bottom of FoT
1061	px	15.290620	\$ Horizontal surface to divide fuel
1062	px	15.773682	\$ Horizontal surface to divide fuel
1063	px	16.256744	\$ Horizontal surface to divide fuel
1064	px	16.739806	\$ Horizontal surface to divide fuel
1065	px	17.222868	\$ Horizontal surface to divide fuel
1066	px	17.705929	\$ Horizontal surface to divide fuel
1067	px	18.188991	\$ Horizontal surface to divide fuel
1068	px	18.672053	\$ Horizontal surface to divide fuel
1069	px	19.155115	\$ Horizontal surface to divide fuel
1070	px	19.638177	\$ Horizontal surface to divide fuel
1071	px	20.121239	\$ Horizontal surface to divide fuel
1072	px	20.604301	\$ Horizontal surface to divide fuel
1073	px	21.087363	\$ Horizontal surface to divide fuel
1074	px	21.570425	\$ Horizontal surface to divide fuel
1075	px	22.053487	\$ Horizontal surface to divide fuel
1076	px	22.536549	\$ Horizontal surface to divide fuel
1077	px	23.019611	\$ Horizontal surface to divide fuel
1078	px	23.502673	\$ Horizontal surface to divide fuel
1079	px	23.985735	\$ Horizontal surface to divide fuel
1080	px	24.468797	\$ Horizontal surface to divide fuel
1081	px	24.951859	\$ Horizontal surface to divide fuel
1082	px	25.434921	\$ Horizontal surface to divide fuel
1083	px	25.917983	\$ Horizontal surface to divide fuel
1084	px	26.401045	\$ Horizontal surface to divide fuel
1085	px	26.884107	\$ Horizontal surface to divide fuel
1086	px	27.367169	\$ Horizontal surface to divide fuel
1087	px	27.850231	\$ Horizontal surface to divide fuel
1088	px	28.333293	\$ Horizontal surface to divide fuel
1089	px	28.816355	\$ Horizontal surface to divide fuel
1090	px	29.299417	\$ Horizontal surface to divide fuel
1091	px	29.782479	\$ Horizontal surface to divide fuel
1092	px	30.265541	\$ Horizontal surface to divide fuel
1093	px	30.748603	\$ Horizontal surface to divide fuel
1094	px	31.231664	\$ Horizontal surface to divide fuel
1095	px	31.714726	\$ Horizontal surface to divide fuel
1096	px	32.197788	\$ Horizontal surface to divide fuel
1097	px	32.680850	\$ Horizontal surface to divide fuel
1098	px	33.163912	\$ Horizontal surface to divide fuel
1099	px	33.646974	\$ Horizontal surface to divide fuel
1100	px	34.130036	\$ Horizontal surface to divide fuel
1101	px	34.613098	\$ Horizontal surface to divide fuel
1102	px	35.096160	\$ Horizontal surface to divide fuel
1103	px	35.579222	\$ Horizontal surface to divide fuel
1104	px	36.062284	\$ Horizontal surface to divide fuel

1105 px 36.545346	\$ Horizontal surface to divide fuel
1106 px 37.028408	\$ Horizontal surface to divide fuel
1107 px 37.511470	\$ Horizontal surface to divide fuel
1108 px 37.994532	\$ Horizontal surface to divide fuel
1109 px 38.477594	\$ Horizontal surface to divide fuel
1110 px 38.960656	\$ Horizontal surface to divide fuel
1111 px 39.443718	\$ Horizontal surface to divide fuel
1112 px 39.926780	\$ Horizontal surface to divide fuel
1113 px 40.409842	\$ Horizontal surface to divide fuel
1114 px 40.892904	\$ Horizontal surface to divide fuel
1115 px 41.375966	\$ Horizontal surface to divide fuel
1116 px 41.859028	\$ Horizontal surface to divide fuel
1117 px 42.342090	\$ Horizontal surface to divide fuel
1118 px 42.825152	\$ Horizontal surface to divide fuel
1119 px 43.308214	\$ Horizontal surface to divide fuel
1120 px 43.791276	\$ Horizontal surface to divide fuel
1121 px 44.274338	\$ Horizontal surface to divide fuel
1122 px 44.757400	\$ Horizontal surface to divide fuel
1123 px 45.240461	\$ Horizontal surface to divide fuel
1124 px 45.723523	\$ Horizontal surface to divide fuel
1125 px 46.206585	\$ Horizontal surface to divide fuel
1126 px 46.689647	\$ Horizontal surface to divide fuel
1127 px 47.172709	\$ Horizontal surface to divide fuel
1128 px 47.655771	\$ Horizontal surface to divide fuel
1129 px 48.138833	\$ Horizontal surface to divide fuel
1130 px 48.621895	\$ Horizontal surface to divide fuel
1131 px 49.104957	\$ Horizontal surface to divide fuel
1132 px 49.588019	\$ Horizontal surface to divide fuel
1133 px 50.071081	\$ Horizontal surface to divide fuel
1134 px 50.554143	\$ Horizontal surface to divide fuel
1135 px 51.037205	\$ Horizontal surface to divide fuel
1136 px 51.520267	\$ Horizontal surface to divide fuel
1137 px 52.003329	\$ Horizontal surface to divide fuel
1138 px 52.486391	\$ Horizontal surface to divide fuel
1139 px 52.969453	\$ Horizontal surface to divide fuel
1140 px 53.452515	\$ Horizontal surface to divide fuel
1141 px 53.935577	\$ Horizontal surface to divide fuel
1142 px 54.418639	\$ Horizontal surface to divide fuel
1143 px 54.901701	\$ Horizontal surface to divide fuel
1144 px 55.000000	\$ Bottom of FiT
1145 px 55.384763	\$ Horizontal surface to divide fuel
1146 px 55.867825	\$ Horizontal surface to divide fuel
1147 px 56.350887	\$ Horizontal surface to divide fuel
1148 px 56.833949	\$ Horizontal surface to divide fuel
1149 px 57.317011	\$ Horizontal surface to divide fuel
1150 px 57.800073	\$ Horizontal surface to divide fuel
1151 px 58.283135	\$ Horizontal surface to divide fuel
1152 px 58.766196	\$ Horizontal surface to divide fuel

c

c Control Rod Height Surfaces

204 px 42.214887	\$ bottom plane control rod cladding
205 px 42.414887	\$ bottom plane control rod(+0.2 from bottom cladding)
206 px 90.114887	\$ top plane control rod cladding(+47.9 from bottom cladding)
207 px 89.714887	\$ top plane control rod(+47.5 from bottom cladding)

c

c Fuel Level Surface

52 px 58.766196	\$ Fuel height, Fuel/Air interface
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c

c ===== User Generated Surface Cards=====

c Surface#	Type	Parameters	Comments
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1 px 0	\$ bottom plane of base reflector
2 px 10.16	\$ top plane of base reflector
3 px 10.668	\$ bottom plane of original reflector annulus
4 px 33.416	\$ top plane of original reflector annulus
5 px 17.668	\$ bottom plane of inner irradiation sites(out)
6 px 17.83308	\$ bottom plane of inner irradiation sites(in)
7 px 10.83308	\$ bottom plane of outer irradiation sites(in)
10 cx 16.11	\$ OD base reflector
11 cx 11.049	\$ ID reflector annulus
12 cx 21.2344	\$ OD reflector annulus
50 px 10.16	\$ bottom plane of fuel container(out)
51 px 10.46	\$ bottom plane of fuel container(in)
53 px 61.2	\$ top plane of fuel container(in)
55 px 61.5	\$ top plane of fuel container(out)
56 px 71.5	\$ top plane of top and added annulus reflectors
60 cx 10	\$ ID fuel container
61 cx 10.3	\$ OD fuel container
c	
c Control Rod Boundaries	
211 c/x 4.49985 13.84911 0.35	\$ OD rod cladding site 1
221 c/x 4.49985 13.84911 0.15	\$ OD control rod site 1
212 c/x 14.56182 0 0.35	\$ OD rod cladding site 2
222 c/x 14.56182 0 0.15	\$ OD control rod site 2
213 c/x 4.49985 -13.84911 0.35	\$ OD rod cladding site 3
223 c/x 4.49985 -13.84911 0.15	\$ OD control rod site 3
214 c/x -11.78076 -8.55972 0.35	\$ OD rod cladding site 4
224 c/x -11.78076 -8.55972 0.15	\$ OD control rod site 4
215 c/x -11.78076 8.55972 0.35	\$ OD rod cladding site 5
225 c/x -11.78076 8.55972 0.15	\$ OD control rod site 5
c	
100 cx 30	\$ ID reactor shell
101 cx 31	\$ OD reactor shell
102 c/x 30 30 133	\$ OD pool
110 px -8	\$ top plane reactor shell base plate
111 px -9	\$ bottom plane reactor shell base plate
112 px -31	\$ bottom plane pool
113 px 533	\$ top plane pool
c	
c Inner Irradiation Site Boundaries	
14 c/x 4.49985 13.84911 1.56718	\$ OD shell inner site 1
141 c/x 4.49985 13.84911 1.4021	\$ ID shell inner site 1
13 c/x 14.56182 0 1.56718	\$ OD shell inner site 2
131 c/x 14.56182 0 1.4021	\$ ID shell inner site 2
17 c/x 4.49985 -13.84911 1.56718	\$ OD shell inner site 3
171 c/x 4.49985 -13.84911 1.4021	\$ ID shell inner site 3
16 c/x -11.78076 -8.55972 1.56718	\$ OD shell inner site 4
161 c/x -11.78076 -8.55972 1.4021	\$ ID shell inner site 4
15 c/x -11.78076 8.55972 1.56718	\$ OD shell inner site 5
151 c/x -11.78076 8.55972 1.4021	\$ ID shell inner site 5
c	
c Outer Irradiation Site Boundaries	
162 c/x -7.146 22.825 1.56718	\$ OD shell outer site 1
163 c/x -7.146 22.825 1.4021	\$ ID shell outer site 1
152 c/x 19.416 14.107 1.61798	\$ OD Cd lining site 2
153 c/x 19.416 14.107 1.56718	\$ OD shell outer site 2
154 c/x 19.416 14.107 1.4021	\$ ID shell outer site 2
142 c/x 19.416 -14.107 1.56718	\$ OD shell outer site 3
143 c/x 19.416 -14.107 1.4021	\$ ID shell outer site 3
132 c/x -7.146 -22.825 1.905	\$ OD shell outer site 4
133 c/x -7.146 -22.825 1.6	\$ ID shell outer site 4

172 c/x -23.7293 0 1.56718 \$ OD shell outer site 5
173 c/x -23.7293 0 1.4021 \$ ID shell outer site 5

c

c Fuel Inlet, Outlet & Gas Removal Tube Boundaries

300 px 15 \$ bottom plane fuel outlet tube
301 c/x -9 0 0.65 \$ OD fuel outlet tube
302 c/x -9 0 0.5 \$ ID fuel outlet tube
400 px 55 \$ bottom plane fuel inlet tube
401 c/x 9 0 0.65 \$ OD fuel inlet tube
402 c/x 9 0 0.5 \$ ID fuel inlet tube
501 c/x 0 5.465 0.65 \$ OD gas removal tube
502 c/x 0 5.465 0.5 \$ ID gas removal tube

c

c Planes to subdivide reflector, pool(for max three tubes in each)

600 p 0 -1 1 0 \$ at 01h30
601 p 0 6 17 0 \$ at 03h30
602 py 0 \$ at 06h00
603 p 0 -6 17 0 \$ at 08h30
604 p 0 1 1 0 \$ at 10h30
999 sx 21 1000 \$ outside world

c ===== Data Cards=====

c Material Data

c Zircaloy-2

m1 40000 -0.982
50000 -0.015
26000 -0.0015
24000 -0.001
28000 -0.0005

c Beryllium with pre-irradiation impurities

m2 4009. -0.9952898
13027. -0.0005965
25055. -0.0003947
26000. -0.0037037
5010. -2e-007
5011. -1e-006
48000. -1.24e-005
64000. -1.7e-006

c Graphite with pre-irradiation impurities

m3 6000. -0.999721
14000. -3e-005
16000. -2e-005
17000. -2e-005
19000. -9e-006
20000. -2e-005
22000. -2e-005
23000. -0.0001
25055. -1e-005
26000. -3e-005
28000. -2e-005

c Fuel solution(UO2SO4) @ 1.3519M

m4 92238. -0.182569
92235. -0.0450658
8016. -0.668915
1001. -0.0726905
1002. -2.17937e-05
16000. -0.0307383

c Water with natural abundance of D

m5 1001. -0.1118684
1002. -3.354e-005

8016. -0.8880981
 c Aluminum Alloy
 m6 13027. -0.9792
 14000. -0.006
 29000. -0.0028
 12000. -0.01
 24000. -0.002
 c Pure Cadmium
 m7 48000. -1
 c Air(saturated at 40 C, with Ar + CO2 added)
 m8 7014. -0.7171522
 7015. -0.002822
 8016. -0.2623858
 18000. -0.0122809
 1001. -0.0052152
 1002. -1.6e-006
 6000. -0.0001423
 c Air(dry at 25 C, with Ar + CO2 added)
 m9 7014. -0.75222
 7015. -0.00296
 8016. -0.23179
 18000. -0.01288
 6000. -0.00015
 c
 c S(a,b) Treatments
 mt4 lwtr.01t
 mt5 lwtr.01t
 mt8 lwtr.01t
 c
 c K Calculations : (Histories / Cycle, Keff Guess, Tally Start Cycle, Total Cycles = should be 120)
 kcode 80000 1.000000 20 120
 kopts kinetics=yes precursor=yes
 c
 FC4 Total Heat in Fuel (W) (Qvol=15175.8cm³) \$(F4)x(MeV->J)x(atom density)x(XSection)x(Heating #)x(Qvol)
 FMESH4:n GEOM=cyl AXS=1,0,0 VEC=0,1,0 ORIGIN=10.46,0,0
 IMESH=10 IINTS=1 JMESH=48.3062 JINTS=1 KMESH=1 KINTS=1
 FACTOR=15175.8 OUT=COL
 FM4 -1.60217733e-13 0 1 -4
 c
 FC14 Total Heat in bottom 16cm of fuel (W) \$(F4)x(MeV->J)x(atom density)x(XSection)x(Heating #)x(Qvol)
 FMESH14:n GEOM=cyl AXS=1,0,0 VEC=0,1,0 ORIGIN=10.46,0,0
 IMESH=10 IINTS=1 JMESH=16 JINTS=1 KMESH=1 KINTS=1
 FACTOR=8312.65 OUT=COL
 FM14 -1.60217733e-13 0 1 -4
 c
 FC24 Total Heat in top 16cm of fuel (W) \$(F4)x(MeV->J)x(atom density)x(XSection)x(Heating #)x(Qvol)
 FMESH24:n GEOM=cyl AXS=1,0,0 VEC=0,1,0 ORIGIN=42.7662,0,0
 IMESH=10 IINTS=1 JMESH=16 JINTS=1 KMESH=1 KINTS=1
 FACTOR=5026.55 OUT=COL
 FM24 -1.60217733e-13 0 1 -4
 c
 FC34 2D Heating Distribution Tally(W/cm³) (FuelVolume= 15.1501 L \$(F4)x(MeV->J)x(atom density)x(XSection)x(Heating#)
 FMESH34:n GEOM=cyl AXS=1,0,0 VEC=0,1,0 ORIGIN=10.16,0,0
 IMESH=10 IINTS=22 JMESH=48.3062 JINTS=103 KMESH=1 KINTS=1
 FACTOR=1 OUT=COL
 FM34 -1.60217733e-13 0 1 -4
 c

```
rand gen=4
c
c Fission Source : (x1 y1 z1, x2 y2 z2...)
ksrc 13 -4.5 0 35 4.5 0 57.25 -4.5 0 259 -9 0 7 9 0
print
```