OPTIMIZATION OF INTEGRATED COAL CLEANING AND BLENDING SYSTEMS

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ABSTRACT

The fundamental requirement for a coal preparation plant is to transform low value run-of-mine (ROM) material into high value marketable products. The significant aspect relative to the plant is that any gain in efficiency flows almost entirely to the "bottom line" for the operation. The incremental quality concept has gained wide acceptance as the best method to optimize the overall efficiency of the various cleaning circuits. Simply stated, the concept requires that all the cleaning circuits operate as near as possible to the same incremental quality. To ensure optimal efficiency, a plant that receives ROM feed from multiple sources must develop a strategy to operate at the same incremental quality, which yields wide ranges in product qualities from the individual ROM coals. In order to provide products that meet contract specifications, clean coal stockpiles can be utilized to accept coals with various qualities, such as "premium," "low," and "filler" qualities, with shipments formulated from the stockpiles to meet product specifications. A more favorable alternative is raw coal blending to produce the specified clean coal qualities. This study will review the incremental quality concept and present case studies in applying the concept to meet product specifications.

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1.0 INTRODUCTION

1.1 Preamble

Coal preparation or processing is the process of cleaning raw coal generated by surface or underground mining. Coal preparation has evolved throughout the decades to what it is today, based on the needs of the industry. Currently, preparation plants can be ran and monitored remotely and have evolved into a highly efficient and productive backbone of the coal industry. Here in Central Appalachia, the coal that is mined varies drastically in height and quality. This means there are some mines that have the ability to use longwall mining method to extract coal while the majority of the companies have to use room and pillar methodology to mine low/thin seams. For the companies that mined the low seams, the quality has multiple constraints that determine its value, such as ash, sulfur, BTU quality (steam or metallurgical classification), etc. Most of the companies have to have a wide variety of mines at their disposal to meet their contract specifications. With multiple mines in multiple seams, coal preparation is a key factor for the survival of these companies.

Coal preparation has evolved from manual selective mining of only the “pure” coal particles during the mining process to sophisticated high tech solids-solids and liquid-solids separation processes. The first mining efforts focused on extracting a saleable product from the mine using picks and shovels to hand load only the coal seam. The use of explosives and mechanized loading increased production rates from the mines, but also delivered ROM coals that contained unsaleable material. The coarse particles were manually rejected by “refuse pickers” and, depending on the quality, the small amount of fine particles was blended with the coarse “clean” coal or rejected to waste piles. As mechanized mining developed to further increase production rates, the portion of fine particles in the ROM also increased. Coal preparation technology had to progress to continually meet the demands to process the increased portion of the fine ROM coal. Today, coal preparation plants routinely process all the ROM coal from 6-8” top size to zero-size particles in multiple parallel circuits based on the size of the particles.

Due to economic considerations, the optimization of coal preparation operations is essential to ensuring the viability of coal mining operations. The goal of the optimization should be to lower production costs and increased profits. In particular, coal blend optimization (on the clean or raw coal side) is a primary focus area that coal companies must be aware of. An issue that affects Central Appalachia is that it is hard for some companies to have adequate blending facilities (stockpile areas) due to the steep terrain. In order to provide products that meet contract specifications, clean coal stockpiles can be utilized to accept coals with various qualities, such as “premium,” “low,” and “filler” qualities, with shipments formulated from the stockpiles to meet product specifications. Also, there is a more favorable alternative method, raw coal blending, to produce the specified clean coal qualities for the specific shipment. These alternatives must each be explored to identify the most appropriate strategy of blend optimization for each mine site involved in coal production.

1.2 Literature Review

1.2.1 Plant Optimization

Coal preparation is as critical to the coal industry as the entire coal extraction process. Since the inception of the modern coal washing facility in the 1940-50s, scientists, researchers, coal companies, manufacturing companies, etc., have been looking to improve all aspects of this process. In the past few decades, more and more time and money have been dedicated to the further advancement of coal optimization abilities. The previous research in the optimization field has included incremental product quality, coal blending optimization, equipment modeling and improvements, computer simulation software, use of cost value/control strategies, etc.

Efficient processing performance for a typical preparation plant depends on recovering all the valuable particles from the ROM and rejecting material that fails to support the cleaned product specifications. Early ideas for producing products within specifications (especially for the ash content) centered on operating each parallel processing circuit to provide the specified product ash, thus ensuring that the final product would meet the specification. This concept was simple to understand and easy to employ. Alternate operating philosophies that illustrated improved recovery can be achieved by adjusting the specific gravity (SG) separating cut-points to near the same value for all the circuits were introduced (Dell, 1956; Abbott, 1982). This concept was based on graphical solutions developed from extensive washability (float/sink) analyses. As expected, most plants relented to operating under the simple concept of merely producing the specified product qualities in each individual circuit.

1.2.2 Incremental Quality Concept

By definition, the incremental quality concept is operating all cleaning circuits as near as possible to the same incremental quality cut-point, which will achieve maximum plant yield. This concept has been widely accepted by industry because it provides useful data that aids in the design, operation and controls strategies, and overall maximum plant optimization. Cebeci used the incremental ash concept to achieve maximum plant yield in the Zonguldak region. Their research involved Drewboy Heavy Medium (HM) bath and HM cyclones to determine the desired cut-points at specific target ash. The results of the study show that using this approach will increase the plant yield from 24% to 30.71% at a target ash of 9.5%, and additional plant yield increased to 33.41% for a target ash of 11.61%. Gupta agrees with the fact that the incremental quality concept will achieve maximum plant yield, but one for one specific quality constraint. The paper suggests when you have multiple quality constraints the incremental concept can become very complex and give multiple flawed solutions, using an example of ash and sulfur as the desired constraints. The theoretical plant yield using incremental ash will be different when compared to the plant yield using incremental sulfur. A solution to multiple constraints is to try and combine constraints and form a new constant, then the incremental approach of those new constants can be used, for example, to combine ash and sulfur into sulfur dioxide emissions (Gupta, 2005). In a study performed by Mohanta using the incremental quality concept, they developed a spreadsheet based program to take inconsideration of equipment imperfections, feed quality variance, and price structure. Their results showed that this method can maximize the value of clean coal, while aiding in deciding key operating parameters and imperfection of the washing equipment for various coal feeds.

1.2.3 Numerical Optimization

Other methods using simulation software include developing preparation plant flowsheets and generating associated equipment models. Numerous companies and researchers have used flowsheet optimization in the past 40 years. The general thought has been to breakdown the coal preparation process into blending, sizing, and separation in a steady state scenario. The goal of this method is to achieve the maximum yield of clean coal at a specific constraint, such as ash content, by optimizing the separation equipment’s cut-points (Rong, 1992). This method can be applied to existing plants and aid in the construction of new state of the art plant. The flowsheet simulation is dependent on the characteristics of the feed coal and contract specification; this will determine the necessary combination of crushers, screens, washers, etc. that will achieve the desired outcome (Abara, 1979). The work of flowsheet optimization is an ongoing task in the coal industry, due to the creation and modification of cleaning equipment and processes, additional models are needed and will continue to be needed in future work for accurate simulations.

1.2.4 Value/Cost Optimization

Some researchers have taken the approach to optimize coal preparation through the use of value and/or cost strategies. A new method to the coal industry is the Internal Value Chain approach, which was originally proposed by Michael Porter of Harvard Business College in 1985. In layman terms, the approach means that a company acquires raw materials and uses those materials to produce something of value or usefulness, this means the more value that is created the more profitable the company is. The approach is divided into two activity groups, the primary and support groups. The primary group involves activities that directly relates to the creation, sales, maintenance, and service of the product while the support group's activities support the primary groups, such as procurement or human resources. An and Zhang took this concept and applied it to the XSMD Taiyum coal preparation facility, stating how significant it was to integrate the internal value of coal preparation to the entire coal industry. They performed their research using a quantitative analysis method which was a combination of analytic hierarchy process (AHP) and fuzzy linear programming (FLP), along with a time factor. From their findings, they suggested areas of improvement based upon value per activity on a cost basis to the plant manager, such as a need to look at coal blending sales (variety of the coal and uses) and heavy medium floatation. Using this method of value chain optimization, an operation can control cost to achieve maximum optimization based on total cost to value and results in maximum profits (An 2013).

1.2.5 Chance Constrained Programming

Shih performed a study that focused on coal blending uncertainty and variability of coals, referring to sulfur content, ash content, and heating value. In this study, they used a Chance Constrained Programming (CCP) technique for coal blending decisions, which takes inconsideration the variability inherent in coal quality. The purpose of the study was to minimize expected and standard deviation of blending costs and sulfur emissions, as well as to determine what the associated tradeoffs are. One case studied involved the tradeoff between expectations and standard deviation of cost. This case stated that an operator might be willing to give up certain cost saving measures to reduce the standard deviation of operating conditions to achieve a more steady operating plant. Another case study focused on expected and standard deviation of sulfur emissions costs, stating that a 10% reduction in sulfur emissions results in a 19% cost increase in coal blending (Shih, 1995). The results from the CCP work shows that when they are competing objectives, such as cost savings versus emissions, this technique can identify reliability and minimize standard deviations concerns to aid in plant decision making.

1.2.6 Genetic Algorithm Optimization

Simulation software has been around for several decades. In the past few years this software has evolved through the use of genetic algorithms (GA), but has had issues and problems along the way. Xi-Jin performed a study to address the problems associated with GA in coal blending optimization by using adaptive simulated annealing genetic algorithms (ASAGA). They based their study upon three key optimization parameters: to find the minimum percent of high quality coal and the maximum percent of low quality coal, to find the lowest cost and largest profit, and to determine the optimal ratio of cost to performance. Their coal blending model encompasses two scenarios: using raw coal and cleaning it below the target ash, then perform blending activities and the other option is to clean the raw coal to meet the contract target ash specification. In addition to the coal blending model, they used a scheduling model, which was responsible to schedule which coal will be clean according to the maximum economic benefits, which assumes all cleaning cost are similar. From their results, ASAGA can achieve significantly better results by using economic benefits as the primary objective to establish the coal blending parameters, when compared to other GA methods.

1.2.7 Micro-Price Optimization

The "micro-price" optimization method is another approach for economic optimization of plant operations (Luttrell et al., 2014). This method by definition assigns unit values (positive, zero, or negative) to each individual types of product that passes through the operations. This method relates the coal industry as being the same as any other commercial business, e.g., retail sales or manufacturing. Based on this concept, Luttrell developed five key questions that coal producers must answer. The first question is "What are we trying to sell?" This question pertains to the material generated through the mining process. Pure coal should have the highest value, middling particles will have a lesser value compared to coal and the rock content, while pure rock will have no value and will incur a cost penalty. The next question is "Who are our customers?" This refers to which market the coal will be sold on, metallurgical or steam market. This question may seem simple but has implications on meeting contract specifications, such as heating value on the steam market or ash content on the metallurgical. The next question is "What will our customers pay?" This refers to price per ton and associated premiums above contract specifications and penalties with ash content. The final question is "What inventory is available?" This refers to coal washability data of inventory and sorting by density versus quality. The inventory represented by good quality should be separated and sold to customers looking for high quality coals, while the lesser quality should be separated at the zero worth value and sold on the low quality markets (Luttrell 2013).

1.3 Objectives

The primary objective of this study was to identify practical systems for coal blending that utilize the incremental quality concept to maximize clean coal production and profitability. To this end, several series of mathematical simulations were conducted to quantify the impact of different control approaches for maintaining a consistent product consistency. Approaches evaluated included (i) operation of cleaning operations at a constant clean coal quality via the manipulation of plant density cut-points, (ii) operation of cleaning operations at a constant incremental quality after blending of raw coal products to maintain a constant clean coal quality, and (iii) operation of cleaning operations at a constant incremental quality followed by blending of clean coal products to maintain a constant clean coal quality. The economic drivers in each case were examined in addition to site specific advantages of disadvantages of each approach.

2.0 BLEND OPTIMIZATION

2.1 Optimization Theory

Coal preparation, for the most part over the years, has been considered a “necessary evil” by coal company management. In many cases plants were “pushed” to process maximum tons without regard to the separating efficiency or the loss of saleable coal to the reject. Within the last two or three decades, the preparation management at several major coal companies have “educated” operations management to the fact that:

- almost all the benefits for process improvement translate directly to the “bottom line”
- major improvements can be accomplished with very little investment
- a small percent in improvement (such as additional saleable material) provides a huge return due to the large volume of material processed.

The basis for the new era in coal preparation is the philosophies introduced by (Dell, 1956, Abbott, 1982), wherein the best performance for parallel circuits is achieved by operating at the same specific gravity (SG) cut-point. Although the earlier graphical solutions based on extensive washability data indicated that the cut-points should be very near the same, the current practice is to control each parallel to separate at the same SG cut-point. This concept, known generally as the incremental quality concept, has been refined by Luttrell and Stanley (Luttrell et al., 2000) and adopted by the major coal companies in the U.S. and promulgated through management workshops and operators training sessions.

To illustrate the incremental quality concept, consider two dissimilar raw coals as shown in Figure 1 using simple blocks to represent the ash content of various particles. In order to produce the same specified ash quality for each of the raw coals, such as 25% ash, the particles are separated at different individual (incremental) particle values, as shown in Figure 1(a).

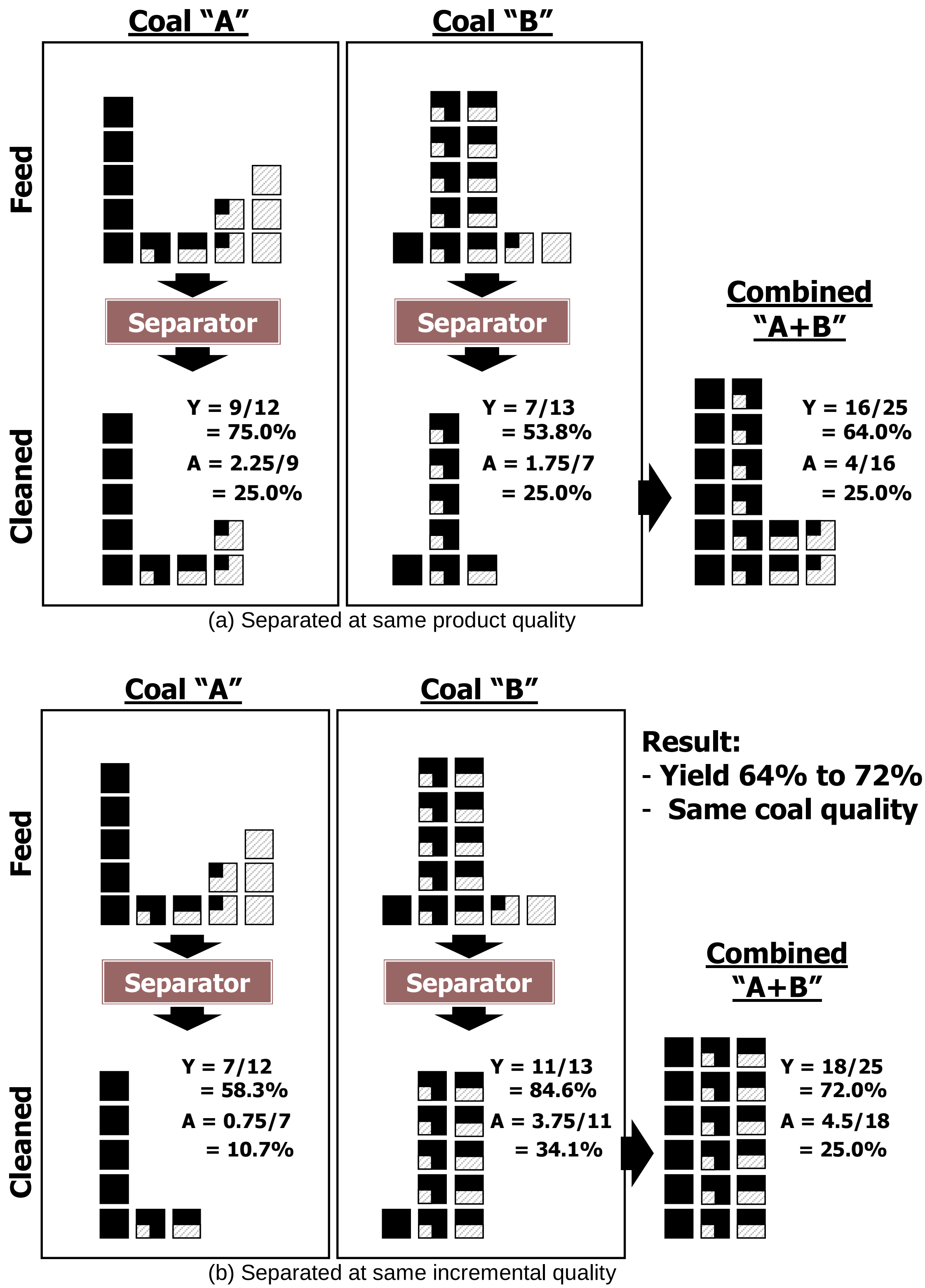

Figure 1. Coals separated to obtain the specified clean coal ash content.

The overall yield resulting for this case is 64%. Notice that in Figure 1(a), particles with 50% ash content are recovered for Coal “A” but rejected for Coal “B”. Figure 1(b) illustrates separating the raw coals at the same SG cut-point. Although the product ash content is different for each coal at the same cut-point, the combined products deliver the specified ash content. The major difference is the improvement in the number of particles recovered when separating at the same cut-point. The simple act of separating at the same cut-point, which is at the same incremental quality, increased the yield from 64% to 72%. This improvement translates into a major increase in revenue when considering the tonnage processed in many large preparation plants and the cost to achieve the improvement—a simple change in operating philosophy.

The incremental concept is applicable for a single plant with parallel processing circuits treating different size fractions of the ROM coal. A collection of washability analyses covering various size fractions indicates a linear correlation with respect to incremental ash content versus the inverse of the SG (1/SG), as shown in Figure 2. A typical plant will incorporate four parallel cleaning circuits:

- coarse circuit, >12 mm, dense medium bath
- small circuit, 12 mm x 1 mm, dense medium cyclone
- fine circuit, 1.00 mm x 0.15 mm, spirals or reflux classifier
- ultra-fine circuit, <0.15 mm, flotation

The coarse and small circuits treat the major portion of the ROM and, therefore, must be operated at the same SG cut-point. The fine circuit operates at a slightly higher SG cut-point, which compensates for a lower processing efficiency, to yield the same incremental quality. A well maintained flotation circuit can typically be operated at maximum performance without reaching the same incremental quality cut-point of the other circuits.

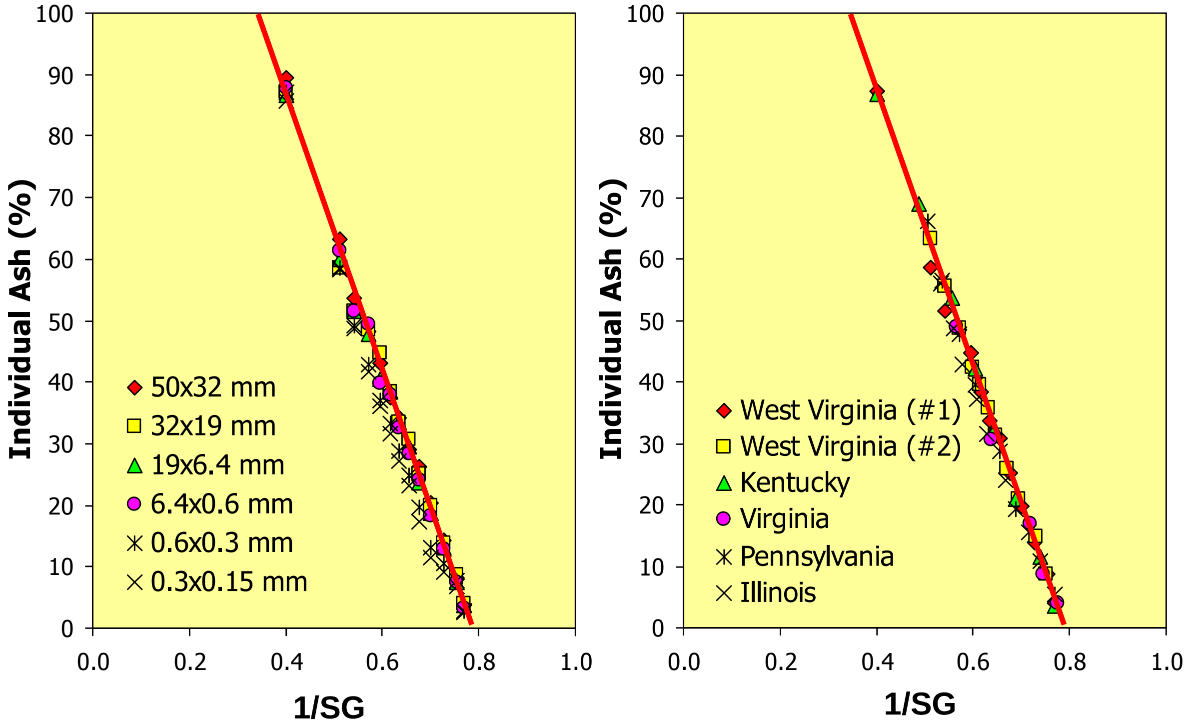

Figure 2. Individual ash versus 1/SG for various size fractions and coal sources.

Furthermore, the collection of washability analyses noted above also indicates that the same linear correlation with respect to incremental ash content versus the inverse of the SG (1/SG) is valid for various coal sources, also shown in Figure 2. This correlation expands the application of the incremental quality concept to include different plants that are processing ROM for the same product quality. For large coal companies with a wide range of ROM sources, this concept provides opportunities to optimize individual plant production by establishing blending programs to meet the specified quality at the final shipping point, or at any point between the plants and the shipping point.

ROM coals feeding a coal preparation plant are inherently variable due to the changing conditions in the mines. A washability analysis for a ROM coal is only an indication of the raw quality for the feed to the plant at the time the sample was taken. The variability may be the result of a change in the conditions and mining areas for a single mine or receiving ROM coal from multiple sources, or a combination of both. The plant, in turn, must accommodate the variability and transform the ROM coal into a product at the specified quality with a minimum of variability. State-of-the-art plant design, equipment, and automated process control systems have the capability to deal with the ever-changing ROM feeds.

One method employed by plant management over the years was to continually adjust the SG cut-point in the processing circuits to always produce the specified product qualities. If the product ash content varied above the specified limits, the SG cut-points were lowered to reduce the ash content, and the SG cut-points were raised to increase the ash content. As illustrated in Figure 1, this operating method would recover high ash incremental material at times while rejecting the same material at other times when the feed conditions changed.

The major objection to adopting the incremental quality concept for an operation is the variability in the product qualities due to the changing ROM feed qualities. For an operation that is forced to ship the clean product as it is produced, adjusting the SG cut-point may be the only option. On the other hand, an operation that ships clean coal in batches or lots, such as unit trains, the incremental quality concept can be adopted with merely a change in the control strategy. If areas around the plant are available for stockpiling either clean product or ROM feed coals, the operation can fully benefit from the improvements in processing efficiency by adopting the incremental quality concept.

2.2 Numerical Simulations

2.2.1 Simulation Routines

Mathematical exercises were developed to illustrate the improvement in clean coal yield by employing the incremental quality concept for a typical preparation plant rated at 500 raw tons per hour (tph) feed and operating 3, 8-hour shifts per day. The clean coal ash content specification was arbitrarily set at 7.5%. A ROM feed washability was simulated to mimic changing mining conditions on a shift-by-shift basis that provided a variable washability distribution for the material as it was received by the plant. The washability distribution was mathematically fit using a bimodal distribution generated using the Visual Basic for Applications (VBA) programming code shown in Appendix I. The distributions roughly followed a sinusoidal pattern with random fluctuations added to approximate real-world peaks and valleys in the washability distribution.

Three operating strategies were simulated to compare the overall plant yield:

- adjust plant SG cut-point to constantly produce the specified product ash content

- operate at a constant SG cut-point and direct the clean product to either a low ash stockpile or a high ash stockpile, then blend from the two stockpiles to deliver the specified clean coal ash content
- operate at a constant SG cut-point and blend the plant feed from a high ash stockpile and a low ash stockpile to deliver the specified clean coal ash content.

An illustration of the preparation plant and stockpile configurations for the three strategies is shown in Figure 3. The strategy incorporating the simple philosophy of controlling each cleaning circuit to deliver the required product ash is shown in Figure 3(a). This configuration requires only one raw and one clean coal stockpile. An ash analyzer monitors the plant product and adjusts cut-point SG for the cleaning circuits to insure each circuit produces the required product ash content.

The second strategy, shown in Figure 3(b), depicts processing the ROM from a single stockpile, operating the plant at a constant cut-point SG, segregating the plant product into two clean coal stockpiles (based on ash content), and blending from the stockpiles to ship the required product ash content. An ash analyzer is required to monitor the plant product in order to segregate the clean coal between the high and low ash stockpiles. A second analyzer is required to blend the high and low ash coals to the required product ash content during shipping.

The third strategy, segregating the ROM into two stockpiles (based on ash content of the clean coal), is shown in Figure 3(c). The plant processes the raw coal at a constant cut-point SG and the feed is blended from the ROM piles to produce a plant product with the required product ash content. The ROM coals must be characterized and segregated (typically by source) between the two raw coal stockpiles. An ash analyzer is required to monitor the plant product and to adjust the portions from the ROM stockpiles.

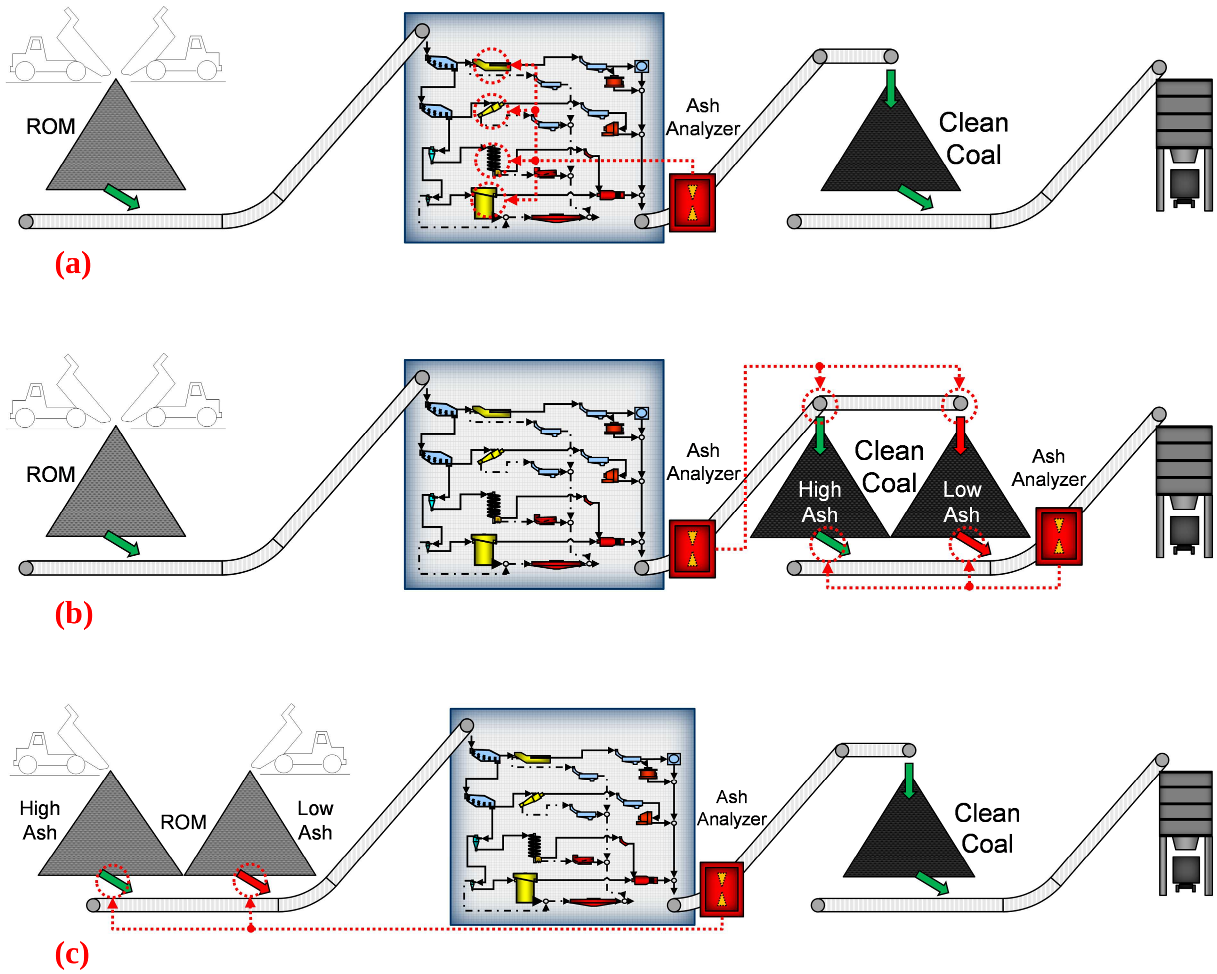

Figure 3. **Strategies to process ROM coals with varying washabilities. (a) Operating plant circuits to produce required product ash, (b) operating plant at constant cut-point SG, blending clean coal stockpiles to produce required product ash and (c) operating plant at constant cut-point SG, blending raw coal stockpiles to produce required product ash content.**

The simulations provide a simple example of how adopting the incremental quality concept can impact plant clean coal production and quality specifications. In actual practice, employing the concept to operational situations would require a thorough review of the ROM sources, the operating capability of the plant (including areas for stockpiles), and collaboration with the company marketing group.

2.2.2 ROM Feed Source

A Microsoft Excel worksheet was developed to simulate washability data that would represent a variable run-of-mine (ROM) feed source to a plant and operating data for 90 shifts (3 shifts per day for 30 days). The data includes plant ROM feed tons, ROM ash content, clean coal tons, clean coal ash, and plant yield. The basis for the simulated washability was a double random sinusoidal variation in the proportions of coal and rock present in each SG fraction. The periods for the sinusoidal variations were different which provided different simulation parameters, thus a different washability analysis for each of the 90 shifts. A plot of the washability analysis for the ROM feed ash content and plant yield at 7.5% clean coal ash for each shift are shown in Figure 4.

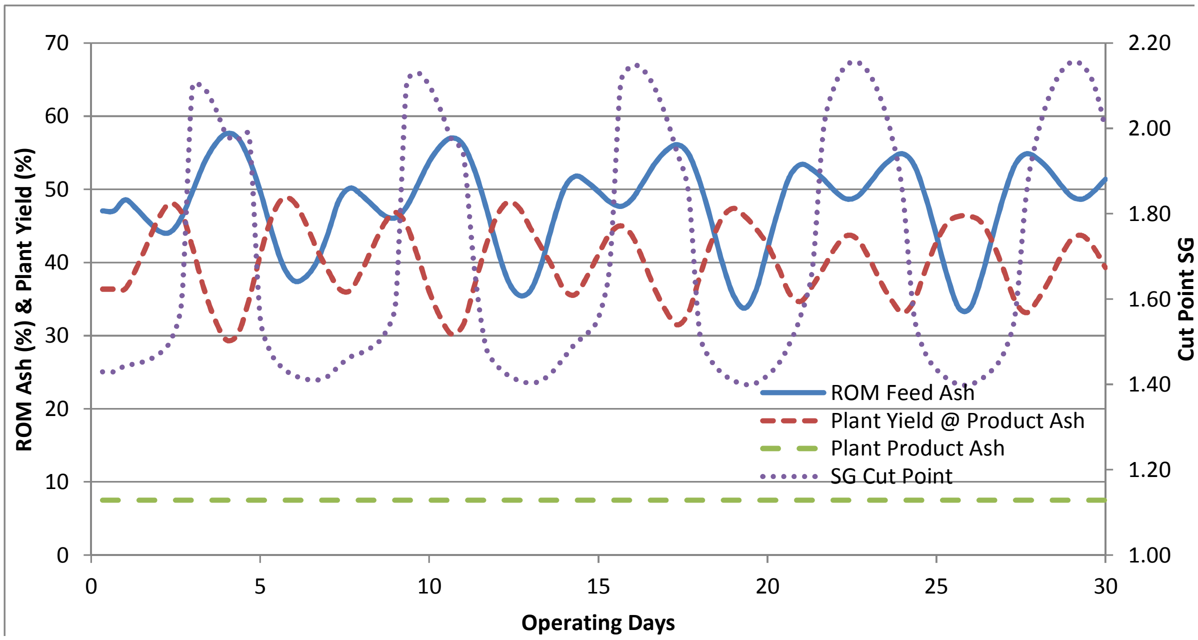

Figure 4. Variations in ROM feed ash content, plant yield, plant ash, and cut-point SG for the constant product ash strategy.

2.2.3 Optimization Strategy I - Plant SG Control

The strategy to adjust the plant SG cut-point to control the clean coal ash content was simulated by determining the SG cut-point that produced 7.5% ash from the ROM washability for each shift. The detailed simulation data is provided in Appendix 2. The clean coal yield for the shift was then determined by summing the incremental yield values (SG float fractions) up to the SG cut-point. The plant product ash and cut-point SG are also shown in Figure 4.

2.2.4 Optimization Strategy II – Clean Coal Blend Control

The strategy to deliver the specified clean coal product by blending varying portions from two clean coal stockpiles was simulated by operating the plant at the same SG cut-point to process the ROM washability for each shift and segregating the plant product into two clean coal stockpiles, one containing clean coal at <7.5% ash and the second containing clean coal at >=7.5% ash. The SG cut-point was set to achieve a weighted average ash content of 7.5% for the total clean coal produced. The clean coals were then blended in proportions to deliver 7.5% ash for unit train lots (10,000 tons). This scenario assumed that the plant processed the ROM as received by shift without any accumulation of the ROM raw and the shipped clean coal was blended from well mixed stockpiles. The unit train lots were shipped when there was sufficient coal in the stockpiles to provide the required proportion for the blended clean coal lot.

The ROM feed ash (which is the plant raw feed), plant yield, plant product ash, and cut-point SG for the constant cut-point SG/clean coal blending strategy is shown in Figure 5. The detailed simulation data is provided in Appendix 3.

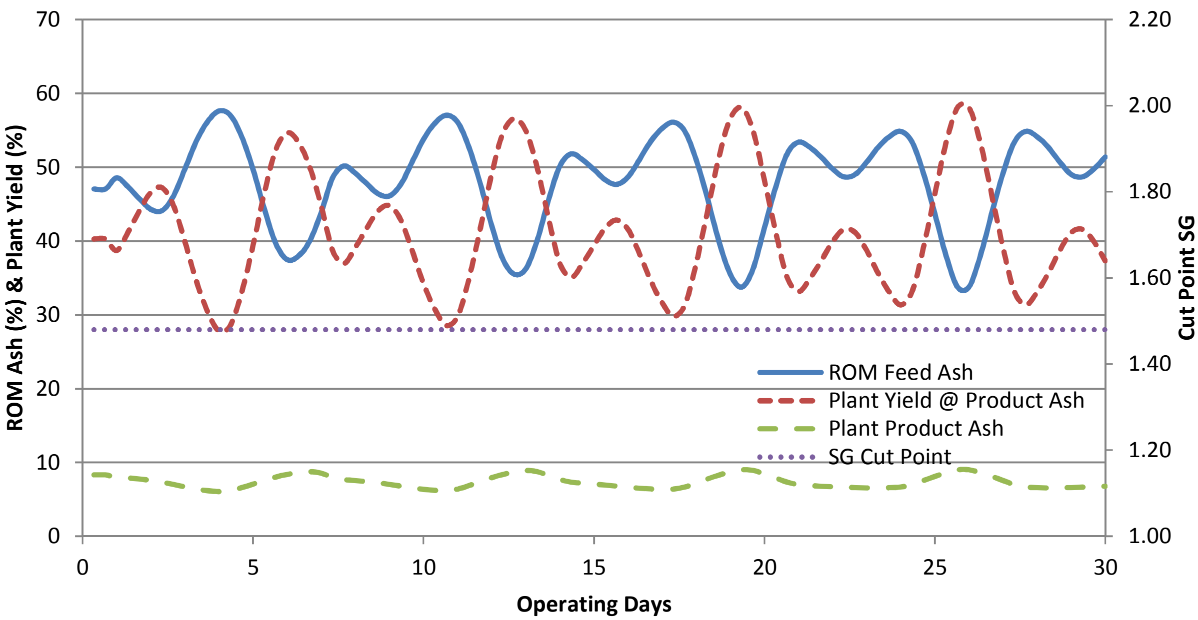

Figure 5. Variations in ROM feed ash content, plant yield, plant ash, and cut-point SG for the constant SG cut-point strategies.

2.2.5 Optimization Strategy III – Raw Coal Blend Control

The strategy to deliver the specified clean coal product by blending varying portions from raw coal stockpiles was simulated by sorting the ROM coals into two stockpiles based on the clean coal ash content at the same SG cut-point. One stockpile contained ROM material that produced a clean coal product at <7.5% ash and the second stockpile contained ROM material that produced a clean coal product at ≥7.5% ash. While operating the plant at a constant SG cut-point, the proportions from each raw stockpile were varied to produce a constant 7.5% ash clean coal. The SG cut-point was set to achieve a weighted average ash content of 7.5% for the total clean coal produced. This scenario assumed the plant only processed coal when there was sufficient ROM in the stockpiles to provide the required proportion for the raw coal blend.

The ROM feed ash (segregated as low-ash ROM and high-ash ROM), plant feed ash, plant yield, plant product ash, and cut-point SG for the constant cut-point SG/raw coal blending strategy is shown in Figure 6. Also, note that the simulation for the varying washabilities made it impossible to process any coal (for 6 shifts) until sufficient quantities of both raw coals were available to satisfy the required blend ratio. The detailed simulation data for this scenario is provided in Appendix 4.

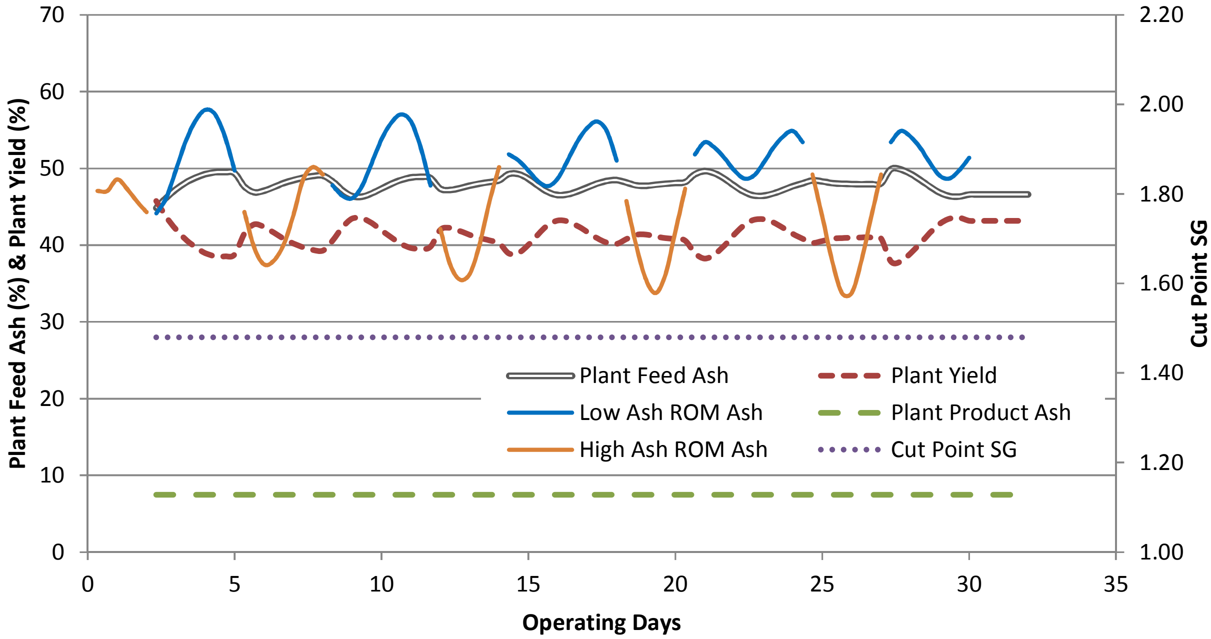

Figure 6. Variations in ROM feed ash, plant feed ash, plant yield, plant product ash, and cut-point SG for the constant SG cut-point strategies.

2.3 Results and Discussion

2.3.1 Overview

The simulations provided an easy to understand example of three strategies that are used for coal preparation. The first strategy, operating all the circuits in a plant to produce a constant specified product ash content by adjusting the SG cut-point in each cleaning circuit, has been widely used, because it is simple to understand (if each circuit is producing the specified product ash, then the total product will meet specification) and easy to institute (if the product ash varies above the specified value, lower the SG cut-point, and vice versa). The second and third strategies incorporate the incremental quality concept to operate all the circuits in a plant at the same SG cut-point, which, in turn, will recover (and reject) the same incremental ash in each of the circuits. The SG cut-point is set and maintained at a value that produces the specified clean coal ash content. Table 1 shows the results of the simulations for the three operating strategies, which are discussed in the following sections.

2.3.2 Optimization Strategy I – Plant SG Control

The simulation of continually adjusting the SG cut-point to produce the specified clean coal ash content provided 144,511 tons of clean coal from 360,000 tons of ROM feed at 40.14% yield, as shown in Table 1. The average SG cut-point was 1.70 SG, ranging from 1.40 to 2.16 SG. The high SG cut-point indicates that very high incremental ash material was required at times to produce the specified clean coal ash content. The low SG cut-point indicates that relatively low incremental ash material was rejected at times to produce the specified clean coal ash content.

Table 1. Comparison of plant operating strategies.

	Adjust SG Cut-point for Constant Product Ash	Constant SG Cut-point with Clean Coal Blending	Constant SG Cut-point with Raw Coal Blending
Plant Feed Rate (tph)	500	500	500
Simulation Period	3 shifts per day 30 days	3 shifts per day 30 days	3 shifts per day 30 days
Total ROM Feed (tons)	360,000	360,000	360,000
Total Clean Coal (tons)	144,511	148,285	148,285
Plant Feed Ash (%)	33.73-57.63	33.73-57.63	44.84-49.89
Plant Yield – Range (%)	29.38-48.76	27.79-58.11	37.84-45.74
Plant Yield – Overall (%)	40.15	41.19	41.19
Plant Product Ash (%)	7.50	6.06 – 9.01	7.50
Clean Coal Product Ash (%)	7.50	7.50	7.50
SG Cut-point	1.40 – 2.16	1.48	1.48

The strategy of plant SG control clearly illustrates that the clean coal shipped contains both high ash components and low ash components, and that both components are recovered or rejected depending on the ROM washability for each shift. Thus, non-valuable high ash material was shipped while valuable low ash material was rejected during the simulated 90 shifts. Under this strategy, the clean coal can be loaded as processed for any size lot. Storage area is required to handle the clean coal accumulation between shipments.

2.2.4 Optimization Strategy II – Clean Coal Blend Control

The results for the clean coal blending strategy are shown in Table 1. The simulation provided 148,285 tons of clean coal from the 360,000 tons of ROM feed at 41.19% yield. The simple act of maintaining a constant SG cut-point for the entire 90 shifts period improved the yield from 40.14% to 41.19% for a 1.05% increase and a 2.61% increase in organic efficiency.

Under this strategy, clean coal storage area must be provided to accumulate the proportions required in each stockpile to ship the specified tons for each lot. The reclaim system must be capable of continually varying the proportion from each stockpile. An online ash analyzer monitoring the ash content at the loading point would provide the optimal control for blending from the stockpiles for the specified clean coal ash.

2.2.4 Optimization Strategy II – Raw Coal Blend Control

The results for the raw coal blending strategy are shown in Table 1. As expected, the simulation provided the same 148,285 tons of clean coal from the 360,000 tons of ROM feed at 41.19% yield. The same improvement was gained with a simple change in the operating philosophy.

The most significant advantages for blending raw coal for the plant feed, as illustrated in Figure 6 and detailed in Table 1, are the reduction in the range of ash content in the plant feed and the reduction in the range of yield for the coals processed. Operating under the first two strategies required the plant to process raw coals with a wide range in ash content —33.73-57.63%. Blending the raw coals for the plant feed provided a more consistent ash content in the feed — 44.84-49.89%. The yields for the first and second strategies ranged from 29.38 to 48.76% and 27.79 to 58.11%, respectively. The range of yields resulting from blending the raw coals for the plant feed was 37.84 to 45.74%. Operating a plant with more consistent feed conditions and product yields reduces large swings in the material flows throughout the plant, which at times may require de-rating of the plant capacity to accommodate the high flow rates and equipment loading.

Under this strategy, raw coal storage area must be provided to allow the segregation of the ROM as it is delivered and the reclaim system must be capable of continually varying the proportion from each stockpile. An online ash analyzer to monitor the plant clean coal product would provide the optimal control for blending from the ROM stockpiles for the specified clean coal ash.

2.2.5 Comparison of Optimization Strategies

The discussion presented above indicates that optimization via operation at a constant SG cut-point preceded by raw coal blending appears to be the most attractive methodology for integrated coal cleaning and blending systems. The improvement in yield and organic efficiency, 1.05% and 2.61%, respectively, was achieved without any modifications to the plant circuits and may appear to be relatively small. The small technical improvements afforded by this approach manifest into large dollar values when considering the volume of material involved. For example, using 500 tph ROM feed and 6,000 operating hours per year as a basis, the yield improvement from 40.14% to 41.19% provides 31,500 additional clean coal tons at the same customer quality specification. For a metallurgical coal product with a value of $100 per ton, this "small" improvement would increase the "bottom line" by over $3 million annually.

3.0 SUMMARY AND CONCLUSIONS

Coal preparation, considered to be a "necessary evil," has evolved into a high tech and integral part of a mining operation. A modern preparation plant transforms low value run-of-mine (ROM) material into high value marketable products. Although the individual processing components have been designed to function very efficiently, the overall plant efficiency can be severely affected by the operating strategy. The significant aspect relative to the total plant is that any gain in efficiency flows almost entirely to the "bottom line" for the operation. The incremental quality concept has gained wide acceptance as the best method to optimize the overall efficiency of the various cleaning circuits. Simply stated, the concept requires that all the cleaning circuits operate as near as possible to the same incremental quality. To demonstrate the impact of operating a plant under the incremental quality concept, simulations were developed to compare three operating strategies.

The first strategy was based on the premise of producing the specified product quality from all the circuits by adjusting the SG cut-points for the circuits, thus ensuring the final product meets the specification. The second and third strategies employ the incremental quality concept (constant SG cut-point) and utilized raw coal or clean coal blending to control the final product quality. The simple exercises, based on a simulated ROM washability, illustrated that the plant yield was improved from 40.15% for the first strategy to 41.19% for the second and third strategies. Although the improvements were achieved without any modifications to the plant circuits, and may appear to be relatively small, the impact is very evident when considering that a metallurgical producer operating 6,000 hours per year could deliver 31,500 additional tons to the market. Based on a market value of $100 per ton, the "small" improvement would provide over $3 million in additional revenue.

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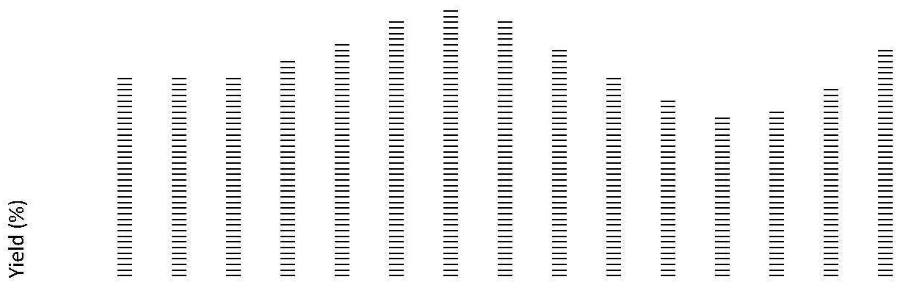
APPENDIX

APPENDIX 1 – VBA CODE FOR WASHABILITY DISTRIBUTION

```
t1 = 0.05
p = 1
Z = 0
A = 0.5

For I = 1 To 26
    IRD = 1.25 + 0.05 * I
    C1 = 1 - Exp(0 - (IRD - x0) / t1)
    C2 = Exp(0 - (IRD - x0) / Coalt2)
    totcoal = A * C1 ^ p * C2
    C3 = 1 - Exp(0 - (3.8 - IRD - x0) / t1)
    C4 = Exp(0 - (3.8 - IRD - x0) / Rockt2)
    totrock = C3 ^ p * C4
    Z = Z + totcoal + totrock
Next I
C1 = 0
C2 = 0
C3 = 0
C4 = 0

C1 = 1 - Exp(0 - (RD - x0) / t1)
C2 = Exp(0 - (RD - x0) / Coalt2)
ycoal = A * C1 ^ p * C2
C3 = 1 - Exp(0 - (3.8 - RD - x0) / t1)
C4 = Exp(0 - (3.8 - RD - x0) / Rockt2)
yrock = C3 ^ p * C4

If RD < 1.3 Then
    wash = 0
ElseIf RD > 2.55 Then
    wash = 0
Else
    wash = 100 * (ycoal + yrock) / Z
End If
End Function
```

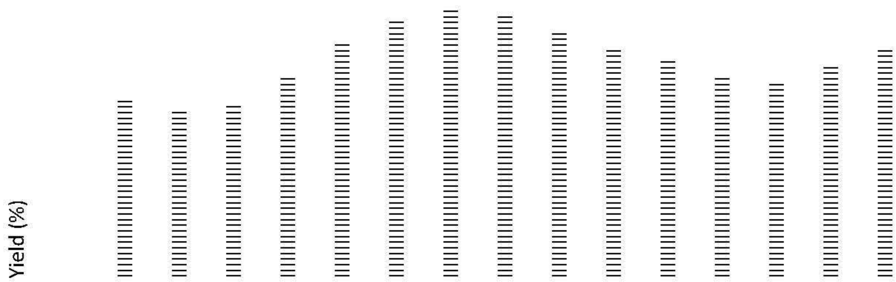
APPENDIX 2 - SIMULATION RESULTS FOR CONSTANT ASH AND VARIABLE SG

Target Ash	7.50															
Max Ash	7.50			SG Max		2.16										
Min Ash	7.50			SG Min		1.40										
Reset																
Add Rock?										X	X	X	X	X	X	
Days		0.3	0.7	1.0	1.3	1.7	2.0	2.3	2.7	3.0	3.3	3.7	4.0	4.3	4.7	5.0
Shifts		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
SG50	**1.70**	1.43	1.43	1.44	1.45	1.46	1.47	1.5	1.59	2.1	2.09	2.05	1.99	1.97	1.99	1.56
Feed Ash	**47.8**	47.05	47.05	48.57	47.35	45.73	44.3	44.14	46.12	49.77	53.51	56.19	57.63	57.04	54.15	49.7
Cln Yield	**40.14**	36.4	36.4	36.4	39.2	42.7	46.1	48.1	46.9	42.0	36.4	32.1	29.4	30.2	34.9	41.1
Cln Ash	**7.50**	7.50	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		6.3	1.5	1.5	1.6	1.7	1.8	1.9	1.9	1.7	1.5	1.3	1.2	1.2	1.4	1.6
Cum Feed		4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
Cum Cln		6	8	9	11	12	14	16	18	20	21	23	24	25	26	28

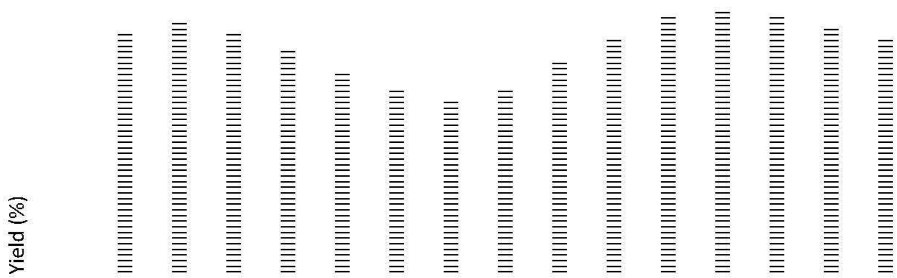


Target Ash	7.50															
Max Ash	7.50															
Min Ash	7.50															
Reset																
Add Rock?														X	X	X
Days		5.3	5.7	6.0	6.3	6.7	7.0	7.3	7.7	8.0	8.3	8.7	9.0	9.3	9.7	10.0
Shifts		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
SG50	**1.70**	1.47	1.44	1.42	1.41	1.41	1.42	1.44	1.46	1.47	1.49	1.52	1.59	2.11	2.13	2.1
Feed Ash	**47.8**	44.3	39.66	37.48	37.98	40.05	43.92	48.57	50.17	49.19	47.78	46.42	46.12	47.68	50.71	53.79
Cln Yield	**40.14**	46.1	48.8	48.3	45.5	41.9	39.0	36.4	36.2	38.9	42.1	45.3	46.9	45.0	40.7	36.0
Cln Ash	**7.50**	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.8	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.6	1.7	1.8	1.9	1.8	1.6	1.4
Cum Feed		64	68	72	76	80	84	88	92	96	100	104	108	112	116	120
Cum Cln		30	32	34	35	37	39	40	42	43	45	47	49	50	52	53

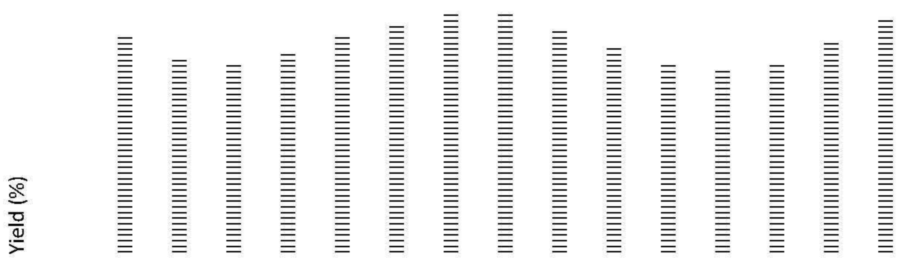
Target Ash	7.50															
Max Ash	7.50															
Min Ash	7.50															
Reset																
Add Rock?		X	X	X												
Days		10.3	10.7	11.0	11.3	11.7	12.0	12.3	12.7	13.0	13.3	13.7	14.0	14.3	14.7	15.0
Shifts		31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
SG50	**1.70**	2.04	1.97	1.94	1.67	1.49	1.44	1.42	1.41	1.4	1.41	1.43	1.46	1.5	1.52	1.56
Feed Ash	**47.8**	55.96	57.04	56.1	52.7	47.78	42.11	37.48	35.5	36.22	40.05	45.57	50.17	51.82	51.01	49.7
Cln Yield	**40.14**	32.4	30.2	31.5	36.8	42.1	46.4	48.3	47.4	44.6	41.9	39.2	36.2	35.7	38.1	41.1
Cln Ash	**7.50**	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.3	1.2	1.3	1.5	1.7	1.9	1.9	1.9	1.8	1.7	1.6	1.4	1.4	1.5	1.6
Cum Feed		124	128	132	136	140	144	148	152	156	160	164	168	172	176	180
Cum Cln		55	56	57	59	60	62	64	66	68	69	71	73	74	75	77



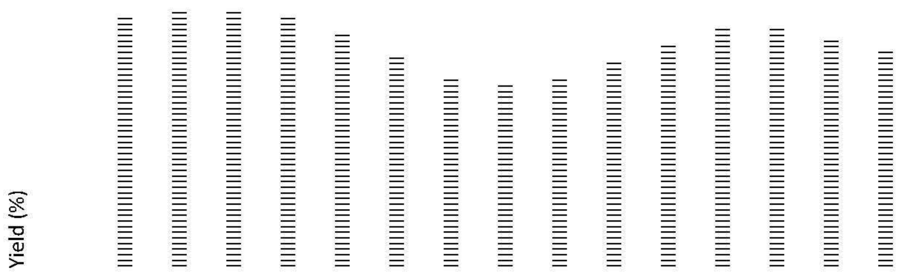
Target Ash	7.50															
Max Ash	7.50															
Min Ash	7.50															
Reset																
Add Rock?			X	X	X	X	X	X	X							
Days		15.3	15.7	16.0	16.3	16.7	17.0	17.3	17.7	18.0	18.3	18.7	19.0	19.3	19.7	20.0
Shifts		46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
SG50	**1.70**	1.67	2.11	2.15	2.14	2.09	2.03	1.94	1.85	1.52	1.46	1.43	1.41	1.4	1.4	1.42
Feed Ash	**47.8**	48.29	47.68	48.69	51.03	53.51	55.26	56.1	54.87	51.01	45.73	39.96	35.5	33.76	36.22	41.79
Cln Yield	**40.14**	43.9	45.0	43.7	40.2	36.4	33.4	31.5	33.1	38.1	42.7	46.1	47.4	46.3	44.6	42.4
Cln Ash	**7.50**	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.8	1.8	1.7	1.6	1.5	1.3	1.3	1.3	1.5	1.7	1.8	1.9	1.9	1.8	1.7
Cum Feed		184	188	192	196	200	204	208	212	216	220	224	228	232	236	240
Cum Cln		79	81	82	84	85	87	88	89	91	93	94	96	98	100	102



Target Ash	7.50															
Max Ash	7.50															
Min Ash	7.50															
Reset																
Add Rock?						X	X	X	X	X	X	X	X			
Days		20.3	20.7	21.0	21.3	21.7	22.0	22.3	22.7	23.0	23.3	23.7	24.0	24.3	24.7	25.0
Shifts		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
SG50	**1.70**	1.45	1.5	1.56	1.67	2	2.1	2.15	2.16	2.13	2.07	1.99	1.85	1.56	1.47	1.44
Feed Ash	**47.8**	47.35	51.82	53.41	52.7	51.38	49.77	48.69	49.04	50.71	52.69	54.15	54.87	53.41	49.19	43.71
Cln Yield	**40.14**	39.2	35.7	34.7	36.8	39.3	42.0	43.7	43.2	40.7	37.5	34.9	33.1	34.7	38.9	42.7
Cln Ash	**7.50**	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.6	1.4	1.4	1.5	1.6	1.7	1.7	1.7	1.6	1.5	1.4	1.3	1.4	1.6	1.7
Cum Feed		244	248	252	256	260	264	268	272	276	280	284	288	292	296	300
Cum Cln		103	105	106	108	109	111	113	114	116	117	119	120	122	123	125



Target Ash	7.50															
Max Ash	7.50															
Min Ash	7.50															
Reset																
Add Rock?									X	X	X	X	X	X	X	X
Days		25.3	25.7	26.0	26.3	26.7	27.0	27.3	27.7	28.0	28.3	28.7	29.0	29.3	29.7	30.0
Shifts		76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
SG50	**1.70**	1.41	1.4	1.4	1.41	1.44	1.47	1.56	1.85	1.99	2.07	2.13	2.16	2.15	2.1	2
Feed Ash	**47.8**	37.98	33.76	33.76	37.98	43.71	49.19	53.41	54.87	54.15	52.69	50.71	49.04	48.69	49.77	51.38
Cln Yield	**40.14**	45.5	46.3	46.3	45.5	42.7	38.9	34.7	33.1	34.9	37.5	40.7	43.2	43.7	42.0	39.3
Cln Ash	**7.50**	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.8	1.9	1.9	1.8	1.7	1.6	1.4	1.3	1.4	1.5	1.6	1.7	1.7	1.7	1.6
Cum Feed		304	308	312	316	320	324	328	332	336	340	344	348	352	356	360
Cum Cln		127	128	130	132	134	135	137	138	139	141	143	144	146	148	149



				0	10	20	30	40	50	60	70	80	90	100	110	120	130
				180	0	20	40	60	80	100	120	140	160	180	0	20	40
	Coalt2		0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06
	Rockt2		0.10	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07
	RD	Ash															
	1.25	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	4.5	25.1	25.1	25.0	26.7	28.8	30.9	32.2	31.7	29.6	26.8	24.4	22.7	23.0	25.2	28.0
2	1.35	10.4	8.1	8.1	7.6	8.4	9.3	9.9	9.9	9.0	7.4	5.7	4.5	3.7	4.0	5.5	7.5
3	1.4	16.0	5.2	5.2	4.7	4.8	5.0	5.0	4.6	3.9	3.0	2.2	1.7	1.5	1.6	2.4	3.5
4	1.45	21.2	3.1	3.1	2.7	2.6	2.5	2.4	2.0	1.6	1.1	0.8	0.6	0.5	0.6	1.0	1.5
5	1.5	26.0	1.9	1.9	1.5	1.4	1.3	1.1	0.9	0.6	0.4	0.3	0.2	0.2	0.2	0.4	0.7
6	1.55	30.5	1.1	1.1	0.8	0.7	0.6	0.5	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3
7	1.6	34.8	0.6	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
8	1.65	38.7	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
9	1.7	42.5	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	1.75	46.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	1.8	49.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	52.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
13	1.9	55.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
14	1.95	58.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0
15	2	61.0	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0
16	2.05	63.6	0.4	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.5	0.2	0.1
17	2.1	66.0	0.6	0.6	0.6	0.3	0.2	0.1	0.0	0.0	0.1	0.2	0.4	0.8	0.8	0.4	0.2
18	2.15	68.3	1.0	1.0	1.0	0.6	0.3	0.2	0.1	0.1	0.2	0.4	0.7	1.3	1.2	0.7	0.3
19	2.2	70.5	1.7	1.7	1.7	1.1	0.6	0.3	0.2	0.2	0.4	0.7	1.3	2.1	2.1	1.3	0.7
20	2.25	72.7	2.7	2.7	2.8	2.0	1.3	0.8	0.6	0.6	0.9	1.5	2.4	3.4	3.4	2.3	1.4
21	2.3	74.7	4.5	4.5	4.7	3.6	2.6	1.8	1.4	1.4	2.0	3.1	4.4	5.6	5.5	4.2	2.8
22	2.35	76.6	7.3	7.3	7.6	6.5	5.2	4.0	3.4	3.5	4.5	6.1	7.8	9.1	9.0	7.5	5.7
23	2.4	78.5	6.7	6.7	7.1	6.4	5.2	3.8	3.1	3.4	5.0	7.0	8.7	9.6	9.4	8.2	6.1
24	2.45	80.3	12.5	12.5	13.2	13.7	13.7	13.3	13.2	14.0	15.7	17.1	17.5	16.9	16.7	16.6	15.5
25	2.5	82.0	16.1	16.1	16.9	19.7	22.7	25.5	27.8	29.3	29.5	27.8	24.7	21.4	21.1	23.6	25.4
26	2.55	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	85.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

			140	150	160	170	180	0	10	20	30	40	50	60	70	80	90
			60	80	100	120	140	160	180	0	20	40	60	80	100	120	140
	Coalt2		0.06	0.07	0.08	0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05
	Rockt2		0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07
	RD	Ash															
	1.25	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	4.5	30.9	32.7	32.7	31.2	29.0	26.9	25.0	24.8	26.5	28.5	30.5	31.7	31.3	29.2	26.7
2	1.35	10.4	9.9	11.9	12.7	12.3	11.2	9.5	7.6	7.1	7.7	8.4	9.0	9.0	8.2	6.9	5.6
3	1.4	16.0	5.0	6.4	7.3	7.5	7.2	6.1	4.7	4.1	4.1	4.2	4.2	3.9	3.3	2.7	2.1
4	1.45	21.2	2.4	3.3	4.0	4.3	4.3	3.7	2.7	2.2	2.1	2.0	1.8	1.6	1.3	1.0	0.8
5	1.5	26.0	1.1	1.6	2.1	2.4	2.6	2.2	1.5	1.2	1.0	0.9	0.8	0.6	0.5	0.4	0.3
6	1.55	30.5	0.5	0.8	1.1	1.4	1.5	1.3	0.8	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1
7	1.6	34.8	0.2	0.4	0.6	0.8	0.9	0.7	0.5	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0
8	1.65	38.7	0.1	0.2	0.3	0.4	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0
9	1.7	42.5	0.0	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
10	1.75	46.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	1.8	49.3	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	52.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	1.9	55.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	1.95	58.3	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15	2	61.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
16	2.05	63.6	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1
17	2.1	66.0	0.1	0.0	0.0	0.1	0.1	0.3	0.6	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.2
18	2.15	68.3	0.2	0.1	0.1	0.1	0.3	0.6	1.0	1.1	0.6	0.3	0.2	0.1	0.1	0.2	0.4
19	2.2	70.5	0.3	0.2	0.2	0.3	0.5	1.0	1.7	1.8	1.2	0.7	0.4	0.2	0.2	0.4	0.8
20	2.25	72.7	0.8	0.5	0.5	0.7	1.1	1.8	2.8	2.9	2.1	1.3	0.8	0.6	0.6	0.9	1.5
21	2.3	74.7	1.8	1.2	1.1	1.5	2.2	3.3	4.7	4.8	3.8	2.7	1.9	1.4	1.5	2.0	3.1
22	2.35	76.6	4.0	3.0	2.8	3.3	4.4	5.9	7.6	7.9	6.8	5.4	4.2	3.5	3.7	4.6	6.1
23	2.4	78.5	3.8	2.2	1.7	2.4	3.7	5.4	7.1	7.6	6.9	5.7	4.3	3.4	3.7	5.2	7.1
24	2.45	80.3	13.3	11.1	10.1	10.3	11.0	12.1	13.2	13.9	14.5	14.6	14.3	14.0	14.7	16.1	17.2
25	2.5	82.0	25.5	24.2	22.3	20.5	18.7	17.6	16.9	17.7	20.8	24.1	27.1	29.3	30.5	30.2	27.9
26	2.55	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	85.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

			100	110	120	130	140	150	160	170	180	0	10	20	30	40	50
			160	180	0	20	40	60	80	100	120	140	160	180	0	20	40
	Coalt2		0.05	0.05	0.05	0.06	0.06	0.07	0.08	0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.06
	Rockt2		0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07
	RD	Ash															
	1.25	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	4.5	24.5	23.0	23.3	25.6	28.5	31.2	32.7	32.5	31.0	29.0	26.9	24.8	24.5	26.1	28.0
2	1.35	10.4	4.6	4.0	4.5	6.2	8.4	10.8	12.7	13.3	12.8	11.2	9.0	7.1	6.4	6.9	7.5
3	1.4	16.0	1.8	1.6	1.9	2.9	4.2	5.9	7.3	8.1	8.2	7.2	5.5	4.1	3.5	3.5	3.5
4	1.45	21.2	0.7	0.6	0.8	1.3	2.0	3.0	4.0	4.7	5.0	4.3	3.2	2.2	1.8	1.6	1.5
5	1.5	26.0	0.2	0.2	0.3	0.5	0.9	1.5	2.1	2.6	2.9	2.6	1.8	1.2	0.9	0.8	0.7
6	1.55	30.5	0.1	0.1	0.1	0.2	0.4	0.7	1.1	1.5	1.7	1.5	1.0	0.6	0.4	0.3	0.3
7	1.6	34.8	0.0	0.0	0.1	0.1	0.2	0.4	0.6	0.8	1.0	0.9	0.6	0.3	0.2	0.2	0.1
8	1.65	38.7	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.5	0.3	0.2	0.1	0.1	0.1
9	1.7	42.5	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.0	0.0
10	1.75	46.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0
11	1.8	49.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
12	1.85	52.5	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0
13	1.9	55.5	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
14	1.95	58.3	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0
15	2	61.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.1	0.0
16	2.05	63.6	0.2	0.5	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.1
17	2.1	66.0	0.4	0.8	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.1	0.3	0.7	0.7	0.4	0.2
18	2.15	68.3	0.7	1.2	1.2	0.7	0.3	0.1	0.1	0.1	0.1	0.3	0.6	1.1	1.1	0.7	0.3
19	2.2	70.5	1.3	2.1	2.0	1.3	0.7	0.3	0.2	0.2	0.3	0.5	1.1	1.8	1.9	1.2	0.7
20	2.25	72.7	2.4	3.4	3.3	2.3	1.3	0.7	0.5	0.4	0.6	1.1	1.9	2.9	3.1	2.2	1.4
21	2.3	74.7	4.4	5.5	5.5	4.1	2.7	1.7	1.1	1.1	1.4	2.2	3.5	4.8	5.0	4.0	2.8
22	2.35	76.6	7.8	9.0	8.9	7.3	5.4	3.8	2.8	2.6	3.1	4.4	6.2	7.9	8.2	7.1	5.7
23	2.4	78.5	8.6	9.4	9.2	7.8	5.7	3.3	1.7	1.3	1.9	3.7	5.9	7.6	8.0	7.4	6.1
24	2.45	80.3	17.4	16.7	16.3	16.0	14.6	12.3	10.1	9.1	9.4	11.0	12.9	13.9	14.6	15.3	15.5
25	2.5	82.0	24.6	21.1	20.7	22.8	24.1	23.9	22.3	20.5	19.0	18.7	18.6	17.7	18.6	21.9	25.4
26	2.55	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	85.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

			60	70	80	90	100	110	120	130	140	150	160	170	180	0	10
			60	80	100	120	140	160	180	0	20	40	60	80	100	120	140
	Coalt2		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.08	0.09	0.09	0.09	0.09
	Rockt2		0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07
	RD	Ash															
	1.25	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	4.5	30.0	31.3	30.9	29.1	26.8	24.8	23.3	23.8	26.1	28.8	31.2	32.5	32.3	31.0	29.1
2	1.35	10.4	8.1	8.2	7.7	6.7	5.7	4.9	4.5	5.1	6.9	9.3	11.7	13.3	13.8	12.8	10.7
3	1.4	16.0	3.5	3.3	3.0	2.6	2.2	2.0	1.9	2.4	3.5	5.0	6.7	8.1	8.9	8.2	6.5
4	1.45	21.2	1.4	1.3	1.1	0.9	0.8	0.8	0.8	1.0	1.6	2.5	3.6	4.7	5.3	5.0	3.7
5	1.5	26.0	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.8	1.3	1.9	2.6	3.2	2.9	2.1
6	1.55	30.5	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.6	1.0	1.5	1.9	1.7	1.2
7	1.6	34.8	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.5	0.8	1.1	1.0	0.7
8	1.65	38.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.6	0.4
9	1.7	42.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.3	0.2
10	1.75	46.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1
11	1.8	49.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
12	1.85	52.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0
13	1.9	55.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	1.95	58.3	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15	2	61.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
16	2.05	63.6	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1
17	2.1	66.0	0.1	0.0	0.0	0.1	0.2	0.4	0.7	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.1
18	2.15	68.3	0.2	0.1	0.1	0.2	0.4	0.7	1.2	1.2	0.7	0.3	0.1	0.1	0.1	0.1	0.3
19	2.2	70.5	0.4	0.2	0.3	0.4	0.7	1.3	2.0	2.0	1.2	0.6	0.3	0.2	0.2	0.3	0.6
20	2.25	72.7	0.9	0.6	0.6	0.9	1.5	2.4	3.3	3.2	2.2	1.3	0.7	0.4	0.4	0.6	1.2
21	2.3	74.7	1.9	1.5	1.5	2.1	3.1	4.3	5.5	5.3	4.0	2.6	1.6	1.1	1.0	1.4	2.3
22	2.35	76.6	4.4	3.7	3.7	4.6	6.1	7.7	8.9	8.7	7.1	5.2	3.6	2.6	2.5	3.1	4.7
23	2.4	78.5	4.7	3.7	3.9	5.2	7.0	8.4	9.2	8.9	7.4	5.2	2.8	1.3	0.9	1.9	4.1
24	2.45	80.3	15.1	14.7	15.1	16.2	17.1	17.1	16.3	15.8	15.3	13.7	11.3	9.1	8.2	9.4	11.9
25	2.5	82.0	28.5	30.5	31.3	30.4	27.8	24.2	20.7	20.1	21.9	22.7	22.2	20.5	18.9	19.0	20.0
26	2.55	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	85.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

			20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
			160	180	0	20	40	60	80	100	120	140	160	180	0	20	40
	Coalt2		0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.08
	Rockt2		0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07
	RD	Ash															
	1.25	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	4.5	26.7	24.5	24.2	25.6	27.5	29.6	30.9	30.8	29.2	27.1	25.2	23.8	24.2	26.5	29.0
2	1.35	10.4	8.4	6.4	5.7	6.2	6.8	7.4	7.7	7.5	6.9	6.1	5.5	5.1	5.7	7.7	10.0
3	1.4	16.0	4.8	3.5	2.9	2.9	2.9	3.0	3.0	2.9	2.7	2.5	2.4	2.4	2.9	4.1	5.8
4	1.45	21.2	2.6	1.8	1.4	1.3	1.2	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.4	2.1	3.1
5	1.5	26.0	1.4	0.9	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	1.0	1.7
6	1.55	30.5	0.7	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.9
7	1.6	34.8	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.5
8	1.65	38.7	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
9	1.7	42.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
10	1.75	46.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
11	1.8	49.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	52.5	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
13	1.9	55.5	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
14	1.95	58.3	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0
15	2	61.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0
16	2.05	63.6	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.1
17	2.1	66.0	0.3	0.7	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.2	0.4	0.7	0.7	0.4	0.1
18	2.15	68.3	0.6	1.1	1.2	0.7	0.4	0.2	0.1	0.1	0.2	0.4	0.7	1.2	1.2	0.6	0.3
19	2.2	70.5	1.1	1.9	1.9	1.3	0.7	0.4	0.3	0.3	0.4	0.7	1.3	2.0	1.9	1.2	0.6
20	2.25	72.7	2.0	3.1	3.2	2.3	1.5	0.9	0.6	0.6	0.9	1.5	2.3	3.2	3.2	2.1	1.2
21	2.3	74.7	3.6	5.0	5.2	4.1	2.9	2.0	1.5	1.5	2.0	3.0	4.2	5.3	5.2	3.8	2.5
22	2.35	76.6	6.5	8.2	8.4	7.3	5.9	4.5	3.7	3.8	4.6	6.0	7.5	8.7	8.4	6.8	4.9
23	2.4	78.5	6.4	8.0	8.5	7.8	6.5	5.0	3.9	4.0	5.2	6.8	8.2	8.9	8.5	6.9	4.6
24	2.45	80.3	13.7	14.6	15.2	16.0	16.2	15.7	15.1	15.2	16.1	16.8	16.6	15.8	15.2	14.5	12.8
25	2.5	82.0	19.7	18.6	19.4	22.8	26.4	29.5	31.3	31.6	30.2	27.3	23.6	20.1	19.4	20.8	21.3
26	2.55	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	85.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

			170	180	0	10	20	30	40	50	60	70	80	90	100	110	120
			60	80	100	120	140	160	180	0	20	40	60	80	100	120	140
	Coalt2		0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	Rockt2		0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07
	RD	Ash															
	1.25	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	4.5	31.2	32.3	32.3	31.2	29.0	26.5	24.2	23.8	25.2	27.1	29.2	30.8	30.9	29.6	27.5
2	1.35	10.4	12.3	13.8	13.8	12.3	10.0	7.7	5.7	5.1	5.5	6.1	6.9	7.5	7.7	7.4	6.8
3	1.4	16.0	7.5	8.9	8.9	7.5	5.8	4.1	2.9	2.4	2.4	2.5	2.7	2.9	3.0	3.0	2.9
4	1.45	21.2	4.3	5.3	5.3	4.3	3.1	2.1	1.4	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.2
5	1.5	26.0	2.4	3.2	3.2	2.4	1.7	1.0	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
6	1.55	30.5	1.4	1.9	1.9	1.4	0.9	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2
7	1.6	34.8	0.8	1.1	1.1	0.8	0.5	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
8	1.65	38.7	0.4	0.6	0.6	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	1.7	42.5	0.2	0.4	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	1.75	46.0	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	1.8	49.3	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	52.5	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	1.9	55.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	1.95	58.3	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15	2	61.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
16	2.05	63.6	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1
17	2.1	66.0	0.1	0.0	0.0	0.1	0.1	0.4	0.7	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.2
18	2.15	68.3	0.1	0.1	0.1	0.1	0.3	0.6	1.2	1.2	0.7	0.4	0.2	0.1	0.1	0.2	0.4
19	2.2	70.5	0.3	0.2	0.2	0.3	0.6	1.2	1.9	2.0	1.3	0.7	0.4	0.3	0.3	0.4	0.7
20	2.25	72.7	0.7	0.4	0.4	0.7	1.2	2.1	3.2	3.2	2.3	1.5	0.9	0.6	0.6	0.9	1.5
21	2.3	74.7	1.5	1.0	1.0	1.5	2.5	3.8	5.2	5.3	4.2	3.0	2.0	1.5	1.5	2.0	2.9
22	2.35	76.6	3.3	2.5	2.5	3.3	4.9	6.8	8.4	8.7	7.5	6.0	4.6	3.8	3.7	4.5	5.9
23	2.4	78.5	2.4	0.9	0.9	2.4	4.6	6.9	8.5	8.9	8.2	6.8	5.2	4.0	3.9	5.0	6.5
24	2.45	80.3	10.3	8.2	8.2	10.3	12.8	14.5	15.2	15.8	16.6	16.8	16.1	15.2	15.1	15.7	16.2
25	2.5	82.0	20.5	18.9	18.9	20.5	21.3	20.8	19.4	20.1	23.6	27.3	30.2	31.6	31.3	29.5	26.4
26	2.55	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	85.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.45	0.4	0.4	0.5	0.5	0.5	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9
1.50	0.1	0.1	0.2	0.2	0.3	0.3	0.5	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.8
1.55	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.7	1.0	1.0	1.0	1.0	1.0	1.0	0.5
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.0	1.0	1.0	1.0	1.0	1.0	0.2
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0	1.0	1.0	1.0	1.0	1.0	0.1
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0	1.0	1.0	1.0	1.0	1.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.9	0.9	0.9	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.9	0.7	0.6	0.7	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.8	0.4	0.3	0.4	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.5	0.2	0.1	0.2	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.2	0.1	0.0	0.1	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	0.9	0.9	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.7	0.6	0.6	0.6	0.6	0.7	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0
1.45	0.6	0.4	0.3	0.3	0.3	0.3	0.5	0.6	0.6	0.7	0.8	1.0	1.0	1.0	1.0
1.50	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.6	0.9	1.0	1.0	1.0
1.55	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.7	1.0	1.0	1.0
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	1.0	1.0	1.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0	1.0	1.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0	1.0	1.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.0	0.9
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.9	0.8
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.7	0.5
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.2
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0
1.40	1.0	1.0	1.0	1.0	0.9	0.8	0.6	0.6	0.5	0.6	0.7	0.8	0.9	1.0	1.0
1.45	1.0	1.0	1.0	1.0	0.7	0.5	0.3	0.3	0.2	0.3	0.4	0.6	0.8	0.8	0.9
1.50	1.0	1.0	1.0	1.0	0.4	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.6	0.8
1.55	1.0	1.0	1.0	1.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5
1.60	1.0	1.0	1.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
1.65	1.0	1.0	1.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1.70	1.0	1.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	1.0	1.0	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	1.0	1.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	1.0	0.9	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.9	0.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.7	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.9
1.40	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.7	0.6	0.5	0.5	0.6
1.45	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.5	0.4	0.3	0.2	0.2	0.3
1.50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.3	0.1	0.1	0.1	0.1	0.1
1.55	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0
1.60	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.1	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	1.0	1.0	1.0	1.0	1.0	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	1.0	1.0	1.0	1.0	1.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	1.0	1.0	1.0	1.0	0.9	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.9	1.0	1.0	0.9	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.8	0.9	0.9	0.8	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.6	0.8	0.7	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.3	0.5	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

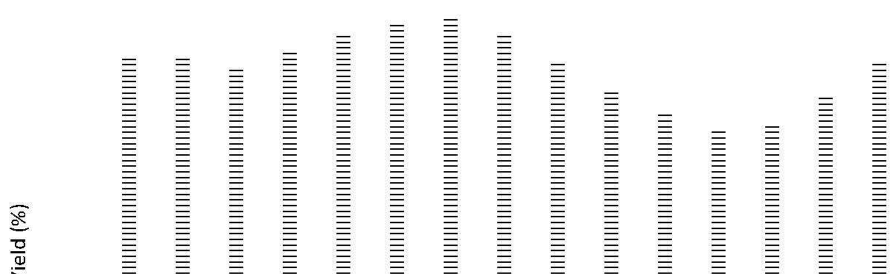
1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9
1.40	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.7
1.45	0.5	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.6	0.4
1.50	0.2	0.5	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.3	0.2
1.55	0.1	0.2	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.1	0.1
1.60	0.0	0.1	0.3	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	0.0	0.0
1.65	0.0	0.0	0.1	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1	0.0	0.0
1.70	0.0	0.0	0.0	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.2	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.8	1.0	1.0	1.0	1.0	1.0	0.7	0.1	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.5	0.9	1.0	1.0	1.0	0.9	0.4	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.2	0.8	0.9	0.9	0.9	0.6	0.2	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.1	0.5	0.8	0.8	0.7	0.3	0.1	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	0.8	0.8	0.8	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.6	0.5	0.5	0.6	0.7	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.45	0.3	0.2	0.2	0.3	0.4	0.6	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.50	0.1	0.1	0.1	0.1	0.2	0.3	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.55	0.0	0.0	0.0	0.0	0.1	0.1	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9	1.0	1.0	1.0	1.0	1.0	0.9
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	1.0	1.0	1.0	1.0	1.0	0.8
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.9	1.0	1.0	1.0	0.9	0.5
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.9	0.9	0.9	0.8	0.2
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.7	0.8	0.8	0.5	0.1
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.5	0.5	0.2	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

APPENDIX 3 - SIMULATION RESULTS FOR CONSTANT SG AND VARIABLE CLEAN COAL STOCKPILE RATIOS

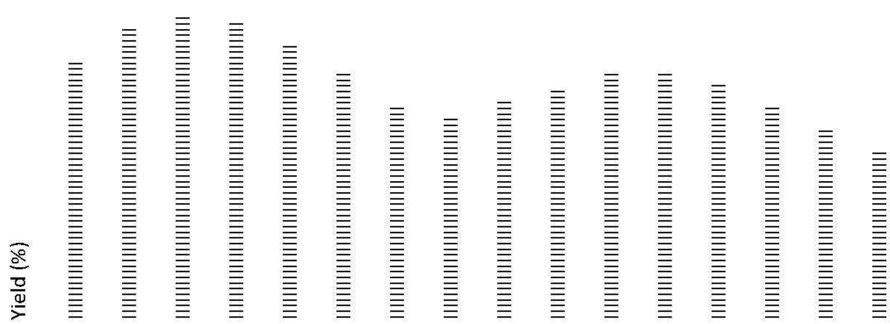
Targ Ash	7.50				
Max Ash	9.01	SG Max	1.48	Yield Improvement	1.05
Min Ash	6.06	SG Min	1.48	OE Improvement	2.61
Reset					

Days		0.3	0.7	1.0	1.3	1.7	2.0	2.3	2.7	3.0	3.3	3.7	4.0	4.3	4.7	5.0
Shifts		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	47.05	47.05	48.57	47.35	45.73	44.3	44.14	46.12	49.77	53.51	56.19	57.63	57.04	54.15	49.7
Cln Yield	**41.19**	40.3	40.3	38.7	41.2	44.1	46.6	47.2	44.8	39.9	34.6	30.5	27.8	28.6	33.1	39.4
Cln Ash	**7.50**	8.3	8.3	8.0	7.9	7.8	7.6	7.3	7.0	6.7	6.4	6.2	6.1	6.2	6.6	7.1
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.6	1.6	1.5	1.6	1.8	1.9	1.9	1.8	1.6	1.4	1.2	1.1	1.1	1.3	1.6
P1 (<7.5 Ash)		0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.8	1.6	1.4	1.2	1.1	1.1	1.3	1.6
Cum to P1		0.0	0.0	0.0	0.0	0.0	0.0	1.9	3.7	5.3	6.7	7.9	9.0	10.1	11.5	13.0
Cum Ash		0.0	0.0	0.0	0.0	0.0	0.0	7.3	7.2	7.0	6.9	6.8	6.7	6.7	6.6	6.7
P2 (>= 7.5 Ash)		1.6	1.6	1.5	1.6	1.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum to P2		1.6	3.2	4.8	6.4	8.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Cum Ash		8.3	8.3	8.2	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
P1 Bal Tons		0.0	0.0	0.0	0.0	0.0	0.0	1.9	3.7	5.3	1.5	2.8	3.9	5.0	6.3	7.9
P1 Ash		0.0	0.0	0.0	0.0	0.0	0.0	7.3	7.2	7.0	6.5	6.3	6.3	6.2	6.3	6.5
P2 Bal Tons		1.6	3.2	4.8	6.4	8.2	10.0	10.0	10.0	10.0	5.2	5.2	5.2	5.2	5.2	5.2
P2 Ash		8.3	8.3	8.2	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Available Tons		1.6	3.2	4.8	6.4	8.2	10.0	11.9	13.7	15.3	6.7	7.9	9.0	10.2	11.5	13.1
Available Ash		8.3	8.3	8.2	8.1	8.1	8.0	7.9	7.8	7.7	7.6	7.4	7.2	7.1	7.1	7.1
Unit Train Tons	10.0															
P1 Shipped Tons										5.1						
P2 Shipped Tons										4.9						
Shipped Tons										10.0						
Shipped Ash										7.5						



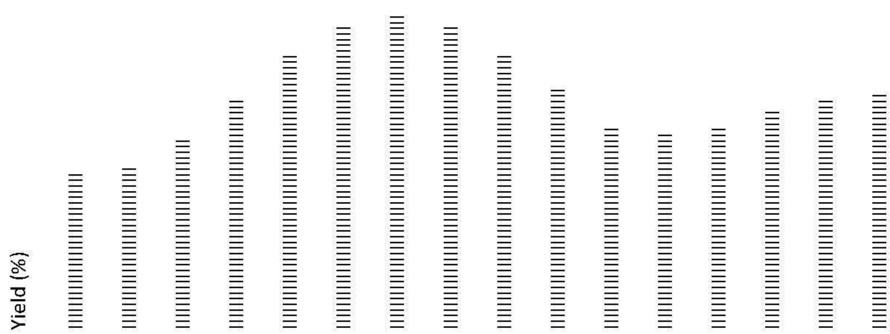
Targ Ash	7.50
Max Ash	9.01
Min Ash	6.06
Reset	

Days		5.3	5.7	6.0	6.3	6.7	7.0	7.3	7.7	8.0	8.3	8.7	9.0	9.3	9.7	10.0	10.3
Shifts		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	44.3	39.66	37.48	37.98	40.05	43.92	48.57	50.17	49.19	47.78	46.42	46.12	47.68	50.71	53.79	55.96
Cln Yield	**41.19**	46.6	52.4	54.7	53.4	50.0	44.7	38.7	37.0	39.1	41.7	44.1	44.8	42.9	38.7	34.3	30.8
Cln Ash	**7.50**	7.6	8.0	8.4	8.6	8.8	8.5	8.0	7.7	7.6	7.4	7.2	7.0	6.8	6.6	6.4	6.2
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.9	2.1	2.2	2.1	2.0	1.8	1.5	1.5	1.6	1.7	1.8	1.8	1.7	1.5	1.4	1.2
P1 (<7.5 Ash)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.8	1.8	1.7	1.5	1.4	1.2
Cum to P1		13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	14.7	16.5	18.3	20.0	21.5	22.9	24.1
Cum Ash		6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8
P2 (>= 7.5 Ash)		1.9	2.1	2.2	2.1	2.0	1.8	1.5	1.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum to P2		11.9	14.0	16.2	18.3	20.3	22.1	23.7	25.1	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7
Cum Ash		7.9	7.9	8.0	8.1	8.1	8.2	8.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
P1 Bal Tons		7.9	7.9	5.1	5.1	0.6	0.6	0.6	0.6	0.6	2.3	4.1	5.9	7.6	3.0	4.4	5.6
P1 Ash		6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.2	7.2	7.1	7.1	6.8	6.7	6.6
P2 Bal Tons		7.0	9.1	4.2	6.3	2.7	4.5	6.1	7.5	9.1	9.1	9.1	9.1	9.1	5.2	5.2	5.2
P2 Ash		7.9	7.9	8.2	8.3	8.6	8.6	8.5	8.3	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Available Tons		14.9	17.0	9.2	11.4	3.4	5.2	6.7	8.2	9.7	11.4	13.2	15.0	16.7	8.2	9.6	10.8
Available Ash		7.1	7.2	7.2	7.5	8.2	8.3	8.3	8.2	8.1	8.0	7.9	7.8	7.7	7.7	7.5	7.3
Unit Train Tons																	
P1 Shipped Tons			2.8		4.4									6.1			
P2 Shipped Tons			7.2		5.6									3.9			
Shipped Tons			10.0		10.0									10.0			
Shipped Ash			7.5		7.5									7.5			



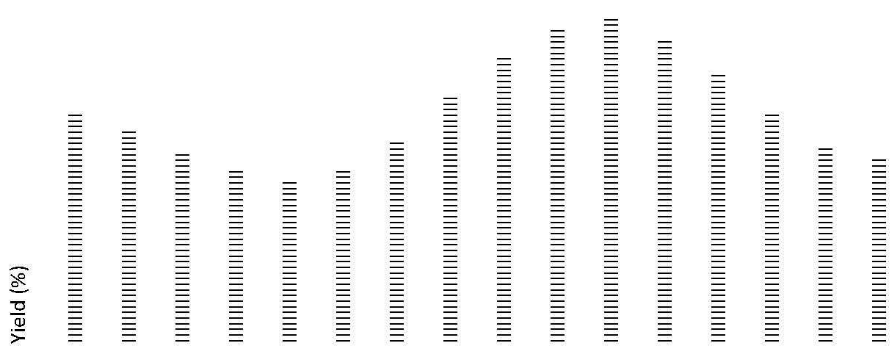
Targ Ash	7.50
Max Ash	9.01
Min Ash	6.06
Reset	

Days		10.7	11.0	11.3	11.7	12.0	12.3	12.7	13.0	13.3	13.7	14.0	14.3	14.7	15.0	15.3	15.7
Shifts		32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	57.04	56.1	52.7	47.78	42.11	37.48	35.5	36.22	40.05	45.57	50.17	51.82	51.01	49.7	48.29	47.68
Cln Yield	**41.19**	28.6	29.8	34.9	41.7	49.1	54.7	56.6	55.0	50.0	43.1	37.0	35.1	37.0	39.4	41.8	42.9
Cln Ash	**7.50**	6.2	6.4	6.9	7.4	7.9	8.4	8.7	8.9	8.8	8.2	7.7	7.3	7.2	7.1	6.9	6.8
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.1	1.2	1.4	1.7	2.0	2.2	2.3	2.2	2.0	1.7	1.5	1.4	1.5	1.6	1.7	1.7
P1 (<7.5 Ash)		1.1	1.2	1.4	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.5	1.6	1.7	1.7
Cum to P1		25.3	26.5	27.9	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	30.9	32.4	34.0	35.7	37.4
Cum Ash		6.7	6.7	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
P2 (>= 7.5 Ash)		0.0	0.0	0.0	0.0	2.0	2.2	2.3	2.2	2.0	1.7	1.5	0.0	0.0	0.0	0.0	0.0
Cum to P2		26.7	26.7	26.7	26.7	28.7	30.9	33.1	35.3	37.3	39.0	40.5	40.5	40.5	40.5	40.5	40.5
Cum Ash		8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
P1 Bal Tons		6.8	8.0	9.4	11.0	11.0	6.8	6.8	1.4	1.4	1.4	1.4	2.8	4.3	5.8	7.5	2.4
P1 Ash		6.5	6.5	6.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	7.0	7.1	7.1	7.0	6.9
P2 Bal Tons		5.2	5.2	5.2	5.2	7.2	3.6	5.9	3.5	5.5	7.2	8.7	8.7	8.7	8.7	8.7	5.5
P2 Ash		8.2	8.2	8.2	8.2	8.1	8.3	8.4	8.7	8.8	8.6	8.5	8.5	8.5	8.5	8.5	8.5
Available Tons		12.0	13.2	14.6	16.2	18.2	10.4	12.6	4.8	6.8	8.6	10.0	11.4	12.9	14.5	16.2	7.9
Available Ash		7.2	7.2	7.1	7.2	7.2	7.2	7.5	8.2	8.3	8.3	8.2	8.1	8.0	7.9	7.8	8.0
Unit Train Tons																	
P1 Shipped Tons						4.3		5.4								6.8	
P2 Shipped Tons						5.7		4.6								3.2	
Shipped Tons						10.0		10.0								10.0	
Shipped Ash						7.5		7.5								7.5	



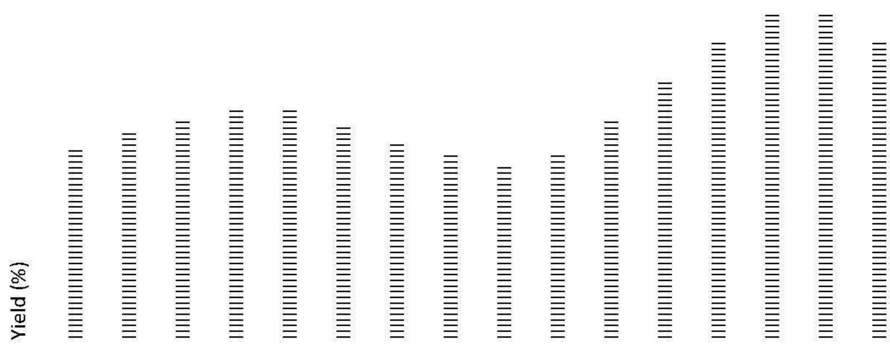
Targ Ash	7.50
Max Ash	9.01
Min Ash	6.06
Reset	

Days		16.0	16.3	16.7	17.0	17.3	17.7	18.0	18.3	18.7	19.0	19.3	19.7	20.0	20.3	20.7	21.0
Shifts		48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	48.69	51.03	53.51	55.26	56.1	54.87	51.01	45.73	39.96	35.5	33.76	36.22	41.79	47.35	51.82	53.41
Cln Yield	**41.19**	41.6	38.3	34.6	31.7	29.8	31.3	37.0	44.1	51.4	56.6	58.1	55.0	48.3	41.2	35.1	33.2
Cln Ash	**7.50**	6.7	6.5	6.4	6.4	6.4	6.7	7.2	7.8	8.3	8.7	9.0	8.9	8.5	7.9	7.3	7.0
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.7	1.5	1.4	1.3	1.2	1.3	1.5	1.8	2.1	2.3	2.3	2.2	1.9	1.6	1.4	1.3
P1 (<7.5 Ash)		1.7	1.5	1.4	1.3	1.2	1.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.3
Cum to P1		39.0	40.6	41.9	43.2	44.4	45.7	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	48.5	49.9
Cum Ash		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
P2 (>= 7.5 Ash)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.1	2.3	2.3	2.2	1.9	1.6	0.0	0.0
Cum to P2		40.5	40.5	40.5	40.5	40.5	40.5	40.5	42.3	44.3	46.6	48.9	51.1	53.1	54.7	54.7	54.7
Cum Ash		8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.3
P1 Bal Tons		4.1	5.6	1.5	2.7	3.9	5.2	6.7	6.7	6.7	6.7	1.8	1.8	1.8	1.8	3.2	4.5
P1 Ash		6.8	6.7	6.4	6.4	6.4	6.5	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.9	7.0
P2 Bal Tons		5.5	5.5	1.0	1.0	1.0	1.0	1.0	2.8	4.8	7.1	4.3	6.5	8.4	10.1	10.1	10.1
P2 Ash		8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.0	8.1	8.3	8.7	8.8	8.7	8.6	8.6	8.6
Available Tons		9.6	11.1	2.5	3.7	4.9	6.2	7.7	9.4	11.5	13.7	6.1	8.3	10.2	11.8	13.3	14.6
Available Ash		7.8	7.6	7.3	7.0	6.8	6.8	6.9	7.0	7.3	7.5	8.1	8.3	8.3	8.3	8.2	8.1
Unit Train Tons																	
P1 Shipped Tons			5.5								4.9						
P2 Shipped Tons			4.5								5.1						
Shipped Tons			10.0								10.0						
Shipped Ash			7.5								7.5						



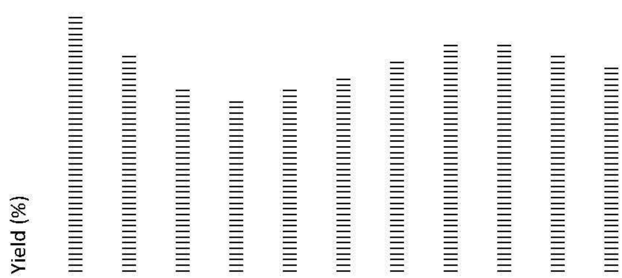
Targ Ash	7.50
Max Ash	9.01
Min Ash	6.06
Reset	

Days		21.3	21.7	22.0	22.3	22.7	23.0	23.3	23.7	24.0	24.3	24.7	25.0	25.3	25.7	26.0	26.3
Shifts		64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	52.7	51.38	49.77	48.69	49.04	50.71	52.69	54.15	54.87	53.41	49.19	43.71	37.98	33.76	33.76	37.98
Cln Yield	**41.19**	34.9	37.3	39.9	41.6	41.1	38.7	35.7	33.1	31.3	33.2	39.1	46.3	53.4	58.1	58.1	53.4
Cln Ash	**7.50**	6.9	6.8	6.7	6.7	6.6	6.6	6.6	6.6	6.7	7.0	7.6	8.1	8.6	9.0	9.0	8.6
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.4	1.5	1.6	1.7	1.6	1.5	1.4	1.3	1.3	1.3	1.6	1.9	2.1	2.3	2.3	2.1
P1 (<7.5 Ash)		1.4	1.5	1.6	1.7	1.6	1.5	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Cum to P1		51.3	52.8	54.4	56.0	57.7	59.2	60.6	62.0	63.2	64.5	64.5	64.5	64.5	64.5	64.5	64.5
Cum Ash		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
P2 (>= 7.5 Ash)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.9	2.1	2.3	2.3	2.1
Cum to P2		54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	56.3	58.1	60.3	62.6	64.9	67.0
Cum Ash		8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
P1 Bal Tons		5.9	7.4	2.6	4.2	5.9	1.7	3.1	4.4	5.7	7.0	7.0	7.0	2.7	2.7	2.7	2.7
P1 Ash		6.9	6.9	6.8	6.7	6.7	6.6	6.6	6.6	6.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7
P2 Bal Tons		10.1	10.1	6.5	6.5	6.5	2.2	2.2	2.2	2.2	2.2	3.8	5.6	2.1	4.5	6.8	8.9
P2 Ash		8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.2	8.1	8.6	8.8	8.9	8.8
Available Tons		16.0	17.5	9.1	10.7	12.4	3.9	5.3	6.7	7.9	9.3	10.8	12.7	4.8	7.1	9.5	11.6
Available Ash		8.0	7.9	8.1	7.8	7.7	7.7	7.4	7.2	7.2	7.1	7.2	7.3	7.5	8.0	8.3	8.3
Unit Train Tons																	
P1 Shipped Tons			6.4			5.7							4.4				
P2 Shipped Tons			3.6			4.3							5.6				
Shipped Tons			10.0			10.0							10.0				
Shipped Ash			7.5			7.5							7.5				



Targ Ash	7.50
Max Ash	9.01
Min Ash	6.06
Reset	

Days		26.7	27.0	27.3	27.7	28.0	28.3	28.7	29.0	29.3	29.7	30.0
Shifts		80	81	82	83	84	85	86	87	88	89	90
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	43.71	49.19	53.41	54.87	54.15	52.69	50.71	49.04	48.69	49.77	51.38
Cln Yield	**41.19**	46.3	39.1	33.2	31.3	33.1	35.7	38.7	41.1	41.6	39.9	37.3
Cln Ash	**7.50**	8.1	7.6	7.0	6.7	6.6	6.6	6.6	6.6	6.7	6.7	6.8
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.9	1.6	1.3	1.3	1.3	1.4	1.5	1.6	1.7	1.6	1.5
P1 (<7.5 Ash)		0.0	0.0	1.3	1.3	1.3	1.4	1.5	1.6	1.7	1.6	1.5
Cum to P1		64.5	64.5	65.9	67.1	68.4	69.9	71.4	73.1	74.7	76.3	77.8
Cum Ash		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
P2 (>= 7.5 Ash)		1.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum to P2		68.9	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
Cum Ash		8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
P1 Bal Tons		2.7	2.7	4.0	5.2	6.6	2.2	3.8	5.4	1.7	3.3	4.8
P1 Ash		6.7	6.7	6.8	6.8	6.7	6.6	6.6	6.6	6.7	6.7	6.7
P2 Bal Tons		10.8	12.4	12.4	12.4	12.4	8.1	8.1	8.1	3.5	3.5	3.5
P2 Ash		8.7	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
Available Tons		13.4	15.0	16.3	17.6	18.9	10.3	11.9	13.5	5.2	6.8	8.3
Available Ash		8.3	8.2	8.1	8.0	7.9	8.1	7.9	7.8	7.9	7.7	7.5
Unit Train Tons												
P1 Shipped Tons						5.8			5.4			
P2 Shipped Tons						4.2			4.6			
Shipped Tons						10.0			10.0			
Shipped Ash						7.5			7.5			



				0	10	20	30	40	50	60	70	80	90	100	110	120	130
				180	0	20	40	60	80	100	120	140	160	180	0	20	40
	Coalt2		0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06
	Rockt2		0.10	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07
	RD	Ash															
	1.25	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	4.5	25.1	25.1	25.0	26.7	28.8	30.9	32.2	31.7	29.6	26.8	24.4	22.7	23.0	25.2	28.0
2	1.35	10.4	8.1	8.1	7.6	8.4	9.3	9.9	9.9	9.0	7.4	5.7	4.5	3.7	4.0	5.5	7.5
3	1.40	16.0	5.2	5.2	4.7	4.8	5.0	5.0	4.6	3.9	3.0	2.2	1.7	1.5	1.6	2.4	3.5
4	1.45	21.2	3.1	3.1	2.7	2.6	2.5	2.4	2.0	1.6	1.1	0.8	0.6	0.5	0.6	1.0	1.5
5	1.50	26.0	1.9	1.9	1.5	1.4	1.3	1.1	0.9	0.6	0.4	0.3	0.2	0.2	0.2	0.4	0.7
6	1.55	30.5	1.1	1.1	0.8	0.7	0.6	0.5	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3
7	1.60	34.8	0.6	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
8	1.65	38.7	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
9	1.70	42.5	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	1.75	46.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	1.80	49.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	52.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
13	1.90	55.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
14	1.95	58.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0
15	2.00	61.0	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0
16	2.05	63.6	0.4	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.5	0.2	0.1
17	2.10	66.0	0.6	0.6	0.6	0.3	0.2	0.1	0.0	0.0	0.1	0.2	0.4	0.8	0.8	0.4	0.2
18	2.15	68.3	1.0	1.0	1.0	0.6	0.3	0.2	0.1	0.1	0.2	0.4	0.7	1.3	1.2	0.7	0.3
19	2.20	70.5	1.7	1.7	1.7	1.1	0.6	0.3	0.2	0.2	0.4	0.7	1.3	2.1	2.1	1.3	0.7
20	2.25	72.7	2.7	2.7	2.8	2.0	1.3	0.8	0.6	0.6	0.9	1.5	2.4	3.4	3.4	2.3	1.4
21	2.30	74.7	4.5	4.5	4.7	3.6	2.6	1.8	1.4	1.4	2.0	3.1	4.4	5.6	5.5	4.2	2.8
22	2.35	76.6	7.3	7.3	7.6	6.5	5.2	4.0	3.4	3.5	4.5	6.1	7.8	9.1	9.0	7.5	5.7
23	2.40	78.5	6.7	6.7	7.1	6.4	5.2	3.8	3.1	3.4	5.0	7.0	8.7	9.6	9.4	8.2	6.1
24	2.45	80.3	12.5	12.5	13.2	13.7	13.7	13.3	13.2	14.0	15.7	17.1	17.5	16.9	16.7	16.6	15.5
25	2.50	82.0	16.1	16.1	16.9	19.7	22.7	25.5	27.8	29.3	29.5	27.8	24.7	21.4	21.1	23.6	25.4
26	2.55	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.60	85.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

		140	150	160	170	180	0	10	20	30	40	50	60	70	80	90	100
		60	80	100	120	140	160	180	0	20	40	60	80	100	120	140	160
	Coalt2	0.06	0.07	0.08	0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05
	Rockt2	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08
	RD																
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	30.9	32.7	32.7	31.2	29.0	26.9	25.0	24.8	26.5	28.5	30.5	31.7	31.3	29.2	26.7	24.5
2	1.35	9.9	11.9	12.7	12.3	11.2	9.5	7.6	7.1	7.7	8.4	9.0	9.0	8.2	6.9	5.6	4.6
3	1.40	5.0	6.4	7.3	7.5	7.2	6.1	4.7	4.1	4.1	4.2	4.2	3.9	3.3	2.7	2.1	1.8
4	1.45	2.4	3.3	4.0	4.3	4.3	3.7	2.7	2.2	2.1	2.0	1.8	1.6	1.3	1.0	0.8	0.7
5	1.50	1.1	1.6	2.1	2.4	2.6	2.2	1.5	1.2	1.0	0.9	0.8	0.6	0.5	0.4	0.3	0.2
6	1.55	0.5	0.8	1.1	1.4	1.5	1.3	0.8	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1
7	1.60	0.2	0.4	0.6	0.8	0.9	0.7	0.5	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0
8	1.65	0.1	0.2	0.3	0.4	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
9	1.70	0.0	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	1.75	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	1.80	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	1.90	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	1.95	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
15	2.00	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
16	2.05	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2
17	2.10	0.1	0.0	0.0	0.1	0.1	0.3	0.6	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.2	0.4
18	2.15	0.2	0.1	0.1	0.1	0.3	0.6	1.0	1.1	0.6	0.3	0.2	0.1	0.1	0.2	0.4	0.7
19	2.20	0.3	0.2	0.2	0.3	0.5	1.0	1.7	1.8	1.2	0.7	0.4	0.2	0.2	0.4	0.8	1.3
20	2.25	0.8	0.5	0.5	0.7	1.1	1.8	2.8	2.9	2.1	1.3	0.8	0.6	0.6	0.9	1.5	2.4
21	2.30	1.8	1.2	1.1	1.5	2.2	3.3	4.7	4.8	3.8	2.7	1.9	1.4	1.5	2.0	3.1	4.4
22	2.35	4.0	3.0	2.8	3.3	4.4	5.9	7.6	7.9	6.8	5.4	4.2	3.5	3.7	4.6	6.1	7.8
23	2.40	3.8	2.2	1.7	2.4	3.7	5.4	7.1	7.6	6.9	5.7	4.3	3.4	3.7	5.2	7.1	8.6
24	2.45	13.3	11.1	10.1	10.3	11.0	12.1	13.2	13.9	14.5	14.6	14.3	14.0	14.7	16.1	17.2	17.4
25	2.50	25.5	24.2	22.3	20.5	18.7	17.6	16.9	17.7	20.8	24.1	27.1	29.3	30.5	30.2	27.9	24.6
26	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

		110	120	130	140	150	160	170	180	0	10	20	30	40	50	60	70
		180	0	20	40	60	80	100	120	140	160	180	0	20	40	60	80
	Coalt2	0.05	0.05	0.06	0.06	0.07	0.08	0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05
	Rockt2	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06
	RD																
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	23.0	23.3	25.6	28.5	31.2	32.7	32.5	31.0	29.0	26.9	24.8	24.5	26.1	28.0	30.0	31.3
2	1.35	4.0	4.5	6.2	8.4	10.8	12.7	13.3	12.8	11.2	9.0	7.1	6.4	6.9	7.5	8.1	8.2
3	1.40	1.6	1.9	2.9	4.2	5.9	7.3	8.1	8.2	7.2	5.5	4.1	3.5	3.5	3.5	3.5	3.3
4	1.45	0.6	0.8	1.3	2.0	3.0	4.0	4.7	5.0	4.3	3.2	2.2	1.8	1.6	1.5	1.4	1.3
5	1.50	0.2	0.3	0.5	0.9	1.5	2.1	2.6	2.9	2.6	1.8	1.2	0.9	0.8	0.7	0.6	0.5
6	1.55	0.1	0.1	0.2	0.4	0.7	1.1	1.5	1.7	1.5	1.0	0.6	0.4	0.3	0.3	0.2	0.2
7	1.60	0.0	0.1	0.1	0.2	0.4	0.6	0.8	1.0	0.9	0.6	0.3	0.2	0.2	0.1	0.1	0.1
8	1.65	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.5	0.3	0.2	0.1	0.1	0.1	0.0	0.0
9	1.70	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0
10	1.75	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
11	1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
12	1.85	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
13	1.90	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
14	1.95	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0
15	2.00	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.1	0.0	0.0	0.0
16	2.05	0.5	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.1	0.0	0.0
17	2.10	0.8	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.1	0.3	0.7	0.7	0.4	0.2	0.1	0.0
18	2.15	1.2	1.2	0.7	0.3	0.1	0.1	0.1	0.1	0.3	0.6	1.1	1.1	0.7	0.3	0.2	0.1
19	2.20	2.1	2.0	1.3	0.7	0.3	0.2	0.2	0.3	0.5	1.1	1.8	1.9	1.2	0.7	0.4	0.2
20	2.25	3.4	3.3	2.3	1.3	0.7	0.5	0.4	0.6	1.1	1.9	2.9	3.1	2.2	1.4	0.9	0.6
21	2.30	5.5	5.5	4.1	2.7	1.7	1.1	1.1	1.4	2.2	3.5	4.8	5.0	4.0	2.8	1.9	1.5
22	2.35	9.0	8.9	7.3	5.4	3.8	2.8	2.6	3.1	4.4	6.2	7.9	8.2	7.1	5.7	4.4	3.7
23	2.40	9.4	9.2	7.8	5.7	3.3	1.7	1.3	1.9	3.7	5.9	7.6	8.0	7.4	6.1	4.7	3.7
24	2.45	16.7	16.3	16.0	14.6	12.3	10.1	9.1	9.4	11.0	12.9	13.9	14.6	15.3	15.5	15.1	14.7
25	2.50	21.1	20.7	22.8	24.1	23.9	22.3	20.5	19.0	18.7	18.6	17.7	18.6	21.9	25.4	28.5	30.5
26	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

		80	90	100	110	120	130	140	150	160	170	180	0	10	20	30	40
		100	120	140	160	180	0	20	40	60	80	100	120	140	160	180	0
	Coalt2	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.08	0.09	0.09	0.09	0.09	0.08	0.07	0.06
	Rockt2	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10
	RD																
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	30.9	29.1	26.8	24.8	23.3	23.8	26.1	28.8	31.2	32.5	32.3	31.0	29.1	26.7	24.5	24.2
2	1.35	7.7	6.7	5.7	4.9	4.5	5.1	6.9	9.3	11.7	13.3	13.8	12.8	10.7	8.4	6.4	5.7
3	1.40	3.0	2.6	2.2	2.0	1.9	2.4	3.5	5.0	6.7	8.1	8.9	8.2	6.5	4.8	3.5	2.9
4	1.45	1.1	0.9	0.8	0.8	0.8	1.0	1.6	2.5	3.6	4.7	5.3	5.0	3.7	2.6	1.8	1.4
5	1.50	0.4	0.3	0.3	0.3	0.3	0.4	0.8	1.3	1.9	2.6	3.2	2.9	2.1	1.4	0.9	0.6
6	1.55	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.6	1.0	1.5	1.9	1.7	1.2	0.7	0.4	0.3
7	1.60	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.5	0.8	1.1	1.0	0.7	0.4	0.2	0.1
8	1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.6	0.4	0.2	0.1	0.1
9	1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.3	0.2	0.1	0.1	0.0
10	1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0
11	1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
12	1.85	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1
13	1.90	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
14	1.95	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2
15	2.00	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3
16	2.05	0.0	0.0	0.1	0.2	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4
17	2.10	0.0	0.1	0.2	0.4	0.7	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.1	0.3	0.7	0.7
18	2.15	0.1	0.2	0.4	0.7	1.2	1.2	0.7	0.3	0.1	0.1	0.1	0.1	0.3	0.6	1.1	1.2
19	2.20	0.3	0.4	0.7	1.3	2.0	2.0	1.2	0.6	0.3	0.2	0.2	0.3	0.6	1.1	1.9	1.9
20	2.25	0.6	0.9	1.5	2.4	3.3	3.2	2.2	1.3	0.7	0.4	0.4	0.6	1.2	2.0	3.1	3.2
21	2.30	1.5	2.1	3.1	4.3	5.5	5.3	4.0	2.6	1.6	1.1	1.0	1.4	2.3	3.6	5.0	5.2
22	2.35	3.7	4.6	6.1	7.7	8.9	8.7	7.1	5.2	3.6	2.6	2.5	3.1	4.7	6.5	8.2	8.4
23	2.40	3.9	5.2	7.0	8.4	9.2	8.9	7.4	5.2	2.8	1.3	0.9	1.9	4.1	6.4	8.0	8.5
24	2.45	15.1	16.2	17.1	17.1	16.3	15.8	15.3	13.7	11.3	9.1	8.2	9.4	11.9	13.7	14.6	15.2
25	2.50	31.3	30.4	27.8	24.2	20.7	20.1	21.9	22.7	22.2	20.5	18.9	19.0	20.0	19.7	18.6	19.4
26	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

		50	60	70	80	90	100	110	120	130	140	150	160	170	180	0	10
		20	40	60	80	100	120	140	160	180	0	20	40	60	80	100	120
	Coalt2	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.08	0.09	0.09	0.09	0.09
	Rockt2	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06
	RD																
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	25.6	27.5	29.6	30.9	30.8	29.2	27.1	25.2	23.8	24.2	26.5	29.0	31.2	32.3	32.3	31.2
2	1.35	6.2	6.8	7.4	7.7	7.5	6.9	6.1	5.5	5.1	5.7	7.7	10.0	12.3	13.8	13.8	12.3
3	1.40	2.9	2.9	3.0	3.0	2.9	2.7	2.5	2.4	2.4	2.9	4.1	5.8	7.5	8.9	8.9	7.5
4	1.45	1.3	1.2	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.4	2.1	3.1	4.3	5.3	5.3	4.3
5	1.50	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	1.0	1.7	2.4	3.2	3.2	2.4
6	1.55	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.9	1.4	1.9	1.9	1.4
7	1.60	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.5	0.8	1.1	1.1	0.8
8	1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.4	0.6	0.6	0.4
9	1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.4	0.4	0.2
10	1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1
11	1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
12	1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0
13	1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
14	1.95	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0
15	2.00	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0
16	2.05	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0
17	2.10	0.4	0.2	0.1	0.0	0.0	0.1	0.2	0.4	0.7	0.7	0.4	0.1	0.1	0.0	0.0	0.1
18	2.15	0.7	0.4	0.2	0.1	0.1	0.2	0.4	0.7	1.2	1.2	0.6	0.3	0.1	0.1	0.1	0.1
19	2.20	1.3	0.7	0.4	0.3	0.3	0.4	0.7	1.3	2.0	1.9	1.2	0.6	0.3	0.2	0.2	0.3
20	2.25	2.3	1.5	0.9	0.6	0.6	0.9	1.5	2.3	3.2	3.2	2.1	1.2	0.7	0.4	0.4	0.7
21	2.30	4.1	2.9	2.0	1.5	1.5	2.0	3.0	4.2	5.3	5.2	3.8	2.5	1.5	1.0	1.0	1.5
22	2.35	7.3	5.9	4.5	3.7	3.8	4.6	6.0	7.5	8.7	8.4	6.8	4.9	3.3	2.5	2.5	3.3
23	2.40	7.8	6.5	5.0	3.9	4.0	5.2	6.8	8.2	8.9	8.5	6.9	4.6	2.4	0.9	0.9	2.4
24	2.45	16.0	16.2	15.7	15.1	15.2	16.1	16.8	16.6	15.8	15.2	14.5	12.8	10.3	8.2	8.2	10.3
25	2.50	22.8	26.4	29.5	31.3	31.6	30.2	27.3	23.6	20.1	19.4	20.8	21.3	20.5	18.9	18.9	20.5
26	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

		20	30	40	50	60	70	80	90	100	110	120
		140	160	180	0	20	40	60	80	100	120	140
	Coalt2	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	Rockt2	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07
	RD											
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	29.0	26.5	24.2	23.8	25.2	27.1	29.2	30.8	30.9	29.6	27.5
2	1.35	10.0	7.7	5.7	5.1	5.5	6.1	6.9	7.5	7.7	7.4	6.8
3	1.40	5.8	4.1	2.9	2.4	2.4	2.5	2.7	2.9	3.0	3.0	2.9
4	1.45	3.1	2.1	1.4	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.2
5	1.50	1.7	1.0	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
6	1.55	0.9	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2
7	1.60	0.5	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
8	1.65	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	1.70	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	1.75	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	1.90	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	1.95	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15	2.00	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
16	2.05	0.1	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1
17	2.10	0.1	0.4	0.7	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.2
18	2.15	0.3	0.6	1.2	1.2	0.7	0.4	0.2	0.1	0.1	0.2	0.4
19	2.20	0.6	1.2	1.9	2.0	1.3	0.7	0.4	0.3	0.3	0.4	0.7
20	2.25	1.2	2.1	3.2	3.2	2.3	1.5	0.9	0.6	0.6	0.9	1.5
21	2.30	2.5	3.8	5.2	5.3	4.2	3.0	2.0	1.5	1.5	2.0	2.9
22	2.35	4.9	6.8	8.4	8.7	7.5	6.0	4.6	3.8	3.7	4.5	5.9
23	2.40	4.6	6.9	8.5	8.9	8.2	6.8	5.2	4.0	3.9	5.0	6.5
24	2.45	12.8	14.5	15.2	15.8	16.6	16.8	16.1	15.2	15.1	15.7	16.2
25	2.50	21.3	20.8	19.4	20.1	23.6	27.3	30.2	31.6	31.3	29.5	26.4
26	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cumulative Yield

	RD	Ash														
	1.25	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	4.5	25.1	25.1	25.0	26.7	28.8	30.9	32.2	31.7	29.6	26.8	24.4	22.7	23.0	25.2	28.0
2	1.35	10.4	33.3	33.3	32.7	35.1	38.1	40.8	42.1	40.7	36.9	32.5	28.9	26.5	27.0	30.7	35.6
3	1.40	16.0	38.5	38.5	37.3	40.0	43.1	45.8	46.7	44.6	39.9	34.7	30.6	27.9	28.6	33.0	39.1
4	1.45	21.2	41.6	41.6	40.0	42.6	45.6	48.2	48.8	46.2	41.1	35.5	31.2	28.4	29.3	34.0	40.6
5	1.50	26.0	43.5	43.5	41.5	44.0	46.9	49.3	49.6	46.8	41.5	35.8	31.4	28.6	29.5	34.4	41.3
6	1.55	30.5	44.5	44.5	42.3	44.7	47.5	49.8	50.0	47.1	41.7	35.9	31.5	28.7	29.6	34.5	41.6
7	1.60	34.8	45.2	45.2	42.8	45.1	47.8	50.0	50.2	47.2	41.7	36.0	31.5	28.7	29.6	34.6	41.7
8	1.65	38.7	45.6	45.6	43.1	45.3	47.9	50.1	50.2	47.2	41.7	36.0	31.5	28.8	29.6	34.6	41.7
9	1.70	42.5	45.8	45.8	43.2	45.4	48.0	50.1	50.3	47.2	41.7	36.0	31.5	28.8	29.7	34.6	41.8
10	1.75	46.0	45.9	45.9	43.3	45.5	48.1	50.2	50.3	47.2	41.7	36.0	31.6	28.8	29.7	34.6	41.8
11	1.80	49.3	46.0	46.0	43.4	45.5	48.1	50.2	50.3	47.2	41.7	36.0	31.6	28.8	29.7	34.7	41.8
12	1.85	52.5	46.1	46.1	43.5	45.5	48.1	50.2	50.3	47.2	41.8	36.0	31.6	28.9	29.8	34.7	41.8
13	1.90	55.5	46.2	46.2	43.6	45.6	48.1	50.2	50.3	47.2	41.8	36.0	31.6	29.0	29.9	34.7	41.8
14	1.95	58.3	46.4	46.4	43.7	45.7	48.1	50.2	50.3	47.2	41.8	36.0	31.7	29.2	30.1	34.8	41.8
15	2.00	61.0	46.6	46.6	44.0	45.8	48.2	50.2	50.3	47.3	41.8	36.1	31.8	29.5	30.3	34.9	41.8
16	2.05	63.6	47.0	47.0	44.4	45.9	48.2	50.2	50.3	47.3	41.8	36.2	32.1	29.9	30.8	35.1	41.9
17	2.10	66.0	47.6	47.6	45.0	46.3	48.4	50.3	50.3	47.3	41.9	36.3	32.5	30.7	31.5	35.5	42.1
18	2.15	68.3	48.6	48.6	46.0	46.9	48.7	50.4	50.4	47.4	42.1	36.7	33.2	31.9	32.8	36.2	42.4
19	2.20	70.5	50.3	50.3	47.8	48.0	49.3	50.8	50.7	47.6	42.4	37.5	34.6	34.0	34.8	37.5	43.1
20	2.25	72.7	53.0	53.0	50.6	50.1	50.6	51.6	51.2	48.2	43.3	39.0	37.0	37.4	38.2	39.9	44.5
21	2.30	74.7	57.5	57.5	55.2	53.7	53.2	53.3	52.6	49.7	45.3	42.0	41.4	43.0	43.8	44.1	47.4
22	2.35	76.6	64.8	64.8	62.8	60.2	58.4	57.3	56.0	53.2	49.8	48.1	49.2	52.2	52.8	51.6	53.0
23	2.40	78.5	71.5	71.5	69.9	66.6	63.5	61.2	59.0	56.6	54.8	55.1	57.8	61.8	62.3	59.8	59.1
24	2.45	80.3	83.9	83.9	83.1	80.3	77.3	74.5	72.2	70.7	70.5	72.2	75.3	78.6	78.9	76.4	74.6
25	2.50	82.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
26	2.55	83.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	2.60	85.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Total																

Cumulative Yield

	RD																
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	30.9	32.7	32.7	31.2	29.0	26.9	25.0	24.8	26.5	28.5	30.5	31.7	31.3	29.2	26.7	24.5
2	1.35	40.8	44.6	45.4	43.5	40.2	36.5	32.7	31.9	34.1	36.9	39.5	40.7	39.5	36.1	32.2	29.1
3	1.40	45.8	51.0	52.7	51.0	47.4	42.6	37.3	35.9	38.3	41.1	43.7	44.6	42.8	38.8	34.4	30.9
4	1.45	48.2	54.3	56.7	55.3	51.7	46.3	40.0	38.1	40.4	43.1	45.5	46.2	44.1	39.8	35.1	31.5
5	1.50	49.3	55.9	58.8	57.7	54.3	48.4	41.5	39.3	41.4	44.0	46.3	46.8	44.6	40.2	35.4	31.8
6	1.55	49.8	56.7	59.9	59.1	55.8	49.7	42.3	39.9	42.0	44.4	46.6	47.1	44.8	40.3	35.5	31.9
7	1.60	50.0	57.1	60.5	59.8	56.7	50.5	42.8	40.3	42.2	44.6	46.7	47.2	44.8	40.3	35.5	31.9
8	1.65	50.1	57.3	60.8	60.3	57.2	50.9	43.1	40.4	42.3	44.7	46.8	47.2	44.9	40.3	35.6	31.9
9	1.70	50.1	57.4	60.9	60.5	57.5	51.2	43.2	40.5	42.4	44.8	46.8	47.2	44.9	40.3	35.6	31.9
10	1.75	50.2	57.4	61.0	60.6	57.7	51.3	43.3	40.6	42.4	44.8	46.8	47.2	44.9	40.3	35.6	31.9
11	1.80	50.2	57.4	61.1	60.7	57.8	51.4	43.4	40.7	42.5	44.8	46.8	47.2	44.9	40.3	35.6	31.9
12	1.85	50.2	57.4	61.1	60.7	57.8	51.5	43.5	40.7	42.5	44.8	46.8	47.2	44.9	40.3	35.6	31.9
13	1.90	50.2	57.4	61.1	60.8	57.9	51.5	43.6	40.8	42.5	44.8	46.9	47.2	44.9	40.4	35.6	32.0
14	1.95	50.2	57.4	61.1	60.8	57.9	51.6	43.7	41.0	42.6	44.8	46.9	47.2	44.9	40.4	35.6	32.1
15	2.00	50.2	57.5	61.1	60.8	58.0	51.7	44.0	41.2	42.7	44.9	46.9	47.3	44.9	40.4	35.7	32.2
16	2.05	50.2	57.5	61.1	60.8	58.0	51.9	44.4	41.6	42.9	44.9	46.9	47.3	44.9	40.4	35.7	32.4
17	2.10	50.3	57.5	61.2	60.9	58.2	52.2	45.0	42.3	43.3	45.1	47.0	47.3	44.9	40.5	35.9	32.8
18	2.15	50.4	57.6	61.3	61.0	58.4	52.8	46.0	43.4	43.9	45.4	47.1	47.4	45.0	40.7	36.3	33.6
19	2.20	50.8	57.8	61.4	61.3	59.0	53.8	47.8	45.2	45.1	46.1	47.5	47.6	45.3	41.1	37.0	34.9
20	2.25	51.6	58.3	61.9	62.0	60.1	55.7	50.6	48.1	47.2	47.4	48.3	48.2	45.9	41.9	38.6	37.3
21	2.30	53.3	59.5	63.1	63.4	62.3	59.0	55.2	52.9	51.0	50.2	50.2	49.7	47.4	44.0	41.6	41.7
22	2.35	57.3	62.5	65.9	66.8	66.7	64.9	62.8	60.8	57.8	55.6	54.4	53.2	51.0	48.6	47.8	49.4
23	2.40	61.2	64.7	67.6	69.2	70.4	70.3	69.9	68.4	64.6	61.2	58.6	56.6	54.8	53.8	54.8	58.0
24	2.45	74.5	75.8	77.7	79.5	81.3	82.4	83.1	82.3	79.2	75.9	72.9	70.7	69.5	69.8	72.1	75.4
25	2.50	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
26	2.55	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	2.60	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Total																

Cumulative Yield

	RD																
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	23.0	23.3	25.6	28.5	31.2	32.7	32.5	31.0	29.0	26.9	24.8	24.5	26.1	28.0	30.0	31.3
2	1.35	27.0	27.8	31.8	36.9	42.0	45.4	45.9	43.8	40.2	35.9	31.9	30.9	33.0	35.6	38.1	39.5
3	1.40	28.6	29.8	34.7	41.1	47.9	52.7	54.0	52.0	47.4	41.4	35.9	34.4	36.5	39.1	41.6	42.8
4	1.45	29.3	30.5	35.9	43.1	50.8	56.7	58.7	56.9	51.7	44.6	38.1	36.2	38.1	40.6	43.0	44.1
5	1.50	29.5	30.9	36.5	44.0	52.3	58.8	61.3	59.9	54.3	46.3	39.3	37.0	38.9	41.3	43.6	44.6
6	1.55	29.6	31.0	36.7	44.4	53.0	59.9	62.8	61.6	55.8	47.3	39.9	37.5	39.2	41.6	43.8	44.8
7	1.60	29.6	31.0	36.8	44.6	53.4	60.5	63.6	62.6	56.7	47.9	40.3	37.7	39.4	41.7	43.9	44.8
8	1.65	29.6	31.1	36.8	44.7	53.6	60.8	64.1	63.2	57.2	48.2	40.4	37.8	39.5	41.7	43.9	44.9
9	1.70	29.7	31.1	36.9	44.8	53.6	60.9	64.3	63.5	57.5	48.4	40.5	37.9	39.5	41.8	44.0	44.9
10	1.75	29.7	31.1	36.9	44.8	53.7	61.0	64.5	63.7	57.7	48.5	40.6	37.9	39.5	41.8	44.0	44.9
11	1.80	29.7	31.2	36.9	44.8	53.7	61.1	64.5	63.8	57.8	48.5	40.7	37.9	39.5	41.8	44.0	44.9
12	1.85	29.8	31.2	36.9	44.8	53.7	61.1	64.6	63.9	57.8	48.6	40.7	38.0	39.6	41.8	44.0	44.9
13	1.90	29.9	31.3	36.9	44.8	53.7	61.1	64.6	64.0	57.9	48.6	40.8	38.1	39.6	41.8	44.0	44.9
14	1.95	30.1	31.5	37.0	44.8	53.7	61.1	64.6	64.0	57.9	48.7	41.0	38.3	39.7	41.8	44.0	44.9
15	2.00	30.3	31.8	37.1	44.9	53.8	61.1	64.6	64.0	58.0	48.8	41.2	38.5	39.8	41.8	44.0	44.9
16	2.05	30.8	32.2	37.3	44.9	53.8	61.1	64.6	64.0	58.0	49.0	41.6	38.9	40.0	41.9	44.0	44.9
17	2.10	31.5	32.9	37.7	45.1	53.8	61.2	64.7	64.1	58.2	49.3	42.3	39.6	40.4	42.1	44.1	44.9
18	2.15	32.8	34.2	38.4	45.4	54.0	61.3	64.7	64.2	58.4	49.9	43.4	40.7	41.0	42.4	44.3	45.0
19	2.20	34.8	36.2	39.7	46.1	54.3	61.4	64.9	64.5	59.0	51.0	45.2	42.6	42.2	43.1	44.6	45.3
20	2.25	38.2	39.5	42.0	47.4	55.0	61.9	65.4	65.1	60.1	52.9	48.1	45.6	44.4	44.5	45.5	45.9
21	2.30	43.8	45.0	46.0	50.2	56.7	63.1	66.4	66.5	62.3	56.4	52.9	50.7	48.4	47.4	47.4	47.4
22	2.35	52.8	53.9	53.4	55.6	60.5	65.9	69.1	69.6	66.7	62.6	60.8	58.8	55.5	53.0	51.8	51.0
23	2.40	62.3	63.1	61.2	61.2	63.8	67.6	70.3	71.6	70.4	68.5	68.4	66.9	62.8	59.1	56.5	54.8
24	2.45	78.9	79.3	77.2	75.9	76.1	77.7	79.5	81.0	81.3	81.4	82.3	81.4	78.1	74.6	71.5	69.5
25	2.50	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
26	2.55	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	2.60	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Total																

Cumulative Yield

	RD																
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	30.9	29.1	26.8	24.8	23.3	23.8	26.1	28.8	31.2	32.5	32.3	31.0	29.1	26.7	24.5	24.2
2	1.35	38.6	35.8	32.5	29.7	27.8	28.8	33.0	38.1	42.9	45.9	46.0	43.8	39.7	35.1	30.9	29.9
3	1.40	41.7	38.4	34.7	31.7	29.8	31.2	36.5	43.1	49.6	54.0	54.9	52.0	46.3	40.0	34.4	32.8
4	1.45	42.8	39.4	35.5	32.5	30.5	32.2	38.1	45.6	53.3	58.7	60.2	56.9	50.0	42.6	36.2	34.1
5	1.50	43.2	39.7	35.8	32.8	30.9	32.7	38.9	46.9	55.2	61.3	63.4	59.9	52.1	44.0	37.0	34.8
6	1.55	43.3	39.8	35.9	32.9	31.0	32.8	39.2	47.5	56.2	62.8	65.2	61.6	53.3	44.7	37.5	35.1
7	1.60	43.3	39.8	36.0	32.9	31.0	32.9	39.4	47.8	56.7	63.6	66.3	62.6	54.0	45.1	37.7	35.2
8	1.65	43.4	39.9	36.0	32.9	31.1	33.0	39.5	47.9	57.0	64.1	67.0	63.2	54.3	45.3	37.8	35.3
9	1.70	43.4	39.9	36.0	32.9	31.1	33.0	39.5	48.0	57.2	64.3	67.3	63.5	54.5	45.4	37.9	35.3
10	1.75	43.4	39.9	36.0	33.0	31.1	33.0	39.5	48.1	57.2	64.5	67.6	63.7	54.6	45.5	37.9	35.3
11	1.80	43.4	39.9	36.0	33.0	31.2	33.1	39.5	48.1	57.3	64.5	67.7	63.8	54.7	45.5	37.9	35.4
12	1.85	43.4	39.9	36.0	33.0	31.2	33.1	39.6	48.1	57.3	64.6	67.8	63.9	54.7	45.5	38.0	35.4
13	1.90	43.4	39.9	36.0	33.0	31.3	33.2	39.6	48.1	57.3	64.6	67.8	64.0	54.8	45.6	38.1	35.5
14	1.95	43.4	39.9	36.0	33.1	31.5	33.4	39.7	48.1	57.3	64.6	67.8	64.0	54.8	45.7	38.3	35.7
15	2.00	43.4	39.9	36.1	33.2	31.8	33.7	39.8	48.2	57.3	64.6	67.8	64.0	54.8	45.8	38.5	35.9
16	2.05	43.4	39.9	36.2	33.4	32.2	34.1	40.0	48.2	57.4	64.6	67.9	64.0	54.9	45.9	38.9	36.4
17	2.10	43.4	40.0	36.3	33.8	32.9	34.8	40.4	48.4	57.4	64.7	67.9	64.1	55.1	46.3	39.6	37.1
18	2.15	43.5	40.2	36.7	34.6	34.2	36.0	41.0	48.7	57.6	64.7	68.0	64.2	55.3	46.9	40.7	38.2
19	2.20	43.8	40.6	37.5	35.9	36.2	38.0	42.2	49.3	57.9	64.9	68.1	64.5	55.9	48.0	42.6	40.2
20	2.25	44.4	41.5	39.0	38.3	39.5	41.2	44.4	50.6	58.6	65.4	68.5	65.1	57.1	50.1	45.6	43.3
21	2.30	45.9	43.5	42.0	42.6	45.0	46.6	48.4	53.2	60.1	66.4	69.5	66.5	59.4	53.7	50.7	48.5
22	2.35	49.7	48.2	48.1	50.3	53.9	55.3	55.5	58.4	63.7	69.1	72.0	69.6	64.0	60.2	58.8	56.9
23	2.40	53.6	53.4	55.1	58.7	63.1	64.1	62.8	63.5	66.5	70.3	72.9	71.6	68.2	66.6	66.9	65.4
24	2.45	68.7	69.6	72.2	75.8	79.3	79.9	78.1	77.3	77.8	79.5	81.1	81.0	80.0	80.3	81.4	80.6
25	2.50	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
26	2.55	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	2.60	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Total																

Cumulative Yield

	RD																
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	25.6	27.5	29.6	30.9	30.8	29.2	27.1	25.2	23.8	24.2	26.5	29.0	31.2	32.3	32.3	31.2
2	1.35	31.8	34.3	36.9	38.6	38.3	36.1	33.2	30.7	28.8	29.9	34.1	39.0	43.5	46.0	46.0	43.5
3	1.40	34.7	37.2	39.9	41.7	41.2	38.8	35.7	33.0	31.2	32.8	38.3	44.8	51.0	54.9	54.9	51.0
4	1.45	35.9	38.4	41.1	42.8	42.3	39.8	36.6	34.0	32.2	34.1	40.4	48.0	55.3	60.2	60.2	55.3
5	1.50	36.5	38.9	41.5	43.2	42.7	40.2	37.0	34.4	32.7	34.8	41.4	49.6	57.7	63.4	63.4	57.7
6	1.55	36.7	39.1	41.7	43.3	42.8	40.3	37.1	34.5	32.8	35.1	42.0	50.5	59.1	65.2	65.2	59.1
7	1.60	36.8	39.1	41.7	43.3	42.8	40.3	37.2	34.6	32.9	35.2	42.2	51.0	59.8	66.3	66.3	59.8
8	1.65	36.8	39.2	41.7	43.4	42.8	40.3	37.2	34.6	33.0	35.3	42.3	51.2	60.3	67.0	67.0	60.3
9	1.70	36.9	39.2	41.7	43.4	42.9	40.3	37.2	34.6	33.0	35.3	42.4	51.3	60.5	67.3	67.3	60.5
10	1.75	36.9	39.2	41.7	43.4	42.9	40.3	37.2	34.6	33.0	35.3	42.4	51.4	60.6	67.6	67.6	60.6
11	1.80	36.9	39.2	41.7	43.4	42.9	40.3	37.2	34.7	33.1	35.4	42.5	51.4	60.7	67.7	67.7	60.7
12	1.85	36.9	39.2	41.8	43.4	42.9	40.3	37.2	34.7	33.1	35.4	42.5	51.5	60.7	67.8	67.8	60.7
13	1.90	36.9	39.2	41.8	43.4	42.9	40.4	37.2	34.7	33.2	35.5	42.5	51.5	60.8	67.8	67.8	60.8
14	1.95	37.0	39.2	41.8	43.4	42.9	40.4	37.3	34.8	33.4	35.7	42.6	51.5	60.8	67.8	67.8	60.8
15	2.00	37.1	39.3	41.8	43.4	42.9	40.4	37.3	34.9	33.7	35.9	42.7	51.5	60.8	67.8	67.8	60.8
16	2.05	37.3	39.4	41.8	43.4	42.9	40.4	37.4	35.1	34.1	36.4	42.9	51.6	60.8	67.9	67.9	60.8
17	2.10	37.7	39.5	41.9	43.4	42.9	40.5	37.6	35.5	34.8	37.1	43.3	51.8	60.9	67.9	67.9	60.9
18	2.15	38.4	39.9	42.1	43.5	43.0	40.7	37.9	36.2	36.0	38.2	43.9	52.1	61.0	68.0	68.0	61.0
19	2.20	39.7	40.6	42.4	43.8	43.3	41.1	38.7	37.5	38.0	40.2	45.1	52.7	61.3	68.1	68.1	61.3
20	2.25	42.0	42.1	43.3	44.4	43.9	41.9	40.2	39.9	41.2	43.3	47.2	53.9	62.0	68.5	68.5	62.0
21	2.30	46.0	45.0	45.3	45.9	45.4	44.0	43.2	44.1	46.6	48.5	51.0	56.3	63.4	69.5	69.5	63.4
22	2.35	53.4	50.8	49.8	49.7	49.2	48.6	49.2	51.6	55.3	56.9	57.8	61.2	66.8	72.0	72.0	66.8
23	2.40	61.2	57.3	54.8	53.6	53.2	53.8	56.0	59.8	64.1	65.4	64.6	65.9	69.2	72.9	72.9	69.2
24	2.45	77.2	73.6	70.5	68.7	68.4	69.8	72.7	76.4	79.9	80.6	79.2	78.7	79.5	81.1	81.1	79.5
25	2.50	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
26	2.55	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	2.60	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Total																

Cumulative Yield

	RD											
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.30	29.0	26.5	24.2	23.8	25.2	27.1	29.2	30.8	30.9	29.6	27.5
2	1.35	39.0	34.1	29.9	28.8	30.7	33.2	36.1	38.3	38.6	36.9	34.3
3	1.40	44.8	38.3	32.8	31.2	33.0	35.7	38.8	41.2	41.7	39.9	37.2
4	1.45	48.0	40.4	34.1	32.2	34.0	36.6	39.8	42.3	42.8	41.1	38.4
5	1.50	49.6	41.4	34.8	32.7	34.4	37.0	40.2	42.7	43.2	41.5	38.9
6	1.55	50.5	42.0	35.1	32.8	34.5	37.1	40.3	42.8	43.3	41.7	39.1
7	1.60	51.0	42.2	35.2	32.9	34.6	37.2	40.3	42.8	43.3	41.7	39.1
8	1.65	51.2	42.3	35.3	33.0	34.6	37.2	40.3	42.8	43.4	41.7	39.2
9	1.70	51.3	42.4	35.3	33.0	34.6	37.2	40.3	42.9	43.4	41.7	39.2
10	1.75	51.4	42.4	35.3	33.0	34.6	37.2	40.3	42.9	43.4	41.7	39.2
11	1.80	51.4	42.5	35.4	33.1	34.7	37.2	40.3	42.9	43.4	41.7	39.2
12	1.85	51.5	42.5	35.4	33.1	34.7	37.2	40.3	42.9	43.4	41.8	39.2
13	1.90	51.5	42.5	35.5	33.2	34.7	37.2	40.4	42.9	43.4	41.8	39.2
14	1.95	51.5	42.6	35.7	33.4	34.8	37.3	40.4	42.9	43.4	41.8	39.2
15	2.00	51.5	42.7	35.9	33.7	34.9	37.3	40.4	42.9	43.4	41.8	39.3
16	2.05	51.6	42.9	36.4	34.1	35.1	37.4	40.4	42.9	43.4	41.8	39.4
17	2.10	51.8	43.3	37.1	34.8	35.5	37.6	40.5	42.9	43.4	41.9	39.5
18	2.15	52.1	43.9	38.2	36.0	36.2	37.9	40.7	43.0	43.5	42.1	39.9
19	2.20	52.7	45.1	40.2	38.0	37.5	38.7	41.1	43.3	43.8	42.4	40.6
20	2.25	53.9	47.2	43.3	41.2	39.9	40.2	41.9	43.9	44.4	43.3	42.1
21	2.30	56.3	51.0	48.5	46.6	44.1	43.2	44.0	45.4	45.9	45.3	45.0
22	2.35	61.2	57.8	56.9	55.3	51.6	49.2	48.6	49.2	49.7	49.8	50.8
23	2.40	65.9	64.6	65.4	64.1	59.8	56.0	53.8	53.2	53.6	54.8	57.3
24	2.45	78.7	79.2	80.6	79.9	76.4	72.7	69.8	68.4	68.7	70.5	73.6
25	2.50	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
26	2.55	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	2.60	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Total											

Cumulative Ash

	RD	Ash															
	1.25	-2.0															
1	1.30	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
2	1.35	10.4	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.7	5.5	5.4	5.3	5.4	5.5	5.7
3	1.40	16.0	7.3	7.3	7.1	7.1	7.1	7.0	6.9	6.7	6.4	6.2	6.0	5.9	6.0	6.3	6.7
4	1.45	21.2	8.3	8.3	8.1	8.0	7.9	7.7	7.5	7.2	6.8	6.5	6.3	6.2	6.3	6.7	7.2
5	1.50	26.0	9.1	9.1	8.7	8.6	8.4	8.1	7.8	7.4	7.0	6.7	6.4	6.3	6.4	6.9	7.5
6	1.55	30.5	9.6	9.6	9.1	8.9	8.6	8.3	8.0	7.5	7.1	6.8	6.5	6.3	6.5	7.0	7.7
7	1.60	34.8	10.0	10.0	9.4	9.1	8.8	8.5	8.0	7.6	7.2	6.8	6.5	6.4	6.6	7.1	7.7
8	1.65	38.7	10.2	10.2	9.6	9.3	8.9	8.5	8.1	7.6	7.2	6.8	6.5	6.4	6.6	7.1	7.8
9	1.70	42.5	10.4	10.4	9.7	9.3	9.0	8.5	8.1	7.6	7.2	6.8	6.5	6.4	6.6	7.1	7.8
10	1.75	46.0	10.5	10.5	9.8	9.4	9.0	8.6	8.1	7.6	7.2	6.8	6.5	6.5	6.6	7.1	7.8
11	1.80	49.3	10.6	10.6	9.9	9.4	9.0	8.6	8.1	7.6	7.2	6.8	6.6	6.5	6.7	7.1	7.8
12	1.85	52.5	10.7	10.7	10.0	9.5	9.0	8.6	8.1	7.7	7.2	6.8	6.6	6.6	6.8	7.2	7.8
13	1.90	55.5	10.8	10.8	10.1	9.5	9.0	8.6	8.1	7.7	7.2	6.8	6.6	6.8	7.0	7.2	7.8
14	1.95	58.3	10.9	10.9	10.2	9.6	9.1	8.6	8.1	7.7	7.2	6.9	6.8	7.1	7.2	7.3	7.8
15	2.00	61.0	11.2	11.2	10.5	9.7	9.1	8.6	8.1	7.7	7.2	6.9	7.0	7.6	7.7	7.5	7.9
16	2.05	63.6	11.6	11.6	11.0	9.9	9.2	8.6	8.1	7.7	7.3	7.1	7.4	8.5	8.6	7.9	8.0
17	2.10	66.0	12.3	12.3	11.7	10.3	9.4	8.7	8.2	7.7	7.4	7.4	8.1	9.9	9.9	8.5	8.2
18	2.15	68.3	13.4	13.4	13.0	11.1	9.7	8.9	8.3	7.9	7.6	8.0	9.5	12.2	12.2	9.7	8.7
19	2.20	70.5	15.3	15.3	15.1	12.5	10.5	9.3	8.6	8.2	8.2	9.2	11.9	15.8	15.6	11.8	9.7
20	2.25	72.7	18.3	18.3	18.3	14.9	12.1	10.3	9.3	8.9	9.5	11.7	15.8	21.0	20.6	15.4	11.7
21	2.30	74.7	22.7	22.7	23.1	19.0	15.1	12.4	11.0	10.9	12.4	16.3	22.1	28.0	27.5	21.0	15.5
22	2.35	76.6	28.8	28.8	29.5	25.2	20.6	16.9	14.9	15.2	18.2	23.9	30.7	36.5	35.9	29.1	22.0
23	2.40	78.5	33.4	33.4	34.5	30.3	25.3	20.7	18.3	19.1	23.7	30.9	37.9	43.0	42.4	35.9	27.8
24	2.45	80.3	40.4	40.4	41.8	38.8	35.1	31.4	29.6	31.2	36.3	42.6	47.7	51.0	50.4	45.5	38.7
25	2.50	82.0	47.1	47.1	48.6	47.3	45.7	44.3	44.1	46.1	49.8	53.5	56.2	57.6	57.0	54.2	49.7
26	2.55	83.6	47.1	47.1	48.6	47.3	45.7	44.3	44.1	46.1	49.8	53.5	56.2	57.6	57.0	54.2	49.7
	2.60	85.2															
	Total																

Cumulative Ash

	RD																
	1.25																
1	1.30	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
2	1.35	5.9	6.1	6.1	6.2	6.1	6.0	5.9	5.8	5.8	5.8	5.8	5.8	5.7	5.6	5.5	5.4
3	1.40	7.0	7.3	7.5	7.6	7.6	7.5	7.1	6.9	6.9	6.9	6.8	6.7	6.5	6.3	6.1	6.0
4	1.45	7.7	8.1	8.5	8.7	8.8	8.6	8.1	7.8	7.7	7.5	7.4	7.2	6.9	6.7	6.5	6.3
5	1.50	8.1	8.7	9.1	9.4	9.6	9.3	8.7	8.3	8.1	7.9	7.7	7.4	7.1	6.9	6.6	6.5
6	1.55	8.3	9.0	9.5	9.9	10.1	9.9	9.1	8.6	8.4	8.1	7.9	7.5	7.2	6.9	6.7	6.5
7	1.60	8.5	9.1	9.7	10.2	10.5	10.3	9.4	8.9	8.6	8.2	7.9	7.6	7.3	7.0	6.7	6.6
8	1.65	8.5	9.2	9.9	10.4	10.8	10.5	9.6	9.0	8.6	8.3	8.0	7.6	7.3	7.0	6.7	6.6
9	1.70	8.5	9.3	10.0	10.5	10.9	10.7	9.7	9.1	8.7	8.3	8.0	7.6	7.3	7.0	6.7	6.6
10	1.75	8.6	9.3	10.0	10.6	11.0	10.8	9.8	9.1	8.7	8.4	8.0	7.6	7.3	7.0	6.7	6.6
11	1.80	8.6	9.3	10.0	10.6	11.1	10.8	9.9	9.2	8.7	8.4	8.0	7.6	7.3	7.0	6.7	6.6
12	1.85	8.6	9.3	10.1	10.7	11.2	10.9	10.0	9.3	8.8	8.4	8.0	7.7	7.3	7.0	6.8	6.7
13	1.90	8.6	9.4	10.1	10.7	11.2	10.9	10.1	9.4	8.8	8.4	8.0	7.7	7.3	7.0	6.8	6.7
14	1.95	8.6	9.4	10.1	10.7	11.2	11.0	10.2	9.6	8.9	8.4	8.0	7.7	7.3	7.0	6.8	6.8
15	2.00	8.6	9.4	10.1	10.7	11.3	11.1	10.5	9.9	9.0	8.5	8.0	7.7	7.3	7.0	6.9	7.0
16	2.05	8.6	9.4	10.1	10.7	11.3	11.3	11.0	10.4	9.3	8.6	8.1	7.7	7.3	7.1	7.0	7.4
17	2.10	8.7	9.4	10.1	10.8	11.5	11.6	11.7	11.2	9.7	8.8	8.2	7.7	7.4	7.2	7.3	8.2
18	2.15	8.9	9.5	10.2	10.9	11.7	12.2	13.0	12.7	10.6	9.2	8.4	7.9	7.5	7.4	7.9	9.5
19	2.20	9.3	9.7	10.4	11.2	12.3	13.3	15.1	15.0	12.2	10.1	8.8	8.2	7.9	8.0	9.2	11.8
20	2.25	10.3	10.2	10.8	11.8	13.4	15.3	18.3	18.5	14.9	11.8	9.9	8.9	8.7	9.4	11.7	15.8
21	2.30	12.4	11.6	12.0	13.3	15.5	18.7	23.1	23.6	19.3	15.2	12.3	10.9	10.8	12.5	16.3	21.9
22	2.35	16.9	14.7	14.8	16.5	19.6	24.0	29.5	30.5	26.1	21.2	17.3	15.2	15.5	18.5	24.1	30.5
23	2.40	20.7	16.8	16.4	18.6	22.6	28.1	34.5	35.8	31.6	26.5	21.7	19.1	19.8	24.3	31.1	37.6
24	2.45	31.4	26.2	24.7	26.6	30.4	35.8	41.8	43.3	40.6	36.9	33.2	31.2	32.6	37.2	42.9	47.5
25	2.50	44.3	39.7	37.5	38.0	40.1	43.9	48.6	50.2	49.2	47.8	46.4	46.1	47.7	50.7	53.8	56.0
26	2.55	44.3	39.7	37.5	38.0	40.1	43.9	48.6	50.2	49.2	47.8	46.4	46.1	47.7	50.7	53.8	56.0
	2.60																
	Total																

Cumulative Ash

	RD																
	1.25																
1	1.30	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
2	1.35	5.4	5.4	5.6	5.8	6.0	6.1	6.2	6.2	6.1	6.0	5.8	5.7	5.7	5.7	5.7	5.7
3	1.40	6.0	6.1	6.5	6.9	7.2	7.5	7.7	7.8	7.6	7.3	6.9	6.7	6.7	6.7	6.6	6.5
4	1.45	6.3	6.5	7.0	7.5	8.0	8.5	8.8	8.9	8.8	8.3	7.8	7.4	7.3	7.2	7.1	6.9
5	1.50	6.4	6.7	7.3	7.9	8.5	9.1	9.5	9.8	9.6	9.0	8.3	7.9	7.7	7.5	7.3	7.1
6	1.55	6.5	6.8	7.4	8.1	8.9	9.5	10.0	10.3	10.1	9.4	8.6	8.1	7.9	7.7	7.4	7.2
7	1.60	6.6	6.9	7.5	8.2	9.0	9.7	10.3	10.7	10.5	9.7	8.9	8.3	8.0	7.7	7.5	7.3
8	1.65	6.6	6.9	7.5	8.3	9.1	9.9	10.5	11.0	10.8	9.9	9.0	8.4	8.1	7.8	7.5	7.3
9	1.70	6.6	6.9	7.5	8.3	9.2	10.0	10.6	11.2	10.9	10.0	9.1	8.4	8.1	7.8	7.5	7.3
10	1.75	6.6	6.9	7.6	8.4	9.2	10.0	10.7	11.3	11.0	10.1	9.1	8.5	8.1	7.8	7.5	7.3
11	1.80	6.7	7.0	7.6	8.4	9.2	10.0	10.8	11.3	11.1	10.1	9.2	8.5	8.1	7.8	7.5	7.3
12	1.85	6.8	7.1	7.6	8.4	9.2	10.1	10.8	11.4	11.2	10.2	9.3	8.6	8.1	7.8	7.5	7.3
13	1.90	7.0	7.2	7.7	8.4	9.2	10.1	10.8	11.4	11.2	10.2	9.4	8.7	8.2	7.8	7.5	7.3
14	1.95	7.2	7.5	7.7	8.4	9.2	10.1	10.8	11.4	11.2	10.3	9.6	8.9	8.3	7.8	7.6	7.3
15	2.00	7.7	8.0	7.9	8.5	9.3	10.1	10.8	11.4	11.3	10.4	9.9	9.3	8.4	7.9	7.6	7.3
16	2.05	8.6	8.7	8.2	8.6	9.3	10.1	10.8	11.5	11.3	10.6	10.4	9.8	8.7	8.0	7.6	7.3
17	2.10	9.9	10.0	8.8	8.8	9.3	10.1	10.9	11.5	11.5	11.0	11.2	10.8	9.2	8.2	7.7	7.4
18	2.15	12.2	12.1	9.9	9.2	9.5	10.2	10.9	11.6	11.7	11.6	12.7	12.4	10.2	8.7	7.9	7.5
19	2.20	15.6	15.4	11.8	10.1	9.9	10.4	11.1	11.9	12.3	12.9	15.0	14.9	11.9	9.7	8.5	7.9
20	2.25	20.6	20.2	15.1	11.8	10.7	10.8	11.5	12.5	13.4	15.1	18.5	18.8	14.9	11.7	9.7	8.7
21	2.30	27.5	26.8	20.4	15.2	12.6	12.0	12.5	13.8	15.5	18.7	23.6	24.3	19.8	15.5	12.3	10.8
22	2.35	35.9	35.0	28.1	21.2	16.6	14.8	15.0	16.6	19.6	24.5	30.5	31.6	27.1	22.0	17.8	15.5
23	2.40	42.4	41.4	34.5	26.5	19.8	16.4	16.1	18.3	22.6	29.1	35.8	37.2	33.1	27.8	22.8	19.8
24	2.45	50.4	49.4	44.0	36.9	29.6	24.7	23.5	25.5	30.4	37.2	43.3	44.9	42.3	38.7	34.9	32.6
25	2.50	57.0	56.1	52.7	47.8	42.1	37.5	35.5	36.2	40.1	45.6	50.2	51.8	51.0	49.7	48.3	47.7
26	2.55	57.0	56.1	52.7	47.8	42.1	37.5	35.5	36.2	40.1	45.6	50.2	51.8	51.0	49.7	48.3	47.7
	2.60																
	Total																

Cumulative Ash

	RD																
	1.25																
1	1.30	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
2	1.35	5.7	5.6	5.5	5.5	5.4	5.5	5.7	5.9	6.1	6.2	6.3	6.2	6.1	5.9	5.7	5.6
3	1.40	6.4	6.3	6.2	6.1	6.1	6.3	6.7	7.1	7.4	7.7	7.8	7.8	7.5	7.1	6.7	6.5
4	1.45	6.8	6.6	6.5	6.5	6.5	6.8	7.3	7.9	8.4	8.8	9.0	8.9	8.5	8.0	7.4	7.1
5	1.50	7.0	6.8	6.7	6.7	6.7	7.0	7.7	8.4	9.0	9.5	9.9	9.8	9.2	8.6	7.9	7.4
6	1.55	7.0	6.9	6.8	6.7	6.8	7.2	7.9	8.6	9.4	10.0	10.4	10.3	9.7	8.9	8.1	7.6
7	1.60	7.1	6.9	6.8	6.8	6.9	7.3	8.0	8.8	9.6	10.3	10.8	10.7	10.0	9.1	8.3	7.7
8	1.65	7.1	6.9	6.8	6.8	6.9	7.3	8.1	8.9	9.8	10.5	11.1	11.0	10.2	9.3	8.4	7.8
9	1.70	7.1	6.9	6.8	6.8	6.9	7.3	8.1	9.0	9.8	10.6	11.3	11.2	10.3	9.3	8.4	7.8
10	1.75	7.1	6.9	6.8	6.8	6.9	7.4	8.1	9.0	9.9	10.7	11.4	11.3	10.4	9.4	8.5	7.9
11	1.80	7.1	6.9	6.8	6.8	7.0	7.4	8.1	9.0	9.9	10.8	11.5	11.3	10.4	9.4	8.5	7.9
12	1.85	7.1	6.9	6.8	6.8	7.1	7.5	8.1	9.0	9.9	10.8	11.5	11.4	10.4	9.5	8.6	8.0
13	1.90	7.1	6.9	6.8	6.9	7.2	7.6	8.2	9.0	9.9	10.8	11.5	11.4	10.5	9.5	8.7	8.1
14	1.95	7.1	6.9	6.9	7.0	7.5	7.9	8.3	9.1	10.0	10.8	11.5	11.4	10.5	9.6	8.9	8.4
15	2.00	7.1	7.0	6.9	7.2	8.0	8.3	8.4	9.1	10.0	10.8	11.6	11.4	10.5	9.7	9.3	8.7
16	2.05	7.1	7.0	7.1	7.6	8.7	9.0	8.7	9.2	10.0	10.8	11.6	11.5	10.6	9.9	9.8	9.4
17	2.10	7.2	7.1	7.4	8.3	10.0	10.2	9.2	9.4	10.0	10.9	11.6	11.5	10.7	10.3	10.8	10.5
18	2.15	7.3	7.4	8.0	9.6	12.1	12.1	10.2	9.7	10.2	10.9	11.7	11.6	11.0	11.1	12.4	12.2
19	2.20	7.7	8.0	9.2	11.8	15.4	15.2	11.9	10.5	10.5	11.1	11.8	11.9	11.6	12.5	14.9	15.0
20	2.25	8.6	9.4	11.7	15.6	20.2	19.7	14.9	12.1	11.2	11.5	12.2	12.5	12.9	14.9	18.8	19.2
21	2.30	10.8	12.5	16.3	21.6	26.8	26.0	19.8	15.1	12.9	12.5	13.1	13.8	15.3	19.0	24.3	25.1
22	2.35	15.7	18.7	23.9	30.0	35.0	34.0	27.1	20.6	16.5	15.0	15.2	16.6	19.8	25.2	31.6	32.8
23	2.40	20.3	24.5	30.9	36.9	41.4	40.1	33.1	25.3	19.1	16.1	16.0	18.3	23.3	30.3	37.2	38.7
24	2.45	33.5	37.5	42.6	46.7	49.4	48.1	42.3	35.1	28.0	23.5	22.5	25.5	31.8	38.8	44.9	46.5
25	2.50	48.7	51.0	53.5	55.3	56.1	54.9	51.0	45.7	40.0	35.5	33.8	36.2	41.8	47.3	51.8	53.4
26	2.55	48.7	51.0	53.5	55.3	56.1	54.9	51.0	45.7	40.0	35.5	33.8	36.2	41.8	47.3	51.8	53.4
	2.60																
	Total																

Cumulative Ash

	RD																
	1.25																
1	1.30	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
2	1.35	5.6	5.6	5.7	5.7	5.6	5.6	5.6	5.5	5.5	5.6	5.8	6.0	6.2	6.3	6.3	6.2
3	1.40	6.5	6.5	6.4	6.4	6.4	6.3	6.3	6.3	6.3	6.5	6.9	7.3	7.6	7.8	7.8	7.6
4	1.45	7.0	6.9	6.8	6.8	6.7	6.7	6.7	6.7	6.8	7.1	7.7	8.2	8.7	9.0	9.0	8.7
5	1.50	7.3	7.1	7.0	7.0	6.9	6.9	6.9	6.9	7.0	7.4	8.1	8.8	9.4	9.9	9.9	9.4
6	1.55	7.4	7.3	7.1	7.0	7.0	6.9	6.9	7.0	7.2	7.6	8.4	9.2	9.9	10.4	10.4	9.9
7	1.60	7.5	7.3	7.2	7.1	7.0	7.0	7.0	7.1	7.3	7.7	8.6	9.4	10.2	10.8	10.8	10.2
8	1.65	7.5	7.3	7.2	7.1	7.0	7.0	7.0	7.1	7.3	7.8	8.6	9.5	10.4	11.1	11.1	10.4
9	1.70	7.5	7.3	7.2	7.1	7.0	7.0	7.0	7.1	7.3	7.8	8.7	9.6	10.5	11.3	11.3	10.5
10	1.75	7.6	7.3	7.2	7.1	7.0	7.0	7.0	7.1	7.4	7.9	8.7	9.7	10.6	11.4	11.4	10.6
11	1.80	7.6	7.3	7.2	7.1	7.0	7.0	7.0	7.1	7.4	7.9	8.7	9.7	10.6	11.5	11.5	10.6
12	1.85	7.6	7.4	7.2	7.1	7.0	7.0	7.0	7.2	7.5	8.0	8.8	9.7	10.7	11.5	11.5	10.7
13	1.90	7.7	7.4	7.2	7.1	7.0	7.0	7.0	7.2	7.6	8.1	8.8	9.7	10.7	11.5	11.5	10.7
14	1.95	7.7	7.4	7.2	7.1	7.0	7.0	7.1	7.3	7.9	8.4	8.9	9.8	10.7	11.5	11.5	10.7
15	2.00	7.9	7.5	7.2	7.1	7.0	7.0	7.1	7.5	8.3	8.7	9.0	9.8	10.7	11.6	11.6	10.7
16	2.05	8.2	7.6	7.3	7.1	7.1	7.1	7.3	7.9	9.0	9.4	9.3	9.9	10.7	11.6	11.6	10.7
17	2.10	8.8	7.8	7.4	7.2	7.1	7.2	7.5	8.5	10.2	10.5	9.7	10.0	10.8	11.6	11.6	10.8
18	2.15	9.9	8.4	7.6	7.3	7.3	7.4	8.1	9.7	12.1	12.2	10.6	10.4	10.9	11.7	11.7	10.9
19	2.20	11.8	9.5	8.2	7.7	7.6	8.0	9.3	11.8	15.2	15.0	12.2	11.0	11.2	11.8	11.8	11.2
20	2.25	15.1	11.7	9.5	8.6	8.6	9.4	11.7	15.4	19.7	19.2	14.9	12.4	11.8	12.2	12.2	11.8
21	2.30	20.4	15.8	12.4	10.8	10.8	12.5	16.0	21.0	26.0	25.1	19.3	15.2	13.3	13.1	13.1	13.3
22	2.35	28.1	22.8	18.2	15.7	15.8	18.5	23.5	29.1	34.0	32.8	26.1	20.1	16.5	15.2	15.2	16.5
23	2.40	34.5	29.1	23.7	20.3	20.5	24.3	30.1	35.9	40.1	38.7	31.6	24.2	18.6	16.0	16.0	18.6
24	2.45	44.0	40.4	36.3	33.5	33.8	37.2	41.7	45.5	48.1	46.5	40.6	33.3	26.6	22.5	22.5	26.6
25	2.50	52.7	51.4	49.8	48.7	49.0	50.7	52.7	54.2	54.9	53.4	49.2	43.7	38.0	33.8	33.8	38.0
26	2.55	52.7	51.4	49.8	48.7	49.0	50.7	52.7	54.2	54.9	53.4	49.2	43.7	38.0	33.8	33.8	38.0
	2.60																
	Total																

Cumulative Ash

	RD											
	1.25											
1	1.30	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
2	1.35	6.0	5.8	5.6	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.6
3	1.40	7.3	6.9	6.5	6.3	6.3	6.3	6.3	6.4	6.4	6.4	6.5
4	1.45	8.2	7.7	7.1	6.8	6.7	6.7	6.7	6.7	6.8	6.8	6.9
5	1.50	8.8	8.1	7.4	7.0	6.9	6.9	6.9	6.9	7.0	7.0	7.1
6	1.55	9.2	8.4	7.6	7.2	7.0	6.9	6.9	7.0	7.0	7.1	7.3
7	1.60	9.4	8.6	7.7	7.3	7.1	7.0	7.0	7.0	7.1	7.2	7.3
8	1.65	9.5	8.6	7.8	7.3	7.1	7.0	7.0	7.0	7.1	7.2	7.3
9	1.70	9.6	8.7	7.8	7.3	7.1	7.0	7.0	7.0	7.1	7.2	7.3
10	1.75	9.7	8.7	7.9	7.4	7.1	7.0	7.0	7.0	7.1	7.2	7.3
11	1.80	9.7	8.7	7.9	7.4	7.1	7.0	7.0	7.0	7.1	7.2	7.3
12	1.85	9.7	8.8	8.0	7.5	7.2	7.0	7.0	7.0	7.1	7.2	7.4
13	1.90	9.7	8.8	8.1	7.6	7.2	7.0	7.0	7.0	7.1	7.2	7.4
14	1.95	9.8	8.9	8.4	7.9	7.3	7.1	7.0	7.0	7.1	7.2	7.4
15	2.00	9.8	9.0	8.7	8.3	7.5	7.1	7.0	7.0	7.1	7.2	7.5
16	2.05	9.9	9.3	9.4	9.0	7.9	7.3	7.1	7.1	7.1	7.3	7.6
17	2.10	10.0	9.7	10.5	10.2	8.5	7.5	7.2	7.1	7.2	7.4	7.8
18	2.15	10.4	10.6	12.2	12.1	9.7	8.1	7.4	7.3	7.3	7.6	8.4
19	2.20	11.0	12.2	15.0	15.2	11.8	9.3	8.0	7.6	7.7	8.2	9.5
20	2.25	12.4	14.9	19.2	19.7	15.4	11.7	9.4	8.6	8.6	9.5	11.7
21	2.30	15.2	19.3	25.1	26.0	21.0	16.0	12.5	10.8	10.8	12.4	15.8
22	2.35	20.1	26.1	32.8	34.0	29.1	23.5	18.5	15.8	15.7	18.2	22.8
23	2.40	24.2	31.6	38.7	40.1	35.9	30.1	24.3	20.5	20.3	23.7	29.1
24	2.45	33.3	40.6	46.5	48.1	45.5	41.7	37.2	33.8	33.5	36.3	40.4
25	2.50	43.7	49.2	53.4	54.9	54.2	52.7	50.7	49.0	48.7	49.8	51.4
26	2.55	43.7	49.2	53.4	54.9	54.2	52.7	50.7	49.0	48.7	49.8	51.4
	2.60											
	Total											

APPENDIX 4 - SIMULATION RESULTS FOR CONSTANT SG AND VARIABLE RAW COAL STOCKPILE RATIOS

Targ Ash	7.50				
Max Ash	9.01	SG Max	1.48	Yield Improvement	1.05
Min Ash	6.06	SG Min	1.48	OE Improvement	2.61
Reset					

Days		0.3	0.7	1.0	1.3	1.7	2.0	2.3	2.7	3.0	3.3	3.7	4.0	4.3	4.7	5.0	5.3	5.7	6.0
Shifts		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	47.05	47.05	48.57	47.35	45.73	44.3	44.14	46.12	49.77	53.51	56.19	57.63	57.04	54.15	49.7	44.3	39.66	37.48
Cln Yield	**41.19**	40.3	40.3	38.7	41.2	44.1	46.6	47.2	44.8	39.9	34.6	30.5	27.8	28.6	33.1	39.4	46.6	52.4	54.7
Cln Ash	**7.50**	8.3	8.3	8.0	7.9	7.8	7.6	7.3	7.0	6.7	6.4	6.2	6.1	6.2	6.6	7.1	7.6	8.0	8.4
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.6	1.6	1.5	1.6	1.8	1.9	1.9	1.8	1.6	1.4	1.2	1.1	1.1	1.3	1.6	1.9	2.1	2.2
R1 (<7.5 P Ash)		0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Cum R1		0.0	0.0	0.0	0.0	0.0	0.0	4.0	8.0	12.0	16.0	20.0	24.0	28.0	32.0	36.0	36.0	36.0	36.0
Daily R1 Ash								44.1	46.1	49.8	53.5	56.2	57.6	57.0	54.2	49.7			
Cum R1 Ash		0.0	0.0	0.0	0.0	0.0	0.0	44.1	45.1	46.7	48.4	49.9	51.2	52.1	52.3	52.0	52.0	52.0	52.0
R1 CC Tons		0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.8	1.6	1.4	1.2	1.1	1.1	1.3	1.6	0.0	0.0	0.0
Cum R1 CC Tons		0.0	0.0	0.0	0.0	0.0	0.0	1.9	3.7	5.3	6.7	7.9	9.0	10.1	11.5	13.0	13.0	13.0	13.0
Cum R1 CC Ash		0.0	0.0	0.0	0.0	0.0	0.0	7.3	7.2	7.0	6.9	6.8	6.7	6.7	6.6	6.7	6.7	6.7	6.7
Cum R1 Yield		0.0	0.0	0.0	0.0	0.0	0.0	47.2	46.0	44.0	41.6	39.4	37.5	36.2	35.8	36.2	36.2	36.2	36.2
R2 (>=7.5 P Ash)		4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0
Cum to R2		4.0	8.0	12.0	16.0	20.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	28.0	32.0	36.0
Daily R2 Ash		47.1	47.1	48.6	47.3	45.7	44.3										44.3	39.7	37.5
Cum R2 Ash		47.1	47.1	47.6	47.5	47.2	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.3	45.5	44.6
R2 CC Tons		1.6	1.6	1.5	1.6	1.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.1	2.2
Cum R2 CC Tons		1.6	3.2	4.8	6.4	8.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.9	14.0	16.2
Cum R2 CC Ash		8.3	8.3	8.2	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.9	7.9	8.0
Cum R2 Yield		40.3	40.3	39.8	40.1	40.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	42.5	43.8	45.0
R1 Bal Tons		0.0	0.0	0.0	0.0	0.0	0.0	4.0	5.1	7.0	9.2	11.7	14.2	16.8	19.4	21.9	20.4	19.3	17.8
R1 Ash		0.0	0.0	0.0	0.0	0.0	0.0	44.1	45.7	48.0	50.4	52.4	53.9	54.6	54.5	53.6	53.6	53.6	53.6
R1 CC Bal Tons		0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.3	3.0	3.6	4.2	4.8	5.4	6.3	7.4	6.9	6.5	6.0
R1 CC Ash		0.0	0.0	0.0	0.0	0.0	0.0	7.3	7.1	6.9	6.7	6.6	6.4	6.4	6.4	6.6	6.6	6.6	6.6
R1 Yield		0.0	0.0	0.0	0.0	0.0	0.0	47.2	45.3	42.2	38.9	36.0	33.7	32.5	32.6	33.8	33.8	33.8	33.8
R2 Bal Tons		4.0	8.0	12.0	16.0	20.0	24.0	24.0	22.9	21.0	18.8	16.3	13.8	11.2	8.6	6.1	7.6	8.7	10.2
R2 Ash		47.1	47.1	47.6	47.5	47.2	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	45.4	42.8	40.7
R2 CC Bal Tons		1.6	3.2	4.8	6.4	8.2	10.0	10.0	9.6	8.8	7.9	6.8	5.8	4.7	3.6	2.6	3.4	4.2	5.2
R2 CC Ash		8.3	8.3	8.2	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.8	7.9	8.1
R2 Yield		40.3	40.3	39.8	40.1	40.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	44.3	48.0	50.6
R1 Feed Tons								2.9	2.1	1.8	1.6	1.5	1.4	1.4	1.5	1.5	1.1	1.5	2.0
R1 Feed Ash								44.1	45.7	48.0	50.4	52.4	53.9	54.6	54.5	53.6	53.6	53.6	53.6
R2 Feed Tons								1.1	1.9	2.2	2.4	2.5	2.6	2.6	2.5	2.5	2.9	2.5	2.0
R2 Feed Ash								46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	45.4	42.8	40.7
Plant Feed Tons								4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Plant Feed Ash								44.8	46.2	47.3	48.1	48.8	49.2	49.5	49.5	49.4	47.6	46.9	47.1
Plant Yield								45.7	43.7	42.0	40.7	39.7	38.9	38.5	38.5	38.8	41.5	42.7	42.4
Plant Clean Tons								1.8	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.6	1.7	1.7	1.7
Plant Clean Ash								7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
CC Stockpile Tons								1.8	3.6	5.3	6.9	8.5	10.0	11.6	13.1	14.7	16.3	18.0	19.7

Targ Ash	7.50																			
Max Ash	9.01																			
Min Ash	6.06																			
Reset																				
Days		6.3	6.7	7.0	7.3	7.7	8.0	8.3	8.7	9.0	9.3	9.7	10.0	10.3	10.7	11.0	11.3	11.7	12.0	12.3
Shifts		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	37.98	40.05	43.92	48.57	50.17	49.19	47.78	46.42	46.12	47.68	50.71	53.79	55.96	57.04	56.1	52.7	47.78	42.11	37.48
Cln Yield	**41.19**	53.4	50.0	44.7	38.7	37.0	39.1	41.7	44.1	44.8	42.9	38.7	34.3	30.8	28.6	29.8	34.9	41.7	49.1	54.7
Cln Ash	**7.50**	8.6	8.8	8.5	8.0	7.7	7.6	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.2	6.4	6.9	7.4	7.9	8.4
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		2.1	2.0	1.8	1.5	1.5	1.6	1.7	1.8	1.8	1.7	1.5	1.4	1.2	1.1	1.2	1.4	1.7	2.0	2.2
R1 (<7.5 P Ash)		0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0
Cum R1		36.0	36.0	36.0	36.0	36.0	36.0	40.0	44.0	48.0	52.0	56.0	60.0	64.0	68.0	72.0	76.0	80.0	80.0	80.0
Daily R1 Ash								47.8	46.4	46.1	47.7	50.7	53.8	56.0	57.0	56.1	52.7	47.8		
Cum R1 Ash		52.0	52.0	52.0	52.0	52.0	52.0	51.6	51.1	50.7	50.5	50.5	50.7	51.0	51.4	51.7	51.7	51.5	51.5	51.5
R1 CC Tons		0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.8	1.8	1.7	1.5	1.4	1.2	1.1	1.2	1.4	1.7	0.0	0.0
Cum R1 CC Tons		13.0	13.0	13.0	13.0	13.0	13.0	14.7	16.5	18.3	20.0	21.5	22.9	24.1	25.3	26.5	27.9	29.5	29.5	29.5
Cum R1 CC Ash		6.7	6.7	6.7	6.7	6.7	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.7	6.7	6.7	6.8	6.8	6.8
Cum R1 Yield		36.2	36.2	36.2	36.2	36.2	36.2	36.8	37.4	38.0	38.4	38.4	38.2	37.7	37.2	36.7	36.6	36.9	36.9	36.9
R2 (>=7.5 P Ash)		4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0
Cum to R2		40.0	44.0	48.0	52.0	56.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	64.0	68.0
Daily R2 Ash		38.0	40.1	43.9	48.6	50.2	49.2												42.1	37.5
Cum R2 Ash		43.9	43.6	43.6	44.0	44.4	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.6	44.2
R2 CC Tons		2.1	2.0	1.8	1.5	1.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.2
Cum R2 CC Tons		18.3	20.3	22.1	23.7	25.1	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	28.7	30.9
Cum R2 CC Ash		8.1	8.1	8.2	8.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Cum R2 Yield		45.8	46.2	46.1	45.5	44.9	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.8	45.4
R1 Bal Tons		15.8	13.6	11.2	8.8	6.5	4.4	6.5	7.8	9.0	10.5	12.2	14.1	16.1	18.2	20.3	22.4	24.5	22.4	20.5
R1 Ash		53.6	53.6	53.6	53.6	53.6	53.6	50.0	48.2	47.3	47.4	48.5	50.0	51.5	52.7	53.4	53.3	52.4	52.4	52.4
R1 CC Bal Tons		5.3	4.6	3.8	3.0	2.2	1.5	2.5	3.2	3.9	4.5	5.1	5.5	6.0	6.4	7.0	7.7	8.7	8.0	7.3
R1 CC Ash		6.6	6.6	6.6	6.6	6.6	6.6	7.1	7.2	7.1	7.0	6.9	6.7	6.6	6.6	6.5	6.6	6.8	6.8	6.8
R1 Yield		33.8	33.8	33.8	33.8	33.8	33.8	38.7	41.4	42.9	42.9	41.5	39.5	37.3	35.4	34.3	34.4	35.6	35.6	35.6
R2 Bal Tons		12.2	14.4	16.8	19.2	21.5	23.6	21.5	20.2	19.0	17.5	15.8	13.9	11.9	9.8	7.7	5.6	3.5	5.6	7.5
R2 Ash		39.8	39.9	40.8	42.5	43.9	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	42.9	40.0
R2 CC Bal Tons		6.3	7.4	8.3	9.1	9.7	10.4	9.5	8.9	8.4	7.8	7.0	6.2	5.3	4.4	3.4	2.5	1.6	2.7	3.8
R2 CC Ash		8.3	8.4	8.4	8.4	8.3	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.0	8.2
R2 Yield		51.5	51.1	49.6	47.3	45.4	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	47.7	51.5
R1 Feed Tons		2.2	2.4	2.4	2.3	2.1	1.9	2.7	2.8	2.6	2.3	2.1	2.0	1.9	1.9	1.9	1.9	2.1	1.9	2.3
R1 Feed Ash		53.6	53.6	53.6	53.6	53.6	53.6	50.0	48.2	47.3	47.4	48.5	50.0	51.5	52.7	53.4	53.3	52.4	52.4	52.4
R2 Feed Tons		1.8	1.6	1.6	1.7	1.9	2.1	1.3	1.2	1.4	1.7	1.9	2.0	2.1	2.1	2.1	2.1	1.9	2.1	1.7
R2 Feed Ash		39.8	39.9	40.8	42.5	43.9	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	42.9	40.0
Plant Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Plant Feed Ash		47.6	48.1	48.5	48.8	49.0	49.0	48.3	47.2	46.4	46.3	46.7	47.4	48.0	48.5	48.8	48.9	48.7	47.4	47.2
Plant Yield		41.6	40.8	40.2	39.7	39.3	39.3	40.5	42.3	43.4	43.5	42.9	41.9	41.0	40.1	39.6	39.5	39.8	42.0	42.2
Plant Clean Tons		1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.7	1.7
Plant Clean Ash		7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
CC Stockpile Ton:		21.4	23.0	24.6	26.2	27.8	29.4	31.0	32.7	34.4	36.2	37.9	39.6	41.2	42.8	44.4	46.0	47.6	49.2	50.9

Targ Ash	7.50
Max Ash	9.01
Min Ash	6.06
Reset	

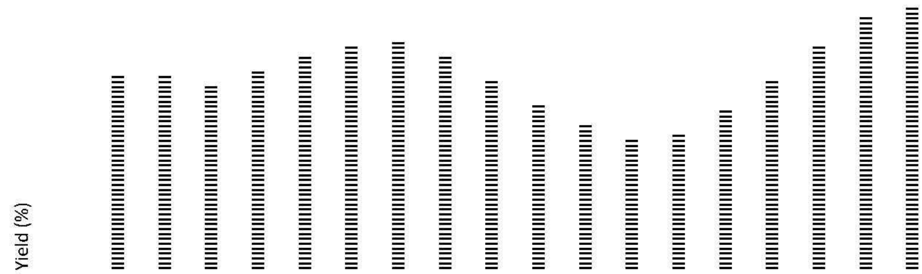
Days		12.7	13.0	13.3	13.7	14.0	14.3	14.7	15.0	15.3	15.7	16.0	16.3	16.7	17.0	17.3	17.7	18.0	18.3	18.7
Shifts		38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	35.5	36.22	40.05	45.57	50.17	51.82	51.01	49.7	48.29	47.68	48.69	51.03	53.51	55.26	56.1	54.87	51.01	45.73	39.96
Cln Yield	**41.19**	56.6	55.0	50.0	43.1	37.0	35.1	37.0	39.4	41.8	42.9	41.6	38.3	34.6	31.7	29.8	31.3	37.0	44.1	51.4
Cln Ash	**7.50**	8.7	8.9	8.8	8.2	7.7	7.3	7.2	7.1	6.9	6.8	6.7	6.5	6.4	6.4	6.4	6.7	7.2	7.8	8.3
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		2.3	2.2	2.0	1.7	1.5	1.4	1.5	1.6	1.7	1.7	1.7	1.5	1.4	1.3	1.2	1.3	1.5	1.8	2.1
R1 (<7.5 P Ash)		0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0
Cum R1		80.0	80.0	80.0	80.0	80.0	84.0	88.0	92.0	96.0	100.0	104.0	108.0	112.0	116.0	120.0	124.0	128.0	128.0	128.0
Daily R1 Ash							51.8	51.0	49.7	48.3	47.7	48.7	51.0	53.5	55.3	56.1	54.9	51.0		
Cum R1 Ash		51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.4	51.3	51.2	51.1	51.1	51.1	51.3	51.4	51.6	51.5	51.5	51.5
R1 CC Tons		0.0	0.0	0.0	0.0	0.0	1.4	1.5	1.6	1.7	1.7	1.7	1.5	1.4	1.3	1.2	1.3	1.5	0.0	0.0
Cum R1 CC Tons		29.5	29.5	29.5	29.5	29.5	30.9	32.4	34.0	35.7	37.4	39.0	40.6	41.9	43.2	44.4	45.7	47.1	47.1	47.1
Cum R1 CC Ash		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Cum R1 Yield		36.9	36.9	36.9	36.9	36.9	36.8	36.8	36.9	37.1	37.4	37.5	37.6	37.5	37.3	37.0	36.8	36.8	36.8	36.8
R2 (>=7.5 P Ash)		4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0
Cum to R2		72.0	76.0	80.0	84.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	92.0	96.0
Daily R2 Ash		35.5	36.2	40.1	45.6	50.2													45.7	40.0
Cum R2 Ash		43.7	43.3	43.1	43.3	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.7	43.5
R2 CC Tons		2.3	2.2	2.0	1.7	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.1
Cum R2 CC Tons		33.1	35.3	37.3	39.0	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	42.3	44.3
Cum R2 CC Ash		8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Cum R2 Yield		46.0	46.5	46.7	46.5	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.2
R1 Bal Tons		18.2	15.6	12.8	10.1	7.4	8.9	10.0	11.0	12.0	13.1	14.4	15.9	17.4	19.1	20.7	22.4	24.0	21.5	19.6
R1 Ash		52.4	52.4	52.4	52.4	52.4	52.1	51.7	51.0	50.1	49.3	49.2	49.6	50.5	51.5	52.4	52.8	52.5	52.5	52.5
R1 CC Bal Tons		6.5	5.5	4.6	3.6	2.6	3.1	3.6	4.1	4.6	5.3	5.8	6.3	6.7	7.1	7.4	7.8	8.5	7.6	6.9
R1 CC Ash		6.8	6.8	6.8	6.8	6.8	7.0	7.1	7.1	7.0	7.0	6.9	6.8	6.7	6.7	6.6	6.6	6.7	6.7	6.7
R1 Yield		35.6	35.6	35.6	35.6	35.6	35.4	36.0	37.2	38.8	40.0	40.4	39.9	38.7	37.2	35.8	35.0	35.3	35.3	35.3
R2 Bal Tons		9.8	12.4	15.2	17.9	20.6	19.1	18.0	17.0	16.0	14.9	13.6	12.1	10.6	8.9	7.3	5.6	4.0	6.5	8.4
R2 Ash		38.2	37.5	38.2	39.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	44.3	42.2
R2 CC Bal Tons		5.3	6.7	8.0	9.1	9.9	9.2	8.7	8.2	7.7	7.1	6.5	5.8	5.1	4.3	3.5	2.7	1.9	3.0	4.0
R2 CC Ash		8.4	8.6	8.6	8.6	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.0	8.2
R2 Yield		53.6	54.0	52.9	50.7	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	45.6	48.4
R1 Feed Tons		2.6	2.8	2.8	2.7	2.5	2.9	3.0	3.0	2.9	2.7	2.6	2.4	2.4	2.3	2.3	2.4	2.5	1.9	2.2
R1 Feed Ash		52.4	52.4	52.4	52.4	52.4	52.1	51.7	51.0	50.1	49.3	49.2	49.6	50.5	51.5	52.4	52.8	52.5	52.5	52.5
R2 Feed Tons		1.4	1.2	1.2	1.3	1.5	1.1	1.0	1.0	1.1	1.3	1.4	1.6	1.6	1.7	1.7	1.6	1.5	2.1	1.8
R2 Feed Ash		38.2	37.5	38.2	39.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	44.3	42.2
Plant Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Plant Feed Ash		47.4	47.8	48.0	48.2	48.4	49.3	49.2	48.6	47.7	46.9	46.5	46.6	47.0	47.5	48.0	48.4	48.5	48.2	47.8
Plant Yield		41.8	41.3	40.9	40.6	40.2	38.9	39.0	40.0	41.4	42.6	43.2	43.1	42.5	41.7	40.9	40.3	40.2	40.8	41.3
Plant Clean Tons		1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.7
Plant Clean Ash		7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
CC Stockpile Ton:		52.6	54.2	55.9	57.5	59.1	60.7	62.2	63.8	65.5	67.2	68.9	70.6	72.3	74.0	75.6	77.3	78.9	80.5	82.2

Targ Ash	7.50
Max Ash	9.01
Min Ash	6.06
Reset	

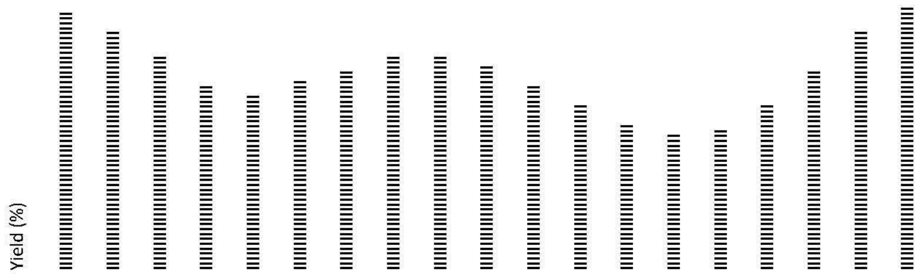
Days		19.0	19.3	19.7	20.0	20.3	20.7	21.0	21.3	21.7	22.0	22.3	22.7	23.0	23.3	23.7
Shifts		57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	35.5	33.76	36.22	41.79	47.35	51.82	53.41	52.7	51.38	49.77	48.69	49.04	50.71	52.69	54.15
Cln Yield	41.19	56.6	58.1	55.0	48.3	41.2	35.1	33.2	34.9	37.3	39.9	41.6	41.1	38.7	35.7	33.1
Cln Ash	**7.50**	8.7	9.0	8.9	8.5	7.9	7.3	7.0	6.9	6.8	6.7	6.7	6.6	6.6	6.6	6.6
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		2.3	2.3	2.2	1.9	1.6	1.4	1.3	1.4	1.5	1.6	1.7	1.6	1.5	1.4	1.3
R1 (<7.5 P Ash)		0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Cum R1		128.0	128.0	128.0	128.0	128.0	132.0	136.0	140.0	144.0	148.0	152.0	156.0	160.0	164.0	168.0
Daily R1 Ash							51.8	53.4	52.7	51.4	49.8	48.7	49.0	50.7	52.7	54.2
Cum R1 Ash		51.5	51.5	51.5	51.5	51.5	51.5	51.6	51.6	51.6	51.6	51.5	51.4	51.4	51.5	51.5
R1 CC Tons		0.0	0.0	0.0	0.0	0.0	1.4	1.3	1.4	1.5	1.6	1.7	1.6	1.5	1.4	1.3
Cum R1 CC Tons		47.1	47.1	47.1	47.1	47.1	48.5	49.9	51.3	52.8	54.4	56.0	57.7	59.2	60.6	62.0
Cum R1 CC Ash		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Cum R1 Yield		36.8	36.8	36.8	36.8	36.8	36.8	36.7	36.6	36.6	36.7	36.9	37.0	37.0	37.0	36.9
R2 (>=7.5 P Ash)		4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum to R2		100.0	104.0	108.0	112.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0
Daily R2 Ash		35.5	33.8	36.2	41.8	47.3										
Cum R2 Ash		43.2	42.8	42.6	42.6	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
R2 CC Tons		2.3	2.3	2.2	1.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum R2 CC Tons		46.6	48.9	51.1	53.1	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
Cum R2 CC Ash		8.2	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
Cum R2 Yield		46.6	47.0	47.3	47.4	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
R1 Bal Tons		17.5	15.0	12.2	9.5	6.7	8.1	9.1	10.0	11.1	12.3	13.6	15.0	16.4	17.9	19.5
R1 Ash		52.5	52.5	52.5	52.5	52.5	52.2	52.7	52.7	52.2	51.4	50.6	50.2	50.3	50.8	51.5
R1 CC Bal Tons		6.2	5.3	4.3	3.3	2.4	2.8	3.1	3.5	3.9	4.5	5.2	5.8	6.4	6.9	7.2
R1 CC Ash		6.7	6.7	6.7	6.7	6.7	7.0	7.0	7.0	6.9	6.8	6.8	6.7	6.7	6.7	6.6
R1 Yield		35.3	35.3	35.3	35.3	35.3	35.2	34.3	34.5	35.5	37.0	38.3	39.1	39.0	38.3	37.2
R2 Bal Tons		10.5	13.0	15.8	18.5	21.3	19.9	18.9	18.0	16.9	15.7	14.4	13.0	11.6	10.1	8.5
R2 Ash		39.6	37.8	37.4	38.4	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
R2 CC Bal Tons		5.4	7.0	8.5	9.8	10.8	10.1	9.6	9.1	8.5	7.9	7.3	6.6	5.8	5.1	4.3
R2 CC Ash		8.4	8.6	8.7	8.6	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
R2 Yield		51.5	53.5	53.9	52.7	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
R1 Feed Tons		2.5	2.7	2.8	2.7	2.6	3.0	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.5	2.5
R1 Feed Ash		52.5	52.5	52.5	52.5	52.5	52.2	52.7	52.7	52.2	51.4	50.6	50.2	50.3	50.8	51.5
R2 Feed Tons		1.5	1.3	1.2	1.3	1.4	1.0	1.0	1.1	1.2	1.3	1.4	1.5	1.5	1.5	1.5
R2 Feed Ash		39.6	37.8	37.4	38.4	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
Plant Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Plant Feed Ash		47.7	47.9	48.0	48.1	48.2	49.2	49.6	49.4	48.7	47.8	46.9	46.5	46.4	46.7	47.2
Plant Yield		41.4	41.1	40.9	40.8	40.6	38.9	38.2	38.8	39.9	41.4	42.6	43.3	43.4	42.9	42.2
Plant Clean Tons		1.7	1.6	1.6	1.6	1.6	1.6	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7
Plant Clean Ash		7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
CC Stockpile Ton:		83.8	85.5	87.1	88.7	90.3	91.9	93.4	95.0	96.6	98.2	99.9	101.7	103.4	105.1	106.8

Targ Ash 7.50
Max Ash 9.01
Min Ash 6.06
Reset

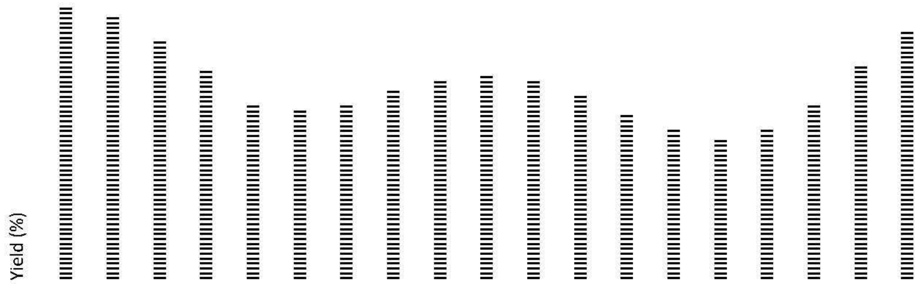
Days		24.0	24.3	24.7	25.0	25.3	25.7	26.0	26.3	26.7	27.0	27.3	27.7	28.0	28.3	28.7	29.0	29.3	29.7	30.0
Shifts		72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
SG50	**1.48**	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Feed Ash	**47.83**	54.87	53.41	49.19	43.71	37.98	33.76	33.76	37.98	43.71	49.19	53.41	54.87	54.15	52.69	50.71	49.04	48.69	49.77	51.38
Cln Yield	**41.19**	31.3	33.2	39.1	46.3	53.4	58.1	58.1	53.4	46.3	39.1	33.2	31.3	33.1	35.7	38.7	41.1	41.6	39.9	37.3
Cln Ash	**7.50**	6.7	7.0	7.6	8.1	8.6	9.0	9.0	8.6	8.1	7.6	7.0	6.7	6.6	6.6	6.6	6.6	6.7	6.7	6.8
Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clean Tons		1.3	1.3	1.6	1.9	2.1	2.3	2.3	2.1	1.9	1.6	1.3	1.3	1.3	1.4	1.5	1.6	1.7	1.6	1.5
R1 (<7.5 P Ash)		4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Cum R1		172.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	180.0	184.0	188.0	192.0	196.0	200.0	204.0	208.0	212.0
Daily R1 Ash		54.9	53.4									53.4	54.9	54.2	52.7	50.7	49.0	48.7	49.8	51.4
Cum R1 Ash		51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.7	51.7	51.8	51.8	51.8	51.7	51.7	51.6	51.6
R1 CC Tons		1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.4	1.5	1.6	1.7	1.6	1.5
Cum R1 CC Tons		63.2	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	65.9	67.1	68.4	69.9	71.4	73.1	74.7	76.3	77.8
Cum R1 CC Ash		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Cum R1 Yield		36.8	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.6	36.5	36.4	36.4	36.4	36.5	36.6	36.7	36.7
R2 (>=7.5 P Ash)		0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum to R2		116.0	116.0	120.0	124.0	128.0	132.0	136.0	140.0	144.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0
Daily R2 Ash				49.2	43.7	38.0	33.8	33.8	38.0	43.7	49.2									
Cum R2 Ash		42.7	42.7	42.9	43.0	42.8	42.5	42.3	42.1	42.2	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4
R2 CC Tons		0.0	0.0	1.6	1.9	2.1	2.3	2.3	2.1	1.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cum R2 CC Tons		54.7	54.7	56.3	58.1	60.3	62.6	64.9	67.0	68.9	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
Cum R2 CC Ash		8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
Cum R2 Yield		47.2	47.2	46.9	46.9	47.1	47.4	47.7	47.9	47.8	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6
R1 Bal Tons		21.0	22.5	19.9	17.9	15.9	13.6	11.0	8.2	5.5	2.9	4.4	5.5	6.8	8.3	9.9	11.5	13.2	14.9	16.6
R1 Ash		52.2	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	53.3	54.5	54.3	53.5	52.4	51.2	50.5	50.3	50.5
R1 CC Bal Tons		7.6	8.0	7.1	6.4	5.6	4.8	3.9	2.9	2.0	1.0	1.5	1.7	2.2	2.8	3.6	4.4	5.1	5.9	6.4
R1 CC Ash		6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	7.0	6.8	6.7	6.6	6.6	6.6	6.6	6.6	6.7
R1 Yield		36.1	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	33.4	31.9	32.6	34.1	36.0	37.8	38.9	39.2	38.7
R2 Bal Tons		7.0	5.5	8.1	10.1	12.1	14.4	17.0	19.8	22.5	25.1	23.6	22.5	21.2	19.7	18.1	16.5	14.8	13.1	11.4
R2 Ash		40.1	40.1	44.5	44.2	42.2	39.8	38.4	38.3	39.3	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
R2 CC Bal Tons		3.5	2.8	3.7	4.6	5.8	7.3	9.0	10.4	11.6	12.5	11.7	11.2	10.5	9.8	9.0	8.2	7.3	6.5	5.7
R2 CC Ash		8.5	8.5	8.1	8.1	8.3	8.5	8.7	8.6	8.6	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
R2 Yield		50.5	50.5	44.9	45.5	48.1	50.9	52.6	52.7	51.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
R1 Feed Tons		2.5	2.6	2.0	2.0	2.3	2.6	2.7	2.7	2.6	2.5	2.9	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.4
R1 Feed Ash		52.2	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	53.3	54.5	54.3	53.5	52.4	51.2	50.5	50.3	50.5
R2 Feed Tons		1.5	1.4	2.0	2.0	1.7	1.4	1.3	1.3	1.4	1.5	1.1	1.4	1.5	1.6	1.7	1.7	1.7	1.7	1.6
R2 Feed Ash		40.1	40.1	44.5	44.2	42.2	39.8	38.4	38.3	39.3	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
Plant Feed Tons		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Plant Feed Ash		47.7	48.1	48.4	48.3	48.1	48.0	48.0	47.9	47.9	48.0	49.9	49.9	49.3	48.5	47.6	46.8	46.4	46.3	46.6
Plant Yield		41.4	40.8	40.3	40.5	40.8	40.9	40.9	41.0	41.0	40.9	37.8	37.9	38.9	40.2	41.6	42.8	43.5	43.6	43.2
Plant Clean Tons		1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7
Plant Clean Ash		7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
CC Stockpile Ton:		108.5	110.1	111.7	113.3	115.0	116.6	118.2	119.9	121.5	123.2	124.7	126.2	127.7	129.3	131.0	132.7	134.5	136.2	137.9



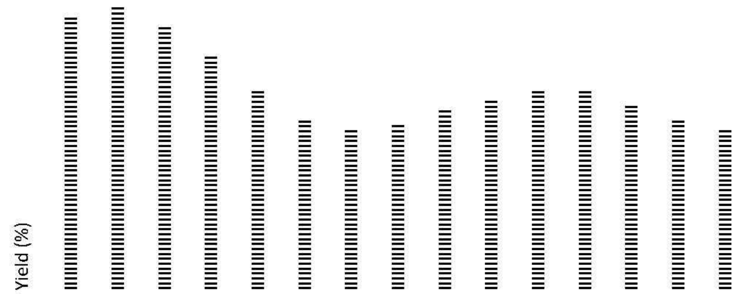
				0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
				180	0	20	40	60	80	100	120	140	160	180	0	20	40	60	80	100
	Coalt2		0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.08
	Rockt2		0.10	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06
	RD	Ash																		
	1.25	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	4.5	25.1	25.1	25.0	26.7	28.8	30.9	32.2	31.7	29.6	26.8	24.4	22.7	23.0	25.2	28.0	30.9	32.7	32.7
2	1.35	10.4	8.1	8.1	7.6	8.4	9.3	9.9	9.9	9.0	7.4	5.7	4.5	3.7	4.0	5.5	7.5	9.9	11.9	12.7
3	1.4	16.0	5.2	5.2	4.7	4.8	5.0	5.0	4.6	3.9	3.0	2.2	1.7	1.5	1.6	2.4	3.5	5.0	6.4	7.3
4	1.45	21.2	3.1	3.1	2.7	2.6	2.5	2.4	2.0	1.6	1.1	0.8	0.6	0.5	0.6	1.0	1.5	2.4	3.3	4.0
5	1.5	26.0	1.9	1.9	1.5	1.4	1.3	1.1	0.9	0.6	0.4	0.3	0.2	0.2	0.2	0.4	0.7	1.1	1.6	2.1
6	1.55	30.5	1.1	1.1	0.8	0.7	0.6	0.5	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.8	1.1
7	1.6	34.8	0.6	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.4	0.6
8	1.65	38.7	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3
9	1.7	42.5	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
10	1.75	46.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
11	1.8	49.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	52.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
13	1.9	55.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
14	1.95	58.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0
15	2	61.0	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0
16	2.05	63.6	0.4	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.5	0.2	0.1	0.0	0.0	0.0
17	2.1	66.0	0.6	0.6	0.6	0.3	0.2	0.1	0.0	0.0	0.1	0.2	0.4	0.8	0.8	0.4	0.2	0.1	0.0	0.0
18	2.15	68.3	1.0	1.0	1.0	0.6	0.3	0.2	0.1	0.1	0.2	0.4	0.7	1.3	1.2	0.7	0.3	0.2	0.1	0.1
19	2.2	70.5	1.7	1.7	1.7	1.1	0.6	0.3	0.2	0.2	0.4	0.7	1.3	2.1	2.1	1.3	0.7	0.3	0.2	0.2
20	2.25	72.7	2.7	2.7	2.8	2.0	1.3	0.8	0.6	0.6	0.9	1.5	2.4	3.4	3.4	2.3	1.4	0.8	0.5	0.5
21	2.3	74.7	4.5	4.5	4.7	3.6	2.6	1.8	1.4	1.4	2.0	3.1	4.4	5.6	5.5	4.2	2.8	1.8	1.2	1.1
22	2.35	76.6	7.3	7.3	7.6	6.5	5.2	4.0	3.4	3.5	4.5	6.1	7.8	9.1	9.0	7.5	5.7	4.0	3.0	2.8
23	2.4	78.5	6.7	6.7	7.1	6.4	5.2	3.8	3.1	3.4	5.0	7.0	8.7	9.6	9.4	8.2	6.1	3.8	2.2	1.7
24	2.45	80.3	12.5	12.5	13.2	13.7	13.7	13.3	13.2	14.0	15.7	17.1	17.5	16.9	16.7	16.6	15.5	13.3	11.1	10.1
25	2.5	82.0	16.1	16.1	16.9	19.7	22.7	25.5	27.8	29.3	29.5	27.8	24.7	21.4	21.1	23.6	25.4	25.5	24.2	22.3
26	2.55	83.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	85.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



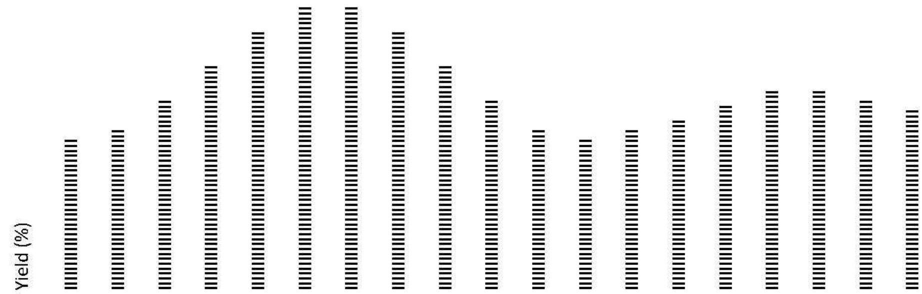
		170	180	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
		120	140	160	180	0	20	40	60	80	100	120	140	160	180	0	20	40	60	80
	Coalt2	0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.08
	Rockt2	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06
	RD																			
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	31.2	29.0	26.9	25.0	24.8	26.5	28.5	30.5	31.7	31.3	29.2	26.7	24.5	23.0	23.3	25.6	28.5	31.2	32.7
2	1.35	12.3	11.2	9.5	7.6	7.1	7.7	8.4	9.0	9.0	8.2	6.9	5.6	4.6	4.0	4.5	6.2	8.4	10.8	12.7
3	1.4	7.5	7.2	6.1	4.7	4.1	4.1	4.2	4.2	3.9	3.3	2.7	2.1	1.8	1.6	1.9	2.9	4.2	5.9	7.3
4	1.45	4.3	4.3	3.7	2.7	2.2	2.1	2.0	1.8	1.6	1.3	1.0	0.8	0.7	0.6	0.8	1.3	2.0	3.0	4.0
5	1.5	2.4	2.6	2.2	1.5	1.2	1.0	0.9	0.8	0.6	0.5	0.4	0.3	0.2	0.2	0.3	0.5	0.9	1.5	2.1
6	1.55	1.4	1.5	1.3	0.8	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.7	1.1
7	1.6	0.8	0.9	0.7	0.5	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.4	0.6
8	1.65	0.4	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3
9	1.7	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
10	1.75	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
11	1.8	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
13	1.9	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
14	1.95	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0
15	2	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0
16	2.05	0.0	0.1	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.5	0.2	0.1	0.0	0.0
17	2.1	0.1	0.1	0.3	0.6	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.2	0.4	0.8	0.7	0.4	0.2	0.1	0.0
18	2.15	0.1	0.3	0.6	1.0	1.1	0.6	0.3	0.2	0.1	0.1	0.2	0.4	0.7	1.2	1.2	0.7	0.3	0.1	0.1
19	2.2	0.3	0.5	1.0	1.7	1.8	1.2	0.7	0.4	0.2	0.2	0.4	0.8	1.3	2.1	2.0	1.3	0.7	0.3	0.2
20	2.25	0.7	1.1	1.8	2.8	2.9	2.1	1.3	0.8	0.6	0.6	0.9	1.5	2.4	3.4	3.3	2.3	1.3	0.7	0.5
21	2.3	1.5	2.2	3.3	4.7	4.8	3.8	2.7	1.9	1.4	1.5	2.0	3.1	4.4	5.5	5.5	4.1	2.7	1.7	1.1
22	2.35	3.3	4.4	5.9	7.6	7.9	6.8	5.4	4.2	3.5	3.7	4.6	6.1	7.8	9.0	8.9	7.3	5.4	3.8	2.8
23	2.4	2.4	3.7	5.4	7.1	7.6	6.9	5.7	4.3	3.4	3.7	5.2	7.1	8.6	9.4	9.2	7.8	5.7	3.3	1.7
24	2.45	10.3	11.0	12.1	13.2	13.9	14.5	14.6	14.3	14.0	14.7	16.1	17.2	17.4	16.7	16.3	16.0	14.6	12.3	10.1
25	2.5	20.5	18.7	17.6	16.9	17.7	20.8	24.1	27.1	29.3	30.5	30.2	27.9	24.6	21.1	20.7	22.8	24.1	23.9	22.3
26	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



		170	180	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
		100	120	140	160	180	0	20	40	60	80	100	120	140	160	180	0	20	40	60
	Coalt2	0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.08
	Rockt2	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06
	RD																			
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	32.5	31.0	29.0	26.9	24.8	24.5	26.1	28.0	30.0	31.3	30.9	29.1	26.8	24.8	23.3	23.8	26.1	28.8	31.2
2	1.35	13.3	12.8	11.2	9.0	7.1	6.4	6.9	7.5	8.1	8.2	7.7	6.7	5.7	4.9	4.5	5.1	6.9	9.3	11.7
3	1.4	8.1	8.2	7.2	5.5	4.1	3.5	3.5	3.5	3.5	3.3	3.0	2.6	2.2	2.0	1.9	2.4	3.5	5.0	6.7
4	1.45	4.7	5.0	4.3	3.2	2.2	1.8	1.6	1.5	1.4	1.3	1.1	0.9	0.8	0.8	0.8	1.0	1.6	2.5	3.6
5	1.5	2.6	2.9	2.6	1.8	1.2	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.8	1.3	1.9
6	1.55	1.5	1.7	1.5	1.0	0.6	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.6	1.0
7	1.6	0.8	1.0	0.9	0.6	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.5
8	1.65	0.5	0.6	0.5	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3
9	1.7	0.3	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
10	1.75	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
11	1.8	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
13	1.9	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
14	1.95	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0
15	2	0.0	0.0	0.0	0.1	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0	0.0
16	2.05	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.4	0.2	0.1	0.0
17	2.1	0.0	0.1	0.1	0.3	0.7	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.2	0.4	0.7	0.7	0.4	0.2	0.1
18	2.15	0.1	0.1	0.3	0.6	1.1	1.1	0.7	0.3	0.2	0.1	0.1	0.2	0.4	0.7	1.2	1.2	0.7	0.3	0.1
19	2.2	0.2	0.3	0.5	1.1	1.8	1.9	1.2	0.7	0.4	0.2	0.3	0.4	0.7	1.3	2.0	2.0	1.2	0.6	0.3
20	2.25	0.4	0.6	1.1	1.9	2.9	3.1	2.2	1.4	0.9	0.6	0.6	0.9	1.5	2.4	3.3	3.2	2.2	1.3	0.7
21	2.3	1.1	1.4	2.2	3.5	4.8	5.0	4.0	2.8	1.9	1.5	1.5	2.1	3.1	4.3	5.5	5.3	4.0	2.6	1.6
22	2.35	2.6	3.1	4.4	6.2	7.9	8.2	7.1	5.7	4.4	3.7	3.7	4.6	6.1	7.7	8.9	8.7	7.1	5.2	3.6
23	2.4	1.3	1.9	3.7	5.9	7.6	8.0	7.4	6.1	4.7	3.7	3.9	5.2	7.0	8.4	9.2	8.9	7.4	5.2	2.8
24	2.45	9.1	9.4	11.0	12.9	13.9	14.6	15.3	15.5	15.1	14.7	15.1	16.2	17.1	17.1	16.3	15.8	15.3	13.7	11.3
25	2.5	20.5	19.0	18.7	18.6	17.7	18.6	21.9	25.4	28.5	30.5	31.3	30.4	27.8	24.2	20.7	20.1	21.9	22.7	22.2
26	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



		170	180	0	10	20	30	40	50	60	70	80	90	100	110	120
		80	100	120	140	160	180	0	20	40	60	80	100	120	140	160
	Coalt2	0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	Rockt2	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08
	RD															
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	32.5	32.3	31.0	29.1	26.7	24.5	24.2	25.6	27.5	29.6	30.9	30.8	29.2	27.1	25.2
2	1.35	13.3	13.8	12.8	10.7	8.4	6.4	5.7	6.2	6.8	7.4	7.7	7.5	6.9	6.1	5.5
3	1.4	8.1	8.9	8.2	6.5	4.8	3.5	2.9	2.9	2.9	3.0	3.0	2.9	2.7	2.5	2.4
4	1.45	4.7	5.3	5.0	3.7	2.6	1.8	1.4	1.3	1.2	1.1	1.1	1.0	1.0	1.0	1.0
5	1.5	2.6	3.2	2.9	2.1	1.4	0.9	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
6	1.55	1.5	1.9	1.7	1.2	0.7	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2
7	1.6	0.8	1.1	1.0	0.7	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
8	1.65	0.5	0.6	0.6	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	1.7	0.3	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	1.75	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	1.8	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	1.9	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	1.95	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
15	2	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
16	2.05	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2
17	2.1	0.0	0.0	0.1	0.1	0.3	0.7	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.2	0.4
18	2.15	0.1	0.1	0.1	0.3	0.6	1.1	1.2	0.7	0.4	0.2	0.1	0.1	0.2	0.4	0.7
19	2.2	0.2	0.2	0.3	0.6	1.1	1.9	1.9	1.3	0.7	0.4	0.3	0.3	0.4	0.7	1.3
20	2.25	0.4	0.4	0.6	1.2	2.0	3.1	3.2	2.3	1.5	0.9	0.6	0.6	0.9	1.5	2.3
21	2.3	1.1	1.0	1.4	2.3	3.6	5.0	5.2	4.1	2.9	2.0	1.5	1.5	2.0	3.0	4.2
22	2.35	2.6	2.5	3.1	4.7	6.5	8.2	8.4	7.3	5.9	4.5	3.7	3.8	4.6	6.0	7.5
23	2.4	1.3	0.9	1.9	4.1	6.4	8.0	8.5	7.8	6.5	5.0	3.9	4.0	5.2	6.8	8.2
24	2.45	9.1	8.2	9.4	11.9	13.7	14.6	15.2	16.0	16.2	15.7	15.1	15.2	16.1	16.8	16.6
25	2.5	20.5	18.9	19.0	20.0	19.7	18.6	19.4	22.8	26.4	29.5	31.3	31.6	30.2	27.3	23.6
26	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



		130	140	150	160	170	180	0	10	20	30	40	50	60	70	80	90	100	110	120
		180	0	20	40	60	80	100	120	140	160	180	0	20	40	60	80	100	120	140
	Coalt2	0.06	0.06	0.07	0.08	0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	Rockt2	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.08	0.07	0.06	0.06	0.06	0.06	0.07
	RD																			
	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	1.3	23.8	24.2	26.5	29.0	31.2	32.3	32.3	31.2	29.0	26.5	24.2	23.8	25.2	27.1	29.2	30.8	30.9	29.6	27.5
2	1.35	5.1	5.7	7.7	10.0	12.3	13.8	13.8	12.3	10.0	7.7	5.7	5.1	5.5	6.1	6.9	7.5	7.7	7.4	6.8
3	1.4	2.4	2.9	4.1	5.8	7.5	8.9	8.9	7.5	5.8	4.1	2.9	2.4	2.4	2.5	2.7	2.9	3.0	3.0	2.9
4	1.45	1.0	1.4	2.1	3.1	4.3	5.3	5.3	4.3	3.1	2.1	1.4	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.2
5	1.5	0.4	0.6	1.0	1.7	2.4	3.2	3.2	2.4	1.7	1.0	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
6	1.55	0.2	0.3	0.5	0.9	1.4	1.9	1.9	1.4	0.9	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2
7	1.6	0.1	0.1	0.3	0.5	0.8	1.1	1.1	0.8	0.5	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
8	1.65	0.0	0.1	0.1	0.2	0.4	0.6	0.6	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	1.7	0.0	0.0	0.1	0.1	0.2	0.4	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	1.75	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	1.8	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.85	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	1.9	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	1.95	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15	2	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
16	2.05	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1
17	2.1	0.7	0.7	0.4	0.1	0.1	0.0	0.0	0.1	0.1	0.4	0.7	0.7	0.4	0.2	0.1	0.0	0.0	0.1	0.2
18	2.15	1.2	1.2	0.6	0.3	0.1	0.1	0.1	0.1	0.3	0.6	1.2	1.2	0.7	0.4	0.2	0.1	0.1	0.2	0.4
19	2.2	2.0	1.9	1.2	0.6	0.3	0.2	0.2	0.3	0.6	1.2	1.9	2.0	1.3	0.7	0.4	0.3	0.3	0.4	0.7
20	2.25	3.2	3.2	2.1	1.2	0.7	0.4	0.4	0.7	1.2	2.1	3.2	3.2	2.3	1.5	0.9	0.6	0.6	0.9	1.5
21	2.3	5.3	5.2	3.8	2.5	1.5	1.0	1.0	1.5	2.5	3.8	5.2	5.3	4.2	3.0	2.0	1.5	1.5	2.0	2.9
22	2.35	8.7	8.4	6.8	4.9	3.3	2.5	2.5	3.3	4.9	6.8	8.4	8.7	7.5	6.0	4.6	3.8	3.7	4.5	5.9
23	2.4	8.9	8.5	6.9	4.6	2.4	0.9	0.9	2.4	4.6	6.9	8.5	8.9	8.2	6.8	5.2	4.0	3.9	5.0	6.5
24	2.45	15.8	15.2	14.5	12.8	10.3	8.2	8.2	10.3	12.8	14.5	15.2	15.8	16.6	16.8	16.1	15.2	15.1	15.7	16.2
25	2.5	20.1	19.4	20.8	21.3	20.5	18.9	18.9	20.5	21.3	20.8	19.4	20.1	23.6	27.3	30.2	31.6	31.3	29.5	26.4
26	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.25	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.35	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1.45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.50	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
1.55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0