2016 Engineering Assessments of Coal Combustion Residual (CCR) Facilities, Intermountain Power Plant

Prepared for
Intermountain Power Service Corporation (IPSC)
October 17, 2016

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1.1 GENERAL

This document presents engineering assessments of coal combustion residual (CCR) facilities at the Intermountain Power Plant (IPP), near Delta, Utah (see Figure 1-1). These assessments are generally made pursuant to the following sections/paragraphs of Code of Federal Regulations (CFR) Title 40 "Protection of Environment", Part 257 "Criteria for Classification of Solid Waste Disposal Facilities and Practices," Subpart D "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments":

- 257.71: Liner Design Criteria for Existing CCR Surface Impoundments
- 257.73(c) through 257.73(e): Structural Integrity Criteria for Existing CCR Surface Impoundments
- 257.81: Run-on and Run-off Controls for CCR Landfills
- 257.82: Hydrologic and Hydraulic Capacity Requirements for CCR Surface Impoundments

The Intermountain Power Plant is owned by Intermountain Power Agency (IPA) and operated by Intermountain Power Service Corporation (IPSC). Existing CCR surface impoundments at the facility include the Bottom Ash Basin and the Waste Water Basin. Existing facilities also include a CCR landfill, referred to as the Combustion By-Products Landfill. These CCR units are shown in Figure 1-2.

The Bottom Ash Basin was commissioned in 1986. The Bottom Ash Basin receives bottom ash sluiced from the boilers and the boiler area sump. The Basin also provides decant water to the ash water recycle basin for reuse in the ash water system and the sulfur dioxide removal system. The major sources of materials placed in the basin are the bottom ash, boiler slag, and other process materials including pulverized rejects, and chemical clean residue.

The Waste Water Basin was commissioned in 1986. The major sources of materials placed in the basin include flue gas emission control residuals and other process material including process water separated for re-use, wash down, coal pile run-off, boiler blowdown, cooling tower blowdown, regenerant, rinsate, leachate from bottom ash, boiler slag, and pulverizer rejects. After solids have settled, the water is reused.

The Combustion By-Products Landfill was commissioned in 1986. The major sources of materials placed in the landfill include dewatered blowdown from the scrubbers mixed with fly ash from the baghouse, and settled-out solids from both the Bottom Ash Basin and Waste Water Basin.

In the context of Title 40, Part 257 requirements, the Intermountain Power Plant (IPP) does not discharge water to any waterway and is not located on any waterway.

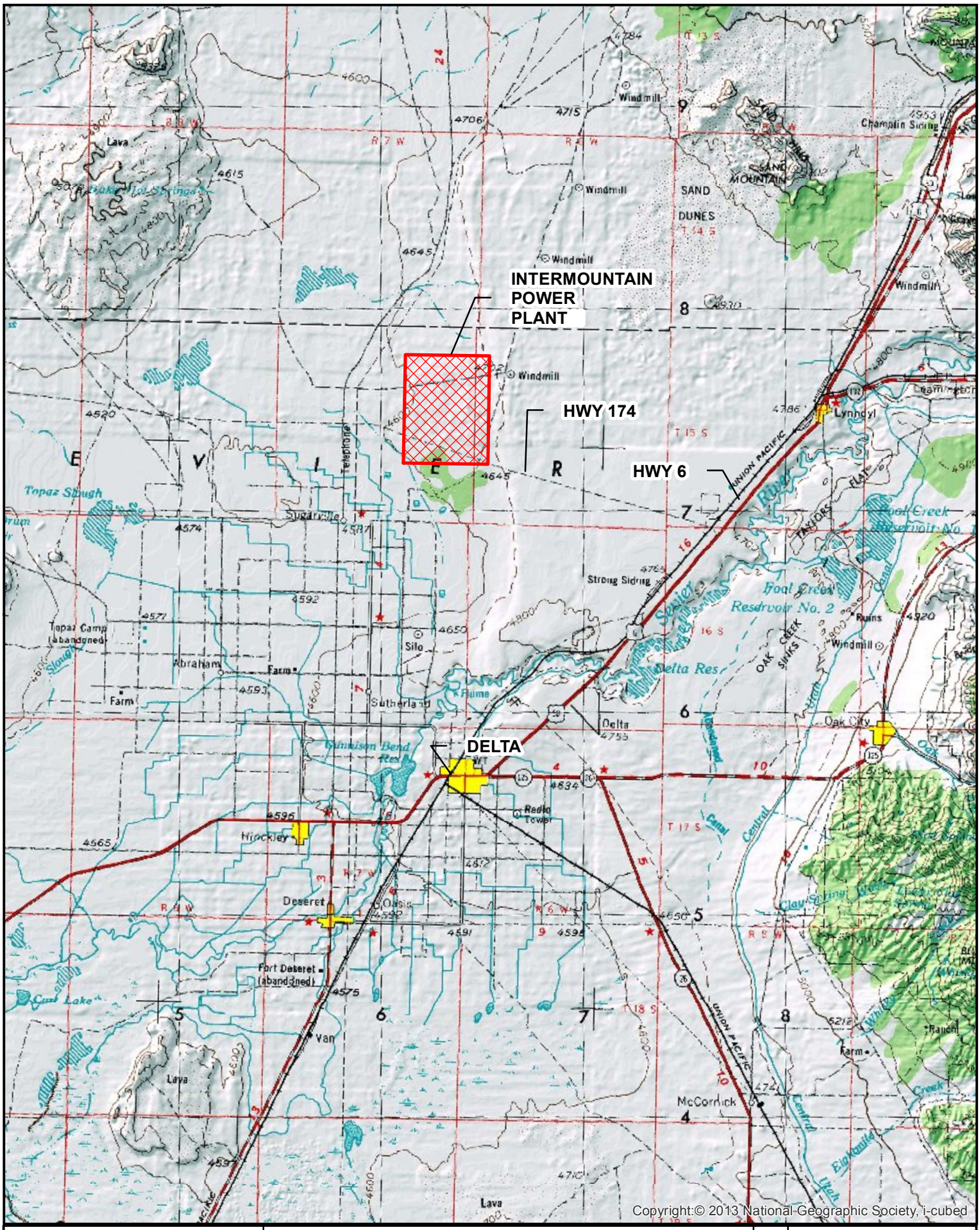
1.2 PURPOSE, AUTHORIZATION, AND SCOPE OF WORK

This report presents the results of engineering assessments performed by Gerhart Cole Inc. (GCI) for IPSC in response to new federal requirements pertaining to the disposal of coal combustion residuals (CCR), pursuant to CFR Title 40, Part 257.

Subjects of the assessments are the Bottom Ash Basin, the Waste Water Basin, and the Combustion By-Products Landfill.

1.3 REFERENCES TO CFR

To facilitate its use, this document references specific sections, paragraphs and clauses of CFR Title 40, Part 257, using the Title's nomenclature such as 257.73(c)(1)(i).



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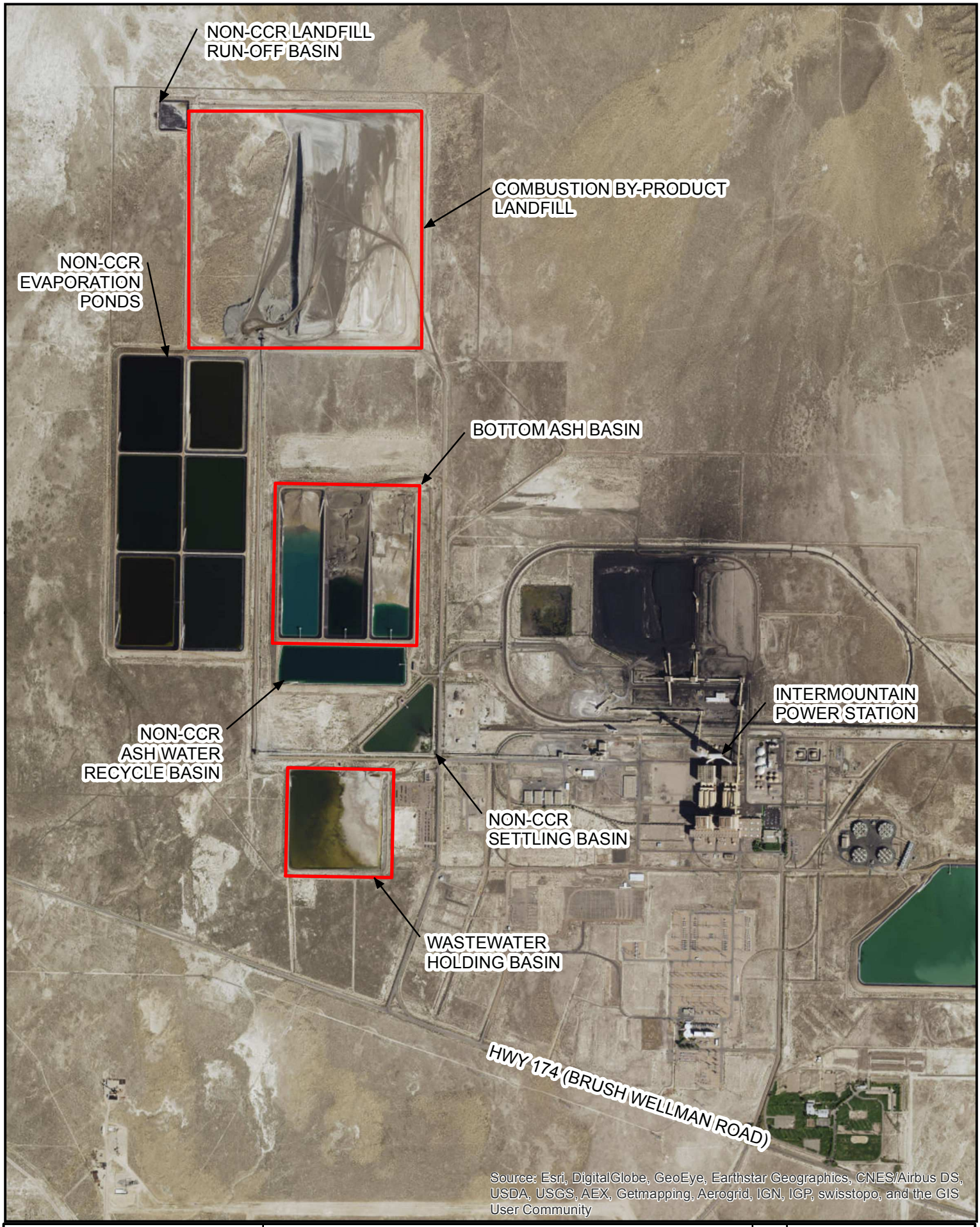
Assessment of Coal Combustion Residual Facilities

Intermountain Power Plant

N

0 5,000 10,000 20,000 Feet

Figure 1-1



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Assessment of Coal Combustion Residual Facilities

Intermountain Power Plant

N

0 500 1,000 2,000 Feet

Figure 1-2

2.1 BOTTOM ASH BASIN – LINER DESIGN [257.71]

The Bottom Ash Basin is lined with a high density polyethylene (HDPE) geomembrane. Where originally installed, the geomembrane is nominally 80 mils thick. In repaired areas, the geomembrane is 60 mils thick. This membrane rests directly on embankment material, without a discrete, underlying secondary seepage barrier component.

The upper portion of the embankment itself is fill (borrow) material derived from on-site native soils, which, based on test holes drilled in the embankment, generally consist of Clayey Sand (SC, SP-SC) and Poorly graded Sand (SP). Lower portions of the embankment consists of native, in-place (non-fill) soils, which, based on test holes drilled in the embankment, generally classify as Poorly graded Sand (SP) and Silty Sand (SM). At depth below the floor of the basin, there are various strata, including a fairly continuous layer of Sandy Lean Clay (CL).

Based on the types of soil present in the embankment, any composite behavior of soils beneath the geomembrane is anticipated to present a liquid flow rate greater than that of two feet of compacted soil with a hydraulic conductivity not exceeding 1×10^{-7} cm/sec. Consequently, this CCR unit is considered under Part 257 to be an existing unlined surface impoundment.

2.2 BOTTOM ASH BASIN – STRUCTURAL INTEGRITY [257.73]

2.2.1 General [Portions of 257.73(a) through (c)]

2.2.1.1 Hazard Classification

The Bottom Ash Basin is constructed using a combination of above ground embankment/dike and below original grade incision. Accordingly, this unit is not considered an incised CCR unit.

The Bottom Ash Basin covers approximately 105 acres and has a nominal capacity of 3,000 acre-feet without accounting for freeboard, with a maximum design depth of 46 feet (actual maximum 2016 survey depth of 47 feet).

This CCR unit classifies as a Low Hazard Potential CCR surface impoundment. This classification reflects the classification provided by the Utah Department of Natural Resources, Division of Water Rights, Dam Safety Section, which considers low hazard dams to be those dams which, if they fail, would cause minimal threat to human life, and economic losses would be minor, or limited to damage sustained by the owner of the structure. This corresponds to the Title 40, Part 257 definition of Low Hazard Potential. The classification is assessed on a periodic (5-year) basis as part of the State's inspection and review process, for which we understand a site inspection was last undertaken April 29, 2014. GCI concurs with this classification and is of the opinion that the classification is in accordance with the requirements of 257.73.

It should be noted that detailed inspections of the units are performed annually by licensed professional engineers, and routine inspections of the CCR impoundments are also performed at intervals not exceeding seven days.

With its inherently adverse high desert climate (i.e. hot dry summers and cold winters), this unit has sparse vegetation with some areas of bare earth. GCI understands that IPSC has worked to establish and re-establish this vegetation.

2.2.1.2 Additional Descriptions of Unit

This CCR unit is owned by Intermountain Power Agency (IPA) and operated by Intermountain Power Service Corporation (IPSC). It is officially identified as Intermountain Power Bottom Ash Basin (UT00463).

This CCR unit is located approximately 11 miles north of Delta, Utah, in Millard County, Utah, at approximately latitude 39.51832 degrees North, Longitude -112.60009 degrees West, as shown in Figure 1-1. Figure 1-2 shows CCR facilities at the IPP at a larger scale.

The CCR unit is being used to dewater/decant bottom ash slurry from the boilers and the boiler area sump via settlement and evaporation.

This CCR unit is situated in the Sevier River Watershed, more specifically USGS hydrologic unit (HUC) 16030005, Lower Sevier. Per the National Resource Conservation Service (NRCS), the Lower Sevier hydrologic unit comprises approximately 4,094 square miles, or about 2,620,563 acres.

Construction records for this CCR unit are sparse. Based on available information, construction of the Intermountain Power Plant began in about September 1981. Available drawings for the facility's impoundment/ponds and embankments are dated 1983, and the unit was commissioned in 1986. It is believed that the unit was built in a single stage of construction.

As stated previously, the upper portion of the Bottom Ash Basin embankment is constructed of compacted fill (borrow) material consisting of on-site native soils which, based on test holes drilled in the embankment, generally consist of Clayey Sand (SC, SP-SC) and Poorly graded Sand (SP). The lower portion of the embankment consists of native, in-place (non-fill) soils which, based on test holes drilled in the embankment, generally classify as Poorly graded Sand (SP) and Silty Sand (SM). At depth below the floor of the basin, there are various strata, including a fairly continuous layer of Sandy Lean Clay (CL). Other than the fill and natural portions of the embankment, there appears to be no explicit zonation of materials or special foundation treatments.

Additional information regarding the physical and/or engineering properties of the materials constituting the foundation and embankment which makes up this CCR unit is provided in Section 2.2.3 of this report.

The Bottom Ash Basin is a relatively large basin, nominally 2,250 feet long and 2,050 feet wide. The Bottom Ash Basin is externally bounded by embankments having a minimum design crest width of about 20 feet (effectively 25 feet based on field observations and measurements) and approximately 3H:1V side slopes both upstream and downstream (i.e., interior and exterior). The embankments (crest Elev. 4684 feet) are approximately 45 feet tall relative to the interior floor (Elev. 4639 feet), based on

design drawings, and are a maximum of 36 feet tall relative to the east and west exteriors, based on field measurements. Field surveys indicate central portions of the basin are somewhat lower, being near Elev. 4637 feet. The south end of the Bottom Ash Basin is bounded by the adjoining non-CCR Ash Water Recycle Basin. Relative to the floor of the Ash Water Recycle Basin (which has the same nominal elevation of 4639 feet), the Bottom Ash Basin is approximately 45 feet tall. The latter height is considered to be the nominal "height" of the structure, being the vertical measurement from the downstream/exterior toe of the unit at its lowest point to the lowest elevation of the crest of the unit. The Bottom Ash Basin is internally subdivided into three sections with intermediate embankments. These embankments are contained within the overall perimeter of the Bottom Ash Basin. Elevations are based on 1929 Mean Sea Level datum, as used in the original design drawings and power plant datum.

This unit is an "off-channel" structure, built substantially above surrounding grade, and therefore only receives meteoric water and the water that is pumped into it. The unit does not receive any runoff from adjoining areas. As such, the facility is designed and operated without a spillway structure.

Inlets to each partition within the Bottom Ash Basin include four 10-inch diameter steel pipes placed on the north embankment crest that discharge directly into energy dissipation discharge structures. The energy dissipation structures consist of a 4-foot wide, 3-foot high concrete rundown structure containing several 18-inch wide baffleblocks spaced on about 3-foot centers. An outlet drop-inlet decant structure is provided at the south end of each section. The concrete descant structures are 8-foot by 14-foot- by 47-foot high (approximate dimensions), and direct water into 24-inch steel, concrete encased discharge pipes that convey fluids to the non-CCR Ash Water Recycle Basin.

Based on field surveys, the storage volume of the Bottom Ash Basin, when empty, is approximately 3000 acre-feet without accounting for approximately 3 feet of freeboard. The normal operating pool surface elevation varies depending upon CCR handling activities within the basin. The maximum normal operating pool surface elevation in one section is reported as less than 4681 feet. When this elevation is reached (or before), discharge operations switch to another section to allow for CCR dewatering and subsequent removal from the section for placement within the Combustion By-Product Landfill.

The maximum pool surface elevation following peak discharge from the inflow design flood is simply the operating pool surface elevation plus the amount of meteoric water received, as discussed hereafter in Section 2.3. We understand this elevation is maintained by standard operating procedures to be less than Elev. 4681 feet in each section.

Area-capacity curves for this CCR unit, developed by Grimshaw Surveying and provided by IPSC, are presented in Appendix C.

This CCR unit is lined with a high density polyethylene (HDPE) geomembrane, nominally 60 to 80 mils thick, depending on location. This membrane rests directly on embankment material.

Available drawing and specification excerpts from the design and construction of this unit are presented in Appendix A of this report. Additional cross-sections of the embankments, based on post-construction geotechnical studies, are presented in Section 2.2.3 and Appendix B of this report.

Existing instrumentation for this unit includes a staff gauge to monitor the water surface pool elevation in the unit and also 11 "perched" groundwater monitoring wells, located outside the embankment. These wells are used to help assess potential leakage from the lined CCR unit. Not considered part of CCR unit instrumentation, there are 24 survey monuments located along the periphery (crest) of the unit. We have considered data from these monuments in our subsequent assessment of unit stability.

Because this unit does not have spillways or diversion features, capacities and substantiating calculations are not presented herein.

To our knowledge there is no record of structural instability of this CCR unit. Additional discussion of stability is presented in Section 2.2.2.

2.2.2 Structural Stability Assessments [257.73(d)]

We are of the opinion that the design, construction, operation, and maintenance of the Bottom Ash Basin is consistent with recognized and generally accepted good engineering practices, for the maximum volume of CCR and CCR waste water that can be impounded. This assessment is based on our review of construction drawings and specifications, the results of post-construction geotechnical studies, periodic observations reported by IPSC, and our own observations.

Stability of the CCR unit's embankment and foundation soils is demonstrated by adequate factors of safety with respect to shear failure, as presented hereafter in Section 2.2.3. Stability is also demonstrated by the lack of visual distress during periodic observations, as well as minimal movement in the 24 survey settlement monuments placed along the embankment. The accuracy of these monuments placed in 2012 appears to be on the order of a couple hundredths of a foot. The largest variance observed through the four measuring events to date (including the survey tolerance) is 0.05 feet at SM9 located in the south embankment. Monuments SM21 through SM24, located along the north embankment, present an apparent settlement 0.04 feet. We consider these movements normal, resulting from the accumulation of relatively thick deposits of CCR solids in the headwaters of the basin.

Because the unit is lined with an HDPE liner, there is minimal concern regarding adverse effects of surface erosion, wave action, and adverse effects of sudden drawdown on the earthen materials inside the basin. The basin is protected at the inlet points with the aforementioned concrete energy dissipaters. External to the basin, it appears that there are regular and adequate maintenance efforts to control and otherwise prevent erosion of the embankment material.

Based on a review of construction specifications (which required compaction of at least 90% of the maximum density as determined by ASTM D 1557), as well as penetration test results obtained during post-construction geotechnical stability assessments of the

embankments, we are of the opinion that the embankments (dikes) are compacted to a density sufficient to withstand the range of loading conditions to which the CCR unit is anticipated to be subjected.

As stated previously, with its inherently adverse climate, this unit has sparse vegetation with some areas of bare earth on the exterior of the basin. GCI understands that IPSC has worked to establish and re-establish this vegetation. Other maintenance activities include the eradication of burrowing animals as needed..

As described previously, given the nature and configuration of this CCR unit, it does not have spillway or diversions. This is discussed further in Section 2.3. Due to its low hazard potential, the design flood discharge, were it applicable, would be based on a 100-year flood.

Hydraulic features passing through the CCR unit are inlet and outlet piping. Based on visual observations and reported behavior during operations, there are no indications of structural inadequacy relative to the pipes and outlet structures. Scheduled observations are made and reported by qualified persons relative to potential indicators of structural distress. Such indicators include excessive, turbid, or sediment-laden seepage; signs of piping or internal erosion; transverse or longitudinal cracking; slides, bulges, boils, sloughs, scarps, sinkholes, or depressions; abormally high or low pool levels; animal burrows; excessive or lacking vegetative cover; slope erosion; or appearance of debris.

Apart from the south embankment, all of the downstream embankment slopes of the Bottom Ash Basin are such that they are not exposed to external bodies of water. The south embankment is common with the non-CCR ash water recycle basin. This basin is also lined, so the embankment slope is not subject to rapid-drawdown conditions. The embankment slope presents adequate factor of safety with respect to potential structural instability caused by shearing of the embankment and/or foundation soils as shown subsequently in Section 2.2.3.

2.2.3 “Safety Factor” Assessments [257.73(e)]

Minimum factors of safety with respect to slope stability have been calculated for the Bottom Ash Basin using several potentially critical cross sections. These calculations were performed using a method-of-slices approach with Bishop’s simplified/modified method for evaluating both force and moment equilibrium. Failure was constrained to breaching failures, where a sufficient portion of the cross-section of the embankment slips to allow release of at least a portion of the impoundment’s contents to the surrounding area. Shallow failures are not included in these analyses as they would not result in breach or discharge of material. Both static and pseudo-static (i.e, dynamic or seismic) loading conditions were considered. A rapid drawdown case was not considered since the basin is lined.

For the seismic case, a horizontal seismic coefficient (k_h) equal to half the peak ground acceleration for the site was used. The mapped peak ground acceleration for the site is about 0.16g (based on B/C boundary conditions), representing a 2% probability of exceedance (i.e., 98% probability of non-exceedance) in 50 years (which equates to an average return period of about 2,475 years), as reported by the USGS as part of its 2008 National Seismic Hazard Mapping Project (the most recent maps for which full hazard deaggregations are available). This value was then adjusted to 0.23g to account for local soil (site classification D) conditions. Hence, the horizontal seismic coefficient used in the analyses is 0.12. Also with respect to the seismic case, a composite Mohr-Coulomb failure envelope was also used, with drained strengths at low stresses and undrained strengths for clays at high confining stresses. Soil strengths were reduced by approximately 20 percent to account for possible soil softening caused by cyclic loading.

Additional details regarding development of strength parameters and cross-sections are presented in our original slope stability assessment report titled, "IPP Coal Combustion Waste Ponds, Geotechnical Stability Analysis Report," prepared for IPSC by Gerhart Cole Inc., and dated April 2013. The stability analyses performed for that report were reassessed for the purposes of this report.

Graphical results showing the calculated critical surfaces and factors of safety for various cross-sections are presented in Appendix B (Figure B-1 through Figure B-10), with the factors of safety also summarized on Table 2-1. As can be seen in the Table, the calculated static factors of safety under the long-term, maximum storage pool loading condition for the various potential critical sections are all at least 1.50. In the case of this unit, the maximum surcharge pool is essentially the same as the long-term maximum storage pool; consequently, separate factors of safety for the maximum surcharge pool were not calculated. The calculated seismic factor of safety for all cross-sections is at least 1.00. As such, we consider this unit stable with respect to slope stability.

Liquefaction analyses were performed using the methods of Youd et al. (2001) for granular layers located below the existing groundwater table (nominally located at a depth of 50 feet below the crest of the embankments). Test hole data representing these layers is presented in our original stability assessment report titled, "IPP Coal Combustion Waste Ponds, Geotechnical Stability Analysis Report," prepared for IPSC by Gerhart Cole Inc., and dated April 2013. The seismic analysis event was obtained from the modal event from the deaggregation previously referenced with regards to slope stability, corresponding to ground motions with a 2% probability of exceedance (i.e., 98% probability of non-exceedance) in 50 years. This event has a moment magnitude of 5.4 at a distance of about 12.3 km. (By way of comparison, the mean event magnitude is 6.1).

The minimum calculated factor of safety against triggering liquefaction was 2.5, corresponding to conditions near the northern embankment near a depth of about

50 feet. This is well in excess of the minimum 1.2 value required. It should be recognized that as performed, this analysis did not take into account the geologic age of the deposits at the critical depth; doing so would likely result in even a larger factor of safety. As such, we consider this unit stable with respect to any potential liquefaction.

2.3 BOTTOM ASH BASIN – HYDROLOGIC AND HYDRAULIC CAPACITY [257.82]

For the low hazard potential classification of this unit, the inflow design flood is a 100-year event. However, as stated previously, this unit is an "off-channel" structure which is built substantially above surrounding grade, and only receives meteoric water and the water that is pumped into it. The unit does not receive runoff from adjoining areas. As such, there is no inflow design flood control system.

Per NOAA Atlas 14, Volume 1, Version 5, the precipitation event near Delta, Utah, corresponding to a 100-year, 24-hour event is 1.97 inches. Given the area of the basin together with the minimal additional contributory areas represented by adjoining roads along the crests of the embankment, we believe that this impoundment unit can readily accommodate this precipitation within the 3-foot nominal freeboard volume, and thus meet the intent of 257.82 requirements.

Table 2-1 Summary of Slope Stability Analysis Results – Bottom Ash Basin

Scenario / Location	Figure No.	Factor of Safety	
		Static	Seismic
North Embankment of Bottom Ash Basin	B-1,B-2	2.54	1.14
Southeast Corner of Bottom Ash Basin, East Embankment	B-3,B-4	2.47	1.34
Southeast Corner of Bottom Ash Basin, South Embankment	B-5,B-6	2.24	1.22
Southwest Corner of Bottom Ash Basin, West Embankment	B-7,B-8	2.56	1.39
Southwest Corner of Bottom Ash Basin, South Embankment	B-9,B-10	2.34	1.28

3.1 WASTE WATER BASIN – LINER DESIGN [257.71]

The Waste Water Basin is lined with a high density polyethylene (HDPE) geomembrane. Where originally installed, the geomembrane is nominally 80 mils thick. In repaired areas, the geomembrane may be 60 mils thick. This membrane rests directly on embankment material, without a discrete, underlying secondary seepage barrier component.

The upper portion of the embankment is fill material derived from native soils, which, based on test holes drilled in the embankment, generally consist of Clayey Sand (SP-SC). The lower portion of the embankment consists of native, in-place (non-fill) soils, which, based on test holes drilled in the embankment, generally classify as Silty Sand (SM), Clayey Sand (SC), and Sandy Lean Clay (CL). At depth below the floor of the basin, there are various strata, including a rather continuous layer of Sandy Lean Clay (CL).

Based on the types of soil present in the embankment, any composite behavior of the soils beneath the geomembrane is anticipated to present a liquid flow rate greater than that of two feet of compacted soil with a hydraulic conductivity not exceeding 1×10^{-7} cm/sec. Consequently, this CCR unit is considered under Part 257 to be an existing unlined surface impoundment. As such, this basin is subject to the requirements of 257.101(a) which requires groundwater monitoring and/or retrofit and/or closure and/or establishment of alternative disposal capacity.

3.2 WASTE WATER BASIN – STRUCTURAL INTEGRITY [257.73]

3.2.1 General [Portions of 257.73(a) through (c)]

3.2.1.1 Hazard Classification

The Waste Water Basin is constructed using a combination of above ground embankment/dike and below original grade incision. Accordingly, this unit is not considered an incised CCR unit.

The Waste Water Basin, as planned, covers approximately 53 acres and has a nominal capacity of 650 acre-feet without accounting for a nominal 3 feet of freeboard, with a maximum design depth of 20 feet (actual maximum 2016 survey depth of 22 feet). A 2016 survey indicates that the actual capacity (again without freeboard) is closer to 765 acre-feet.

This CCR unit classifies as a Low Hazard Potential CCR surface impoundment. This classification reflects the classification provided by the Utah Department of Natural Resources, Division of Water Rights, Dam Safety Section, which considers low hazard dams to be those dams which, if they fail, would cause minimal threat to human life, and economic losses would be minor, or limited to damage sustained by the owner of the structure. This corresponds to the Title 40, Part 257 definition of Low Hazard Potential. The classification is assessed on a periodic (5-year) basis as part of the State's inspection and review process, for which we understand a site inspection was last undertaken April 29, 2014. GCI concurs with this classification and is of the opinion that the classification is in accordance with the requirements of 257.73.

It should be noted that detailed inspections of the units are performed annually by licensed professional engineers, and routine inspections of the CCW impoundments are also performed at intervals not exceeding seven days.

With its inherently adverse high desert climate (i.e., hot, dry summers and cold winters), this unit has sparse vegetation with some areas of bare earth. GCI understands that IPSC has worked to establish and re-establish this vegetation.

3.2.1.2 Additional Descriptions of Unit

This CCR unit is owned by Intermountain Power Agency (IPA) and operated by Intermountain Power Service Corporation (IPSC). It is officially identified as Intermountain Power Waste Water Basin (UT00468).

This CCR unit is located approximately 11 miles north of Delta, Utah, in Millard County, Utah, at approximately latitude 39.50784 degrees North, Longitude -112.60009 degrees West, as shown in Figure 1-1. Figure 1-2 shows CCR facilities at the IPP at a larger scale.

This CCR unit is being used to store waste water from various sources. During storage, CCR settles out via gravity. Water from the basin is decanted into a structure after which it is pumped either to the non-CCR Ash Water Recycle Basins or non-CCR Evaporation Ponds.

This CCR unit is situated in the Sevier River Watershed, more specifically USGS hydrologic unit (HUC) 16030005, Lower Sevier. Per the NRCS, the Lower Sevier hydrologic unit comprises approximately 4,094 square miles, or about 2,620,563 acres.

Construction records for this CCR unit are sparse. Based on available information, construction of the Intermountain Power Plant started in about September 1981. Available drawings for the facility's impoundments/ponds and embankments are dated 1983, and the unit was commissioned in 1986. It is believed that the unit was built in a single stage of construction.

As stated previously, the upper portion of the Waste Water Basin embankment consists of fill material derived from native soils, which, based on test holes drilled in the embankment, generally consist of Clayey Sand (SP-SC). The lower portion of the embankment consists of native, in-place (non-fill) soils that, based on test holes drilled in the embankment, generally classify as Silty Sand (SM), Clayey Sand (SC), and Sandy Lean Clay (CL). At depth below the floor of the basin, there are various strata, including a rather continuous layer of Sandy Lean Clay (CL). Other than the fill and natural portions of the embankment, there appears to be no explicit zonation of materials or special foundation treatments.

Additional information regarding the physical and/or engineering properties of materials constituting the foundation and embankment comprising this CCR unit is provided in Section 3.2.3 of this report.

The Waste Water Basin presents a footprint of about 1,500 feet square. The unit is bounded on all sides by embankments having a minimum design crest width of about

20 feet (effectively 25 feet based on field observations and measurements) and approximately 3H:1V side slopes both upstream and downstream (i.e., interior and exterior). The embankments (crest Elev. 4650 feet) are approximately 20 feet tall relative to the interior floor (Elev. 4630 feet) based on design drawings, and about a maximum of 12 feet tall relative to the existing ground surface, based on field measurements. Recent field surveys indicate that the central portion of the basin is somewhat lower, being near Elev. 4628 feet. The 12-foot height is considered to be the nominal "height" of the structure, being the vertical measurement from the downstream/exterior toe of the unit at its lowest point to the lowest elevation of the crest of the unit. Elevations are based on 1929 Mean Sea Level datum, as used in the original design drawings.

This unit is an "off-channel" structure that is built substantially above surrounding grade and only receives meteoric water and the water that is pumped into it. The unit does not receive any runoff from adjoining areas. As such, the facility is designed and operated without a spillway structure.

The inlet to the Waste Water Basin is a buried and submerged inlet pipeline located near the northeast corner of the basin, along the east embankment. The outlet consists of a drop-inlet structure located at the north end of the basin that feeds water to the Waste Water Basin Pump Station, where the water is subsequently pumped to other facilities.

Based on field surveys, the storage volume of the Waste Water Basin, when empty, is approximately 765 acre-feet (650 acre-feet design plan) without accounting for approximately 3 feet of freeboard. The maximum normal operating pool surface is reported as approximately Elev. 4647 feet.

The maximum pool surface elevation following peak discharge from the inflow design flood is simply the operating pool surface elevation plus the amount of meteoric water received, as discussed hereafter in Section 3.3. We understand this elevation is maintained by standard operating procedures to be less than Elev. 4647 feet.

Area-capacity curves for this CCR unit, developed by Grimshaw Surveying and provided by IPSC, are presented in Appendix C.

The CCR unit is lined with a high density polyethylene (HDPE) geomembrane, nominally 60 to 80 mils thick, depending on location. This membrane rests directly on embankment material.

Available drawing and specification excerpts from the design and construction of this unit are presented in Appendix A. Additional embankment cross-sections, based on post-construction geotechnical studies, are presented in Section 3.2.3 and Appendix B of this report.

Existing instrumentation for this unit includes a staff gauge to monitor the water surface pool elevation in the unit and also 7 "perched" groundwater monitoring wells, located outside the embankment. These wells are used to help assess potential leakage from the lined CCR unit. Not considered part of CCR unit instrumentation, there are 16

survey monuments located along the periphery (crest) of the unit. We have considered data from these monuments in our subsequent assessment of unit stability.

Because this unit does not have spillways or diversion features, capacities and substantiating calculations are not presented herein.

To our knowledge there is no record of structural instability of this CCR unit. Additional discussions of stability are presented in Section 3.2.2.

3.2.2 Structural Stability Assessments [257.73(d)]

We are of the opinion that the design, construction, operation, and maintenance of the Waste Water Basin is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR waste water that can be impounded. This assessment is based on a review of construction drawings and specifications, the results of post-construction geotechnical studies, periodic observations reported by IPSC, and our own observations.

Stability of the CCR unit's embankment and foundation soils is demonstrated by adequate factors of safety with respect to shear failure, as presented hereafter in Section 3.2.3. Stability is also demonstrated by the lack of visual distress during periodic observations, as well as minimal movement in the 16 survey settlement monuments placed along the embankment. The accuracy of these monuments placed in 2012 appears to be on the order of a couple hundredths of a foot. The largest variance observed through the four measuring events to date (including the survey tolerance) is 0.07 feet at SM32 located in the south embankment. Monuments SM31 through SM35, located along the southwest quadrant of the embankment, present an apparent typical settlement 0.04 to 0.05 feet. We believe these movements are not indicative of adverse stability, but recommend continued monitoring.

Given the nature of this CCR unit, there are no abutments, hence, no comments regarding such are offered.

Because the unit is lined with an HDPE liner, there is minimal concern regarding adverse effects of surface erosion, wave action, and adverse effects of sudden drawdown. External to the basin, it appears that there are regular and adequate maintenance efforts to control and otherwise prevent erosion of the embankment material.

Based on a review of the construction specifications (which required compaction of at least 90% of the maximum density as determined by ASTM D 1557) as well as penetration test results obtained during post-construction geotechnical stability assessments of the embankments, we are of the opinion that the embankments (dikes) are compacted to a density sufficient to withstand the range of loading conditions to which the CCR unit is subjected.

As stated previously, with its inherently adverse climate, this unit has sparse vegetation with some areas of bare earth on the exterior of the basin. GCI understands that IPSC

has worked to establish and re-establish this vegetation. Other maintenance activities include the eradication of burrowing animals as needed.

As described previously, given the nature and configuration of this CCR unit, it does not have a spillway or diversions. This is discussed further in response to 257.82. Due to its low hazard potential, the design flood discharge, were it applicable, would be based on a 100-year flood.

Hydraulic features passing through the CCR units are inlet and outlet piping. Based on visual observations and reported behavior during operations, there are no indications of inadequate structural integrity. Scheduled observations are made and reported by qualified persons relative to potential indicators of structural distress. Such indicators include excessive, turbid, or sediment-laden seepage; signs of piping or internal erosion; transverse or longitudinal cracking; slides, bulges, boils, sloughs, scarps, sinkholes, or depressions; abormally high or low pool levels; animal burrows; excessive or lacking vegetative cover; slope erosion; or appearance of debris.

All of the downstream (external) embankment slopes of the Waste Water Basin are such that they are not exposed to external bodies of water.

3.2.3 "Safety Factor" Assessments [257.73(e)]

Minimum factors of safety with respect to slope stability have been calculated for the Waste Water Basin using two potentially critical cross sections. These calculations were performed using a method-of-slices approach with Bishop's simplified/modified for evaluating both force and moment equilibrium. Failure was constrained to breaching failures, where a sufficient portion of the cross-section of the embankment slips to allow release of at least a portion of the impoundment's contents to the surrounding area. Shallow failures are not included in these analyses as they would not result in breach or discharge of material. Both static and pseudo-static (i.e, dynamic or seismic) loading conditions were considered. A rapid drawdown case was not considered since the basin is lined.

For the seismic case, a horizontal seismic coefficient (k_h) equal to half the peak ground acceleration for the site was used. The mapped peak ground acceleration for the site is about 0.16g (based on B/C boundary conditions), representing a 2% probability of exceedance (i.e., 98% probability of non-exceedance) in 50 years (which equates to an average return period of about 2,475 years), as reported by the USGS as part of its 2008 National Seismic Hazard Mapping Project (the most recent maps for which full hazard deaggregations are available). This value was then adjusted to 0.23g to account for local soil (site classification D) conditions. Hence, the horizontal seismic coefficient used in the analyses is 0.12. Also with respect to the seismic case, a composite Mohr-Coulomb failure envelope was also used, with drained strengths at low stresses and undrained strengths for clays at high confining stresses. Soil strengths were reduced by approximately 20 percent to account for possible soil softening caused by cyclic loading.

Additional details regarding development of strength parameters and cross-sections are presented in our original slope stability assessment report titled, "IPP Coal Combustion Waste Ponds, Geotechnical Stability Analysis Report," prepared for IPSC by Gerhart Cole Inc., and dated April 2013. The stability analyses included in that report were reassessed for the purposes of this report.

Graphical results showing the calculated critical surfaces and factors of safety for various cross-sections are presented in Appendix B (Figure B-11 through Figure B-14), with the factors of safety also summarized on Table 3-1. As can be seen in the Table, the calculated static factors of safety under the long-term, maximum storage pool loading condition for the various potential critical sections are all at least 1.50. In the case of this unit, the maximum surcharge pool is essentially the same as the long-term maximum storage pool; consequently, separate factors of safety for the maximum surcharge pool were not calculated. The calculated seismic factor of safety for all cross-sections is at least 1.00. As such, we consider this unit stable with respect to slope stability.

Liquefaction analyses were performed using the methods of Youd et al. (2001) for granular layers located below the existing groundwater table (nominally located at a depth of 28 to 30 feet below the crest of the embankments). Test hole data representing these layers is presented in our original stability assessment report titled, "IPP Coal Combustion Waste Ponds, Geotechnical Stability Analysis Report," prepared for IPSC by Gerhart Cole Inc., and dated April 2013. The seismic analysis event was obtained from the modal event from the deaggregation previously referenced with regards to slope stability, corresponding to ground motions with a 2% probability of exceedance (i.e., 98% probability of non-exceedance) in 50 years. This event has a moment magnitude of 5.4 at a distance of about 12.3 km. (By way of comparison, the mean event magnitude is 6.1).

The minimum calculated factor of safety against triggering liquefaction was 1.8, corresponding to conditions near the southern embankment near a depth of about 41 feet. This is well in excess of the minimum 1.2 value required. It should be recognized that as performed, this analysis did not take into account the geologic age of the deposits at the critical depth; doing so would likely result in even a larger factor of safety. As such, we consider this unit stable with respect to any potential liquefaction.

3.3 WASTE WATER BASIN – HYDROLOGIC AND HYDRAULIC CAPACITY [257.82]

For the low hazard potential classification of this unit, the inflow design flood is a 100-year event. However, as stated previously, this unit is an "off-channel" structure which is built substantially above surrounding grade which only receives meteoric water and the water that is pumped into it. The unit does not receive runoff from adjoining areas. As such, there is no inflow design flood control system.

Per NOAA Atlas 14, Volume 1, Version 5, the precipitation event near Delta, Utah, corresponding to a 100-year, 24-hour event is 1.97 inches. Given the area of the basin (about 53 acres) together with the minimal additional contributing area presented by adjoining roads along the crests of the embankment, we believe that this impoundment unit can readily accommodate this precipitation within the 3-foot freeboard volume, and thus meet the intent of 257.82 requirements.

Table 3-1 Summary of Slope Stability Analysis Results – Waste Water Basin

Scenario / Location	Figure No.	Factor of Safety	
		Static	Seismic
Northwest Corner of Waste Water Basin	B-11,B-12	4.46	2.64
South Embankment of Waste Water Basin	B-13,B-14	3.86	2.20

4.1 COMBUSTION BY-PRODUCT LANDFILL – RUN-ON AND RUN-OFF CONTROLS [257.81]

4.1.1 GENERAL

The CCR landfill, referred to as the Combustion By-Product Landfill, consists of approximately 271 acres with a nearly square footprint (see Figure 1-1). It is surrounded by the "Ash Truck Haul Road." The landfill is informally divided into seven sections running north-south, each being approximately 480 feet wide. Sections are numbered 1 through 7, starting from east to west. The landfill area has been unevenly utilized, with a majority of the landfilled CCR material located in Sections 1 through 4, reaching a height of approximately 40 to 60 feet above the surrounding (original) grade. Side slopes of the landfill vary from approximately 1.3H:1V along the active west face to approximately 4 to 5H:1V along the non-active (but not closed) south, east, and north faces.

The landfill is isolated from the surrounding area by (listed in order of distance away from the landfilled CCR materials) the Ash Truck Haul Road, a drainage/containment channel, another perimeter road, and an exterior berm. The roads and channel are unpaved. The typical geometry of the drainage channel may be approximated as a trapezoid, being typically at least 4 feet deep, at least 12 feet wide at the base, and with nominal 1.5H:1V side slopes. The exterior berm is typically at least 4 to 6 feet tall and isolates the drainage channel and landfill facility from the surrounding area.

The natural slope in the vicinity of the site is approximately 0.5 to 1% down to the west and north. The drainage channel typically follows this grade. At the northwest corner of the landfill, there is the Landfill Run-off Basin into which the perimeter drainage channels from the south and east discharge. This lined basin has an approximate storage capacity of 30 acre-feet, excluding freeboard.

The surrounding area land cover may generally be described as desert shrub with a poor degree of density. Native soils in the general area are largely mapped by the USDA/SCS (U.S. Soil Conservation Service, now known as the Natural Resources Conservation Service, NRCS) as "Yenrab-Uffens complex (0 to 10% slopes)" with a lesser part of "Yenrab fine sand". The former unit is considered to be a combination of hydrologic groups A and C, whereas the latter is hydrologic group A. Of the four possible groups of A through D, group A soils are considered to present the lowest runoff potential, and include deep sands with very little silt and clay as well as deep rapidly permeable gravel. Group C soils present a moderately high runoff potential, and include shallow soils and soils containing considerable clay and colloids with below average infiltration potential after saturation.

Per 257.81, the run-on/run-off evaluation event is a 24-hour, 25-year storm. Per NOAA Atlas 14, Volume 1, Version 5, the event near Delta, Utah, corresponding to 24-hour, 25-year storm produces 1.61 inches of precipitation.

4.1.2 RUN-ON CONTROL

The run-on control plan consists of isolating the landfill unit from the surrounding area, thereby preventing run-on. The landfill unit is configured such that the CCR material is placed at or above the surrounding grade. The landfill area and perimeter drainage channel are also isolated from the relatively level surrounding area by the exterior perimeter berm. Any precipitation excess is forced around the landfill area. Consequently, run-on of flow onto the CCR unit during peak discharge from the evaluation storm event is not anticipated.

4.1.3 RUN-OFF CONTROL

The run-off control plan consists of using the perimeter drainage channel to control precipitation run-off. As stated previously, the landfill is configured such that run-off is intercepted by the perimeter drainage channel and then conveyed to the Landfill Run-off Basin. To evaluate run-off from the landfill, a SCS-based curve number (CN) and unit hydrograph approach has been used. Based on the nature of the CCR material when placed, we have conservatively estimated the curve number to be 96, much like a dirt road or an artificial western desert landscape with a weed barrier and minimal granular cover. The calculated total runoff from the landfill under this scenario for the evaluation storm is about 27.1 acre-feet. This is less than the storage capacity of the Landfill Run-off Basin.

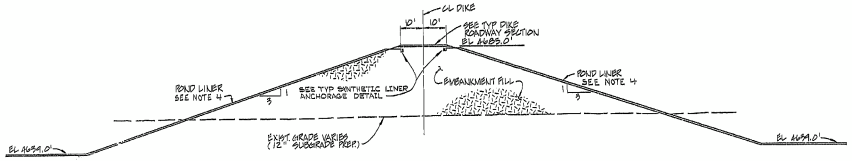
With respect to capacity of the drainage channel, based on a conservative Manning's 'n' value of 0.045, the calculated maximum carrying capacity is approximately 330 to 460 cfs for slopes ranging from 0.5 to 1%. Using common methods of estimating time of concentration for sheet flow, shallow concentrated flow, and channel flow (where overland flow is assumed to occur from the mid-point of the landfill, and channel length is based on the point furthest from the run-off basin), the calculated time of concentration for routing is approximately 40 minutes. Using the median temporal storm distribution from NOAA Atlas 14, Volume 1, Version 5 (general precipitation area), the 1975/1986 SCS triangular unit hydrograph approach with K=484 produces a calculated peak runoff of approximately 23.0 cfs when all flow is routed to a single conveyance. Supporting calculations are provided in Appendix D. In reality, the landfill is served by at least two different conveyances – the portion of the drainage channel extending east from the run-off basin along the north and then east sides of the landfill, and the other portion of the drainage channel extending south from the run-off basin along the west and then south sides of the landfill. Given the calculated peak carrying capacity of the drainage channel is greater than the calculated peak run-off, we are of the opinion that that the run-off control system is adequate to contain the water volume resulting from the evaluation storm.

5.1 LIMITATIONS

The assessments and recommendations presented in this document are based on limited field studies and laboratory testing, as well as our understanding of the project's design, manner of construction, operation, and maintenance. If conditions are found later that are different from those described, we should be notified immediately so that we can make revisions as necessary.

This document was prepared solely for the use of the addressee (our Client) and may not contain sufficient information for other parties or uses.

We represent that our services are performed within the limitations prescribed by our Client, in a manner consistent with the level of care and skill ordinarily exercised by other professional consultants under similar circumstances. No other representation, expressed or implied, and no warranty or guarantee is included or intended. We do not assume responsibility for the accuracy of information provided by others.



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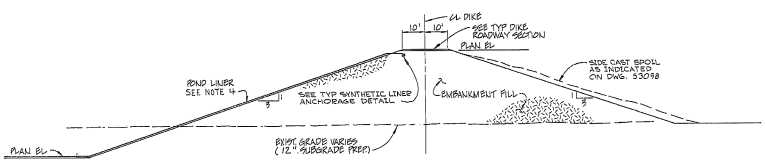

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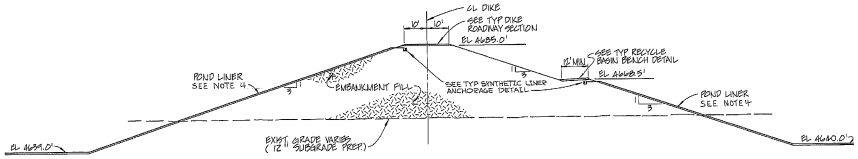

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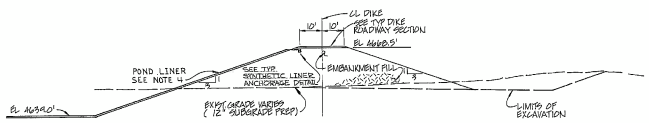

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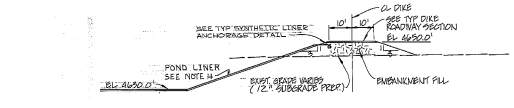

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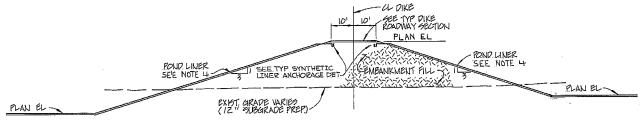

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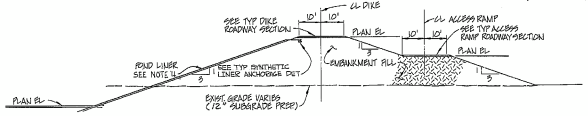

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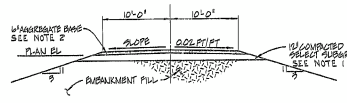

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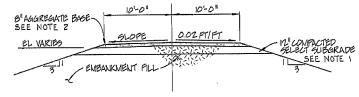

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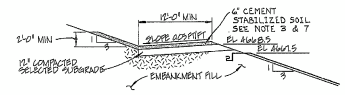

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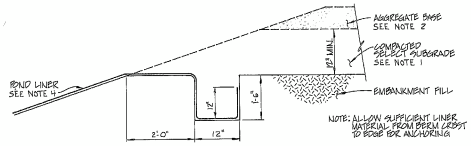

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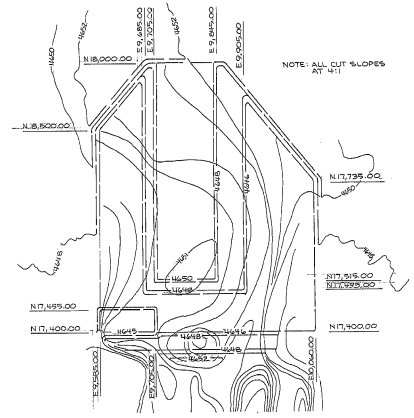

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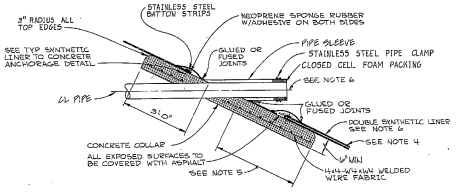

TYPICAL SYNTHETIC LINER PIPE PENETRATION DETAIL TYPE 1 & 2
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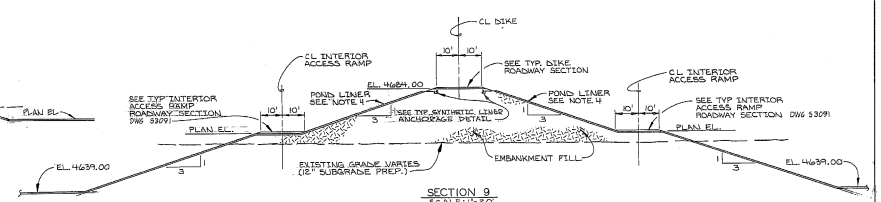
GENERAL NOTES

1. 12" COMPACTED SELECT SUBGRADE TO BE PLACED UNDER CONTRACT 71.0202.
2. AGGREGATE BASE TO BE PLACED UNDER CONTRACT 71.0202.
3. CEMENT STABILIZED SOIL TO BE PLACED UNDER CONTRACT 71.0202.
4. ALL POND LINERS EXCEPT FOR ONSITE RESERVOIR TO BE INSTALLED UNDER CONTRACT 71.0206. ONSITE RESERVOIR LINER SHALL BE INSTALLED UNDER CONTRACT 71.0207. IF A SYNTHETIC LINER IS SELECTED BY THE OWNER. ONSITE RESERVOIR LINER SHALL BE INSTALLED UNDER CONTRACT 71.0202 IF A CLAY LINER IS SELECTED BY THE OWNER.
5. EXTEND CONCRETE COLLAR TO TOE OF DIKE FOR TYPE 2 PIPE PENETRATION.
6. COLLAR AND DOUBLE SYNTHETIC LINER SHALL EXTEND THREE FEET EITHER SIDE OF PIPE FOR TYPE 1 AND 2 DISCHARGE PIPE. DOUBLE LINER SHALL EXTEND TEN FEET PAST TOE OF SLOPE. ANCHORAGE DETAILS FOR DOUBLE SYNTHETIC LINER SHALL BE AS DETAILED BY LINER SUPPLIER.
7. SOIL-CEMENT SHALL CONSIST OF 10 PERCENT CEMENT BY WEIGHT.



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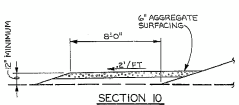

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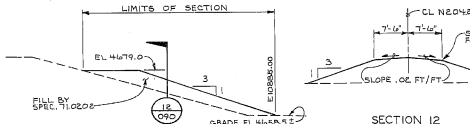

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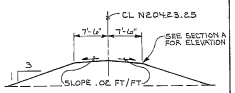

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REV 3 11-9-84 ISSUED FOR CONST SPEC 71.0206 71.0202
REV 2 8-17-84 ISSUED FOR BIDS SPEC. 71.0206
REV 2 2-23-84 ISSUED FOR CONST SPEC. 71.0207
REV 1 12-7-83 ISSUED FOR BIDS SPEC 71.0207
REV 1 11-22-83 ISSUED FOR ADDENDUM 1 SPEC. 71.0202
REV 0 11-1-83 ISSUED FOR BIDS, SPEC. 71.0202.

HIGHLY SKILLED PROFESSIONAL ENGINEERS No. 5454 Burton L. McCorkle STATE OF UTAH

NO.	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP'D
5	11-9-84	ECN 0264/71.0202 & APPROVED FOR CONST SPEC 71.0206	WVR	ALN	
4	2-23-84	REVISED EMBANKMENTS FOR CONST. SPEC 71.0207	WVR	WML	
3	11-23-83	ADDED EMB DETAIL NOTE 7, & DIMENSIONS	LEN	VAH	
2	11-1-83	INITIAL ISSUE	GVR	ALN	
1	L-30-87	CONFORMED TO CONSTRUCTION RECORDS	BRP	ALN	

SCALE: AS NOTED

I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF UTAH
SIGNED
DATE 11-1-83 REG NO. 2583

BLACK & VEATCH CONSULTING ENGINEERS

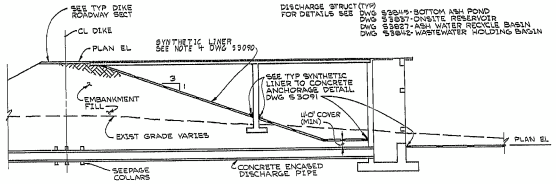
ENGINEER GVR DRAWN WML
CHECKED GVR DATE 2-28-84

IPP INTERMOUNTAIN POWER PROJECT

PONDS AND EMBANKMENTS
SECTIONS AND DETAILS

PROJECT 9255-9STU-S3090
DRAWING NUMBER 4
REV
CODE
AREA

P-BV-2408



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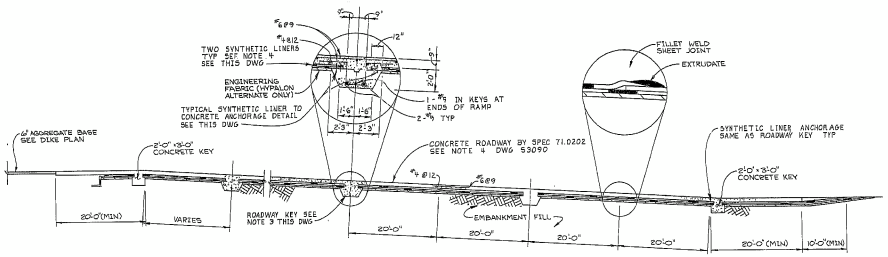
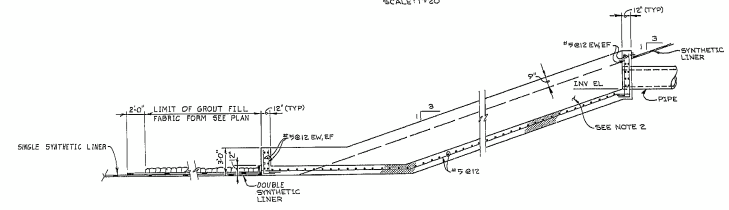
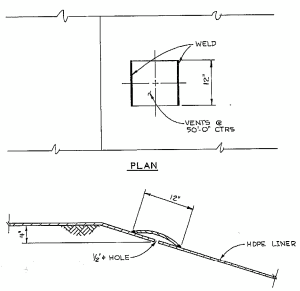


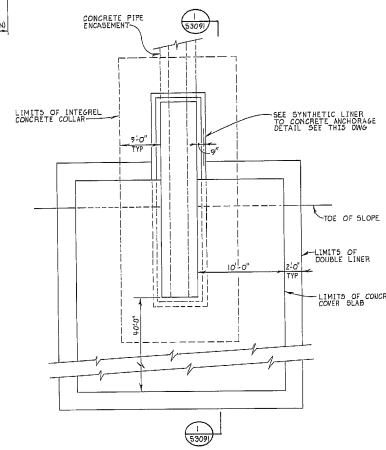
TYPICAL INTERIOR ACCESS RAMP DETAIL (SYNTHETIC LINER OPTION)
SCALE: 1"=10'



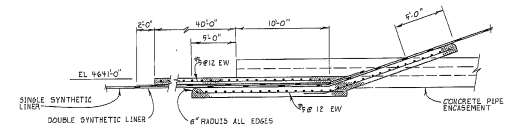
TYPICAL SYNTHETIC LINER PIPE PENETRATION TYPE 3
NO SCALE



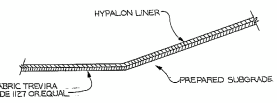
HDPE GAS VENT DETAIL
NO SCALE
SEE THIS DWG



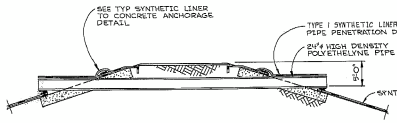
TYPE 4 SYNTHETIC LINER PIPE PENETRATION
SCALE: 1"=5'



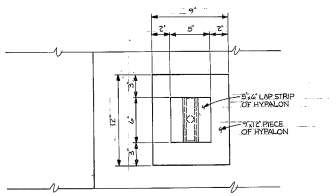
SECTION 1
NO SCALE
SEE THIS DWG

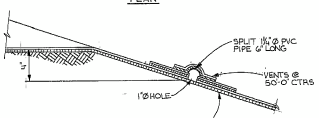


TYPICAL HYPALON SYNTHETIC LINER DETAIL
NO SCALE

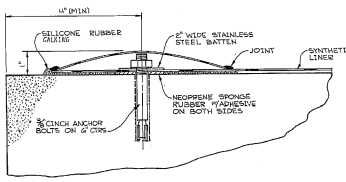


TYPICAL EVAPORATION POND OVERFLOW STRUCTURE
SCALE: 1"=10'

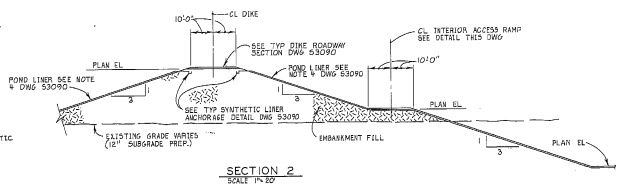




HYPALON GAS VENT DETAIL
NO SCALE
SEE THIS DWG



TYPICAL SYNTHETIC LINER TO CONCRETE ANCHORAGE DETAIL
SCALE: 1"=1'-0"



SECTION 2
SCALE 1"=20'

NOTES

1. SEE DWG 53090 FOR GENERAL NOTES.
2. TYPE 3 PENETRATION SHALL EXTEND THREE FEET EITHER SIDE OF THE DISCHARGE PIPE.
3. THE CONCRETE ROADWAY SHALL BE INSTALLED IN TWO POURS. THE FIRST POUR SHALL CONSIST OF THE KEYS ONLY. THE SYNTHETIC LINER SHALL THEN BE PLACED ON THE RAMP AND ATTACHED TO THE KEYS. THE ROADWAY SURFACE SHALL BE POURED FOLLOWING THE INSTALLATION OF THE SYNTHETIC LINER.
4. IN ADDITION TO THE REQUIREMENTS OF THE TYPICAL ANCHORAGE DETAIL, THE HDPE SHEETS SHALL BE SEPARATED BY NEOPRENE SPONGE RUBBER WITH ADHESIVE ON BOTH SIDES. TWO LINES OF BATTEN STRIPS SHALL BE USED ON ALL FOUR SIDES OF THE KEY TRENCH ANCHORAGE DETAIL.

REGISTERED PROFESSIONAL ENGINEER No. 5454 Burford L. McCorkle STATE OF UTAH

REV 4 11-9-84 ISSUED FOR CONST SPEC. 71.0206
REV 3 8-17-84 ISSUED FOR BIDS. SPEC. 71.0206
REV 2 2-28-84 ISSUED FOR CONST SPEC 71.0202, 71.0207
REV 1 12-16-83 ISSUED FOR ADDENDUM 2 SPEC 71.0202.
REV 0 12-2-83 ISSUED FOR BIDS SPEC 71.0207
REV 0 11-1-83 ISSUED FOR BIDS, SPEC. 71.0202.

REV	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP	FLN
3	8-17-84	REVISED & ADDED DETAILS & NOTES 3,4				
2	2-28-84	REVISED & APPROVED FOR CONST SPEC 71.0202, 71.0207				
1	12-16-83	ADDED DETAILS AND SECTIONS 1 & 2	LEW	GVR	BLM	
0	11-1-83	INITIAL ISSUE	GVR		BLM	
5	4-30-87	CONFORMED TO CONSTRUCTION RECORDS				
4	11-9-84	APPROVED FOR CONS'T SPEC. 71.0206				

SCALE: AS NOTED

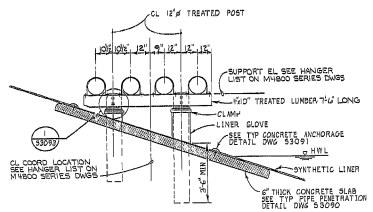
I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF UTAH.
SIGNED B. L. McCorkle
DATE 11/1/83 REG NO. 5454

BLACK & VEATCH CONSULTING ENGINEERS
ENGINEER | DRAWN TAR | CHECKED GVR | DATE 2-27-84

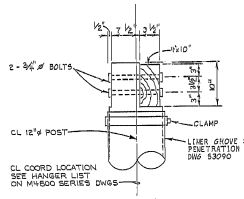
IPP INTERMOUNTAIN POWER PROJECT

PONDS AND EMBANKMENTS
LINER DETAILS

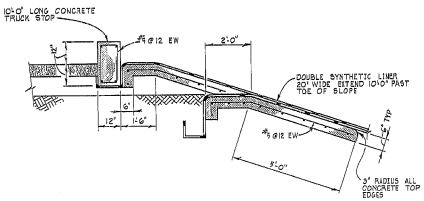
PROJECT | DRAWING NUMBER 9255-9STU-S3091 | REV 5
CODE
AREA



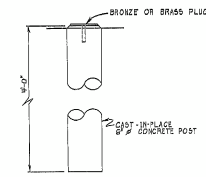
BOTTOM ASH PIPE SUPPORT DETAIL LOOKING EAST
(120 REQUIRED)
NO SCALE



DETAIL 1
NO SCALE
SEE THIS DWG



DETAIL 2
NO SCALE
SEE DWG 53098

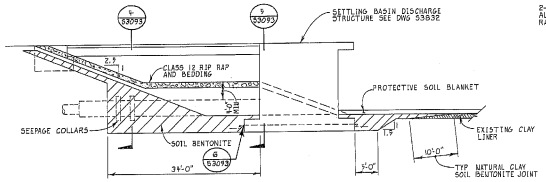


SETTLEMENT MONUMENT
NO SCALE

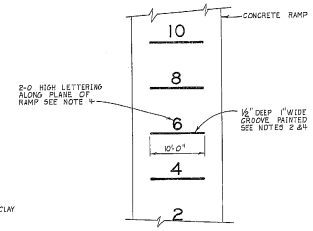
SETTLEMENT MONUMENT LOCATION *

MONUMENT NUMBER	NORTH COORDINATE	EAST COORDINATE
SM-1	15,017	19,080
SM-2	14,080	19,919
SM-3	13,141	18,900
SM-4	13,900	17,990
SM-9	14,284	18,000
SM-6	22,410	7,323
SM-7	20,190	6,329
SM-8	20,190	8,899
SM-9	17,981	7,323
SM-10	20,499	9,780
SM-11	19,320	10,809
SM-12	19,320	8,749
SM-13	18,178	9,780
SM-14	17,490	9,780

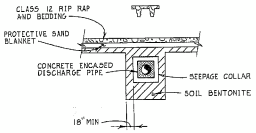
* SEE NOTES BELOW



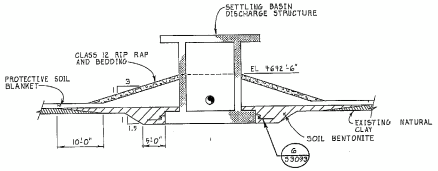
SETTLING BASIN STRUCTURE DIKE INTERFACE
SCALE: 1"=10'



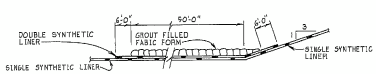
DETAIL 3
NO SCALE
SEE NOTE 2



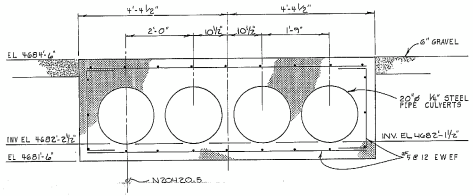
SECTION 4
SCALE: 1"=10'
SEE THIS DWG



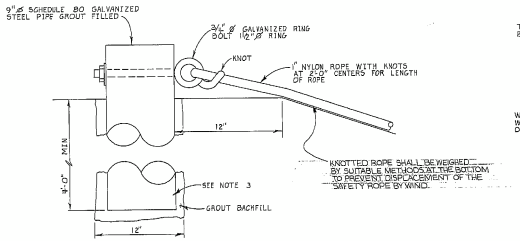
SECTION 5
SCALE: 1"=10'
SEE THIS DWG



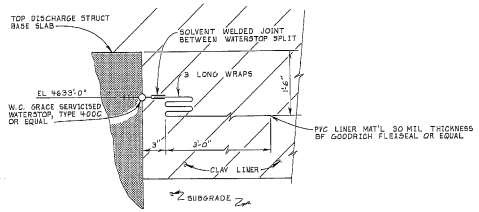
BOTTOM ASH POND GROUT FILLED FABRIC FORM DETAIL
NO SCALE



BOTTOM ASH CULVERT DETAIL LOOKING WEST
(3 REQUIRED)
NO SCALE



SAFETY ROPE DETAIL
NO SCALE



DETAIL 6
NO SCALE
SEE THIS DWG

NOTES

1. SEE DWG 53090 FOR GENERAL NOTES
2. GRIND GROOVE AND PAINT DEPTH LEVEL EVERY 2'-0" CHANGE IN VERTICAL ELEVATION.
3. SAFETY ROPES AT 100 FEET SPACING CENTERED BETWEEN GAS VENTS ON PERIMETER OF ALL SYNTHETIC LINED PONDS. INSTALLED BY CONTRACT 71.0206.
4. PAINT SHALL BE A MIN 10 MILS OF CARBOLINE 191 SURFACER BELOW @ MILS OF WHITE CARBOLINE PHENOLINE 300 FINISH BACKGROUND. THE NUMBERS SHALL BE PAINTED WITH A MIN OF 5 MILS OF CARBOLINE PHENOLINE 302, BLACK.
5. MONUMENTS SHALL BE LOCATED ON EDGE OF AGGREGATE SURFACED ROADS, AS AS CLOSE AS POSSIBLE TO LISTED COORDINATES.
6. MONUMENTS SHALL BE INSTALLED AS SOON AS POSSIBLE FOLLOWING COMPLETION OF EACH RESPECTIVE EMBANKMENT TO PROPERLY MONITOR SETTLEMENT.
7. THE ELEVATION OF EACH MONUMENT SHALL BE ESTABLISHED TO THE NEAREST 0.01 FT.
8. THE CONTRACTOR SHALL SUBMIT FINAL LOCTIONS AND ELEVATIONS OF ALL MONUMENTS TO THE CONSTRUCTION MANAGER.

REGISTERED PROFESSIONAL ENGINEER No. 5454 Burford L. McConie STATE OF UTAH

REV	DATE	ISSUED
REV 5	11-9-84	ISSUED FOR CONST. SPEC. 71.0206
REV 4	8-29-84	ISSUED TO CONTR. 71.0202
REV 3	8-17-84	ISSUED FOR BIDS SPEC 71.0206
REV 2	2-28-84	ISSUED FOR CONSTRUCTION SPEC. 71.0202, 71.0207
REV 1	12-16-83	ISSUED FOR ADDENDUM 2 SPEC 71.0202
REV 0	11-23-83	ISSUED FOR ADDENDUM 1 SPEC 71.0202
REV 0	11-2-83	ISSUED FOR BIDS SPEC 71.0207

REV	DATE	REVISIONS AND RECORD OF ISSUE	BY	CH	APP	FLM
6	6-30-87	CONFORMED TO CONSTRUCTION RECORDS	SRD			RJM
5	11-9-84	APPROVED FOR CONST SPEC 71.0206	MRK	MTK	RJM	—
4	8-29-84	REVISED ASH PIPE SUPPORT DETAIL & DETAIL 1	MRK	MTK	RJM	—
3	8-17-84	ECN 022/71.0202, REVISED & ADDED DETAILS, NOTES	MRK	MTK	RJM	—
2	2-28-84	REVISED & APPROVED FOR CONST. SPEC. 71.0202, 71.0207	MRK	MTK	RJM	—
1	12-16-83	ADDED DETAILS AND NOTES	LEN	GVR	RJM	—
0	11-23-83	INITIAL ISSUE	LEN		JJP	—

SCALE:

I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF UTAH.
SIGNED Burford L. McConie
DATE 11-23-83 REG NO. 5454

BLACK & VEATCH CONSULTING ENGINEERS

ENGINEER GVR | DRAWN LEN
CHECKED GVR | DATE 2-28-84

INTERMOUNTAIN POWER PROJECT

PONDS AND EMBANKMENTS
LINER DETAILS

PROJECT 9255 - 9STU-S3093 | DRAWING NUMBER | REV 6
CODE
AREA

P-BA-2408

from borrow areas as necessary. After preparation of the fill or embankment site, the subgrade shall be scarified, leveled, and rolled so that surface materials of the subgrade will be compact and well bonded with the first layer of the fill or embankment. All material deposited in fills and embankments shall be free from rocks or stones, brush, stumps, logs, roots, debris, and organic or other objectionable materials. Fills and embankments shall be constructed in horizontal layers not exceeding 8 inches in uncompacted thickness. Material deposited in piles or windrows by excavating and hauling equipment shall be spread and leveled prior to compaction.

Each layer shall be thoroughly compacted. The compacted density of each layer shall be at least 90 per cent of the maximum density within a range of ±2 per cent of optimum moisture content as determined by ASTM D1557. If the material fails to meet the density specified, compaction methods shall be modified as required to attain the specified density.

2A.10 BORROW AREAS. Material necessary to complete fills and embankments shall be excavated from borrow areas and hauled to the fill or embankment site. Borrow material will be available on the Owner's property.

The location, size, shape, depth, drainage, and surfacing of all borrow areas shall be acceptable to the Construction Manager. Borrow areas shall be regular in shape, with finish graded surfaces when completed. Side slopes shall not be steeper than three horizontal to one vertical and shall be uniform for the entire length of any one side.

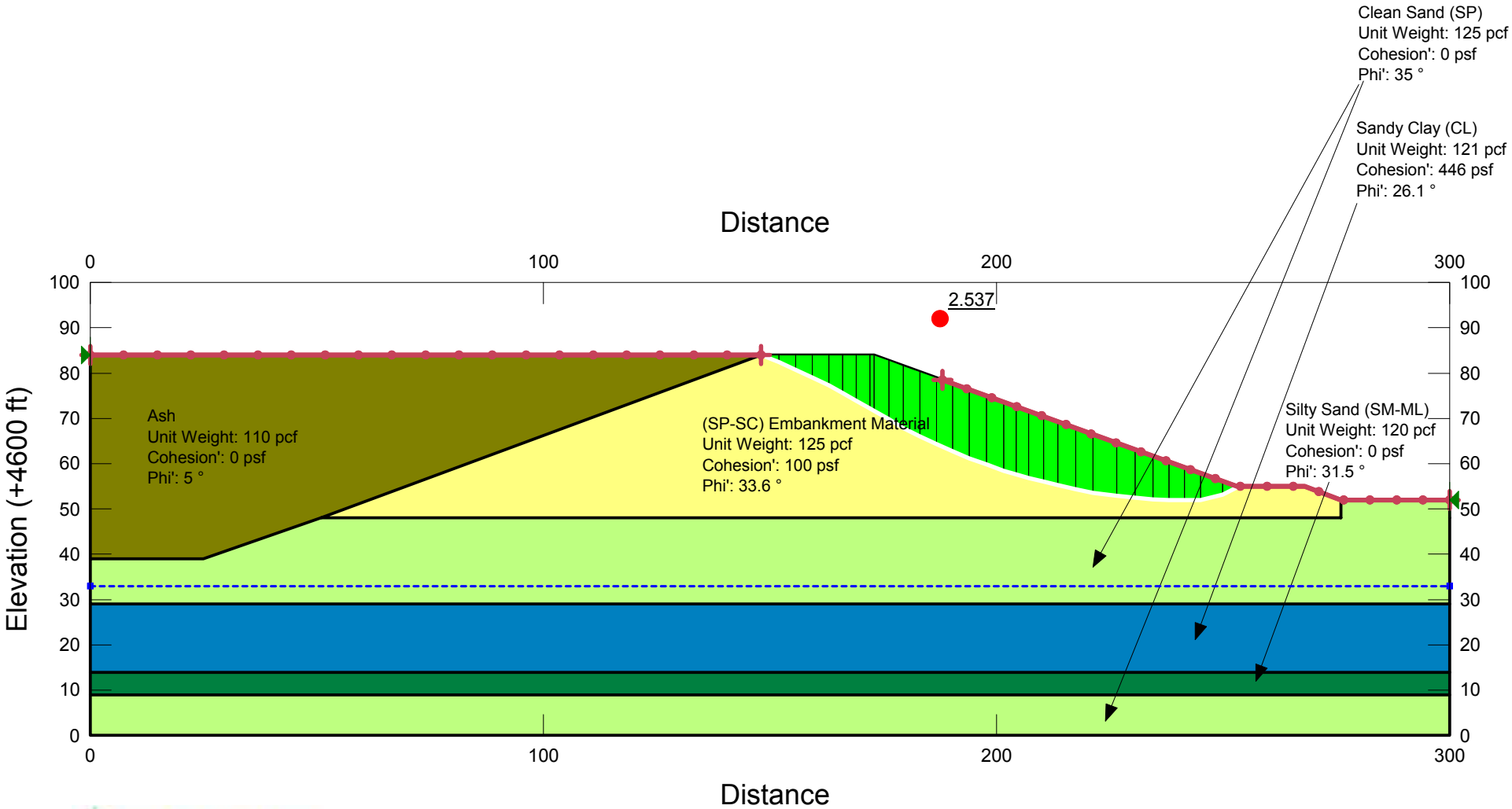
2A.11 MAINTENANCE AND RESTORATION OF FILLS AND BACKFILLS. Fills and backfills that settle or erode before final acceptance of the work, and pavement, structures, and other facilities damaged by such settlement or erosion, shall be repaired. The settled or eroded areas shall be refilled, compacted, and graded to conform to the elevation indicated on the drawings or to the elevation of the adjacent ground surface. Damaged facilities shall be repaired in a manner acceptable to the Construction Manager.

Earth slopes of the roads and parking areas constructed under these specifications shall be maintained to the lines and grades indicated on the drawings until the final acceptance of the roads and parking areas.

2A.12 GRADING TO ESTABLISH FINAL GRADES. All areas of the site shall be graded as required to establish the final grade elevations as indicated on the drawings. The grading shall be finished to the contours and elevations indicated on the drawings or, if not indicated, to the matching contours and elevations of the original, undisturbed ground surface. The final grading shall provide smooth uniform surfacing and effective drainage of the ground areas.

Intermountain Power Station CCR Assessment

Cross-section: North Embankment of Bottom Ash Basin
Static Limit Equilibrium Analysis

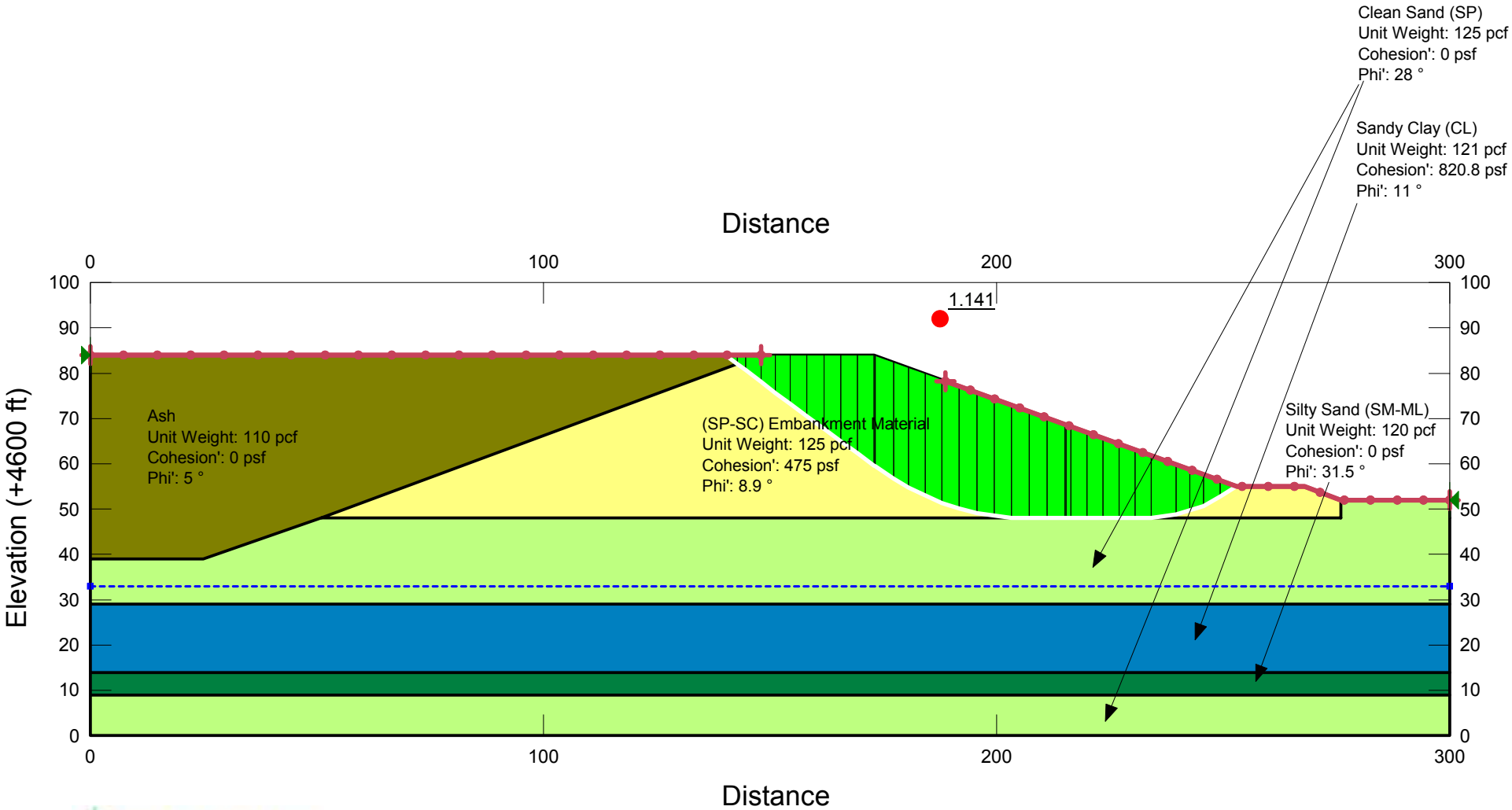


GERHART COLE INC.
GEOTECHNICAL ENGINEERS

Figure B-1

Intermountain Power Station CCR Assessment

Cross-section: North Embankment of Bottom Ash Basin
Pseudo-Dynamic Limit Equilibrium Analysis

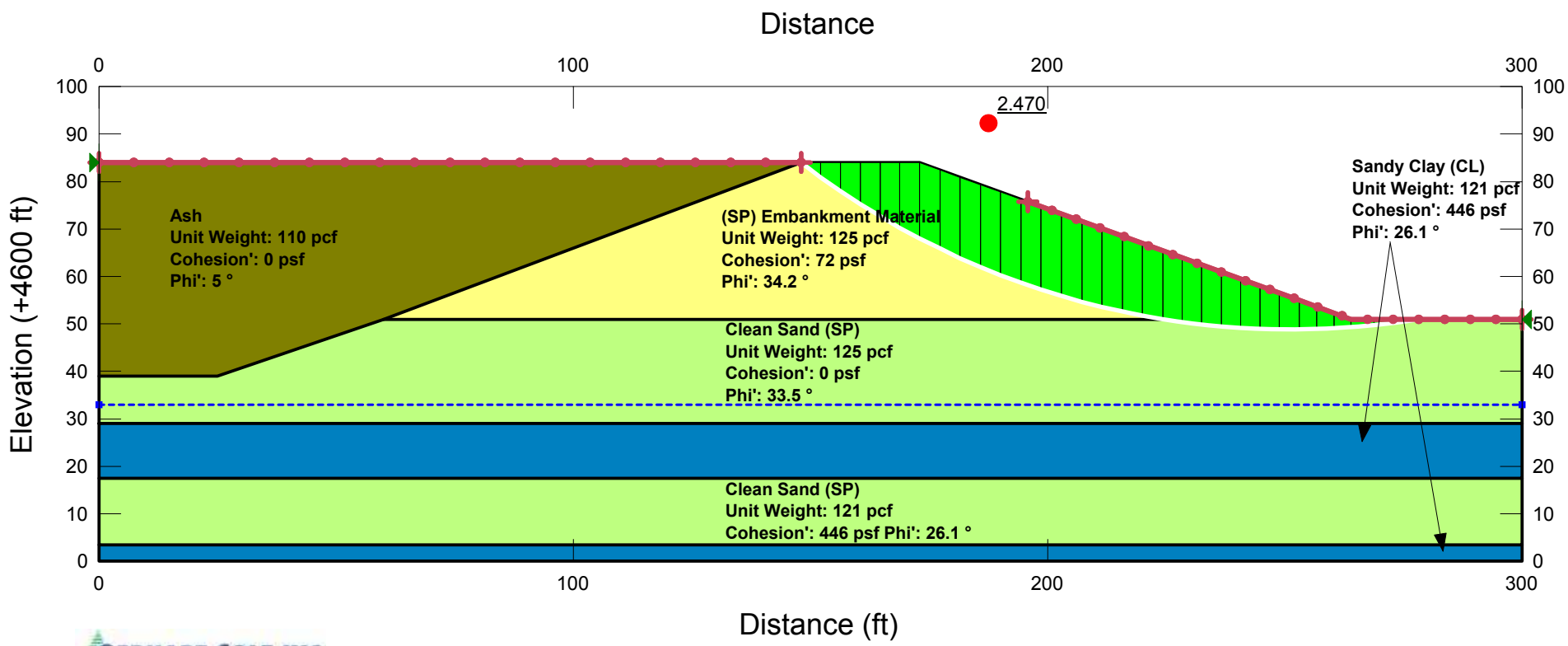


GERHART COLE INC.
GEOTECHNICAL ENGINEERS

Figure B-2

Intermountain Power Station CCR Assessment

Cross-section: Southeast Corner of Bottom Ash Basin
Static Limit Equilibrium Analysis

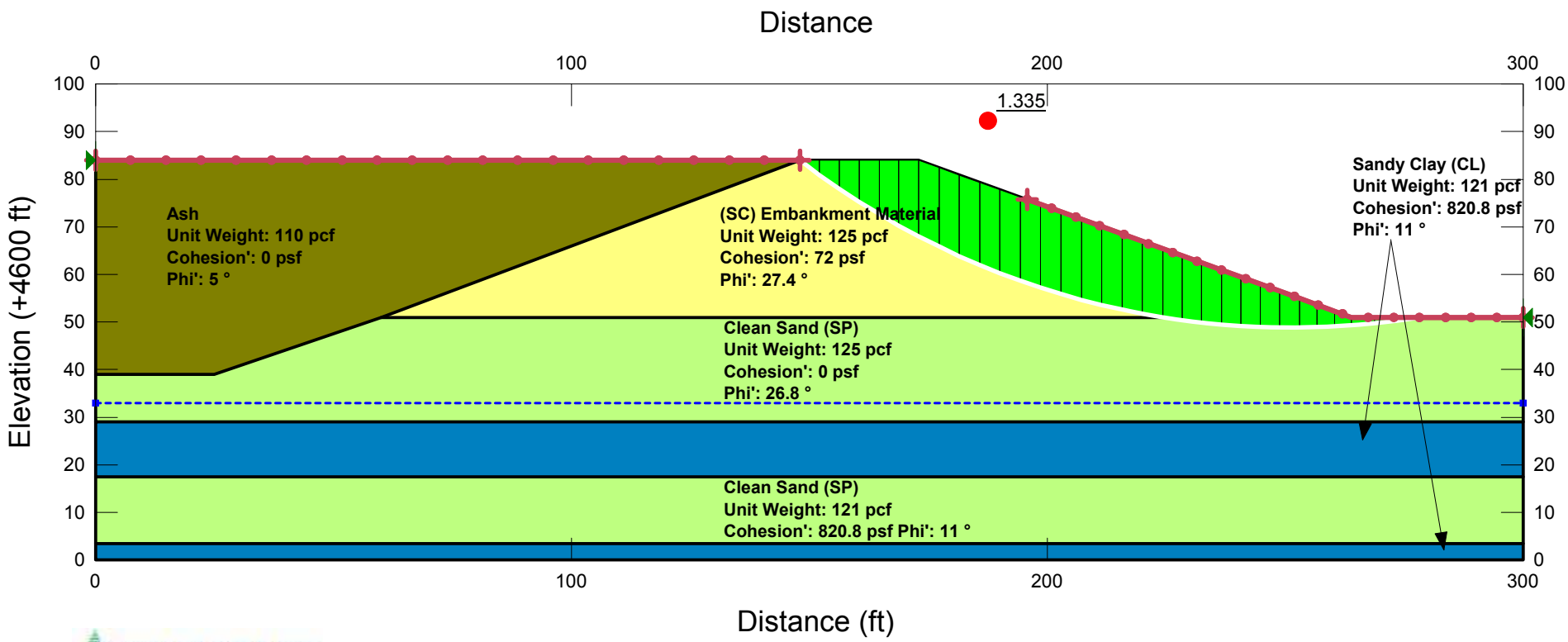


GERHART COLE INC.
GEOTECHNICAL ENGINEERS

Figure B-3

Intermountain Power Station CCR Assessment

Cross-section: Southeast Corner of Bottom Ash Basin
Pseudo-Dynamic Limit Equilibrium Analysis

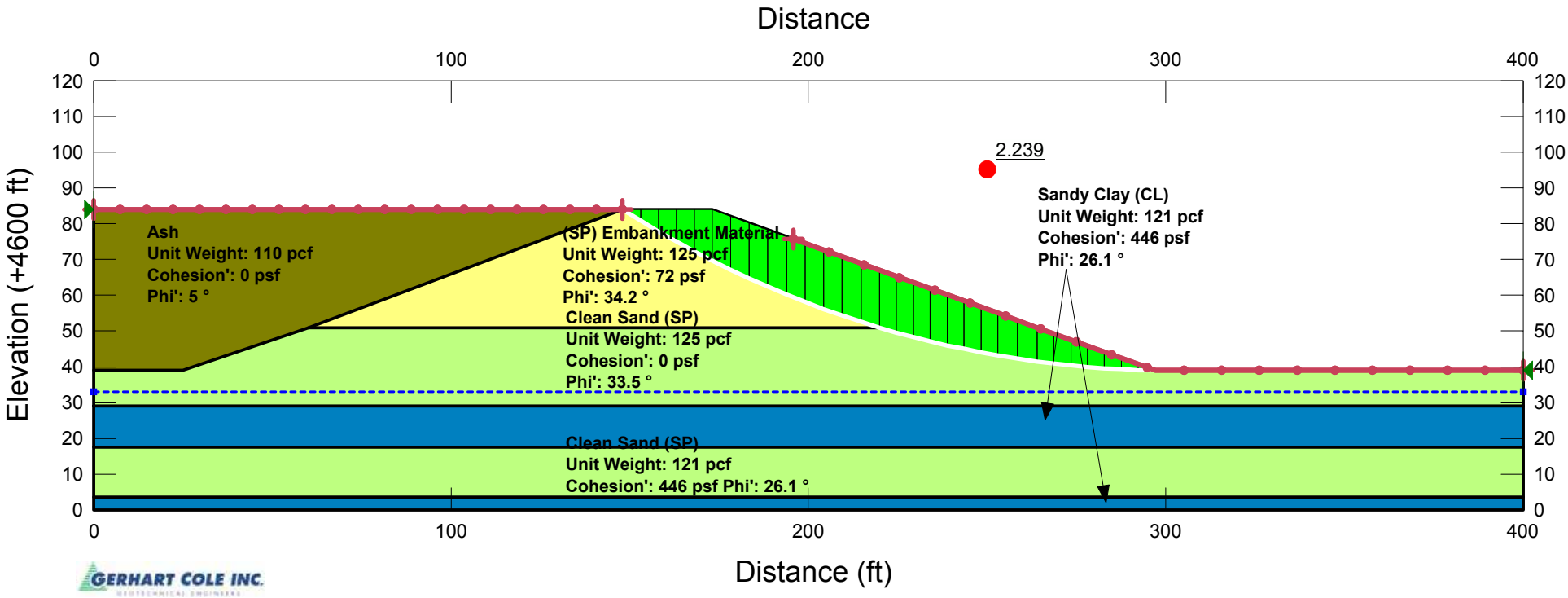


GERHART COLE INC.
GEOTECHNICAL ENGINEERS

Figure B-4

Intermountain Power Station CCR Assessment

Cross-section: Southeast Corner of Bottom Ash Basin - South Embankment
Static Limit Equilibrium Analysis

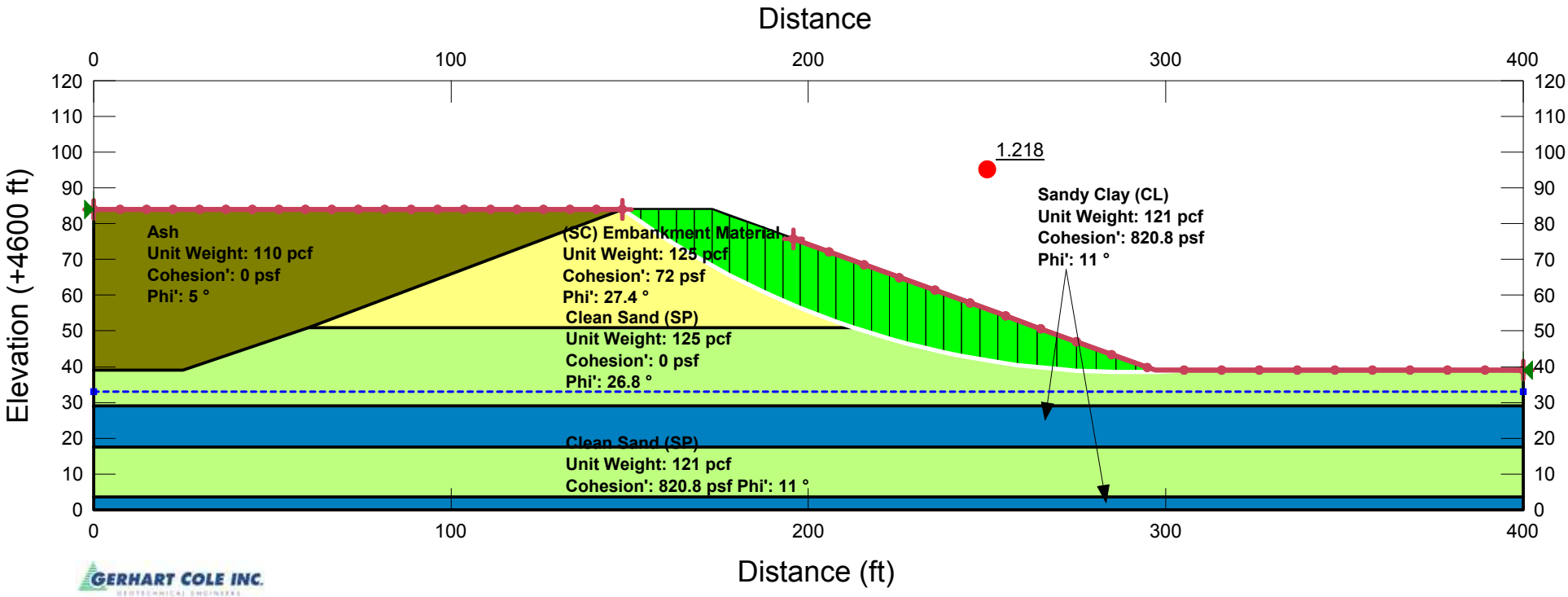


GERHART COLE INC.

Figure B-5

Intermountain Power Station CCR Assessment

Cross-section: Southeast Corner of Bottom Ash Basin - South Embankment
Pseudo-Dynamic Limit Equilibrium Analysis

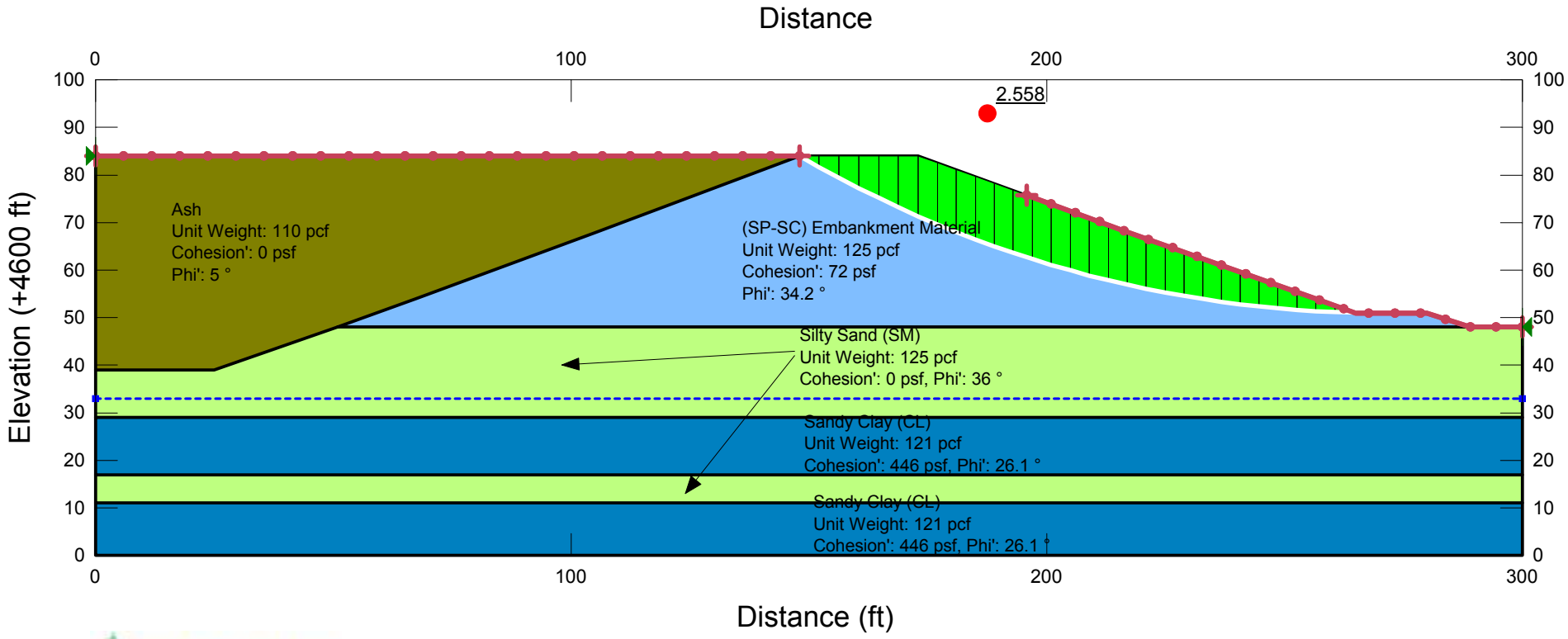


GERHART COLE INC.

Figure B-6

Intermountain Power Station CCR Assessment

Cross-section: Southwest Corner of Bottom Ash Basin
Static Limit Equilibrium Analysis

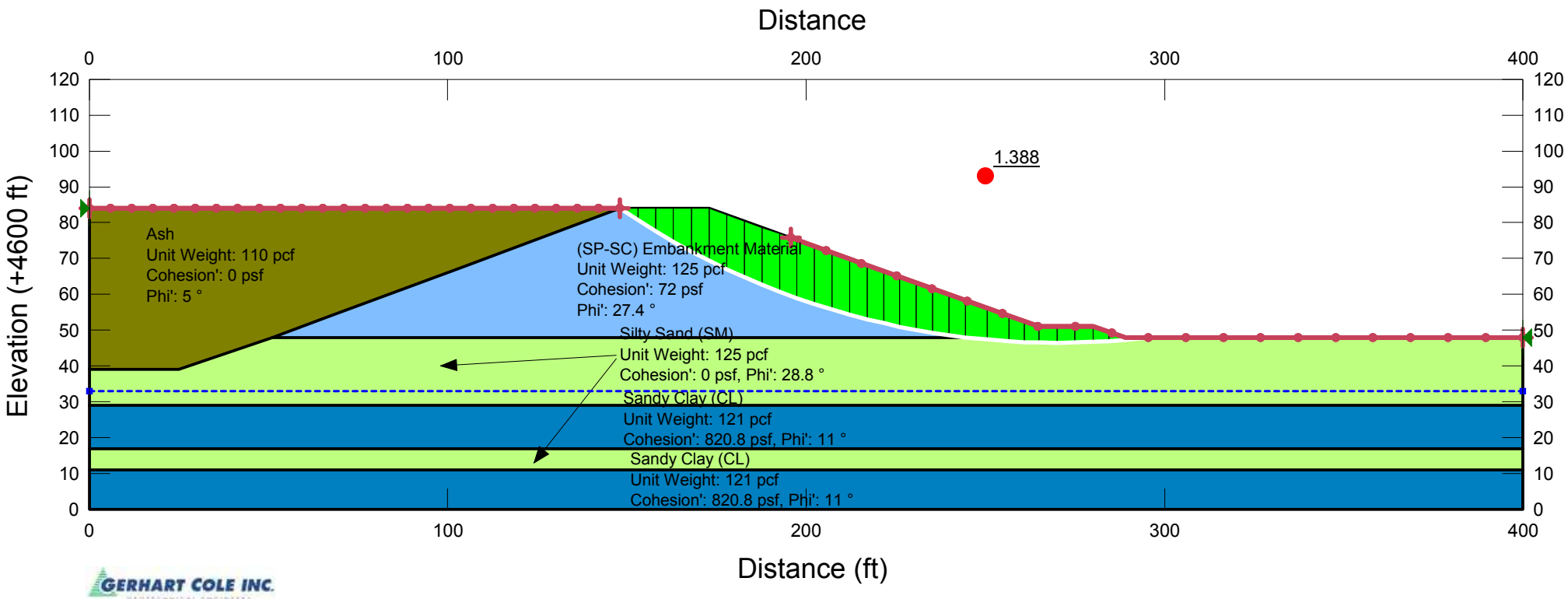


GERHART COLE INC.
GEOTECHNICAL ENGINEERS

Figure B-7

Intermountain Power Station CCR Assessment

Cross-section: Southwest Corner of Bottom Ash Basin
Pseudo-Dynamic Limit Equilibrium Analysis

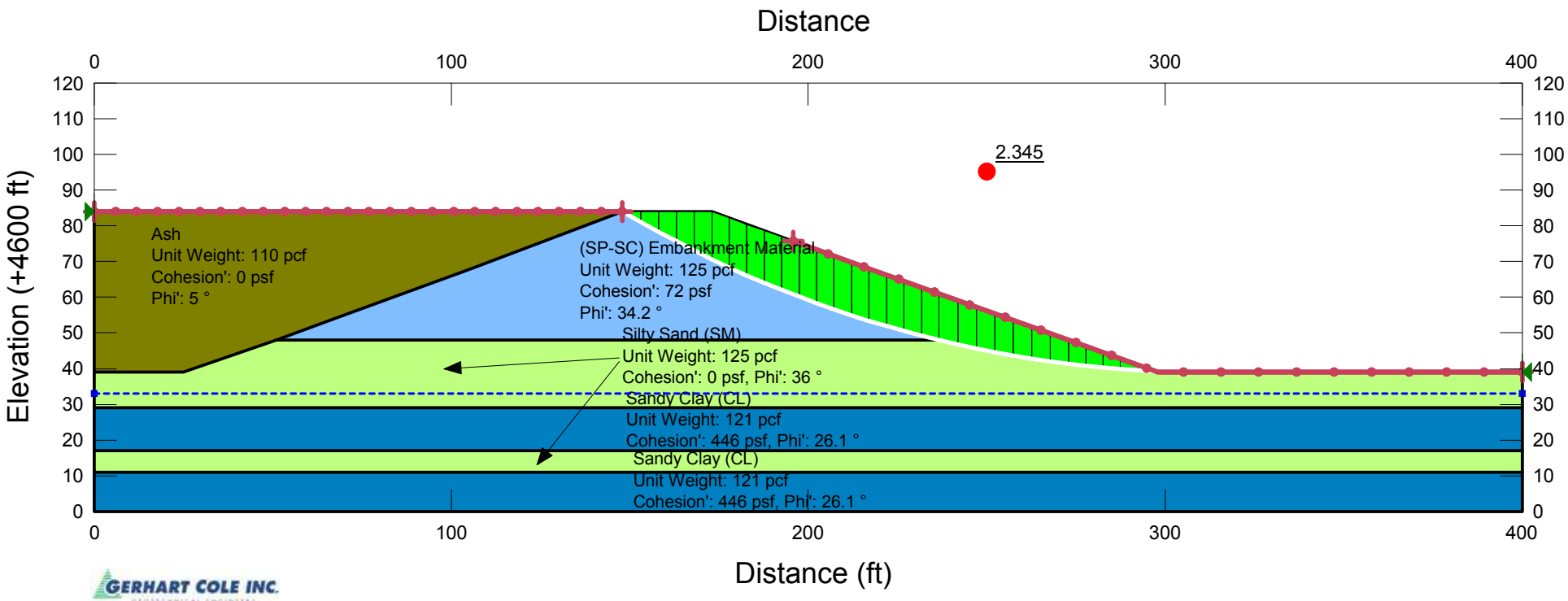


GERHART COLE INC.

Figure B-8

Intermountain Power Station CCR Assessment

Cross-section: Southwest Corner of Bottom Ash Basin -South Embankment
Static Limit Equilibrium Analysis

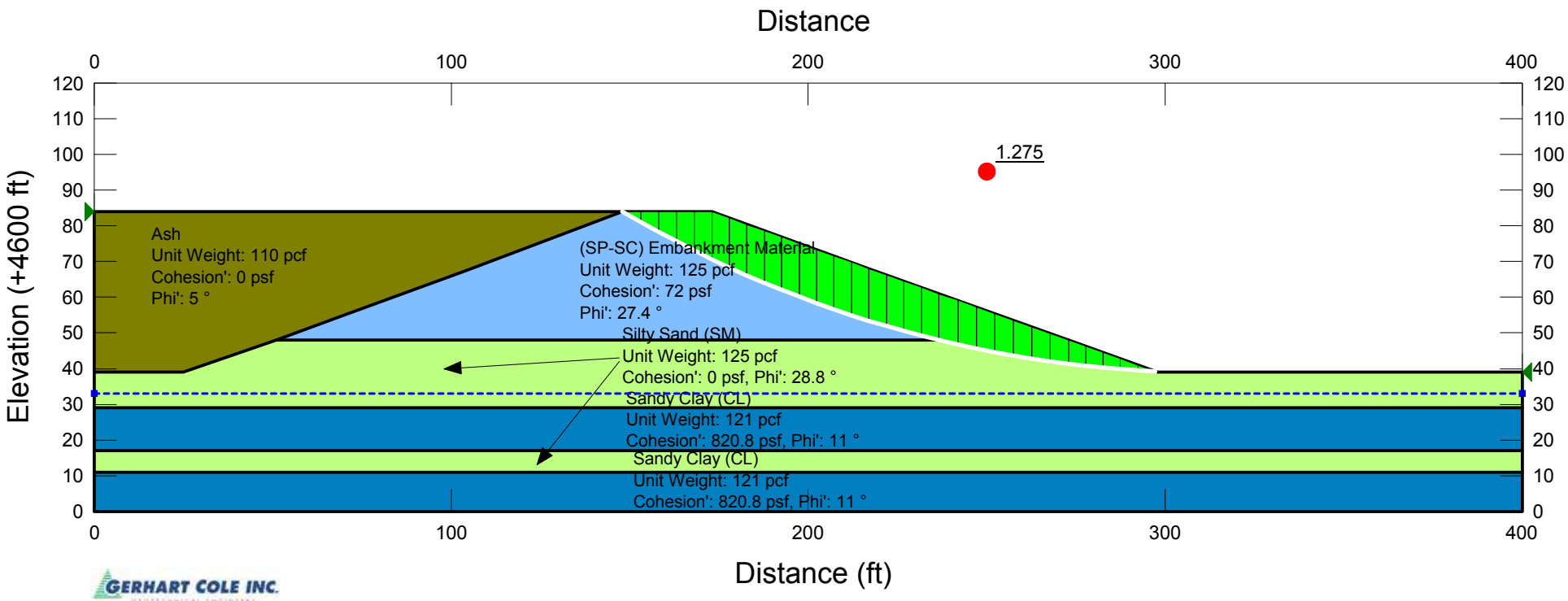


GERHART COLE INC.

Figure B-9

Intermountain Power Station CCR Assessment

Cross-section: Southwest Corner of Bottom Ash Basin - South Embankment
Pseudo-Dynamic Limit Equilibrium Analysis

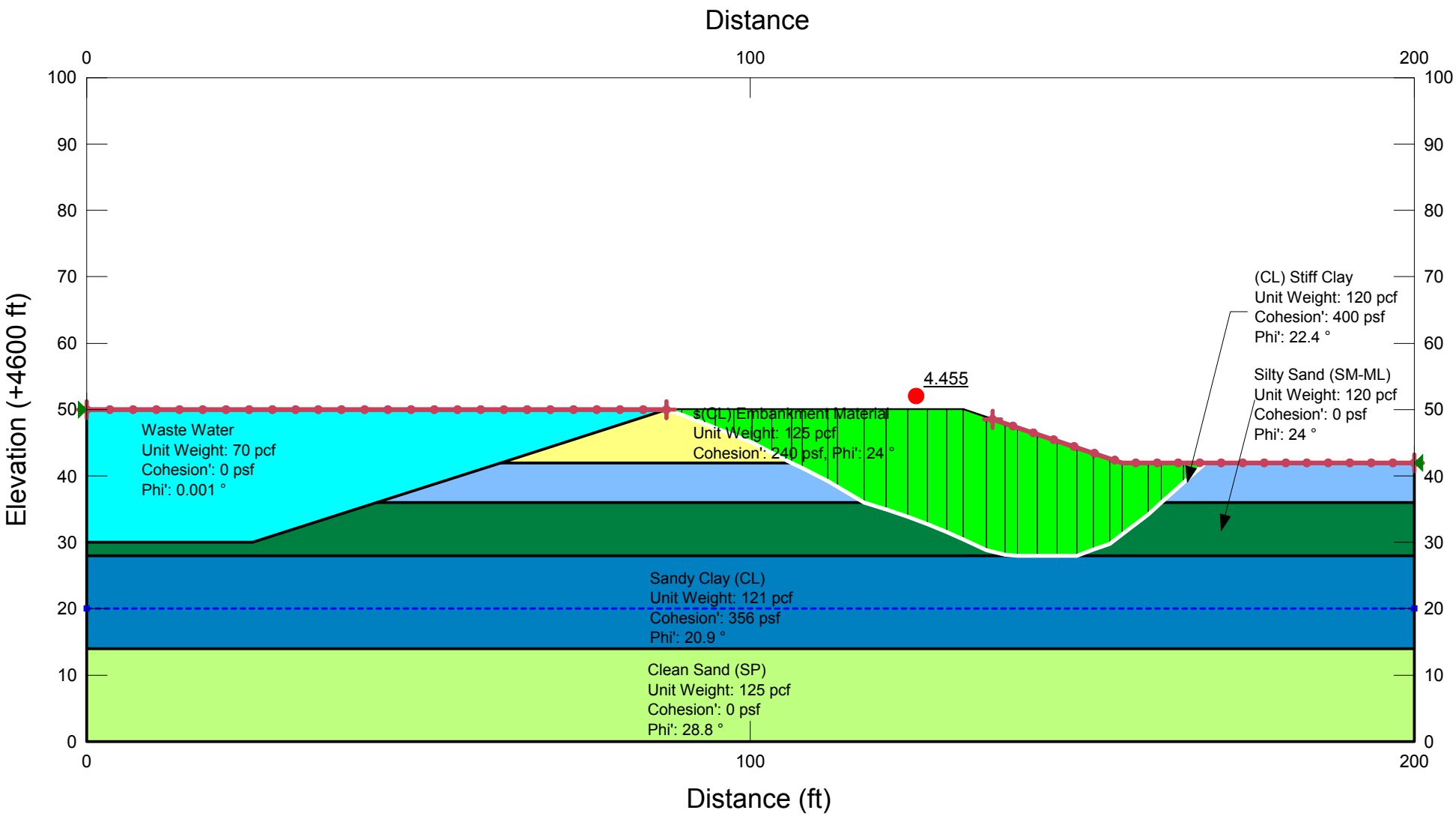


GERHART COLE INC.
GEOTECHNICAL ENGINEERS

Figure B-10

Intermountain Power Station CCR Assessment

Cross-section: Northwest Corner of Waste Water Basin
Static Limit Equilibrium Analysis



GERHART COLE INC.
GEOTECHNICAL ENGINEERS

Figure B-11

Intermountain Power Station CCR Assessment

Cross-section: Northwest Corner of Waste Water Basin
Pseudo-Dynamic Limit Equilibrium Analysis

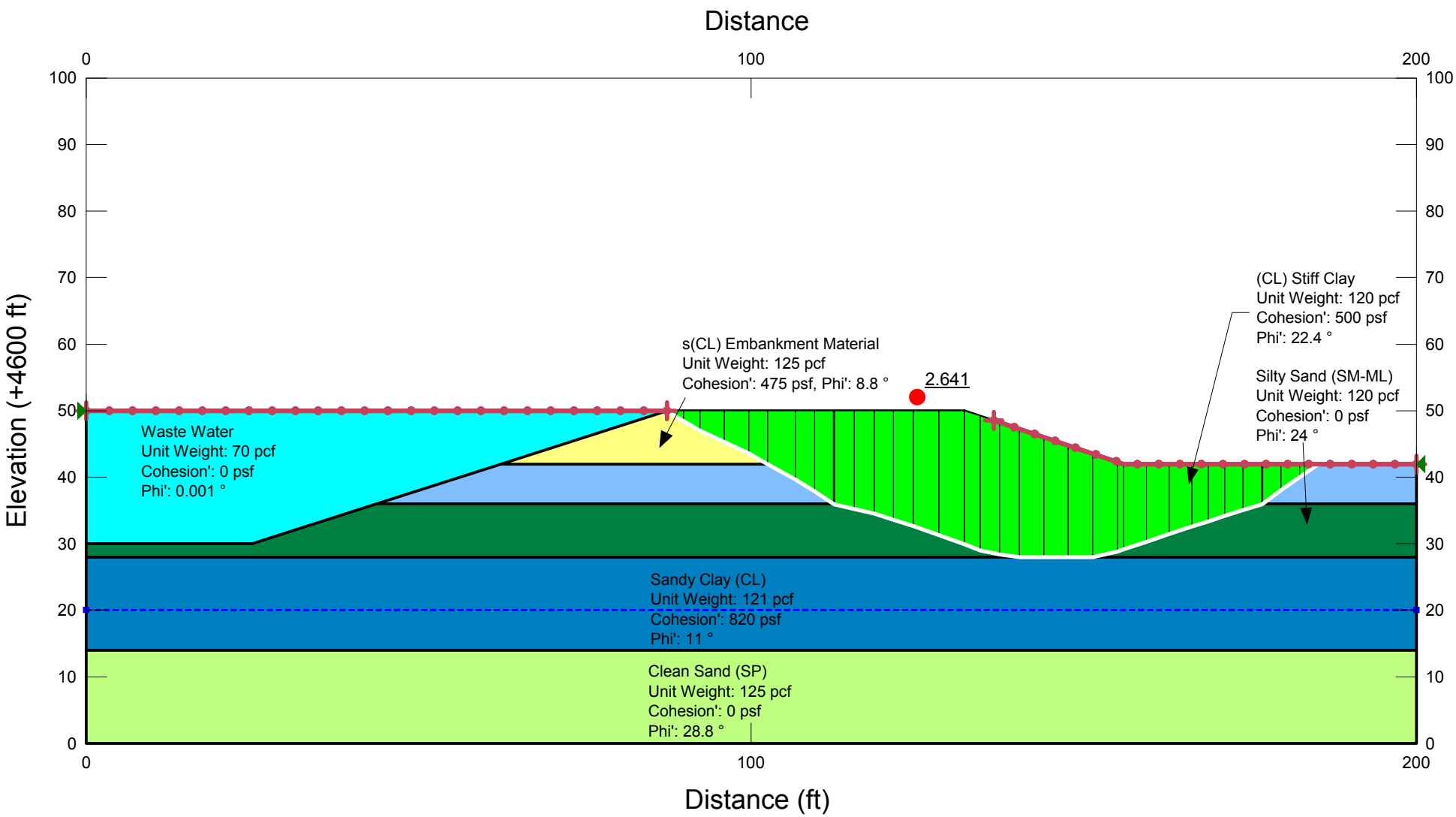


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Figure B-12

Intermountain Power Station CCR Assessment

Cross-section: South Embankment of Waste Water Basin
Static Limit Equilibrium Analysis

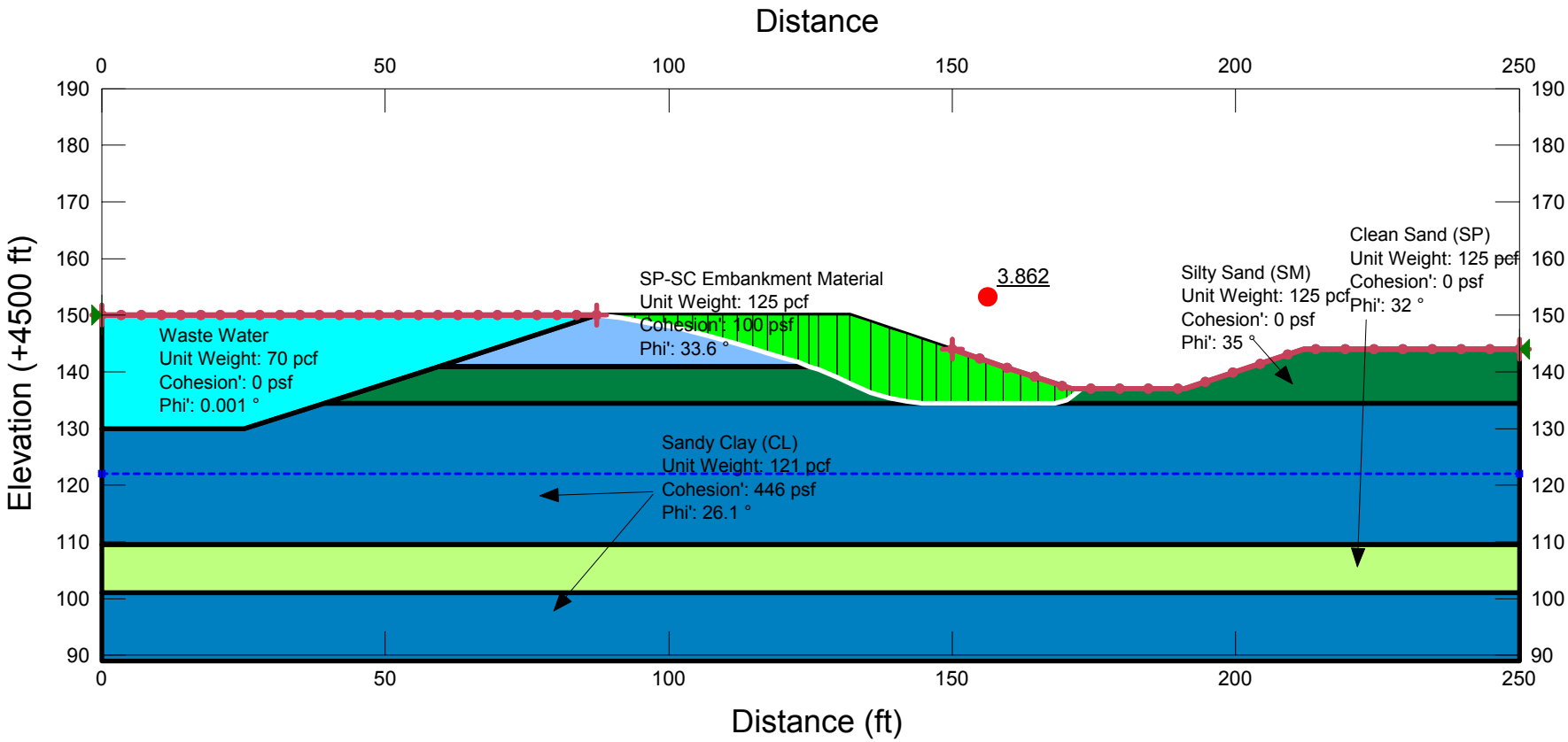

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Figure B-13

Intermountain Power Station CCR Assessment

Cross-section: South Embankment of Waste Water Basin
Pseudo-Dynamic Limit Equilibrium Analysis

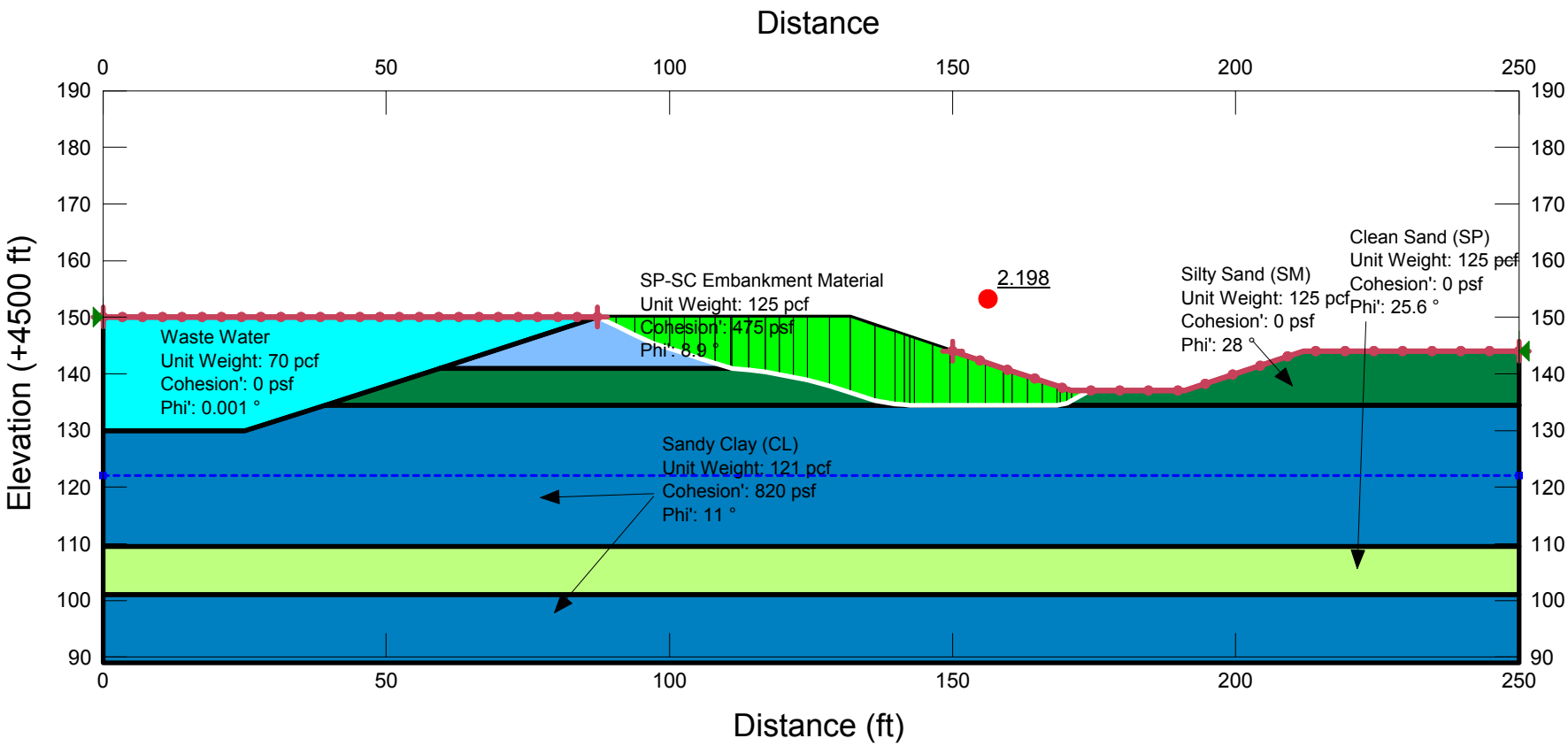

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Figure B-14

Bottom Ash Basin Capacity Table

Contour Elevation	Water Depth	Volume in Acre Feet
4684	47	3421
4682	45	3124
4680	43	2929
4678	41	2744
4676	39	2561
4674	37	2383
4672	35	2210
4670	33	2041
4668	31	1877
4666	29	1718
4664	27	1564
4662	25	1414
4660	23	1268
4658	21	1127
4656	19	990
4654	17	858
4652	15	729
4650	13	606
4648	11	486
4646	9	371
4644	7	260
4642	5	153
4640	3	50
4637	0	0

Waste Water Basin Capacity Table

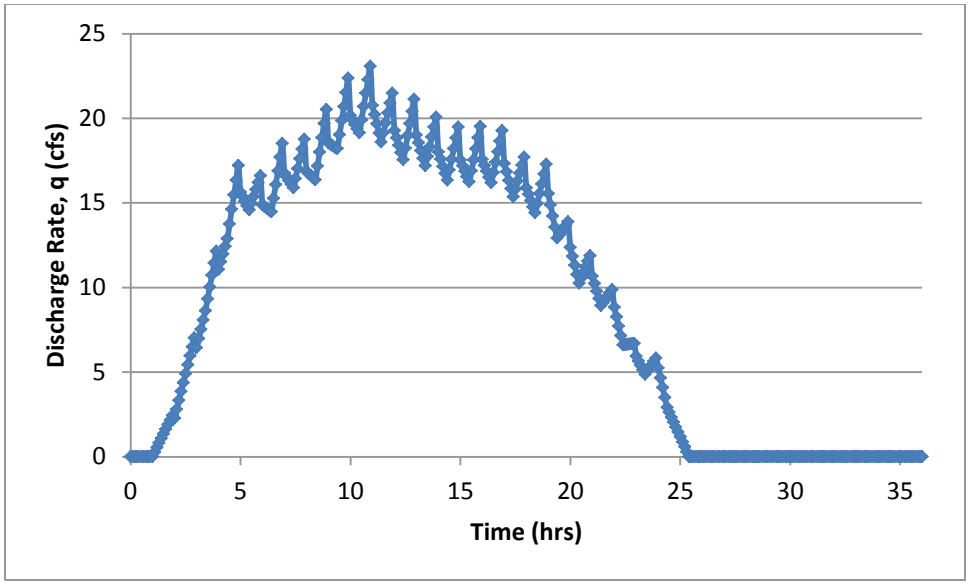
Contour Elevation	Water Depth	Volume in Acre Feet
4650	22	917
4649	21	866
4648	20	815
4647	19	765
4646	18	716
4645	17	667
4644	16	618
4643	15	570
4642	14	522
4641	13	474
4640	12	427
4639	11	380
4638	10	334
4637	9	287
4636	8	242
4635	7	197
4634	6	152
4633	5	108
4632	4	64
4631	3	28
4630	2	8.5
4629	1	1.3
4628	0	0

RAINFALL EXCESS CALCULATIONS

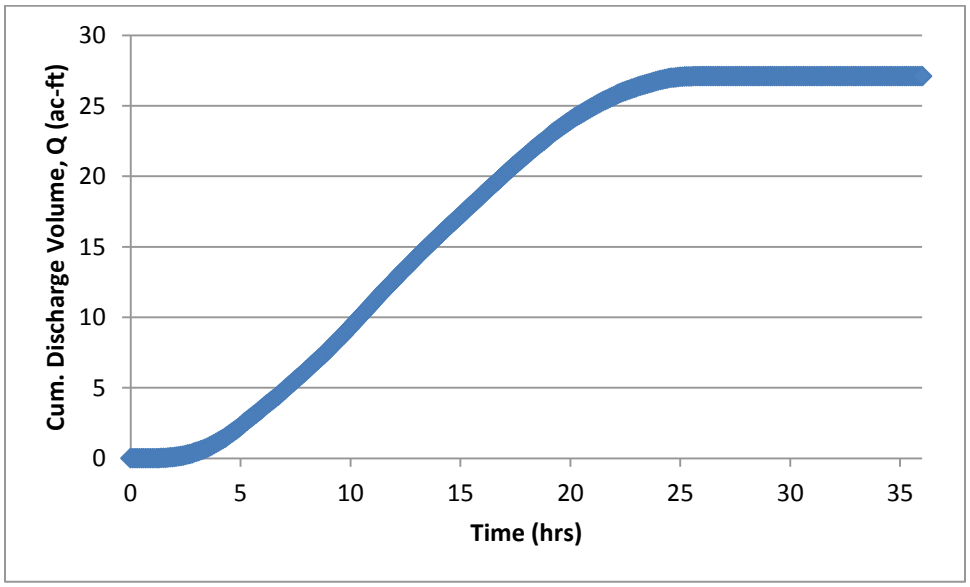
	Rainfall Excess									L
	CN	96								
	Precip (in)	1.61								
	Duration (hr)	24								
	Area (ac)	271								
	(mi^2)	0.4234375								
	S' (in)	0.4166667								
						Cumulative	Incrementa	Cumulative	Instantanec	Cumulative
		Time	Duration	Precip	Precip	Excess, R	Excess, R	Excess	Excess	Infiltration
	Increment	(hr)	(%)	(%)	(in)	(in)	(in)	(ac-ft)	(in/hr)	(in)
	0	0	0	0	0	0	0	0	0	0
	1	1	4.1666667	5	0.0805	1.94E-05	1.94E-05	0.0004381	1.94E-05	0.0804806
	2	2	8.3333333	9.6666667	0.1556333	0.0106905	0.0106711	0.2414267	0.0106711	0.1449429
	3	3	12.5	14.25	0.229425	0.0379253	0.0272348	0.8564795	0.0272348	0.1914997
	4	4	16.666667	19.5	0.31395	0.082165	0.0442397	1.85556	0.0442397	0.231785
	5	5	20.833333	25.416667	0.4092083	0.1430149	0.0608499	3.229753	0.0608499	0.2661934
	6	6	25	30	0.483	0.1956718	0.0526569	4.4189224	0.0526569	0.2873282
	7	7	29.166667	35.1875	0.5665188	0.2594517	0.0637799	5.8592841	0.0637799	0.3070671
	8	8	33.333333	39.916667	0.6426583	0.3205401	0.0610884	7.2388637	0.0610884	0.3221182
	9	9	37.5	45.125	0.7265125	0.3903204	0.0697803	8.8147355	0.0697803	0.3361921
	10	10	41.666667	50.555556	0.8139444	0.4652688	0.0749484	10.507321	0.0749484	0.3486756
	11	11	45.833333	55.958333	0.9009292	0.541589	0.0763201	12.230884	0.0763201	0.3593402
	12	12	50	60.75	0.978075	0.6104602	0.0688713	13.786227	0.0688713	0.3676148
	13	13	54.166667	65.541667	1.0552208	0.680251	0.0697907	15.362334	0.0697907	0.3749699
	14	14	58.333333	69.944444	1.1261056	0.745063	0.064812	16.826006	0.064812	0.3810426
	15	15	62.5	74.25	1.195425	0.8089885	0.0639255	18.269656	0.0639255	0.3864365
	16	16	66.666667	78.555556	1.2647444	0.8733819	0.0643934	19.723875	0.0643934	0.3913625
	17	17	70.833333	82.75	1.332275	0.9365079	0.0631259	21.149469	0.0631259	0.3957671
	18	18	75	86.5	1.39265	0.9932368	0.0567289	22.430597	0.0567289	0.3994132
	19	19	79.166667	90.25	1.453025	1.0502122	0.0569754	23.717292	0.0569754	0.4028128
	20	20	83.333333	93	1.4973	1.0921366	0.0419245	24.664086	0.0419245	0.4051634
	21	21	87.5	95.5	1.53755	1.1303463	0.0382097	25.526988	0.0382097	0.4072037
	22	22	91.666667	97.5	1.56975	1.1609762	0.0306299	26.218713	0.0306299	0.4087738
	23	23	95.833333	98.75	1.589875	1.1801466	0.0191704	26.651644	0.0191704	0.4097284
	24	24	100	100	1.61	1.1993368	0.0191902	27.085022	0.0191902	0.4106632

COMPOSITE RUNOFF HYDROGRAPH

(Oscillations due to discretization of 24 unit hydrographs)



COMPOSITE DISCHARGE CURVE



tc (hr) **0.6666667**

Lag Time = 0.6 x tc (hr) 0.4

Incremental Hydrograph #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Increment 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
time (hr) 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Time to Peak, tp (hr)	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	0.9	0.9	0.9	0.9	0.9
Cum Time to Peak, tp (hr)	0.9	1.9	2.9	3.9	4.9	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.9	13.9	14.9	15.9	16.9	17.9	18.9	19.9	20.9	21.9	22.9	23.9
Excess, R (in)	1.94E-05	0.0106711	0.0272348	0.0442397	0.0608499	0.0526569	0.0637799	0.0610884	0.0697803	0.0749484	0.0763201	0.0688713	0.0697907	0.064812	0.0639255	0.0643934	0.0631259	0.0567289	0.0569754	0.0419245	0.0382097	0.0306299	0.0191704	0.0191902
qp (cfs)	0.0044174	2.429969	6.2017824	10.074061	13.856446	11.990791	14.523647	13.910761	15.890041	17.066906	17.379259	15.683043	15.892414	14.758689	14.556809	14.663367	14.374743	12.918044	12.974166	9.5468419	8.7009311	6.9748949	4.365389	4.3698914

Total Time (hr)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	q (cfs)	Cumulative q (cfs)
0	0	0	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	0.0004908	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0004908
0.2	0.0009816	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0009816
0.3	0.0014725	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0014725
0.4	0.0019633	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0019633
0.5	0.0024541	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0024541
0.6	0.0029449	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0029449
0.7	0.0034357	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0034357
0.8	0.0039265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0039265
0.9	0.0044174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0044174
1	0.0041229	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0041229
1.1	0.0038284	0.2699966	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2738249
1.2	0.0035339	0.5399931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.543527
1.3	0.0032394	0.8099897	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8132291
1.4	0.0029449	1.0799862	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0829311
1.5	0.0026504	1.3499828	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3526332
1.6	0.0023559	1.6199794	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6223353
1.7	0.0020614	1.8899759	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8920373
1.8	0.0017669	2.1599725	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1617394
1.9	0.0014725	2.429969	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4314415
2	0.001178	2.2679711	3.06E-15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2691491
2.1	0.0008835	2.1059732	0.6890869	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.7959436
2.2	0.000589	1.9439752	1.3781739	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.3227381
2.3	0.0002945	1.7819773	2.0672608	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.8495326
2.4	8.414E-06	1.6199794	2.7563477	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.3763355
2.5	0	1.4579814	3.4454347	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.9034161
2.6	0	1.2959835	4.1345216	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.4305051
2.7	0	1.1339855	4.8236085	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.9575941
2.8	0	0.9719876	5.5126955	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.4846831
2.9	0	0.8099897	6.2017824	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.0117721
3	0	0.6479917	5.7883302	1.491E-14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.436322
3.1	0	0.4859938	5.3748781	1.1193401	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.980212
3.2	0	0.3239959	4.9614259	2.2386803	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.5241021
3.3	0	0.1619979	4.5479738	3.3580204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.0679921
3.4	0	0.0046285	4.1345216	4.4773605	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.6165106
3.5	0	0	3.7210694	5.5967007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.3177701
3.6	0	0	3.3076173	6.7160408	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.023658
3.7	0	0	2.8941651	7.8353809	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.729546
3.8	0	0	2.480713	8.9547211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.435434
3.9	0	0	2.0672608	10.074061	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.141322
4	0	0	1.6538086	9.4024571	2.735E-14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.056266
4.1	0	0	1.2403565	8.730853	1.5396051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.510815
4.2	0	0	0.8269043	8.0592489	3.0792102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.965363
4.3	0	0	0.4134522	7.3876449	4.6188152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.419912
4.4	0	0	0.0118129	6.7160408	6.1584203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.886274
4.5	0	0	0	6.0444367	7.6980254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.742462
4.6	0	0	0	5.3728326	9.2376305	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.610463
4.7	0	0	0	4.7012286	10.777236	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.478464
4.8	0	0	0	4.0296245	12.316841	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.346465
4.9	0	0	0	3.3580204	13.856446	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.214466
5	0	0	0	2.6864163	12.932683	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.619099
5.1	0	0	0	2.0148122	12.00892	1.3323102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.356042
5.2	0	0	0	1.3432082	11.085157	2.6646203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.092985
5.3	0	0	0	0.6716041	10.161394	3.9969305	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.829928
5.4	0	0	0	0.0191887	9.2376305	5.3292407	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.58606
5.5	0	0	0	0	8.3138674	6.6615508	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.975418
5.6	0	0	0	0	7.3901044	7.993861	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.383965

5.7	0	0	0	0	6.4663413	9.3261711	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.792512
5.8	0	0	0	0	5.5425783	10.658481	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.20106
5.9	0	0	0	0	4.6188152	11.990791	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.609607
6	0	0	0	0	3.6950522	11.191405	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.886458
6.1	0	0	0	0	2.7712891	10.392019	1.6137386	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.777047
6.2	0	0	0	0	1.8475261	9.5926332	3.2274772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.667636
6.3	0	0	0	0	0.923763	8.7932471	4.8412158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.558226
6.4	0	0	0	0	0.0263932	7.993861	6.4549544	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.475209
6.5	0	0	0	0	0	7.1944749	8.0686929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.263168
6.6	0	0	0	0	0	6.3950888	9.6824315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.07752
6.7	0	0	0	0	0	5.5957027	11.29617	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.891873
6.8	0	0	0	0	0	4.7963166	12.909909	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.706225
6.9	0	0	0	0	0	3.9969305	14.523647	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.520578
7	0	0	0	0	0	3.1975444	13.555404	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.752949
7.1	0	0	0	0	0	2.3981583	12.587161	1.5456401	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.530959
7.2	0	0	0	0	0	1.5987722	11.618918	3.0912802	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.30897
7.3	0	0	0	0	0	0.7993861	10.650675	4.6369203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.086981
7.4	0	0	0	0	0	0.0228396	9.6824315	6.1825604	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.887832
7.5	0	0	0	0	0	0	8.7141884	7.7282005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.442389
7.6	0	0	0	0	0	0	7.7459452	9.2738406	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.019786
7.7	0	0	0	0	0	0	6.7777021	10.819481	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.597183
7.8	0	0	0	0	0	0	5.8094589	12.365121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.17458
7.9	0	0	0	0	0	0	4.8412158	13.910761	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.751977
8	0	0	0	0	0	0	3.8729726	12.983377	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.856349
8.1	0	0	0	0	0	0	2.9047295	12.055993	1.7655601	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.726282
8.2	0	0	0	0	0	0	1.9364863	11.128609	3.5311202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.596215
8.3	0	0	0	0	0	0	0.9682432	10.201225	5.2966803	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.466148
8.4	0	0	0	0	0	0	0.0276641	9.2738406	7.0622404	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.363745
8.5	0	0	0	0	0	0	0	8.3464566	8.8278005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.174257
8.6	0	0	0	0	0	0	0	7.4190725	10.593361	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.012433
8.7	0	0	0	0	0	0	0	6.4916884	12.358921	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.850609
8.8	0	0	0	0	0	0	0	5.5643044	14.124481	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.688785
8.9	0	0	0	0	0	0	0	4.6369203	15.890041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.526961
9	0	0	0	0	0	0	0	3.7095363	14.830705	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.540241
9.1	0	0	0	0	0	0	0	2.7821522	13.771369	1.8963229	0	0	0	0	0	0	0	0	0	0	0	0	0	18.449844
9.2	0	0	0	0	0	0	0	1.8547681	12.712033	3.7926457	0	0	0	0	0	0	0	0	0	0	0	0	0	18.359447
9.3	0	0	0	0	0	0	0	0.9273841	11.652697	5.6889686	0	0	0	0	0	0	0	0	0	0	0	0	0	18.269049
9.4	0	0	0	0	0	0	0	0.0264967	10.593361	7.5852915	0	0	0	0	0	0	0	0	0	0	0	0	0	18.205149
9.5	0	0	0	0	0	0	0	0	9.5340246	9.4816143	0	0	0	0	0	0	0	0	0	0	0	0	0	19.015639
9.6	0	0	0	0	0	0	0	0	8.4746885	11.377937	0	0	0	0	0	0	0	0	0	0	0	0	0	19.852626
9.7	0	0	0	0	0	0	0	0	7.4153524	13.27426	0	0	0	0	0	0	0	0	0	0	0	0	0	20.689612
9.8	0	0	0	0	0	0	0	0	6.3560164	15.170583	0	0	0	0	0	0	0	0	0	0	0	0	0	21.526599
9.9	0	0	0	0	0	0	0	0	5.2966803	17.066906	0	0	0	0	0	0	0	0	0	0	0	0	0	22.363586
10	0	0	0	0	0	0	0	0	4.2373443	15.929112	0	0	0	0	0	0	0	0	0	0	0	0	0	20.166456
10.1	0	0	0	0	0	0	0	0	3.1780082	14.791318	1.9310288	0	0	0	0	0	0	0	0	0	0	0	0	19.900355
10.2	0	0	0	0	0	0	0	0	2.1186721	13.653525	3.8620575	0	0	0	0	0	0	0	0	0	0	0	0	19.634254
10.3	0	0	0	0	0	0	0	0	1.0593361	12.515731	5.7930863	0	0	0	0	0	0	0	0	0	0	0	0	19.368153
10.4	0	0	0	0	0	0	0	0	0.0302667	11.377937	7.7241151	0	0	0	0	0	0	0	0	0	0	0	0	19.132319
10.5	0	0	0	0	0	0	0	0	0	10.240143	9.6551438	0	0	0	0	0	0	0	0	0	0	0	0	19.895287
10.6	0	0	0	0	0	0	0	0	0	9.1023498	11.586173	0	0	0	0	0	0	0	0	0	0	0	0	20.688522
10.7	0	0	0	0	0	0	0	0	0	7.964556	13.517201	0	0	0	0	0	0	0	0	0	0	0	0	21.481757
10.8	0	0	0	0	0	0	0	0	0	6.8267623	15.44823	0	0	0	0	0	0	0	0	0	0	0	0	22.274992
10.9	0	0	0	0	0	0	0	0	0	5.6889686	17.379259	0	0	0	0	0	0	0	0	0	0	0	0	23.068227
11	0	0	0	0	0	0	0	0	0	4.5511749	16.220642	0	0	0	0	0	0	0	0	0	0	0	0	20.771817
11.1	0	0	0	0	0	0	0	0	0	3.4133812	15.062024	1.7425603	0	0	0	0	0	0	0	0	0	0	0	20.217966
11.2	0	0	0	0	0	0	0	0	0	2.2755874	13.903407	3.4851206	0	0	0	0	0	0	0	0	0	0	0	19.664115
11.3	0	0	0	0	0	0	0	0	0	1.1377937	12.74479	5.2276809	0	0	0	0	0	0	0	0	0	0	0	19.110265
11.4	0	0	0	0	0	0	0	0	0	0.0325084	11.586173	6.9702413	0	0	0	0	0	0	0	0	0	0	0	18.588922
11.5	0	0	0	0	0	0	0	0	0	0	10.427555	8.7128016	0	0	0	0	0	0	0	0	0	0	0	19.140357
11.6	0	0	0	0	0	0	0	0	0	0	9.2689381	10.455362	0	0	0	0	0	0	0	0	0	0	0	19.7243
11.7	0	0	0	0	0	0	0	0	0	0	8.1103208	12.197922	0	0	0	0	0	0	0	0	0	0	0	20.308243
11.8	0	0	0	0	0	0	0	0	0	0	6.9517036	13.940483	0	0	0	0	0	0	0	0	0	0	0	20.892186
11.9	0	0	0	0	0	0	0	0	0	0	5.7930863	15.683043	0	0	0	0	0	0	0	0	0	0	0	21.476129
12	0	0	0	0	0	0	0	0	0	0	4.634469	14.637507	0	0	0	0	0	0	0	0	0	0	0	19.271976
12.1	0	0	0	0	0	0	0	0	0	0	3.4758518	13.59197	1.7658237	0	0	0	0	0	0	0	0	0	0	18.833646
12.2	0	0	0	0	0	0	0	0	0	0	2.3172345	12.546434	3.5316475	0	0	0	0	0	0	0	0	0	0	18.395316
12.3	0	0	0	0	0	0	0	0	0	0	1.1586173	11.500898	5.2974712	0	0	0	0	0	0	0	0	0	0	17.956987
12.4	0	0	0	0	0	0	0	0	0	0	0.0331034	10.455362	7.063295	0	0	0	0	0	0	0	0	0	0	17.55176
12.5	0	0	0	0	0	0	0	0	0	0	0	9.4098257	8.8291187	0	0	0	0	0	0	0	0	0	0	18.238944

12.6	0	0	0	0	0	0	0	0	0	0	0	8.3642895	10.594942	0	0	0	0	0	0	0	0	0	0	18.959232
12.7	0	0	0	0	0	0	0	0	0	0	0	7.3187533	12.360766	0	0	0	0	0	0	0	0	0	0	19.67952
12.8	0	0	0	0	0	0	0	0	0	0	0	6.2732171	14.12659	0	0	0	0	0	0	0	0	0	0	20.399807
12.9	0	0	0	0	0	0	0	0	0	0	0	5.2276809	15.892414	0	0	0	0	0	0	0	0	0	0	21.120095
13	0	0	0	0	0	0	0	0	0	0	0	4.1821448	14.832919	0	0	0	0	0	0	0	0	0	0	19.015064
13.1	0	0	0	0	0	0	0	0	0	0	0	3.1366086	13.773425	1.6398543	0	0	0	0	0	0	0	0	0	18.549888
13.2	0	0	0	0	0	0	0	0	0	0	0	2.0910724	12.713931	3.2797087	0	0	0	0	0	0	0	0	0	18.084712
13.3	0	0	0	0	0	0	0	0	0	0	0	1.0455362	11.654437	4.919563	0	0	0	0	0	0	0	0	0	17.619536
13.4	0	0	0	0	0	0	0	0	0	0	0	0.0298725	10.594942	6.5594173	0	0	0	0	0	0	0	0	0	17.184232
13.5	0	0	0	0	0	0	0	0	0	0	0	0	9.5354482	8.1992716	0	0	0	0	0	0	0	0	0	17.73472
13.6	0	0	0	0	0	0	0	0	0	0	0	0	8.475954	9.839126	0	0	0	0	0	0	0	0	0	18.31508
13.7	0	0	0	0	0	0	0	0	0	0	0	0	7.4164597	11.47898	0	0	0	0	0	0	0	0	0	18.89544
13.8	0	0	0	0	0	0	0	0	0	0	0	0	6.3569655	13.118835	0	0	0	0	0	0	0	0	0	19.4758
13.9	0	0	0	0	0	0	0	0	0	0	0	0	5.2974712	14.758689	0	0	0	0	0	0	0	0	0	20.05616
14	0	0	0	0	0	0	0	0	0	0	0	0	4.237977	13.774776	0	0	0	0	0	0	0	0	0	18.012753
14.1	0	0	0	0	0	0	0	0	0	0	0	0	3.1784827	12.790864	1.6174232	0	0	0	0	0	0	0	0	17.58677
14.2	0	0	0	0	0	0	0	0	0	0	0	0	2.1189885	11.806951	3.2348465	0	0	0	0	0	0	0	0	17.160786
14.3	0	0	0	0	0	0	0	0	0	0	0	0	1.0594942	10.823039	4.8522697	0	0	0	0	0	0	0	0	16.734803
14.4	0	0	0	0	0	0	0	0	0	0	0	0	0.0302713	9.839126	6.4696929	0	0	0	0	0	0	0	0	16.33909
14.5	0	0	0	0	0	0	0	0	0	0	0	0	0	8.8552134	8.0871162	0	0	0	0	0	0	0	0	16.94233
14.6	0	0	0	0	0	0	0	0	0	0	0	0	0	7.8713008	9.7045394	0	0	0	0	0	0	0	0	17.57584
14.7	0	0	0	0	0	0	0	0	0	0	0	0	0	6.8873882	11.321963	0	0	0	0	0	0	0	0	18.209351
14.8	0	0	0	0	0	0	0	0	0	0	0	0	0	5.9034756	12.939386	0	0	0	0	0	0	0	0	18.842861
14.9	0	0	0	0	0	0	0	0	0	0	0	0	0	4.919563	14.556809	0	0	0	0	0	0	0	0	19.476372
15	0	0	0	0	0	0	0	0	0	0	0	0	0	3.9356504	13.586355	0	0	0	0	0	0	0	0	17.522006
15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	2.9517378	12.615901	1.629263	0	0	0	0	0	0	0	17.196902
15.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9678252	11.645447	3.2585261	0	0	0	0	0	0	0	16.871799
15.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9839126	10.674993	4.8877891	0	0	0	0	0	0	0	16.546695
15.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0281118	9.7045394	6.5170522	0	0	0	0	0	0	0	16.249703
15.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.7340855	8.1463152	0	0	0	0	0	0	0	16.880401
15.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.7636315	9.7755783	0	0	0	0	0	0	0	17.53921
15.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.7931776	11.404841	0	0	0	0	0	0	0	18.198019
15.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.8227236	13.034104	0	0	0	0	0	0	0	18.856828
15.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.8522697	14.663367	0	0	0	0	0	0	0	19.515637
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.8818158	13.68581	0	0	0	0	0	0	0	17.567625
16.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.9113618	12.708252	1.5971937	0	0	0	0	0	0	17.216807
16.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9409079	11.730694	3.1943874	0	0	0	0	0	0	16.865989
16.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9704539	10.753136	4.7915811	0	0	0	0	0	0	16.515171
16.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0277273	9.7755783	6.3887748	0	0	0	0	0	0	16.19208
16.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.7980204	7.9859684	0	0	0	0	0	0	16.783989
16.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.8204626	9.5831621	0	0	0	0	0	0	17.403625
16.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.8429048	11.180356	0	0	0	0	0	0	18.023261
16.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.865347	12.77755	0	0	0	0	0	0	18.642896
16.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.8877891	14.374743	0	0	0	0	0	0	19.262532
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.9102313	13.416427	0	0	0	0	0	0	17.326658
17.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.9326735	12.458111	1.4353382	0	0	0	0	0	16.826122
17.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9551157	11.499795	2.8706764	0	0	0	0	0	16.325587
17.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9775578	10.541478	4.3060146	0	0	0	0	0	15.825051
17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0279302	9.5831621	5.7413528	0	0	0	0	0	15.352445
17.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.6248459	7.176691	0	0	0	0	0	15.801537
17.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.6665297	8.6120291	0	0	0	0	0	16.278559
17.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.7082135	10.047367	0	0	0	0	0	16.755581
17.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.7498973	11.482706	0	0	0	0	0	17.232603
17.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.7915811	12.918044	0	0	0	0	0	17.709625
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.8332649	12.056841	0	0	0	0	0	15.890106
18.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.8749486	11.195638	1.441574	0	0	0	0	15.512161
18.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9166324	10.334435	2.883148	0	0	0	0	15.134215
18.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9583162	9.4732321	4.324722	0	0	0	0	14.75627
18.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0273805	8.6120291	5.766296	0	0	0	0	14.405706
18.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.7508262	7.20787	0	0	0	0	14.958696
18.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.8896233	8.6494441	0	0	0	0	15.539067
18.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.0284204	10.091018	0	0	0	0	16.119438
18.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.1672175	11.532592	0	0	0	0	16.69981
18.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.3060146	12.974166	0	0	0	0	17.280181
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.4448117	12.109222	0	0	0	0	15.554033
19.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5836087	11.244277	1.0607602	0	0	0	14.888646
19.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7224058	10.379333	2.1215204	0	0	0	14.223259
19.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8612029	9.5143885	3.1822806	0	0	0	13.557872
19.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0246058	8.6494441	4.2430408	0	0	0	12.917091

19.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.7844996	5.3038011	0	0	0	0	13.088301
19.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.9195552	6.3645613	0	0	0	0	13.284117
19.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.0546108	7.4253215	0	0	0	0	13.479932
19.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.1896664	8.4860817	0	0	0	0	13.675748
19.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.324722	9.5468419	0	0	0	0	13.871564
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.4597776	8.9103858	1.374E-13	0	0	0	12.370163
20.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5948332	8.2739297	0.9667701	0	0	0	11.835533
20.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7298888	7.6374735	1.9335402	0	0	0	11.300903
20.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8649444	7.0010174	2.9003104	0	0	0	10.766272
20.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0247127	6.3645613	3.8670805	0	0	0	10.256354
20.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.7281051	4.8338506	0	0	0	10.561956
20.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.091649	5.8006207	0	0	0	10.89227
20.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.4551929	6.7673908	0	0	0	11.222584
20.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.8187368	7.7341609	0	0	0	11.552898
20.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.1822806	8.7009311	0	0	0	11.883212
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5458245	8.120869	2.203E-13	0	0	10.666693
21.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9093684	7.5408069	0.7749883	0	0	10.225164
21.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2729123	6.9607448	1.5499766	0	0	9.7836337
21.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6364561	6.3806828	2.324965	0	0	9.3421039
21.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0181845	5.8006207	3.0999533	0	0	8.9187585
21.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.2205586	3.8749416	0	0	9.0955002
21.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.6404966	4.6499299	0	0	9.2904265
21.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.0604345	5.4249183	0	0	9.4853527
21.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.4803724	6.1999066	0	0	9.680279
21.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.9003104	6.9748949	0	0	9.8752053
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.3202483	6.5099019	2.068E-13	0	8.8301502
22.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7401862	6.0449089	0.4850432	0	8.2701384
22.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1601241	5.5799159	0.9700865	0	7.7101265
22.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5800621	5.1149229	1.4551297	0	7.1501147
22.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0165732	4.6499299	1.9401729	0	6.606676
22.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.1849369	2.4252161	0	6.6101531
22.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.7199439	2.9102594	0	6.6302033
22.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.254951	3.3953026	0	6.6502535
22.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.789958	3.8803458	0	6.6703038
22.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.324965	4.365389	0	6.690354
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.859972	4.0743631	2.76E-13	5.9343351
23.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.394979	3.7833372	0.4855435	5.6638596
23.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.929986	3.4923112	0.971087	5.3933842
23.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.464993	3.2012853	1.4566305	5.1229088
23.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0132855	2.9102594	1.942174	4.8657188
23.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.6192334	2.4277174	5.0469509
23.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.3282075	2.9132609	5.2414684
23.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.0371816	3.3988044	5.435986
23.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7461556	3.8843479	5.6305035
23.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4551297	4.3698914	5.8250211
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1641037	4.0785653	5.242669
24.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8730778	3.7872392	4.660317
24.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5820519	3.4959131	4.077965
24.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2910259	3.204587	3.495613
24.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008315	2.9132609	2.921576
24.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.6219348	2.6219348
24.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.3306087	2.3306087
24.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.0392827	2.0392827
24.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7479566	1.7479566
24.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4566305	1.4566305
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1653044	1.1653044
25.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8739783	0.8739783
25.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5826522	0.5826522
25.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2913261	0.2913261
25.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0083236	0.0083236
25.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

26.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
30.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

33.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
35.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Incremental Hydrograph #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Time to Peak, tp (hr)	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	0.9	0.9	0.9	0.9	0.9
Cum Time to Peak, tp (hr)	0.9	1.9	2.9	3.9	4.9	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.9	13.9	14.9	15.9	16.9	17.9	18.9	19.9	20.9	21.9	22.9	23.9
Excess, R (in)	1.94E-05	0.0106711	0.0272348	0.0442397	0.0608499	0.0526569	0.0637799	0.0610884	0.0697803	0.0749484	0.0763201	0.0688713	0.0697907	0.064812	0.0639255	0.0643934	0.0631259	0.0567289	0.0569754	0.0419245	0.0382097	0.0306299	0.0191704	0.0191902
Qa (ac-ft)	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777

Total Time (hr)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Q (ac-ft)	Cumulative Q (ac-ft)
0	0	0	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	1.752E-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.752E-06
0.2	6.571E-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.571E-06
0.3	1.489E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.489E-05
0.4	2.629E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.629E-05
0.5	4.118E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.118E-05
0.6	5.914E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.914E-05
0.7	8.061E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.061E-05
0.8	0.0001051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0001051
0.9	0.0001347	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0001347
1	0.0001643	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0001643
1.1	0.0001963	0.000964	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0011602
1.2	0.0002261	0.0036148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0038409
1.3	0.0002537	0.0081936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0084473
1.4	0.0002799	0.0144593	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0147393
1.5	0.000304	0.0226529	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.022957
1.6	0.0003259	0.0325335	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0328594
1.7	0.000345	0.0443419	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0446869
1.8	0.000364	0.0578373	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0582013
1.9	0.0003792	0.074104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0744832
2	0.0003943	0.0903707	1.093E-17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.090765
2.1	0.0004061	0.1079629	0.0024602	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1108292
2.2	0.0004179	0.1243502	0.0092258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1339939
2.3	0.0004245	0.1395324	0.0209118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1608687
2.4	0.0004311	0.1539918	0.0369032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.191326
2.5	0.0004344	0.1672461	0.057815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2254955
2.6	0.0004376	0.1792956	0.0830321	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2627653
2.7	0.0004381	0.1897786	0.1131697	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3033864
2.8	0.0004381	0.2002616	0.1476127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3483123
2.9	0.0004381	0.2085757	0.1891287	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3981425
3	0.0004381	0.2168898	0.2306448	5.324E-17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4479727
3.1	0.0004381	0.2233965	0.2755437	0.0039963	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5033746
3.2	0.0004381	0.2299032	0.3173672	0.0149862	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5626947
3.3	0.0004381	0.233518	0.3561156	0.0339687	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6240404
3.4	0.0004381	0.2371328	0.3930187	0.0599448	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6905345
3.5	0.0004381	0.2389403	0.4268466	0.0939136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7601386
3.6	0.0004381	0.2407477	0.4575993	0.1348759	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8336609
3.7	0.0004381	0.2409887	0.4843541	0.1838308	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9096116
3.8	0.0004381	0.2409887	0.5111089	0.2397793	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9923149
3.9	0.0004381	0.2409887	0.5323282	0.3072172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0809722
4	0.0004381	0.2409887	0.5535475	0.3746552	9.764E-17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1696294
4.1	0.0004381	0.2409887	0.5701539	0.447588	0.0054968	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2646655
4.2	0.0004381	0.2409887	0.5867604	0.5155255	0.0206129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3643255
4.3	0.0004381	0.2409887	0.5959862	0.5784676	0.0467226	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4626031
4.4	0.0004381	0.2409887	0.605212	0.6384124	0.0824516	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5675027
4.5	0.0004381	0.2409887	0.6098249	0.6933618	0.1291741	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6737876
4.6	0.0004381	0.2409887	0.6144377	0.7433159	0.185516	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7846964
4.7	0.0004381	0.2409887	0.6150528	0.7867759	0.2528515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8961069
4.8	0.0004381	0.2409887	0.6150528	0.8302359	0.3298063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.0165217
4.9	0.0004381	0.2409887	0.6150528	0.8647041	0.4225643	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.143748
5	0.0004381	0.2409887	0.6150528	0.8991724	0.5153224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2709743
5.1	0.0004381	0.2409887	0.6150528	0.9261476	0.6156384	0.0047567	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4030222
5.2	0.0004381	0.2409887	0.6150528	0.9531227	0.7090836	0.0178375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5365234
5.3	0.0004381	0.2409887	0.6150528	0.968109	0.7956577	0.0404318	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.660678
5.4	0.0004381	0.2409887	0.6150528	0.9830952	0.8781093	0.0713502	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.7890342

5.5	0.0004381	0.2409887	0.6150528	0.9905883	0.9536899	0.1117819	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.9125397
5.6	0.0004381	0.2409887	0.6150528	0.9980814	1.0223996	0.1605379	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.0374983
5.7	0.0004381	0.2409887	0.6150528	0.9990804	1.082177	0.2188072	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.1565441
5.8	0.0004381	0.2409887	0.6150528	0.9990804	1.1419544	0.2854007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.282915
5.9	0.0004381	0.2409887	0.6150528	0.9990804	1.189364	0.3656696	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.4105936
6	0.0004381	0.2409887	0.6150528	0.9990804	1.2367737	0.4459385	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.5382722
6.1	0.0004381	0.2409887	0.6150528	0.9990804	1.2738769	0.5327479	0.0057614	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.6679462
6.2	0.0004381	0.2409887	0.6150528	0.9990804	1.3109801	0.6136114	0.0216054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.8017569
6.3	0.0004381	0.2409887	0.6150528	0.9990804	1.331593	0.6885291	0.0489723	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.9246544
6.4	0.0004381	0.2409887	0.6150528	0.9990804	1.3522059	0.7598792	0.0864217	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.0540668
6.5	0.0004381	0.2409887	0.6150528	0.9990804	1.3625123	0.8252836	0.135394	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.1787499
6.6	0.0004381	0.2409887	0.6150528	0.9990804	1.3728188	0.884742	0.1944488	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.3075696
6.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	0.9364709	0.2650266	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.4312504
6.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	0.9881998	0.3456868	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.5636395
6.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.0292261	0.4429112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.7018903
7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.0702525	0.5401356	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.8401411
7.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.10236	0.645282	0.0055183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.9829134
7.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1344676	0.7432266	0.0206937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.1281409
7.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1523052	0.8339694	0.0469057	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.2629332
7.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1701427	0.9203911	0.0827748	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.4030616
7.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1790615	0.999611	0.1296805	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.5381059
7.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1879802	1.0716291	0.1862432	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.6756056
7.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.1342849	0.2538426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.8070499
7.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.1969406	0.3310991	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.9469621
7.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.2466331	0.4242207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.0897762
8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.2963255	0.5173423	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.2325903
8.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.3352153	0.6180517	0.0063035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.3784928
8.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.3741051	0.7118631	0.0236381	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.5285286
8.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.3957105	0.7987766	0.0535796	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.6669891
8.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4173159	0.8815514	0.0945523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.812342
8.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4281186	0.9574282	0.148132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.9526012
8.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4389214	1.0264072	0.2127427	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.0969936
8.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.0864189	0.2899604	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.2356634
8.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.1464306	0.3782092	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.383924
8.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.1940261	0.4845806	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.5378908
9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.2416216	0.5909519	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.6918577
9.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.2788703	0.7059906	0.0067703	0	0	0	0	0	0	0	0	0	0	0	0	0	7.8509153
9.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3161189	0.8131499	0.0253888	0	0	0	0	0	0	0	0	0	0	0	0	0	8.0139417
9.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3368126	0.9124298	0.0575479	0	0	0	0	0	0	0	0	0	0	0	0	0	8.1660744
9.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3575063	1.0069821	0.1015551	0	0	0	0	0	0	0	0	0	0	0	0	0	8.3253276
9.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3678532	1.093655	0.1591031	0	0	0	0	0	0	0	0	0	0	0	0	0	8.4798954
9.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3782	1.1724486	0.2284991	0	0	0	0	0	0	0	0	0	0	0	0	0	8.6384318
9.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.2409991	0.3114358	0	0	0	0	0	0	0	0	0	0	0	0	0	8.7912985
9.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.3095495	0.4062206	0	0	0	0	0	0	0	0	0	0	0	0	0	8.9546337
9.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.3639171	0.5204701	0	0	0	0	0	0	0	0	0	0	0	0	0	9.1232508
10	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.4182846	0.6347196	0	0	0	0	0	0	0	0	0	0	0	0	0	9.291868
10.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.4608332	0.7582784	0.0068943	0	0	0	0	0	0	0	0	0	0	0	0	9.4648695
10.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5033817	0.8733742	0.0258534	0	0	0	0	0	0	0	0	0	0	0	0	9.6414731
10.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5270198	0.9800071	0.0586011	0	0	0	0	0	0	0	0	0	0	0	0	9.8044917
10.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5506579	1.0815623	0.1034138	0	0	0	0	0	0	0	0	0	0	0	0	9.9744976
10.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5624769	1.1746545	0.1620149	0	0	0	0	0	0	0	0	0	0	0	0	10.13801
10.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.574296	1.2592838	0.232681	0	0	0	0	0	0	0	0	0	0	0	0	10.305124
10.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.3329112	0.3171356	0	0	0	0	0	0	0	0	0	0	0	0	10.464782
10.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.4065387	0.4136551	0	0	0	0	0	0	0	0	0	0	0	0	10.634929
10.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.4649329	0.5299956	0	0	0	0	0	0	0	0	0	0	0	0	10.809664
11	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.5233271	0.6463361	0	0	0	0	0	0	0	0	0	0	0	0	10.984399
11.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.5690269	0.7721562	0.0062214	0	0	0	0	0	0	0	0	0	0	0	11.16214
11.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6147268	0.8893584	0.0233301	0	0	0	0	0	0	0	0	0	0	0	11.342151
11.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6401155	0.9979429	0.0528817	0	0	0	0	0	0	0	0	0	0	0	11.505676
11.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6655043	1.1013567	0.0933206	0	0	0	0	0	0	0	0	0	0	0	11.674917
11.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6781987	1.1961526	0.1462023	0	0	0	0	0	0	0	0	0	0	0	11.835289
11.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6908931	1.2823308	0.2099713	0	0	0	0	0	0	0	0	0	0	0	11.997931
11.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.3573058	0.2861831	0	0	0	0	0	0	0	0	0	0	0	12.15081
11.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.4322807	0.3732823	0	0	0	0	0	0	0	0	0	0	0	12.312884
11.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.4917437	0.478268	0	0	0	0	0	0	0	0	0	0	0	12.477333
12	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.5512066	0.5832537	0	0	0	0	0	0	0	0	0	0	0	12.641781
12.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.5977428	0.6967937	0.0063044	0	0	0	0	0	0	0	0	0	0	12.808162

12.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.644279	0.802557	0.0236416	0	0	0	0	0	0	0	0	0	0	0	12.977799
12.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.6701324	0.9005436	0.0535876	0	0	0	0	0	0	0	0	0	0	0	13.131585
12.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.6959859	0.9938642	0.0945664	0	0	0	0	0	0	0	0	0	0	0	13.291738
12.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7089126	1.0794081	0.1481541	0	0	0	0	0	0	0	0	0	0	0	13.443796
12.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7218393	1.1571753	0.2127745	0	0	0	0	0	0	0	0	0	0	0	13.59911
12.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.2248327	0.2900037	0	0	0	0	0	0	0	0	0	0	0	13.74572
12.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.2924901	0.3782657	0	0	0	0	0	0	0	0	0	0	0	13.90164
12.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.3461494	0.4846529	0	0	0	0	0	0	0	0	0	0	0	14.061686
13	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.3998088	0.5910402	0	0	0	0	0	0	0	0	0	0	0	14.221733
13.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.441803	0.706096	0.0058547	0	0	0	0	0	0	0	0	0	0	14.384638
13.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.4837973	0.8132713	0.0219551	0	0	0	0	0	0	0	0	0	0	14.549908
13.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5071275	0.912566	0.0497648	0	0	0	0	0	0	0	0	0	0	14.700342
13.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5304576	1.0071325	0.0878203	0	0	0	0	0	0	0	0	0	0	14.856294
13.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5421227	1.0938184	0.1375851	0	0	0	0	0	0	0	0	0	0	15.00441
13.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5537877	1.1726237	0.1975957	0	0	0	0	0	0	0	0	0	0	15.154891
13.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.2411844	0.2693156	0	0	0	0	0	0	0	0	0	0	15.296727
13.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.309745	0.3512812	0	0	0	0	0	0	0	0	0	0	15.447253
13.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.3641207	0.450079	0	0	0	0	0	0	0	0	0	0	15.600427
14	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.4184964	0.5488769	0	0	0	0	0	0	0	0	0	0	15.7536
14.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.4610513	0.6557249	0.0057746	0	0	0	0	0	0	0	0	0	15.908778
14.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5036062	0.7552546	0.0216548	0	0	0	0	0	0	0	0	0	16.066743
14.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5272478	0.8474659	0.0490841	0	0	0	0	0	0	0	0	0	16.210025
14.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5508894	0.9352862	0.086619	0	0	0	0	0	0	0	0	0	16.359022
14.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5627102	1.0157881	0.1357031	0	0	0	0	0	0	0	0	0	16.500429
14.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.574531	1.0889717	0.1948928	0	0	0	0	0	0	0	0	0	16.644623
14.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.1526414	0.2656317	0	0	0	0	0	0	0	0	0	16.780607
14.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.2163111	0.3464761	0	0	0	0	0	0	0	0	0	16.925122
14.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.2668078	0.4439225	0	0	0	0	0	0	0	0	0	17.073065
15	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.3173045	0.5413689	0	0	0	0	0	0	0	0	0	17.221008
15.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.3568236	0.6467554	0.0058169	0	0	0	0	0	0	0	0	17.37173
15.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.3963427	0.7449237	0.0218133	0	0	0	0	0	0	0	0	17.525414
15.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4182978	0.8358736	0.0494434	0	0	0	0	0	0	0	0	17.665949
15.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4402529	0.9224927	0.0872531	0	0	0	0	0	0	0	0	17.812333
15.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4512304	1.0018934	0.1366965	0	0	0	0	0	0	0	0	17.952155
15.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.462208	1.074076	0.1963195	0	0	0	0	0	0	0	0	18.094938
15.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.1368748	0.2675762	0	0	0	0	0	0	0	0	18.230457
15.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.1996736	0.3490124	0	0	0	0	0	0	0	0	18.374692
15.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.2494795	0.4471721	0	0	0	0	0	0	0	0	18.522658
16	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.2992854	0.5453318	0	0	0	0	0	0	0	0	18.670623
16.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.338264	0.6514898	0.0057024	0	0	0	0	0	0	0	18.821462
16.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.3772426	0.7503766	0.0213839	0	0	0	0	0	0	0	18.975009
16.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.3988973	0.8419924	0.0484702	0	0	0	0	0	0	0	19.115366
16.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4205521	0.9292455	0.0855357	0	0	0	0	0	0	0	19.261339
16.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4313795	1.0092275	0.1340059	0	0	0	0	0	0	0	19.400619
16.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4422068	1.0819384	0.1924552	0	0	0	0	0	0	0	19.542606
16.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.1451969	0.2623094	0	0	0	0	0	0	0	19.677163
16.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.2084554	0.3421426	0	0	0	0	0	0	0	19.820254
16.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.2586259	0.4383703	0	0	0	0	0	0	0	19.966653
17	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.3087964	0.5345979	0	0	0	0	0	0	0	20.113051
17.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.3480603	0.6386663	0.0051245	0	0	0	0	0	0	20.261508
17.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.3873242	0.7356067	0.0192169	0	0	0	0	0	0	20.411804
17.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4091375	0.8254191	0.0435584	0	0	0	0	0	0	20.547771
17.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4309508	0.9109548	0.0768677	0	0	0	0	0	0	20.68843
17.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4418574	0.9893625	0.1204261	0	0	0	0	0	0	20.821302
17.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.452764	1.0606422	0.1729523	0	0	0	0	0	0	20.956015
17.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.1226556	0.2357276	0	0	0	0	0	0	21.082258
17.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.1846689	0.3074708	0	0	0	0	0	0	21.216014
17.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.2338519	0.393947	0	0	0	0	0	0	21.351674
18	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.2830349	0.4804231	0	0	0	0	0	0	21.487333
18.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.321526	0.5739455	0.0051468	0	0	0	0	0	21.624493
18.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.360017	0.6610622	0.0193004	0	0	0	0	0	21.764254
18.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.3814009	0.7417733	0.0437476	0	0	0	0	0	21.890797
18.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4027849	0.818641	0.0772016	0	0	0	0	0	22.022502
18.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4134768	0.889103	0.1209493	0	0	0	0	0	22.147404
18.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4241688	0.9531595	0.1737037	0	0	0	0	0	22.274907
18.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.0088885	0.2367517	0	0	0	0	0	22.395109
18.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.0646176	0.3088066	0	0	0	0	0	22.522893

18.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.1088165	0.3956585	0	0	0	0	0	22.653944
19	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.1530155	0.4825103	0	0	0	0	0	22.784995
19.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.1876059	0.576439	0.0037872	0	0	0	0	22.917301
19.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2221964	0.6639342	0.0142019	0	0	0	0	23.049802
19.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2414133	0.7449959	0.032191	0	0	0	0	23.168069
19.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2606302	0.8221976	0.0568077	0	0	0	0	23.289105
19.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2702387	0.8929657	0.0889987	0	0	0	0	23.401672
19.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2798472	0.9573005	0.1278172	0	0	0	0	23.514434
19.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.0132716	0.1742101	0	0	0	0	23.618079
19.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.0692428	0.2272306	0	0	0	0	23.727071
19.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.1136338	0.2911392	0	0	0	0	23.83537
20	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.1580247	0.3550478	4.905E-16	0	0	0	23.94367
20.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.1927655	0.4241638	0.0034516	0	0	0	24.050978
20.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2275062	0.4885458	0.0129435	0	0	0	24.159593
20.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2468066	0.5481939	0.0293387	0	0	0	24.254937
20.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.266107	0.6050015	0.0517741	0	0	0	24.35348
20.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2757573	0.6570752	0.0811128	0	0	0	24.444543
20.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2854075	0.7044149	0.1164918	0	0	0	24.536912
20.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.7456005	0.158774	0	0	0	24.621666
20.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.786786	0.2070965	0	0	0	24.711174
20.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.8194504	0.2653424	0	0	0	24.802084
21	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.8521148	0.3235883	7.864E-16	0	0	24.892995
21.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.8776783	0.3865802	0.0027669	0	0	24.984317
21.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9032417	0.4452576	0.0103759	0	0	25.076167
21.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9174436	0.4996204	0.0235187	0	0	25.157874
21.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9316455	0.5513945	0.0415035	0	0	25.241835
21.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9387465	0.5988542	0.0650222	0	0	25.319914
21.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9458474	0.6419993	0.0933829	0	0	25.398521
21.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.6795355	0.1272774	0	0	25.470899
21.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.7170718	0.166014	0	0	25.547172
21.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.7468419	0.2127055	0	0	25.623633
22	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.776612	0.2593969	7.383E-16	0	25.700095
22.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.7999104	0.3098929	0.0017317	0	25.775621
22.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8232088	0.3569302	0.006494	0	25.850719
22.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8361523	0.4005088	0.0147197	0	25.915467
22.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8490958	0.4420123	0.0259759	0	25.98117
22.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8555676	0.4800572	0.0406955	0	26.040406
22.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8620394	0.5146435	0.0584457	0	26.099214
22.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.5447335	0.0796593	0	26.151381
22.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.5748236	0.1039035	0	26.205715
22.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.5986881	0.1331263	0	26.258802
23	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6225526	0.1623492	9.854E-16	26.31189
23.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6412292	0.1939532	0.0017335	26.363904
23.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6599058	0.2233925	0.0065007	26.416787
23.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6702816	0.2506671	0.0147348	26.462672
23.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6806575	0.276643	0.0260027	26.510291
23.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6858455	0.3004542	0.0407375	26.554025
23.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6910334	0.3221008	0.058506	26.598628
23.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.3409333	0.0797415	26.639388
23.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.3597658	0.1040106	26.68249
23.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.3747019	0.1332636	26.726679
24	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.389638	0.1625166	26.770868
24.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4013272	0.1941532	26.814193
24.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4130163	0.2236229	26.855352
24.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4195103	0.2509257	26.889149
24.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4260042	0.2769283	26.921646
24.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4292512	0.3007641	26.948728
24.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4324982	0.322433	26.973644
24.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.3412849	26.992929
24.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.3601368	27.011781
24.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.3750884	27.026733
25	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.3900399	27.041684
25.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4017411	27.053385
25.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4134423	27.065087
25.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.419943	27.071587
25.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4264436	27.078088
25.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4296939	27.081338

25.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4329443	27.084589
25.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
25.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
25.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
26	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
26.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
26.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
26.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
26.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
26.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
26.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
26.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
26.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
26.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
27	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
27.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
27.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
27.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
27.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
27.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
27.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
27.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
27.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
27.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
28	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
28.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
28.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
28.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
28.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
28.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
28.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
28.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
28.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
28.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
29	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
29.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
29.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
29.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
29.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
29.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
29.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
29.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
29.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
29.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
30	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
30.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
30.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
30.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
30.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
30.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
30.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
30.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
30.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
30.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
31	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
31.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
31.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
31.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
31.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
31.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
31.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
31.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
31.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
31.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
32	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
32.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
32.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022

32.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
32.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
32.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
32.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
32.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
32.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
32.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
33	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
33.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
33.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
33.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
33.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
33.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
33.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
33.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
33.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
33.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
34	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
34.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
34.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
34.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
34.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
34.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
34.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
34.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
34.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
34.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
35	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
35.1	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
35.2	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
35.3	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
35.4	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
35.5	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
35.6	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
35.7	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
35.8	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
35.9	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022
36	0.0004381	0.2409887	0.6150528	0.9990804	1.374193	1.1891694	1.4403617	1.3795796	1.5758718	1.6925857	1.7235629	1.5553431	1.5761071	1.4636716	1.4436505	1.4542183	1.4255944	1.2811283	1.2866942	0.9467942	0.8629023	0.6917251	0.4329311	0.4333777	27.085022