



December 14, 2022

PCD File No.:

Water Resources Report Hill Subdivision Filing No. 1

The following describes the water supply to serve four proposed (4) residential lots on 16.47 acres collectively, and is located within the north half of the southwest one-quarter of the northwest one-quarter of Section 29, Township 11 South, Range 65 west of the 6th principal meridian in El Paso County, Colorado (Subject Property). This letter is based on a decree entered in Case No. 21CW3203, Water Division 2 (consolidated with Division 1 Case No. 21CW3074) (Decree/copy attached), which decreed the Dawson groundwater underlying the Subject Property, and approves a plan for augmentation for use of up to four (4) wells in the Dawson aquifer to serve each lot for a 300 year water supply period. The existing Hill Well No. 1, as referenced in the decree is permitted under Permit No. 63600-F and decreed in a previous case: 05CW37. Three (3) wells (Hill Wells No. 2-4) are proposed following platting of the property into four lots.

AMOUNTS DECREED AND AVAILABILTY

There are four aquifers identified in the decree entered in Case No. 21CW3203 that exist beneath the subject property. The Dawson Aquifer is the aquifer mainly used for withdrawal in this water decree and this aquifer is defined as **Not Non-Tributary (NNT)**. A NNT aquifer is an aquifer that can have withdrawal of groundwater for 100 years without depleting the natural stream or aquifer. The Denver, Arapahoe, and Laramie-Fox Aquifers which are defined as **Non-Tributary (NT)**. An NT aquifer is defined as a source of groundwater that would be depleted in a span of 100 years if used for a main source of water. These NT aquifers are used for replacement for over-pumping of NNTs or for other purposes defined by a water decree. The referenced decree sets forth withdrawal amounts based on 300-year aquifer life and El Paso County's required demonstration of adequate water supply for a 300 year term. The following annual amounts are decreed and are based on annual withdrawals over a 300 year period (one acre-foot is 325,851 gallons).

Table 1: Groundwater Basin Water Rights Defined in Case 21CW3203

Aquifer	Annual Amount-300 years (Acre-Feet)	Total (Acre-Feet)
Dawson (NNT)	5.87	1760.46
Denver (NT)	4.77	1431.46
Arapahoe (NT)	2.43	730.16
Laramie-Fox Hills (NT)	1.71	512.26

Engineers • Surveyors
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Fax 719-635-5450 • e-mail mve@mvecivil.com

The 21CW3203 case defines the consumptive factors of these water rights to be:

Consumptive Factor	Use
0.26 acre-feet per year per lot	In-house use
0.325 acre-feet per year per lot	Irrigation of 1,600 square feet of lawn or garden
0.24 acre-feet per year per lot	Livestock water limited to 4 horses or equivalent livestock

Annual withdrawals of currently constructed Hill Well No. 1 (proposed Lot 1) from the Dawson aquifer (NNT) shall not exceed 0.825 acre feet (268,827 gallons). The annual withdrawals from yet to be constructed Hill Wells No. 2 - 4 (proposed Lots 2, 3, & 4) from the Dawson aquifer (NNT) shall not exceed 0.825 acre feet each (268,827 gallons). Collectively, these wells shall not exceed 3.30 acre-feet per year. The State or Division Engineer shall curtail the pumping of more than those amounts from the Dawson aquifer. Replacement of pumped groundwater shall be through the one existing septic system and the three proposed septic systems.

WATER SUPPLY

The residential lots (up to three potential) will be served by individual not non-tributary Dawson aquifer wells to be permitted and to operate pursuant to an augmentation plan as approved in the Decree. The Decree allows the existing Dawson aquifer well to withdraw 0.825 acre-foot per year, and the three proposed Dawson aquifer wells to withdraw 0.825 acre-foot per year each for 300 years for the following uses:

Currently constructed Hill Well No. 1 (Lot 1) and To be constructed Hill Wells No. 2, 3, 4 (Lots 2, 3, 4)

- In-house use: 0.26 acre-feet per year per lot (Total = 1.04 acre-feet/yr)
- Irrigation use: 0.325 acre-feet per year per lot limited to irrigation of 1,600 sf of lawn or garden (Total = 1.30 acre-feet/yr)
- Stock-watering use: 0.24 acre-feet per year limited to watering 4 horses or equivalent livestock (Total = 0.96 acre-feet/yr)

Total amount for subdivision over 300 years = 300 x 3.30 = 990.0 acre-feet

Total decreed Dawson aquifer water = 990 acre-feet

The water supply for the residential lots using four (4) Dawson aquifer wells pursuant to the augmentation plan approved in the referenced Decree is sufficient and satisfies the 300 year supply requirement of El Paso County.

AUGMENTATION

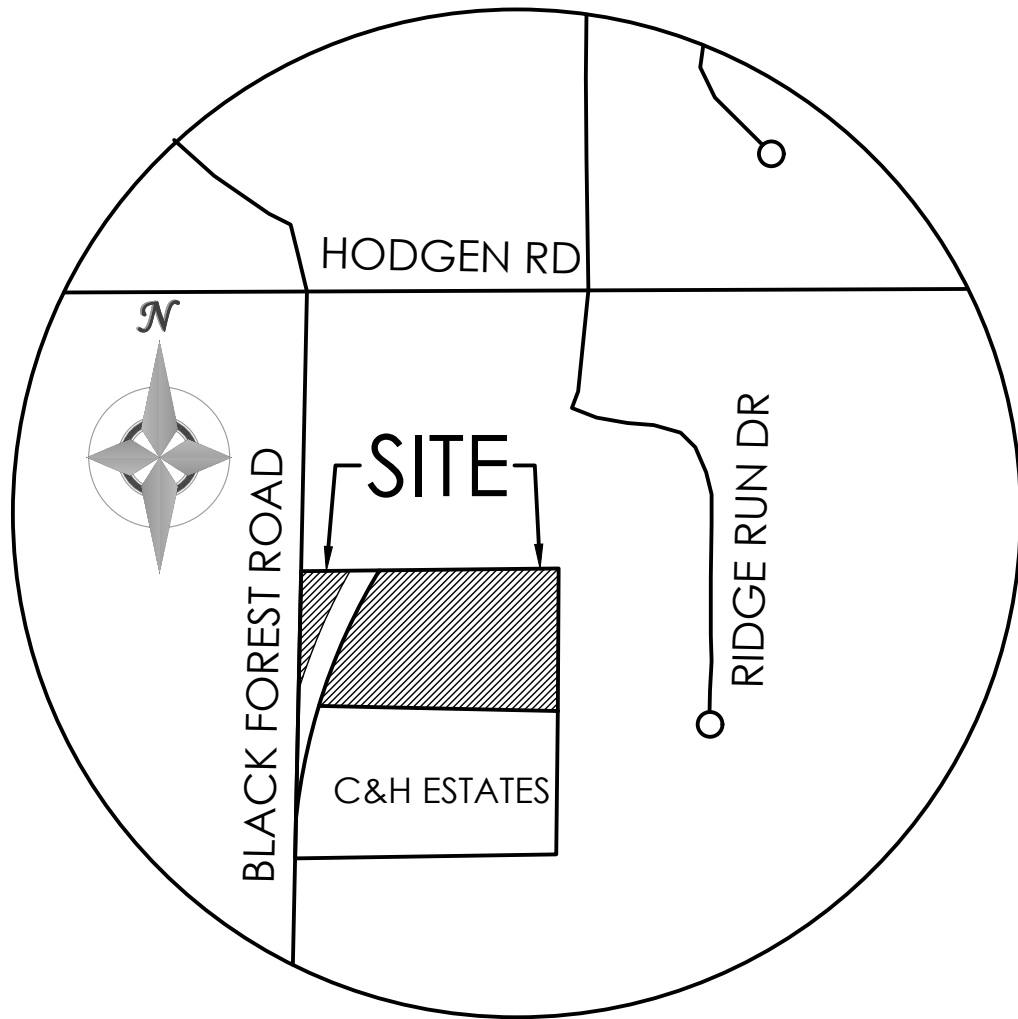
The Plan for Augmentation is established in the decree entered in Case No. 21CW3203, Water Division 2 (Decree/copy attached). Use of Hill Wells Nos. 1 through 4, and any additional or replacement wells drilled to the Dawson Aquifer, requires replacement of actual stream depletion.

Depletion caused by pumping water from the Dawson aquifer shall be replaced as provided and decreed. Each lot will utilize a maximum of 0.825 annual acre-feet per year for a maximum total of 3.30 annual acre-feet per year collectively for all four proposed lots. The augmentation obligation for Hill Wells No. 1 through 4 are septic return flows from indoor uses. Applicants shall also reserve their non-tributary Laramie-Fox Hills aquifer water (512.26 acre-feet) and Arapahoe aquifer (730.16 acre-feet) with an additional 529.74 acre-feet from the Arapahoe aquifer for post-injurious pumping which includes prior pumping of Hill Well 1 prior to the new water decree. The Augmentation Plan provided by the referenced decree prescribes a pumping period of a minimum of 300 years, as required to meet El Paso County's 300-year water requirement for approval of subdivisions utilizing non-renewable water resources for their source of water supply. Covenants for this subdivision will reinforce the findings and responsibilities and requirements of referenced water court decree.

WATER QUALITY

M.V.E., inc. has examined water quality testing results for the existing well (Permit No. 63600-F) located at the property adjacent to the southwest side of the existing Lot 1. The water samples were drawn from the water well fixtures connected to the State of Colorado permitted well of the Dawson Aquifer at 6905 Alpaca Heights. The samples were taken on 7/28/22. Testing for the required contaminants was performed by Colorado Analytical Laboratory and Hazen Research, Inc. The examined reports contain tests for each of the required contaminants in accordance with the El Paso County Land Development Code. The Dawson Aquifer is a confined aquifer. M.V.E. Inc. compared the test results to the Maximum Contaminant Level (MCL), radiological, and pH level requirements for each substance. The water sample passed all requirements according to El Paso County standards contained in the Land Development Code. The pH level was tested at 6.5 while the range of acceptable pH levels is between 6.5 to 8.5. It is recommended that water user continue to monitor the pH level of the water supply to insure the water source remains within El Paso County Standards and non-corrosive in nature. Mitigation for high or low pH levels is commonly available. The water quality results are attached to this report in the appendix.

| Attachments



VICINITY MAP

NOT TO SCALE

EL PASO COUNTY LAND DEVELOPMENT CODE

Chapter V - Section 55 Subdivision Summary Form

Date: December 2, 2022

SUBDIVISION NAME:

Hill Subdivision Filing No. 1

County El Paso

Type of Submittal:

Request for Exemption _____

Preliminary Plan _____

Final Plat Yes- Hill Subdivision Filing No. 1

SUBDIVISION LOCATION: Township 11 S Range 65 W Section 29 1/4
NW

OWNER(S) NAME

Douglas E. Hill, Katherine L. Hill ADDRESS

6910 Alpaca Heights

Colorado Springs, CO

SUBDIVIDER(S) NAME

Douglas E. Hill, Katherine L. Hill

ADDRESS 13985 Silverton Road

Colorado Springs, CO 80921

	Type of Subdivision	Number of Dwelling Units	Area (Acres)	% of Total Area*
	Single Family	4	16.475 Ac	100%
	Apartments			
	Condominiums			
	Mobile Homes			
	Commercial	N/A		
	Industrial	N/A		
	Other (specify)			
	Street			
	Walkways			

	Dedicated School Sites			
	Reserved Park Sites			
	Private Open Areas			
	Easements			
	Other (specify)			
	TOTAL	4	16.475	100%

* (By map measure)

Estimated Water Requirements 2,946 gal/day
(gallons/day).

Proposed Water Source(s)
1 existing private well, 3 proposed wells

Estimated Sewage Disposal Requirement 836 gal/day
(gallons/day).

Proposed Means of Sewage Disposal
OWTS

ACTION:

Planning Commission Recommendation
Approval _____ Date _____
Disapproval _____
Remarks: _____

Board of County Commissioners
Approval _____ Date _____
Disapproval _____
Exemption under C.R.S. 30-28-101 (10) (d) _____
Remarks (if exemption, state reason): _____

Note: This form is required by C.R.S. 30-28-136 (4), but is not a part of the regulations of El Paso County, Colorado.

<p>DISTRICT COURT, WATER DIVISION 1, CO</p> <p>Court Address: 901 9th Avenue P.O. Box 2038 Greeley, CO Phone Number: (970) 475-2540</p>	<p>DATE FILED: July 15, 2022 4:46 PM CASE NUMBER: 2021CW3203</p> <p style="text-align: center;">▲ COURT USE ONLY ▲</p>
<p>CONCERNING THE APPLICATION FOR WATER RIGHTS OF:</p> <p>DOUGLAS E. HILL and KATHERINE L. HILL</p> <p>IN EL PASO COUNTY</p>	<p>Case No.: 21CW3203 (c/r Div. 1 05CW37, consolidated with Division 2 Case No. 21CW3074 pursuant to Order of Panel on Multi-District Litigation 22MD6)</p>
<p style="text-align: center;">FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF REFEREE AND DECREE</p>	

THIS MATTER comes before the Water Referee on the Application filed by Douglas E. Hill and Katherine L. Hill. Having reviewed said Application and other pleadings on file, and being fully advised on this matter, the Water Referee makes the following findings and orders:

GENERAL FINDINGS OF FACT

The applicants in this case are Douglas E. Hill and Katherine L. Hill, whose address is 13985 Silverton Road, Colorado Springs, CO 80921 ("Applicants"). Applicants are the owners of the land totaling approximately 16.47 acres ("Applicants' Property"). Applicants' Property is a portion of the land within the C&H Estates Subdivision, for which the underlying groundwater was previously quantified and a plan for augmentation was previously decreed by this Court in Case No. 05CW37. Applicants seek to amend the 05CW37 decree only as concerns the Applicants' Property. All structures sought to be augmented by the plan decreed herein are located on the Applicants' Property, and Applicants are the owners of the place of use where the water will be put to beneficial use.

1. The Applicants filed this Application with the Water Courts for both Water Divisions 1 and 2 on November 30, 2021. The Application was referred to the Water Referees in both Divisions 1 and 2 on or about November 30, 2021.

2. The time for filing statements of opposition to the Application expired on the last day of January, 2022. No statements of opposition were timely filed.

3. A Motion for Consolidation of the cases into Water Division 1 was filed with the

Colorado Supreme Court on February 3, 2022. The Panel on Consolidated Multidistrict Litigation certified the Motion for Consolidation to the Chief Justice on April February 14, 2022. Chief Justice, Brian D. Boatright, granted the Motion for Consolidation by Order dated March 22, 2022.

4. On November 30, 2021, the Water Court, Division 2 on Motion from Applicant, ordered that consolidated publication be made by only Division 1.

5. The Clerk of this Court has caused publication of the Application filed in this matter as provided by statute and the publication costs have been paid. On December 21, 2021, proof of publication in the *Daily Transcript* in El Paso County was filed with Water Court Division 1. All notices of the Application have been given in the manner required by law.

6. No new Determination of Facts were filed by the Office of the State Engineer pursuant to C.R.S. §37-92-302(2), as all such determinations relevant to the adjudication of underlying groundwater were completed in the prior 05CW37 matter.

7. Pursuant to C.R.S. §37-92-302(4), the office of the Division Engineer for Water Division 1 filed its Consultation Report dated February 14, 2022, and a Response to the Consultation Report was filed by the Applicants on March 15, 2022. Both the Consultation Report and Response have been considered by the Water Referee in the entry of this Ruling.

8. The Water Court has jurisdiction over the subject matter of these proceedings and over all who have standing to appear as parties whether they have appeared or not. The land and water rights involved in this case are not within a designated groundwater basin.

PLAN FOR AUGMENTATION

9. Summary & Case History. Applicants have requested a revision or amendment to an existing augmentation plan concerning the use and augmentation of Denver Basin groundwater supplies underlying the Applicants' Property, as located in northern El Paso County, Colorado. Applicants own Lot 1 and Tract A of the C&H Estates subdivision, as depicted on attached **Exhibit A** map, also known as 6910 Alpaca Heights, Colorado Springs, CO 80908 located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 29, Township 11 South, Range 65 West of the 6th P.M. ("Applicants' Property").

A. Underground water rights within the Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers, along with a plan for augmentation, were previously decreed by this Court in Case No. 05CW37, as consolidated with Water Court Division 2, Case No. 05CW13 (the "05CW37 Decree"). The 05CW37 Decree established an augmentation plan for approximately 36.47 acres of land located in part of the NW $\frac{1}{4}$ of Section 29, Township 11 South, Range 65 West of the 6th P.M., known as the C&H Estates, consisting of Lot 1 and Tract A (16.47 acres, the Applicants' Property), Lot 2 (8.95 acres), and Lot 3 (8.84 acres). Following entry of the 05CW37 Decree, a right-of-way over approximately 2.21 acres of land previously owned by the developer of C&H Estates was dedicated to El Paso County; however, no groundwater underlying the right-of-way was conveyed to the County, and said groundwater remains in the ownership of the owners of Lot 1 (and Tract A), Lot 2, and Lot 3, *pro rata* to their overlying land ownership, consistent

with the water covenants executed at the time of platting of the C&H Estates subdivision. The augmentation plan decreed in the 05CW37 Decree provides for withdrawals of a combined 3.9 acre-feet of water per year from the not-nontributary Dawson aquifer from individual wells on each of the lots at a rate not to exceed 15 gpm. Of the total 3.9 annual acre-feet of water, 2.0 annual acre-feet was allocated by recorded covenants, and by Applicants' well permit, to the Applicants' Property, and the remaining 1.9 annual acre-feet were allocated to Lots 2 and 3 (0.95 acre-feet per lot). The 05CW37 Decree sets forth the consumptive factor for the subject water uses as in-house use (0.314 acre-feet)¹. Applicant's estimated consumption for other than in-house uses are as follows: irrigation (0.65 acre-feet/limited to irrigation of 11,000 square feet), and stockwatering of four large domestic animals (0.05 acre-feet). These uses are to be augmented by return flows from the individual non-evaporative septic systems on each lot during the pumping life of the wells. Post-pumping augmentation obligations under the 05CW37 plan were met by the reservation of 1,019 acre-feet of water in the Laramie-Fox Hills aquifer (a 300-year aquifer life). Applicants did not seek, and this Court does not decree, any change to the previously decreed facts, calculations, or assumptions, except as otherwise expressly decreed herein.

B. Applicants are the current owners of Lot 1 and Tract A, the Applicants' Property, with existing Well Permit No. 63600-F ("Hill Well No. 1"). Based upon the allocation of Denver Basin supplies adjudicated in Case No. 05CW37 and the water covenants allocation *pro rata* to the overlying landowner, Applicants are the owners of the following water in the Denver Basin aquifers underlying Applicants' Property, being 48.1% of the quantities previously adjudicated:

Aquifer	Annual Amount – 300 years (Acre-Feet)	Total (Acre-Feet)
Dawson (NNT)	5.87	1,760.46
Denver (NT)	4.77	1,431.46
Arapahoe (NT)	2.43	730.16
Laramie-Fox Hills (NT)	1.71	512.26 ²

10. Revisions/Amendments to 05CW37 Plan for Augmentation. No amendments or revisions to the 05CW37 Decree as would affect the rights and entitlements of the owners of Lots 2 and 3 of the C&H Estates subdivision are contemplated nor decreed herein. Applicants intend to further subdivide the Applicants' Property into a maximum of four (4) total lots, requiring up to four (4) individual wells. The following amendments and revisions to the plan for augmentation set forth in the 05CW37 Decree, only as pertains to the Applicants' Property, are hereby decreed

¹ Applicants, by this decree, reduce their in-house uses of water from the 0.314 acre foot figure previously decreed in the 05CW37 Decree to a 0.26 acre foot figure, consistent with the applicable El Paso County Land Development Code. The previously decreed 0.314 figure remains applicable to Lots 2 and 3, and is unchanged by this Decree. For purposes of conservatism, however, Applicants calculate available replacement supplies generated from septic return flows upon a lesser 0.20 acre foot per residence figure.

² The entirety of this entitlement has been reserved for post pumping depletions pursuant to the 05CW37 Decree, and by this application is intended to remain so dedicated.

as below.

11. Structures to be Augmented: The structures to be augmented are the Hill Well Nos. 1 through 4, as proposed to be constructed, or as currently constructed, to the not-nontributary Dawson aquifer, including any future replacement or substitute wells as may be constructed to the not-nontributary Dawson aquifer formation underlying the Applicants' Property.

A. Existing Well. The Hill Well No. 1, with existing Division of Water Resources Well Permit No. 63600-F, is located approximately 2,000 feet from the north section line and 500 feet from the west section line in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 29, Township 11 South, Range 65 West of the 6th P.M. and is completed to the Dawson aquifer. Upon approval of this amended augmentation plan, Applicants will file an application with the State Engineer's Office to re-permit this well.

B. Proposed Additional Wells: Applicants will construct up to three additional wells on Applicants' Property, one on each lot, based on the anticipated subdivision into up to four lots. All such wells shall be constructed to the Dawson aquifer.

C. Statement of Plan for Augmentation. By the amendments and revisions decreed herein, Applicants may provide for the augmentation of stream depletions caused by pumping the not-nontributary Dawson aquifer wells proposed for up to four residential lots on Applicants' Property, consistent with the El Paso County Land Development Code requirements. Return flows resulting from the use of non-evaporative septic disposal systems will provide sufficient return flows to replace all depletions from the pumping of up to four individual wells during the 300-year pumping life, while reserved nontributary supplies in the Arapahoe and Laramie-Fox Hills aquifers will replace any injurious post-pumping depletions in proper time, place, and amount.

12. Water Rights to be Used for Augmentation. The water rights to be used for augmentation during pumping are the septic return flows resulting from pumping of the not-nontributary Dawson aquifer by the Hill Well Nos. 1 through 4, as well as return flows from any replacement/substitute wells, as set forth in this plan for augmentation, together with water rights from the nontributary Arapahoe and Laramie-Fox Hills aquifers for the replacement of any injurious post pumping depletions.

13. Pursuant to C.R.S. §37-90-137(9)(c.5), the augmentation obligation for the Hill Well Nos. 1 through 4, and any additional or replacement wells constructed to the Dawson aquifer, requires the replacement of actual stream depletions to the extent necessary to prevent any injurious effect. The water rights to be used for augmentation during pumping are the septic return flows of the not-nontributary Hill Well Nos. 1 through 4, to be pumped as set forth in this plan for augmentation. The water rights to be used for augmentation following cessation of pumping are the previously reserved portion of nontributary water rights in the Laramie-Fox Hills aquifer, as decreed in Case No. 05CW37, and an additional 495.74 acre feet of Applicants' nontributary Arapahoe aquifer water rights, as necessary to replace the incremental increase in depletions resulting from the amendment and revisions to the 05CW37 augmentation plan described herein.

Applicants shall thereby provide for the augmentation of all injurious stream depletions caused by pumping the Hill Well Nos. 1 through 4, as approved herein. Water use criteria as follows:

A. Use: The Hill Well Nos. 1 through 4 may each pump up to 0.825 acre-foot of water per year, for a maximum total of 3.30 acre feet being withdrawn from the Dawson aquifer annually. Consistent with El Paso County Land Development Code, households will utilize up to 0.26 acre feet of water per year per residence, with the additional 0.565 acre feet per year per residence available for other uses, including but not limited to, irrigation of lawns and gardens and watering of domestic animals and livestock.

B. Depletions: Consistent with the Depletion Report provided by the State Engineer's Office, maximum stream depletions over the 300-year pumping period of the Hill Well Nos. 1 through 4 amount to approximately twenty-one percent (21%) of pumping. Because Hill Well No. 1 (DWR Permit No. 63600-F) has previously operated under the plan for augmentation decreed in Case No. 05CW37 and will continue to pump under the plan decreed herein, lagged depletions attributable to prior 05CW37 pumping must be accounted for. Applicants' consultant has calculated the maximum lagged depletions associated with the prior 17 years of pumping from Hill Well No. 1, assuming maximum pumping of 2.0 acre feet annually, and such lagged depletions are described and depicted in Table 1 in the attached **Exhibit B**. Maximum annual depletions for total residential pumping from all wells, including lagged depletions from the prior pumping of Hill Well No. 1 are therefore 0.719 acre feet in year 300 of this plan. Should Applicants' pumping be less than the 0.825 acre feet per lot described herein, or should fewer than four lots be developed, resulting depletions and required replacements will be correspondingly reduced, so long as adequate return flows are produced from in-house uses to replace depletions. However, for purposes of this plan, maximum depletions will be presumed, and replacements of such maximum depletions, 21% of pumping, will be replaced. While landscape irrigation is presumed to be only 85% consumptive resulting in return flows which could be claimed as an augmentation source, Applicants make no claims for the use of such irrigation return flows herein, but expressly reserve the right to make such claims in the future.

C. Augmentation of Depletions During Pumping Life of Wells: Pursuant to C.R.S. §37-90-137(9)(c.5), Applicants are required to replace actual stream depletions attributable to pumping of up to four residential wells. Consistent with the prior 05CW37 Decree, depletions during pumping will be effectively replaced by residential return flows from non-evaporative septic systems. The annual consumptive use for non-evaporative septic systems is 10% per year per residence. At the conservative household use rate of 0.20 acre feet per residence per year utilized for this purpose a total of 0.72 acre feet is replaced to the stream system per year, utilizing non-evaporative septic systems (assuming four lots). Thus, with maximum depletions of 0.719 acre feet in year 300, stream depletions will be adequately augmented during pumping.

D. Augmentation of Post Pumping Depletions: This plan for augmentation shall have a pumping period of a minimum of 300 years. For the replacement of any injurious post-pumping depletions which may be associated with the use of the Hill Well Nos. 1 through 4, Applicants will maintain their pro-rata reservation of the nontributary Laramie Fox Hills aquifer as described in the 05CW37 Decree or 512.26 acre-feet as shown in the table in paragraph 9.B,

and further reserve an additional 529.74 acre feet of the nontributary Arapahoe aquifer to replace any injurious post pumping depletions, including prior pumping of Hill Well No. 1. Applicants also reserve the right to substitute other legally available augmentation sources for such post pumping depletions upon further approval of the Court under its retained jurisdiction. Even though this reservation is made, under the Court's retained jurisdiction, Applicants reserve the right in the future to prove that post pumping depletions will be noninjurious. The reserved nontributary Arapahoe and Laramie-Fox Hills aquifer groundwater will be used to replace any injurious post-pumping depletions. Upon entry of a decree in this case, the State Engineer shall be bound by this decree and C.R.S. §37-90-137(4) in issuing new well permits for the Hill Well No. 1, and new permits for Hill Well Nos. 2 through 4, for the uses in accordance with this Application and otherwise in compliance with C.R.S. §37-90-137, consistent with and in reference to the plan for augmentation decreed herein.

14. Because depletions occur to both the South Platte and Arkansas River systems under the State's groundwater flow model, the Application in this case was filed in both Water Divisions 1 and 2. The return flows set forth above as augmentation will accrue to only South Platte River system where most of the depletions will occur and where the Applicants' Property is located. Under this augmentation plan, the total amount of depletions will be replaced to the South Platte River system as set forth herein, and the Court finds that those replacements are sufficient under this augmentation plan, subject to Paragraphs 32-36 herein.

15. This decree, upon recording, shall constitute a covenant running with Applicants' Property, benefitting and burdening said land, and requiring construction of wells to the nontributary Arapahoe and Laramie-Fox Hills aquifers and pumping of water to replace any injurious post-pumping depletions under this decree. Subject to the requirements of this decree, in order to determine the amount and timing of post-pumping replacement obligations, if any, under this augmentation plan, Applicants or their successors shall use information commonly used by the Colorado Division of Water Resources for augmentation plans of this type at the time. Pursuant to this covenant, the water from the nontributary Arapahoe and Laramie-Fox Hills aquifers reserved herein may not be severed in ownership from the overlying Applicants' Property. This covenant shall be for the benefit of, and enforceable by, third parties owning vested water rights who would be materially injured by the failure to provide for the replacement of post-pumping depletions under the decree, and shall be specifically enforceable by such third parties against the owner of the Applicants' Property.

16. Applicants or their successors shall be required to initiate pumping from the Arapahoe and/or Laramie-Fox Hills aquifer for the replacement of post-pumping depletions when either: (i) the absolute total amount of water available from the Dawson aquifer allowed to be withdrawn under the plan for augmentation decreed herein has been pumped; (ii) the Applicants or their successors in interest have acknowledged in writing that all withdrawals for beneficial use through the Hill Well Nos. 1 through 4 have permanently ceased, or (iii) a period of 10 consecutive years where either no withdrawals of groundwater has occurred.

17. Accounting and responsibility for post-pumping depletions in the amount set forth herein shall continue for the shortest of the following periods: (i) the period provided by statute;

(ii) the period specified by any subsequent change in statute; (iii) the period required by the Court under its retained jurisdiction; (iv) the period determined by the State Engineer; or (v) the period as established by Colorado Supreme Court final decisions. Should Applicants' obligation hereunder to account for and replace such post-pumping stream depletions be abrogated for any reason, then the Arapahoe and Laramie-Fox Hills aquifer groundwater reserved for such a purpose shall be free from the reservation herein and such groundwater may be used or conveyed by its owner without restriction for any post-pumping depletions.

18. The term of this augmentation plan is for a minimum of 300 years, however, the length of the plan for a particular well or wells may be extended beyond such time provided the total pumping allocated to such well or wells is not exceeded and an amended plan for augmentation is approved by the Court. Should the actual operation of this augmentation plan depart from the planned diversions described in Paragraph 13 such that annual diversions are increased or the duration of the plan is extended, the Applicants must prepare and submit a revised model of stream depletions caused by the actual pumping schedule. This analysis must utilize depletion modeling acceptable to the State Engineer, and to this Court, and must represent the water use under the plan for the entire term of the plan to date. The analysis must show that return flows have equaled or exceeded actual stream depletions throughout the pumping period and that reserved nontributary water remains sufficient to replace post-pumping depletions.

19. Consideration has been given to the depletions from Applicants' use and proposed uses of water, in quantity, time and location, together with the amount and timing of augmentation water which will be provided by the Applicants, and the existence, if any, injury to any owner of or person entitled to use water under a vested water right.

20. It is determined that the timing, quantity and location of replacement water under the protective terms in this decree are sufficient to protect the vested rights of other water users and eliminate material injury thereto. The replacement water shall be of a quantity and quality so as to meet the requirements for which the water of senior appropriators has normally been used, and provided of such quality, such replacement water shall be accepted by the senior appropriators for substitution for water derived by the exercise of the Hill Well Nos. 1 through 4. As a result of the operation of this plan for augmentation, the depletions from the Hill Well Nos. 1 through 4 and any additional or replacement wells associated therewith will not result in material injury to the vested water rights of others.

CONCLUSIONS OF LAW

21. The application for revision and amendment of plan for augmentation was filed with the Water Clerks for Water Divisions 1 and 2, pursuant to C.R.S. §§37-92-302(1)(a) and 37-90-137(9)(c.5). These cases were properly consolidated before Water Division 1.

22. The Applicants' request for adjudication of this amendment to plan for augmentation is contemplated and authorized by law, and this Court and the Water Referee have exclusive jurisdiction over these proceedings. C.R.S. §§37-92-302(1)(a), 37-92-203, and 37-92-305.

23. Subject to the terms of this decree, and the prior 05CW37 Decree, the Applicants are entitled to the sole right to withdraw all the legally available water in the Denver Basin aquifers underlying the Applicants' Property, and the right to use that water to the exclusion of all others subject to the terms of this decree.

24. The Applicants have complied with C.R.S. §37-90-137(4), and the groundwater is legally available for withdrawal by nontributary well(s), and legally available for withdrawal by not-nontributary well(s) upon the entry of this decree approving an amendment to the augmentation plan previously decreed in Case No. 05CW37, pursuant to C.R.S. §37-90-137(9)(c.5).

25. The Denver Basin water rights decreed in this case are not conditional water rights, but are vested water rights determined pursuant to C.R.S. §37-90-137(4). No applications for diligence are required. Applicants' claims for nontributary and not-nontributary groundwater meet the requirements of Colorado Law.

26. The Applicants' request for approval of an amendment to the plan for augmentation subject of the prior 05CW37 Decree is contemplated and authorized by law. If administered in accordance with this decree, this plan for augmentation will permit the uninterrupted diversions from the Hill Well Nos. 1 through 4 without adversely affecting any other vested water rights in the Arkansas River and South Platte River or their tributaries and when curtailment would otherwise be required to meet a valid senior call for water. C.R.S. §§37-92-305(3), (5), and (8).

IT IS THEREFORE ORDERED, ADJUDGED AND DECREED AS FOLLOWS:

27. All of the foregoing Findings of Fact and Conclusions of Law are incorporated herein by reference, and are considered to be a part of this decretal portion as though set forth in full.

28. The Application for amendment and revision of the Plan for Augmentation subject of the prior 05CW37 Decree, as proposed by the Applicants, is approved subject to the terms of this decree.

29. The Applicants' have furnished acceptable proof as to all claims and, therefore, the claims described in the Application are granted and approved in accordance with the terms and conditions of this decree, and provided such terms and conditions are complied with, operation of the plan for augmentation decreed herein will not result in any material injury to senior vested water rights.

30. The Applicants shall comply with C.R.S. §37-90-137(9)(b), requiring the relinquishment of the right to consume two percent (2%) of the amount of the nontributary groundwater withdrawn. Ninety-eight percent (98%) of the nontributary groundwater withdrawn

may therefore be consumed. No plan for augmentation shall be required to provide for such relinquishment.

31. The State Engineer, the Division Engineer, and/or the Water Commissioner shall not curtail the diversion and use of water covered by the Hill Well Nos. 1 through 4 so long as the return flows from the annual diversions associated with the Hill Well Nos. 1 through 4 accrue to the stream system pursuant to the conditions contained herein and the conditions of this decree are satisfied. To the extent that Applicants or one of their successors or assigns is ever unable to provide the replacement water required, then the Hill Well Nos. 1 through 4 shall not be entitled to operate under the protection of this plan, and shall be subject to administration and curtailment in accordance with the laws, rules, and regulation of the State of Colorado. Pursuant to C.R.S. §37-92-305(8), the State Engineer shall curtail all out-of-priority diversions which are not so replaced so as to prevent injury to vested water rights. In order for this plan for augmentation to operate, return flows from the septic systems discussed herein, as appropriate, shall at all times during pumping be in an amount sufficient to replace the amount of stream depletions. Return flows may be used only to replace depletions under this plan for augmentation, and may not be used, sold, traded, or assigned in whole or in part for any other purpose. If for any reason, sufficient return flows are not available to replace the actual depletions calculated using the AUG3 model, the Applicants must be required to pump water directly into the stream in the amount that has not been replaced by return flows. If such water is withdrawn from the Dawson aquifer well(s) operated under the augmentation plan the amount of water being pumped from the well(s) for other purposes must be reduced so that the allowed annual withdrawal from the well(s) is not exceeded. Such replacement must be made prior to the irrigation season for the following year.

32. The Court retains jurisdiction over this matter to make adjustments in the allowed average annual amount of withdrawal from the Denver Basin aquifers, either upwards or downwards, to conform to actual local aquifer characteristics, and that the Applicants need not refile, republish, or otherwise amend this application to request such adjustments. The Court further retains jurisdiction should the Applicants later seek to amend this decree by seeking to prove that post-pumping depletions are noninjurious, that the extent of replacement for post-pumping depletions is less than the amount of water reserved herein, and other post-pumping matters addressed in Paragraph 13.D.

A. At such time as adequate data may be available, Applicants or the State Engineer may invoke the Court's retained jurisdiction as provided in this Paragraph 32 for purposes of making a final determination of water rights as to the quantities of water available and allowed average annual withdrawals from any of the Denver Basin aquifers quantified and adjudicated herein. Any person seeking to invoke the Court's retained jurisdiction for such purpose shall file a verified petition with the Court setting forth with particularity the factual basis for such final determination of Denver Basin water rights under this decree, together with the proposed decretal language to effect the petition. Within four months of the filing of such verified petition, the State Engineer's Office shall utilize such information as available to make a final determination of water rights finding, and shall provide such information to the Court, Applicants, and the petitioning party.

B. If no protest is filed with the Court to such findings by the State Engineer's Office within sixty (60) days, this Court shall incorporate by entry of an Amended Decree such "final determination of water rights", and the provisions of this Paragraph 32 concerning adjustments to the Denver Basin ground water rights based upon local aquifer conditions shall no longer be applicable. In the event of a protest being timely filed, or should the State Engineer's Office make no timely determination as provided in Paragraph 32.A., above, the "final determination of water rights" sought in the petition may be made by the Water Court after notice to all parties and following a full and fair hearing, including entry of an Amended Decree, if applicable in the Court's reasonable discretion.

33. Pursuant to C.R.S. §37-92-304(6), the Court shall retain continuing jurisdiction over the plan for augmentation decreed herein for reconsideration of the question of whether the provisions of this decree are necessary and/or sufficient to prevent injury to vested water rights of others, as pertains to the use of Denver Basin groundwater supplies adjudicated herein for augmentation purposes. The court also retains continuing jurisdiction for the purpose of determining compliance with the terms of the augmentation plan.

34. As pertains to the Denver Basin groundwater supplies, the court shall retain continuing jurisdiction for so long as Applicants are required to replace depletions to the Arkansas stream system, to determine whether the replacement of depletions to Arkansas stream system instead of the South Platte stream system is causing material injury to water rights tributary to the South Platte stream system.

35. Any person may invoke the Court's retained jurisdiction at any time that Applicants are causing depletions, including ongoing post-pumping depletions, to the South Platte River system and is replacing such depletions to only the Arkansas River system. Any person seeking to invoke the Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for the alleged material injury and to request that the Court reconsider material injury to petitioners' vested water rights associated with the above replacement of depletions under this decree, together with the proposed decretal language to effect the petition. The party filing the petition shall have the burden of proof going forward to establish a prima facie case based on the facts alleged in the petition and that Applicants' failure to replace depletions to the South Platte River system is causing material injury to water rights owned by that party invoking the Court's retained jurisdiction, except that the State and Division Engineer may invoke the Court's retained jurisdiction by establishing a prima facie case that material injury is occurring to any vested or conditionally decreed water rights in the South Platte River system due to the location of Applicants' replacement water. If the Court finds that those facts are established, the Applicants shall thereupon have the burden of proof to show (i) that petitioner is not materially injured, or (ii) that any modification sought by the petitioner is not required to avoid material injury to the petitioner, or (iii) that any term or condition proposed by Applicants in response to the petition does avoid material injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert material injury to the vested water rights of others.

36. Except as otherwise specifically provided in Paragraphs 32-35, above, pursuant to the provisions of C.R.S. §37-92-304(6), this plan for augmentation decreed herein shall be subject

to the reconsideration of this Court on the question of material injury to vested water rights of others, for a period of five years, except as otherwise provided herein. Any person, within such period, may petition the Court to invoke its retained jurisdiction. Any person seeking to invoke the Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for requesting that the Court reconsider material injury to petitioner's vested water rights associated with the operation of this decree, together with proposed decretal language to effect the petition. The party filing the petition shall have the burden of proof of going forward to establish a prima facie case based on the facts alleged in the petition. If the Court finds those facts are established, Applicants shall thereupon have the burden of proof to show: (i) that the petitioner is not materially injured, or (ii) that any modification sought by the petitioner is not required to avoid material injury to the petitioner, or (iii) that any term or condition proposed by Applicants in response to the petition does avoid material injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert material injury to the vested water rights of others. If no such petition is filed within such period and the retained jurisdiction period is not extended by the Court in accordance with the revisions of the statute, this matter shall become final under its own terms.

37. Pursuant to C.R.S. §37-92-502(5)(a), the Applicants shall install and maintain such water measurement devices and recording devices as are deemed essential by the State Engineer or Division Engineers, and the same shall be installed and operated in accordance with instructions from said entities. Applicants are to install and maintain a totalizing flow meter on all Hill Well, and any additional or replacement wells associated therewith. Applicants are also to maintain records and provide reports to the State Engineer or Division Engineers as instructed by said entities, on at least an annual basis. Such accounting must include the amount of water pumped by each Denver Basin well, the annual depletion, the amount of replacement water provided by each replacement source, the net impact on the stream and any other information required.

38. The vested water rights, water right structures, and plan for augmentation decreed herein shall be subject to all applicable administrative rules and regulations, as currently in place or as may in the future be promulgated, of the offices of Colorado State and Division Engineers for administration of such water rights, to the extent such rules and regulations are uniformly applicable to other similarly situated water rights and water users.

39. This Ruling of Referee, when entered as a decree of the Water Court, shall be recorded in the real property records of El Paso County, Colorado. Copies of this ruling shall be mailed as provided by statute.

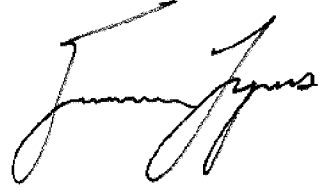
Date: June 16, 2022



John S. Cowan
Water Referee
Water Division One

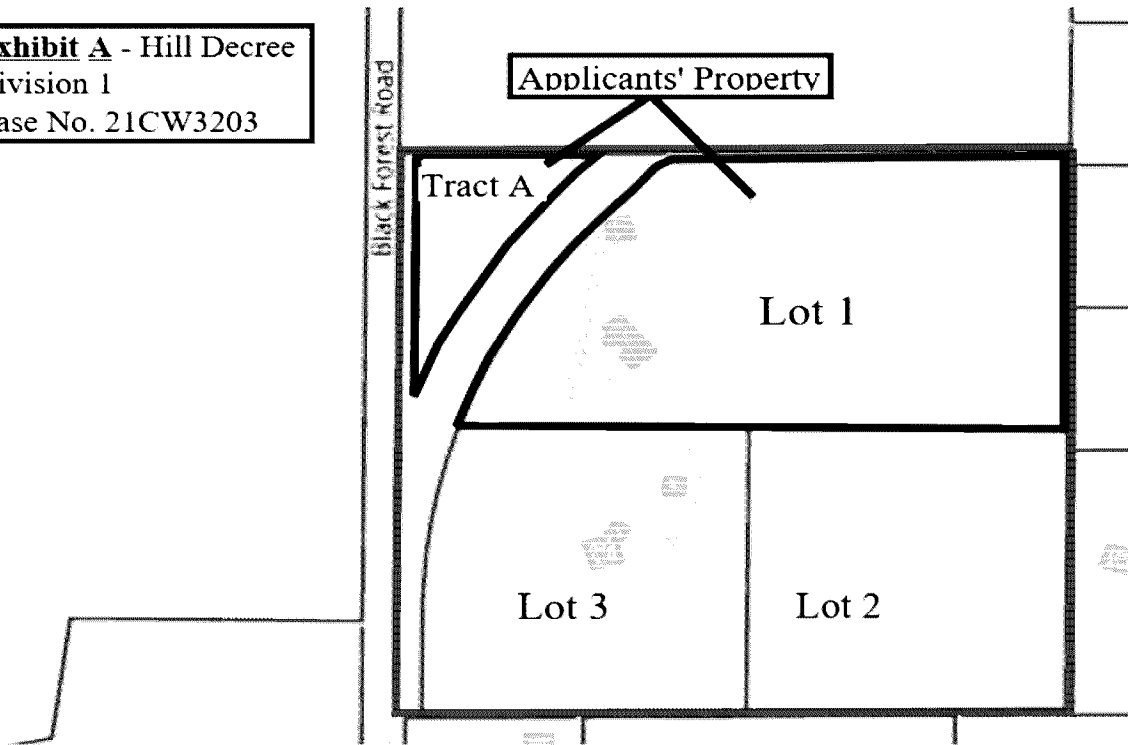
The court finds that no protest was filed in this matter. The foregoing ruling is confirmed and approved and is made the judgment and decree of this Court.

Date: July 15, 2022

A handwritten signature in black ink, appearing to read "Shannon Lyons", written in a cursive style.

Shannon Lyons
Alternate Water Judge
Water Division One

Exhibit A - Hill Decree
Division 1
Case No. 21CW3203



Depletion + Lagged Depletion Summary - Hill Property

Year	Case 5CW37		Case 21CW3203		Total Annual Depletions (AF/year)
	Pumping (AF/year)	Depletions (AF/year)	Pumping (AF/year)	Depletions (AF/year)	
2005	2.0	0.001	-	-	0.001
2006	2.0	0.003	-	-	0.003
2007	2.0	0.005	-	-	0.005
2008	2.0	0.007	-	-	0.007
2009	2.0	0.009	-	-	0.009
2010	2.0	0.010	-	-	0.010
2011	2.0	0.012	-	-	0.012
2012	2.0	0.014	-	-	0.014
2013	2.0	0.015	-	-	0.015
2014	2.0	0.016	-	-	0.016
2015	2.0	0.018	-	-	0.018
2016	2.0	0.019	-	-	0.019
2017	2.0	0.020	-	-	0.020
2018	2.0	0.022	-	-	0.022
2019	2.0	0.023	-	-	0.023
2020	2.0	0.024	-	-	0.024
2021	2.0	0.026	-	-	0.026
2022	-	0.025	3.30	0.002	0.028
2023	-	0.025	3.30	0.005	0.030
2024	-	0.024	3.30	0.008	0.033
2025	-	0.024	3.30	0.011	0.035
2026	-	0.023	3.30	0.014	0.037
2027	-	0.022	3.30	0.017	0.040
2028	-	0.022	3.30	0.020	0.042
2029	-	0.022	3.30	0.022	0.044
2030	-	0.021	3.30	0.025	0.046
2031	-	0.021	3.30	0.027	0.048
2032	-	0.021	3.30	0.029	0.051
2033	-	0.021	3.30	0.032	0.053
2034	-	0.021	3.30	0.034	0.055
2035	-	0.021	3.30	0.036	0.057
2036	-	0.021	3.30	0.038	0.059
2037	-	0.021	3.30	0.040	0.061
2038	-	0.021	3.30	0.042	0.063
2039	-	0.021	3.30	0.044	0.065
2040	-	0.021	3.30	0.046	0.067
2041	-	0.021	3.30	0.048	0.069
2042	-	0.021	3.30	0.050	0.071
2043	-	0.021	3.30	0.052	0.073
2044	-	0.021	3.30	0.054	0.075
2045	-	0.021	3.30	0.056	0.077
2046	-	0.021	3.30	0.058	0.079
2047	-	0.021	3.30	0.060	0.081
2048	-	0.021	3.30	0.062	0.083
2049	-	0.021	3.30	0.064	0.086
2050	-	0.021	3.30	0.066	0.088
2051	-	0.021	3.30	0.068	0.090
2052	-	0.021	3.30	0.070	0.092
2053	-	0.022	3.30	0.072	0.094
2054	-	0.022	3.30	0.074	0.096

2055	-	0.022	3.30	0.076	0.098
2056	-	0.022	3.30	0.079	0.100
2057	-	0.022	3.30	0.081	0.102
2058	-	0.022	3.30	0.083	0.105
2059	-	0.022	3.30	0.085	0.107
2060	-	0.022	3.30	0.087	0.109
2061	-	0.022	3.30	0.089	0.111
2062	-	0.022	3.30	0.091	0.113
2063	-	0.022	3.30	0.093	0.115
2064	-	0.022	3.30	0.095	0.117
2065	-	0.022	3.30	0.097	0.120
2066	-	0.022	3.30	0.099	0.122
2067	-	0.023	3.30	0.101	0.124
2068	-	0.023	3.30	0.104	0.126
2069	-	0.023	3.30	0.106	0.128
2070	-	0.023	3.30	0.108	0.131
2071	-	0.023	3.30	0.110	0.133
2072	-	0.023	3.30	0.112	0.135
2073	-	0.023	3.30	0.114	0.137
2074	-	0.023	3.30	0.117	0.140
2075	-	0.023	3.30	0.119	0.142
2076	-	0.023	3.30	0.121	0.144
2077	-	0.023	3.30	0.123	0.146
2078	-	0.023	3.30	0.125	0.149
2079	-	0.023	3.30	0.128	0.151
2080	-	0.023	3.30	0.130	0.153
2081	-	0.023	3.30	0.132	0.155
2082	-	0.024	3.30	0.134	0.158
2083	-	0.024	3.30	0.136	0.160
2084	-	0.024	3.30	0.139	0.162
2085	-	0.024	3.30	0.141	0.165
2086	-	0.024	3.30	0.143	0.167
2087	-	0.024	3.30	0.145	0.169
2088	-	0.024	3.30	0.148	0.172
2089	-	0.024	3.30	0.150	0.174
2090	-	0.024	3.30	0.152	0.176
2091	-	0.024	3.30	0.155	0.179
2092	-	0.024	3.30	0.157	0.181
2093	-	0.024	3.30	0.159	0.183
2094	-	0.024	3.30	0.161	0.186
2095	-	0.024	3.30	0.164	0.188
2096	-	0.024	3.30	0.166	0.190
2097	-	0.024	3.30	0.168	0.193
2098	-	0.024	3.30	0.171	0.195
2099	-	0.024	3.30	0.173	0.197
2100	-	0.024	3.30	0.175	0.200
2101	-	0.024	3.30	0.178	0.202
2102	-	0.024	3.30	0.180	0.204
2103	-	0.024	3.30	0.182	0.207
2104	-	0.025	3.30	0.185	0.209
2105	-	0.025	3.30	0.187	0.212
2106	-	0.025	3.30	0.189	0.214
2107	-	0.025	3.30	0.192	0.216
2108	-	0.025	3.30	0.194	0.219
2109	-	0.025	3.30	0.196	0.221

2110	-	0.025	3.30	0.199	0.224
2111	-	0.025	3.30	0.201	0.226
2112	-	0.025	3.30	0.204	0.228
2113	-	0.025	3.30	0.206	0.231
2114	-	0.025	3.30	0.208	0.233
2115	-	0.025	3.30	0.211	0.236
2116	-	0.025	3.30	0.213	0.238
2117	-	0.025	3.30	0.216	0.240
2118	-	0.025	3.30	0.218	0.243
2119	-	0.025	3.30	0.220	0.245
2120	-	0.025	3.30	0.223	0.248
2121	-	0.025	3.30	0.225	0.250
2122	-	0.025	3.30	0.228	0.253
2123	-	0.025	3.30	0.230	0.255
2124	-	0.025	3.30	0.232	0.257
2125	-	0.025	3.30	0.235	0.260
2126	-	0.025	3.30	0.237	0.262
2127	-	0.025	3.30	0.240	0.265
2128	-	0.025	3.30	0.242	0.267
2129	-	0.025	3.30	0.245	0.270
2130	-	0.025	3.30	0.247	0.272
2131	-	0.025	3.30	0.249	0.275
2132	-	0.025	3.30	0.252	0.277
2133	-	0.025	3.30	0.254	0.279
2134	-	0.025	3.30	0.257	0.282
2135	-	0.025	3.30	0.259	0.284
2136	-	0.025	3.30	0.261	0.287
2137	-	0.025	3.30	0.264	0.289
2138	-	0.025	3.30	0.266	0.292
2139	-	0.025	3.30	0.269	0.294
2140	-	0.025	3.30	0.271	0.296
2141	-	0.025	3.30	0.274	0.299
2142	-	0.025	3.30	0.276	0.301
2143	-	0.025	3.30	0.279	0.304
2144	-	0.025	3.30	0.281	0.306
2145	-	0.025	3.30	0.283	0.309
2146	-	0.025	3.30	0.286	0.311
2147	-	0.025	3.30	0.288	0.314
2148	-	0.025	3.30	0.291	0.316
2149	-	0.025	3.30	0.293	0.319
2150	-	0.025	3.30	0.296	0.321
2151	-	0.025	3.30	0.298	0.323
2152	-	0.025	3.30	0.301	0.326
2153	-	0.025	3.30	0.303	0.328
2154	-	0.025	3.30	0.306	0.331
2155	-	0.025	3.30	0.308	0.333
2156	-	0.025	3.30	0.310	0.336
2157	-	0.025	3.30	0.313	0.338
2158	-	0.025	3.30	0.315	0.341
2159	-	0.025	3.30	0.318	0.343
2160	-	0.025	3.30	0.320	0.345
2161	-	0.025	3.30	0.323	0.348
2162	-	0.025	3.30	0.325	0.350
2163	-	0.025	3.30	0.328	0.353
2164	-	0.025	3.30	0.330	0.355

2165	-	0.025	3.30	0.333	0.358
2166	-	0.025	3.30	0.335	0.360
2167	-	0.025	3.30	0.337	0.363
2168	-	0.025	3.30	0.340	0.365
2169	-	0.025	3.30	0.342	0.368
2170	-	0.025	3.30	0.345	0.370
2171	-	0.025	3.30	0.347	0.372
2172	-	0.025	3.30	0.350	0.375
2173	-	0.025	3.30	0.352	0.377
2174	-	0.025	3.30	0.355	0.380
2175	-	0.025	3.30	0.357	0.382
2176	-	0.025	3.30	0.359	0.385
2177	-	0.025	3.30	0.362	0.387
2178	-	0.025	3.30	0.364	0.389
2179	-	0.025	3.30	0.367	0.392
2180	-	0.025	3.30	0.369	0.394
2181	-	0.025	3.30	0.372	0.397
2182	-	0.025	3.30	0.374	0.399
2183	-	0.025	3.30	0.377	0.402
2184	-	0.025	3.30	0.379	0.404
2185	-	0.025	3.30	0.381	0.406
2186	-	0.025	3.30	0.384	0.409
2187	-	0.025	3.30	0.386	0.411
2188	-	0.025	3.30	0.389	0.414
2189	-	0.025	3.30	0.391	0.416
2190	-	0.025	3.30	0.394	0.419
2191	-	0.025	3.30	0.396	0.421
2192	-	0.025	3.30	0.399	0.423
2193	-	0.025	3.30	0.401	0.426
2194	-	0.025	3.30	0.403	0.428
2195	-	0.025	3.30	0.406	0.431
2196	-	0.025	3.30	0.408	0.433
2197	-	0.025	3.30	0.411	0.436
2198	-	0.025	3.30	0.413	0.438
2199	-	0.025	3.30	0.416	0.440
2200	-	0.025	3.30	0.418	0.443
2201	-	0.025	3.30	0.420	0.445
2202	-	0.025	3.30	0.423	0.448
2203	-	0.025	3.30	0.425	0.450
2204	-	0.025	3.30	0.428	0.452
2205	-	0.025	3.30	0.430	0.455
2206	-	0.025	3.30	0.432	0.457
2207	-	0.025	3.30	0.435	0.460
2208	-	0.025	3.30	0.437	0.462
2209	-	0.025	3.30	0.440	0.464
2210	-	0.025	3.30	0.442	0.467
2211	-	0.025	3.30	0.445	0.469
2212	-	0.025	3.30	0.447	0.472
2213	-	0.025	3.30	0.449	0.474
2214	-	0.025	3.30	0.452	0.476
2215	-	0.025	3.30	0.454	0.479
2216	-	0.025	3.30	0.456	0.481
2217	-	0.025	3.30	0.459	0.483
2218	-	0.025	3.30	0.461	0.486
2219	-	0.025	3.30	0.464	0.488

2220	-	0.025	3.30	0.466	0.491
2221	-	0.024	3.30	0.468	0.493
2222	-	0.024	3.30	0.471	0.495
2223	-	0.024	3.30	0.473	0.498
2224	-	0.024	3.30	0.476	0.500
2225	-	0.024	3.30	0.478	0.502
2226	-	0.024	3.30	0.480	0.505
2227	-	0.024	3.30	0.483	0.507
2228	-	0.024	3.30	0.485	0.510
2229	-	0.024	3.30	0.487	0.512
2230	-	0.024	3.30	0.490	0.514
2231	-	0.024	3.30	0.492	0.517
2232	-	0.024	3.30	0.495	0.519
2233	-	0.024	3.30	0.497	0.521
2234	-	0.024	3.30	0.499	0.524
2235	-	0.024	3.30	0.502	0.526
2236	-	0.024	3.30	0.504	0.528
2237	-	0.024	3.30	0.506	0.531
2238	-	0.024	3.30	0.509	0.533
2239	-	0.024	3.30	0.511	0.535
2240	-	0.024	3.30	0.513	0.538
2241	-	0.024	3.30	0.516	0.540
2242	-	0.024	3.30	0.518	0.542
2243	-	0.024	3.30	0.521	0.545
2244	-	0.024	3.30	0.523	0.547
2245	-	0.024	3.30	0.525	0.549
2246	-	0.024	3.30	0.528	0.552
2247	-	0.024	3.30	0.530	0.554
2248	-	0.024	3.30	0.532	0.556
2249	-	0.024	3.30	0.535	0.558
2250	-	0.024	3.30	0.537	0.561
2251	-	0.024	3.30	0.539	0.563
2252	-	0.024	3.30	0.542	0.565
2253	-	0.024	3.30	0.544	0.568
2254	-	0.024	3.30	0.546	0.570
2255	-	0.024	3.30	0.549	0.572
2256	-	0.024	3.30	0.551	0.575
2257	-	0.024	3.30	0.553	0.577
2258	-	0.024	3.30	0.555	0.579
2259	-	0.024	3.30	0.558	0.581
2260	-	0.024	3.30	0.560	0.584
2261	-	0.024	3.30	0.562	0.586
2262	-	0.024	3.30	0.565	0.588
2263	-	0.024	3.30	0.567	0.591
2264	-	0.024	3.30	0.569	0.593
2265	-	0.024	3.30	0.572	0.595
2266	-	0.024	3.30	0.574	0.597
2267	-	0.023	3.30	0.576	0.600
2268	-	0.023	3.30	0.578	0.602
2269	-	0.023	3.30	0.581	0.604
2270	-	0.023	3.30	0.583	0.606
2271	-	0.023	3.30	0.585	0.609
2272	-	0.023	3.30	0.588	0.611
2273	-	0.023	3.30	0.590	0.613
2274	-	0.023	3.30	0.592	0.616

2275	-	0.023	3.30	0.594	0.618
2276	-	0.023	3.30	0.597	0.620
2277	-	0.023	3.30	0.599	0.622
2278	-	0.023	3.30	0.601	0.625
2279	-	0.023	3.30	0.604	0.627
2280	-	0.023	3.30	0.606	0.629
2281	-	0.023	3.30	0.608	0.631
2282	-	0.023	3.30	0.610	0.633
2283	-	0.023	3.30	0.613	0.636
2284	-	0.023	3.30	0.615	0.638
2285	-	0.023	3.30	0.617	0.640
2286	-	0.023	3.30	0.619	0.642
2287	-	0.023	3.30	0.622	0.645
2288	-	0.023	3.30	0.624	0.647
2289	-	0.023	3.30	0.626	0.649
2290	-	0.023	3.30	0.628	0.651
2291	-	0.023	3.30	0.631	0.653
2292	-	0.023	3.30	0.633	0.656
2293	-	0.023	3.30	0.635	0.658
2294	-	0.023	3.30	0.637	0.660
2295	-	0.023	3.30	0.639	0.662
2296	-	0.023	3.30	0.642	0.664
2297	-	0.023	3.30	0.644	0.667
2298	-	0.023	3.30	0.646	0.669
2299	-	0.023	3.30	0.648	0.671
2300	-	0.023	3.30	0.651	0.673
2301	-	0.023	3.30	0.653	0.675
2302	-	0.023	3.30	0.655	0.678
2303	-	0.023	3.30	0.657	0.680
2304	-	0.023	3.30	0.659	0.682
2305	-	0.023	3.30	0.662	0.684
2306	-	0.023	3.30	0.664	0.686
2307	-	0.023	3.30	0.666	0.688
2308	-	0.023	3.30	0.668	0.691
2309	-	0.022	3.30	0.670	0.693
2310	-	0.022	3.30	0.673	0.695
2311	-	0.022	3.30	0.675	0.697
2312	-	0.022	3.30	0.677	0.699
2313	-	0.022	3.30	0.679	0.702
2314	-	0.022	3.30	0.681	0.704
2315	-	0.022	3.30	0.684	0.706
2316	-	0.022	3.30	0.686	0.708
2317	-	0.022	3.30	0.688	0.710
2318	-	0.022	3.30	0.690	0.712
2319	-	0.022	3.30	0.692	0.714
2320	-	0.022	3.30	0.694	0.717
2321	-	0.022	3.30	0.696	0.719
2322	-	0.022	3.30	0.696	0.719
2323	-	0.022	-	0.696	0.718
2324	-	0.022	-	0.695	0.717
2325	-	0.022	-	0.694	0.716
2326	-	0.022	-	0.693	0.715
2327	-	0.022	-	0.692	0.714
2328	-	0.022	-	0.692	0.714
2329	-	0.022	-	0.691	0.713

2330	-	0.022	-	0.691	0.713
2331	-	0.022	-	0.691	0.713
2332	-	0.022	-	0.691	0.713
2333	-	0.022	-	0.691	0.713
2334	-	0.022	-	0.691	0.713
2335	-	0.022	-	0.691	0.712
2336	-	0.022	-	0.691	0.713
2337	-	0.022	-	0.691	0.713
2338	-	0.022	-	0.691	0.713
2339	-	0.022	-	0.691	0.713
2340	-	0.022	-	0.691	0.713
2341	-	0.022	-	0.691	0.713
2342	-	0.022	-	0.691	0.713
2343	-	0.022	-	0.691	0.713
2344	-	0.022	-	0.691	0.713
2345	-	0.022	-	0.691	0.713
2346	-	0.022	-	0.692	0.713
2347	-	0.022	-	0.692	0.713
2348	-	0.022	-	0.692	0.713
2349	-	0.022	-	0.692	0.713
2350	-	0.021	-	0.692	0.713
2351	-	0.021	-	0.692	0.713
2352	-	0.021	-	0.692	0.714
2353	-	0.021	-	0.692	0.714
2354	-	0.021	-	0.692	0.714
2355	-	0.021	-	0.692	0.714
2356	-	0.021	-	0.692	0.714
2357	-	0.021	-	0.692	0.714
2358	-	0.021	-	0.692	0.714
2359	-	0.021	-	0.692	0.714
2360	-	0.021	-	0.692	0.714
2361	-	0.021	-	0.692	0.714
2362	-	0.021	-	0.692	0.713
2363	-	0.021	-	0.692	0.713
2364	-	0.021	-	0.692	0.713
2365	-	0.021	-	0.692	0.713
2366	-	0.021	-	0.692	0.713
2367	-	0.021	-	0.692	0.713
2368	-	0.021	-	0.692	0.713
2369	-	0.021	-	0.692	0.713
2370	-	0.021	-	0.692	0.713
2371	-	0.021	-	0.692	0.713
2372	-	0.021	-	0.691	0.712
2373	-	0.021	-	0.691	0.712
2374	-	0.021	-	0.691	0.712
2375	-	0.021	-	0.691	0.712
2376	-	0.021	-	0.691	0.712
2377	-	0.021	-	0.691	0.712
2378	-	0.021	-	0.691	0.711
2379	-	0.021	-	0.690	0.711
2380	-	0.021	-	0.690	0.711
2381	-	0.021	-	0.690	0.711
2382	-	0.021	-	0.690	0.710
2383	-	0.021	-	0.689	0.710
2384	-	0.021	-	0.689	0.710

2385	-	0.021	-	0.689	0.710
2386	-	0.021	-	0.689	0.709
2387	-	0.021	-	0.689	0.709
2388	-	0.021	-	0.688	0.709
2389	-	0.021	-	0.688	0.709
2390	-	0.021	-	0.688	0.708
2391	-	0.020	-	0.687	0.708
2392	-	0.020	-	0.687	0.708
2393	-	0.020	-	0.687	0.707
2394	-	0.020	-	0.687	0.707
2395	-	0.020	-	0.686	0.707
2396	-	0.020	-	0.686	0.706
2397	-	0.020	-	0.686	0.706
2398	-	0.020	-	0.685	0.706
2399	-	0.020	-	0.685	0.705
2400	-	0.020	-	0.684	0.705
2401	-	0.020	-	0.684	0.704
2402	-	0.020	-	0.684	0.704
2403	-	0.020	-	0.683	0.704
2404	-	0.020	-	0.683	0.703
2405	-	0.020	-	0.683	0.703
2406	-	0.020	-	0.682	0.702
2407	-	0.020	-	0.682	0.702
2408	-	0.020	-	0.681	0.702
2409	-	0.020	-	0.681	0.701
2410	-	0.020	-	0.681	0.701
2411	-	0.020	-	0.680	0.700
2412	-	0.020	-	0.680	0.700
2413	-	0.020	-	0.679	0.699
2414	-	0.020	-	0.679	0.699
2415	-	0.020	-	0.678	0.698
2416	-	0.020	-	0.678	0.698
2417	-	0.020	-	0.678	0.697
2418	-	0.020	-	0.677	0.697
2419	-	0.020	-	0.677	0.696
2420	-	0.020	-	0.676	0.696
2421	-	0.020	-	0.676	0.695
2422	-	0.020	-	0.675	0.695
2423	-	0.020	-	0.675	0.694
2424	-	0.020	-	0.674	0.694
2425	-	0.020	-	0.674	0.693
2426	-	0.020	-	0.673	0.693
2427	-	0.020	-	0.673	0.692
2428	-	0.020	-	0.672	0.692
2429	-	0.020	-	0.672	0.691
2430	-	0.020	-	0.671	0.691
2431	-	0.020	-	0.671	0.690
2432	-	0.020	-	0.670	0.689
2433	-	0.019	-	0.669	0.689
2434	-	0.019	-	0.669	0.688
2435	-	0.019	-	0.668	0.688
2436	-	0.019	-	0.668	0.687
2437	-	0.019	-	0.667	0.687
2438	-	0.019	-	0.667	0.686
2439	-	0.019	-	0.666	0.685

2440	-	0.019	-	0.666	0.685
2441	-	0.019	-	0.665	0.684
2442	-	0.019	-	0.664	0.684
2443	-	0.019	-	0.664	0.683
2444	-	0.019	-	0.663	0.683
2445	-	0.019	-	0.663	0.682
2446	-	0.019	-	0.662	0.681
2447	-	0.019	-	0.662	0.681
2448	-	0.019	-	0.661	0.680
2449	-	0.019	-	0.660	0.680
2450	-	0.019	-	0.660	0.679
2451	-	0.019	-	0.659	0.678
2452	-	0.019	-	0.659	0.678
2453	-	0.019	-	0.658	0.677
2454	-	0.019	-	0.657	0.676
2455	-	0.019	-	0.657	0.676
2456	-	0.019	-	0.656	0.675
2457	-	0.019	-	0.656	0.675
2458	-	0.019	-	0.655	0.674
2459	-	0.019	-	0.654	0.673
2460	-	0.019	-	0.654	0.673
2461	-	0.019	-	0.653	0.672
2462	-	0.019	-	0.653	0.671
2463	-	0.019	-	0.652	0.671
2464	-	0.019	-	0.651	0.670
2465	-	0.019	-	0.651	0.669
2466	-	0.019	-	0.650	0.669
2467	-	0.019	-	0.649	0.668
2468	-	0.019	-	0.649	0.667
2469	-	0.019	-	0.648	0.667
2470	-	0.019	-	0.647	0.666
2471	-	0.019	-	0.647	0.665
2472	-	0.019	-	0.646	0.665
2473	-	0.019	-	0.645	0.664
2474	-	0.019	-	0.645	0.663
2475	-	0.019	-	0.644	0.663
2476	-	0.019	-	0.644	0.662
2477	-	0.018	-	0.643	0.661
2478	-	0.018	-	0.642	0.661
2479	-	0.018	-	0.642	0.660
2480	-	0.018	-	0.641	0.659
2481	-	0.018	-	0.640	0.659
2482	-	0.018	-	0.640	0.658
2483	-	0.018	-	0.639	0.657
2484	-	0.018	-	0.638	0.657
2485	-	0.018	-	0.638	0.656
2486	-	0.018	-	0.637	0.655
2487	-	0.018	-	0.636	0.655
2488	-	0.018	-	0.636	0.654
2489	-	0.018	-	0.635	0.653
2490	-	0.018	-	0.634	0.653
2491	-	0.018	-	0.634	0.652
2492	-	0.018	-	0.633	0.651
2493	-	0.018	-	0.632	0.650
2494	-	0.018	-	0.632	0.650

2495	-	0.018	-	0.631	0.649
2496	-	0.018	-	0.630	0.648
2497	-	0.018	-	0.630	0.648
2498	-	0.018	-	0.629	0.647
2499	-	0.018	-	0.628	0.646
2500	-	0.018	-	0.628	0.646
2501	-	0.018	-	0.627	0.645
2502	-	0.018	-	0.626	0.644
2503	-	0.018	-	0.626	0.643
2504	-	0.018	-	0.625	0.643
2505	-	0.018	-	0.624	0.642
2506	-	0.018	-	0.624	0.641
2507	-	0.018	-	0.623	0.641
2508	-	0.018	-	0.622	0.640
2509	-	0.018	-	0.622	0.639
2510	-	0.018	-	0.621	0.639
2511	-	0.018	-	0.620	0.638
2512	-	0.018	-	0.619	0.637
2513	-	0.018	-	0.619	0.636
2514	-	0.018	-	0.618	0.636
2515	-	0.018	-	0.617	0.635
2516	-	0.018	-	0.617	0.634
2517	-	0.018	-	0.616	0.634
2518	-	0.018	-	0.615	0.633
2519	-	0.018	-	0.615	0.632
2520	-	0.018	-	0.614	0.632
2521	-	0.018	-	0.613	0.631
2522	-	0.018	-	0.613	0.630
2523	-	0.017	-	0.612	0.629
2524	-	0.017	-	0.611	0.629
2525	-	0.017	-	0.611	0.628
2526	-	0.017	-	0.610	0.627
2527	-	0.017	-	0.609	0.627
2528	-	0.017	-	0.608	0.626
2529	-	0.017	-	0.608	0.625
2530	-	0.017	-	0.607	0.624
2531	-	0.017	-	0.606	0.624
2532	-	0.017	-	0.606	0.623
2533	-	0.017	-	0.605	0.622
2534	-	0.017	-	0.604	0.622
2535	-	0.017	-	0.604	0.621
2536	-	0.017	-	0.603	0.620
2537	-	0.017	-	0.602	0.619
2538	-	0.017	-	0.602	0.619
2539	-	0.017	-	0.601	0.618
2540	-	0.017	-	0.600	0.617
2541	-	0.017	-	0.599	0.617
2542	-	0.017	-	0.599	0.616
2543	-	0.017	-	0.598	0.615
2544	-	0.017	-	0.597	0.615
2545	-	0.017	-	0.597	0.614
2546	-	0.017	-	0.596	0.613
2547	-	0.017	-	0.595	0.612
2548	-	0.017	-	0.595	0.612
2549	-	0.017	-	0.594	0.611

2550	-	0.017	-	0.593	0.610
2551	-	0.017	-	0.593	0.610
2552	-	0.017	-	0.592	0.609
2553	-	0.017	-	0.591	0.608
2554	-	0.017	-	0.591	0.607
2555	-	0.017	-	0.590	0.607
2556	-	0.017	-	0.589	0.606
2557	-	0.017	-	0.588	0.605
2558	-	0.017	-	0.588	0.605
2559	-	0.017	-	0.587	0.604
2560	-	0.017	-	0.586	0.603
2561	-	0.017	-	0.586	0.602
2562	-	0.017	-	0.585	0.602
2563	-	0.017	-	0.584	0.601
2564	-	0.017	-	0.584	0.600
2565	-	0.017	-	0.583	0.600
2566	-	0.017	-	0.582	0.599
2567	-	0.017	-	0.582	0.598
2568	-	0.017	-	0.581	0.598
2569	-	0.017	-	0.580	0.597
2570	-	0.017	-	0.580	0.596
2571	-	0.017	-	0.579	0.595
2572	-	0.016	-	0.578	0.595
2573	-	0.016	-	0.578	0.594
2574	-	0.016	-	0.577	0.593
2575	-	0.016	-	0.576	0.593
2576	-	0.016	-	0.576	0.592
2577	-	0.016	-	0.575	0.591
2578	-	0.016	-	0.574	0.591
2579	-	0.016	-	0.573	0.590
2580	-	0.016	-	0.573	0.589
2581	-	0.016	-	0.572	0.588
2582	-	0.016	-	0.571	0.588
2583	-	0.016	-	0.571	0.587
2584	-	0.016	-	0.570	0.586
2585	-	0.016	-	0.569	0.586
2586	-	0.016	-	0.569	0.585
2587	-	0.016	-	0.568	0.584
2588	-	0.016	-	0.567	0.584
2589	-	0.016	-	0.567	0.583
2590	-	0.016	-	0.566	0.582
2591	-	0.016	-	0.565	0.581
2592	-	0.016	-	0.565	0.581
2593	-	0.016	-	0.564	0.580
2594	-	0.016	-	0.563	0.579
2595	-	0.016	-	0.563	0.579
2596	-	0.016	-	0.562	0.578
2597	-	0.016	-	0.561	0.577
2598	-	0.016	-	0.561	0.577
2599	-	0.016	-	0.560	0.576
2600	-	0.016	-	0.559	0.575
2601	-	0.016	-	0.559	0.574
2602	-	0.016	-	0.558	0.574
2603	-	0.016	-	0.557	0.573
2604	-	0.016	-	0.557	0.572

2605	-	0.016	-	0.556	0.572
2606	-	0.016	-	0.555	0.571
2607	-	0.016	-	0.555	0.570
2608	-	0.016	-	0.554	0.570
2609	-	0.016	-	0.553	0.569
2610	-	0.016	-	0.553	0.568
2611	-	0.016	-	0.552	0.568
2612	-	0.016	-	0.551	0.567
2613	-	0.016	-	0.551	0.566
2614	-	0.016	-	0.550	0.566
2615	-	0.016	-	0.549	0.565
2616	-	0.016	-	0.549	0.564
2617	-	0.016	-	0.548	0.564
2618	-	0.016	-	0.547	0.563
2619	-	0.016	-	0.547	0.562
2620	-	0.016	-	0.546	0.562
2621	-	0.016	-	0.545	0.561
2622	-	0.016	-	0.545	0.560
2623	-	0.016	-	0.544	0.560
2624	-	0.015	-	0.543	0.559
2625	-	0.015	-	0.543	0.558
2626	-	0.015	-	0.542	0.558
2627	-	0.015	-	0.541	0.557
2628	-	0.015	-	0.541	0.556
2629	-	0.015	-	0.540	0.555
2630	-	0.015	-	0.539	0.555
2631	-	0.015	-	0.539	0.554
2632	-	0.015	-	0.538	0.553
2633	-	0.015	-	0.537	0.553
2634	-	0.015	-	0.537	0.552
2635	-	0.015	-	0.536	0.551
2636	-	0.015	-	0.535	0.551
2637	-	0.015	-	0.535	0.550
2638	-	0.015	-	0.534	0.549
2639	-	0.015	-	0.534	0.549
2640	-	0.015	-	0.533	0.548
2641	-	0.015	-	0.532	0.547
2642	-	0.015	-	0.532	0.547
2643	-	0.015	-	0.531	0.546
2644	-	0.015	-	0.530	0.545
2645	-	0.015	-	0.530	0.545
2646	-	0.015	-	0.529	0.544
2647	-	0.015	-	0.528	0.543
2648	-	0.015	-	0.528	0.543
2649	-	0.015	-	0.527	0.542
2650	-	0.015	-	0.526	0.541
2651	-	0.015	-	0.526	0.541
2652	-	0.015	-	0.525	0.540
2653	-	0.015	-	0.525	0.539
2654	-	0.015	-	0.524	0.539
2655	-	0.015	-	0.523	0.538
2656	-	0.015	-	0.523	0.538
2657	-	0.015	-	0.522	0.537
2658	-	0.015	-	0.521	0.536
2659	-	0.015	-	0.521	0.536

2660	-	0.015	-	0.520	0.535
2661	-	0.015	-	0.519	0.534
2662	-	0.015	-	0.519	0.534
2663	-	0.015	-	0.518	0.533
2664	-	0.015	-	0.518	0.532
2665	-	0.015	-	0.517	0.532
2666	-	0.015	-	0.516	0.531
2667	-	0.015	-	0.516	0.530
2668	-	0.015	-	0.515	0.530
2669	-	0.015	-	0.514	0.529
2670	-	0.015	-	0.514	0.528
2671	-	0.015	-	0.513	0.528
2672	-	0.015	-	0.513	0.527
2673	-	0.015	-	0.512	0.527
2674	-	0.015	-	0.511	0.526
2675	-	0.015	-	0.511	0.525
2676	-	0.015	-	0.510	0.525
2677	-	0.015	-	0.509	0.524
2678	-	0.015	-	0.509	0.523
2679	-	0.015	-	0.508	0.523
2680	-	0.014	-	0.508	0.522
2681	-	0.014	-	0.507	0.521
2682	-	0.014	-	0.506	0.521
2683	-	0.014	-	0.506	0.520
2684	-	0.014	-	0.505	0.520
2685	-	0.014	-	0.504	0.519
2686	-	0.014	-	0.504	0.518
2687	-	0.014	-	0.503	0.518
2688	-	0.014	-	0.503	0.517
2689	-	0.014	-	0.502	0.516
2690	-	0.014	-	0.501	0.516
2691	-	0.014	-	0.501	0.515
2692	-	0.014	-	0.500	0.514
2693	-	0.014	-	0.500	0.514
2694	-	0.014	-	0.499	0.513
2695	-	0.014	-	0.498	0.513
2696	-	0.014	-	0.498	0.512
2697	-	0.014	-	0.497	0.511
2698	-	0.014	-	0.497	0.511
2699	-	0.014	-	0.496	0.510
2700	-	0.014	-	0.495	0.509
2701	-	0.014	-	0.495	0.509
2702	-	0.014	-	0.494	0.508
2703	-	0.014	-	0.494	0.508
2704	-	0.014	-	0.493	0.507
2705	-	0.014	-	0.492	0.506
2706	-	0.014	-	0.492	0.506
2707	-	0.014	-	0.491	0.505
2708	-	0.014	-	0.491	0.505
2709	-	0.014	-	0.490	0.504
2710	-	0.014	-	0.489	0.503
2711	-	0.014	-	0.489	0.503
2712	-	0.014	-	0.488	0.502
2713	-	0.014	-	0.487	0.501
2714	-	0.014	-	0.487	0.501

2715	-	0.014	-	0.486	0.500
2716	-	0.014	-	0.486	0.500
2717	-	0.014	-	0.485	0.499
2718	-	0.014	-	0.485	0.498
2719	-	0.014	-	0.484	0.498
2720	-	0.014	-	0.483	0.497
2721	-	0.014	-	0.483	0.497
2722	-	0.014	-	0.482	0.496
2723	-	0.014	-	0.482	0.495
2724	-	0.014	-	0.481	0.495
2725	-	0.014	-	0.480	0.494
2726	-	0.014	-	0.480	0.494
2727	-	0.014	-	0.479	0.493
2728	-	0.014	-	0.479	0.492
2729	-	0.014	-	0.478	0.492
2730	-	0.014	-	0.477	0.491
2731	-	0.014	-	0.477	0.491
2732	-	0.014	-	0.476	0.490
2733	-	0.014	-	0.476	0.489
2734	-	0.014	-	0.475	0.489
2735	-	0.014	-	0.475	0.488
2736	-	0.014	-	0.474	0.488
2737	-	0.014	-	0.473	0.487
2738	-	0.014	-	0.473	0.486
2739	-	0.014	-	0.472	0.486
2740	-	0.013	-	0.472	0.485
2741	-	0.013	-	0.471	0.485
2742	-	0.013	-	0.471	0.484
2743	-	0.013	-	0.470	0.483
2744	-	0.013	-	0.469	0.483
2745	-	0.013	-	0.469	0.482
2746	-	0.013	-	0.468	0.482
2747	-	0.013	-	0.468	0.481
2748	-	0.013	-	0.467	0.481
2749	-	0.013	-	0.467	0.480
2750	-	0.013	-	0.466	0.479
2751	-	0.013	-	0.465	0.479
2752	-	0.013	-	0.465	0.478
2753	-	0.013	-	0.464	0.478
2754	-	0.013	-	0.464	0.477
2755	-	0.013	-	0.463	0.476
2756	-	0.013	-	0.463	0.476
2757	-	0.013	-	0.462	0.475
2758	-	0.013	-	0.461	0.475
2759	-	0.013	-	0.461	0.474
2760	-	0.013	-	0.460	0.474
2761	-	0.013	-	0.460	0.473
2762	-	0.013	-	0.459	0.472
2763	-	0.013	-	0.459	0.472
2764	-	0.013	-	0.458	0.471
2765	-	0.013	-	0.457	0.471
2766	-	0.013	-	0.457	0.470
2767	-	0.013	-	0.456	0.469
2768	-	0.013	-	0.456	0.469
2769	-	0.013	-	0.455	0.468

2770	-	0.013	-	0.455	0.468
2771	-	0.013	-	0.454	0.467
2772	-	0.013	-	0.454	0.467
2773	-	0.013	-	0.453	0.466
2774	-	0.013	-	0.452	0.465
2775	-	0.013	-	0.452	0.465
2776	-	0.013	-	0.451	0.464
2777	-	0.013	-	0.451	0.464
2778	-	0.013	-	0.450	0.463
2779	-	0.013	-	0.450	0.463
2780	-	0.013	-	0.449	0.462
2781	-	0.013	-	0.449	0.462
2782	-	0.013	-	0.448	0.461
2783	-	0.013	-	0.448	0.460
2784	-	0.013	-	0.447	0.460
2785	-	0.013	-	0.446	0.459
2786	-	0.013	-	0.446	0.459
2787	-	0.013	-	0.445	0.458
2788	-	0.013	-	0.445	0.458
2789	-	0.013	-	0.444	0.457
2790	-	0.013	-	0.444	0.456
2791	-	0.013	-	0.443	0.456
2792	-	0.013	-	0.443	0.455
2793	-	0.013	-	0.442	0.455
2794	-	0.013	-	0.442	0.454
2795	-	0.013	-	0.441	0.454
2796	-	0.013	-	0.441	0.453
2797	-	0.013	-	0.440	0.453
2798	-	0.013	-	0.439	0.452
2799	-	0.013	-	0.439	0.452
2800	-	0.013	-	0.438	0.451
2801	-	0.013	-	0.438	0.450
2802	-	0.013	-	0.437	0.450
2803	-	0.013	-	0.437	0.449
2804	-	0.013	-	0.436	0.449
2805	-	0.013	-	0.436	0.448
2806	-	0.012	-	0.435	0.448
2807	-	0.012	-	0.435	0.447
2808	-	0.012	-	0.434	0.447
2809	-	0.012	-	0.434	0.446
2810	-	0.012	-	0.433	0.446
2811	-	0.012	-	0.433	0.445
2812	-	0.012	-	0.432	0.444
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2814	-	0.012	-	0.431	0.443
2815	-	0.012	-	0.430	0.443
2816	-	0.012	-	0.430	0.442
2817	-	0.012	-	0.429	0.442
2818	-	0.012	-	0.429	0.441
2819	-	0.012	-	0.428	0.441
2820	-	0.012	-	0.428	0.440
2821	-	0.012	-	0.427	0.440
2822	-	0.012	-	0.427	0.439
2823	-	0.012	-	0.426	0.439
2824	-	0.012	-	0.426	0.438

2825	-	0.012	-	0.425	0.437
2826	-	0.012	-	0.425	0.437
2827	-	0.012	-	0.424	0.436
2828	-	0.012	-	0.424	0.436
2829	-	0.012	-	0.423	0.435
2830	-	0.012	-	0.423	0.435
2831	-	0.012	-	0.422	0.434
2832	-	0.012	-	0.422	0.434
2833	-	0.012	-	0.421	0.433
2834	-	0.012	-	0.421	0.433
2835	-	0.012	-	0.420	0.432
2836	-	0.012	-	0.420	0.432
2837	-	0.012	-	0.419	0.431
2838	-	0.012	-	0.419	0.431
2839	-	0.012	-	0.418	0.430
2840	-	0.012	-	0.418	0.430
2841	-	0.012	-	0.417	0.429
2842	-	0.012	-	0.417	0.429
2843	-	0.012	-	0.416	0.428
2844	-	0.012	-	0.416	0.427
2845	-	0.012	-	0.415	0.427
2846	-	0.012	-	0.415	0.426
2847	-	0.012	-	0.414	0.426
2848	-	0.012	-	0.414	0.425
2849	-	0.012	-	0.413	0.425
2850	-	0.012	-	0.413	0.424
2851	-	0.012	-	0.412	0.424
2852	-	0.012	-	0.412	0.423
2853	-	0.012	-	0.411	0.423
2854	-	0.012	-	0.411	0.422
2855	-	0.012	-	0.410	0.422
2856	-	0.012	-	0.410	0.421
2857	-	0.012	-	0.409	0.421
2858	-	0.012	-	0.409	0.420
2859	-	0.012	-	0.408	0.420
2860	-	0.012	-	0.408	0.419
2861	-	0.012	-	0.407	0.419
2862	-	0.012	-	0.407	0.418
2863	-	0.012	-	0.406	0.418
2864	-	0.012	-	0.406	0.417
2865	-	0.012	-	0.405	0.417
2866	-	0.012	-	0.405	0.416
2867	-	0.012	-	0.404	0.416
2868	-	0.012	-	0.404	0.415
2869	-	0.012	-	0.403	0.415
2870	-	0.012	-	0.403	0.414
2871	-	0.012	-	0.402	0.414
2872	-	0.012	-	0.402	0.413
2873	-	0.012	-	0.401	0.413
2874	-	0.012	-	0.401	0.412
2875	-	0.012	-	0.400	0.412
2876	-	0.012	-	0.400	0.411
2877	-	0.011	-	0.399	0.411
2878	-	0.011	-	0.399	0.410
2879	-	0.011	-	0.398	0.410

2880	-	0.011	-	0.398	0.409
2881	-	0.011	-	0.397	0.409
2882	-	0.011	-	0.397	0.408
2883	-	0.011	-	0.396	0.408
2884	-	0.011	-	0.396	0.407
2885	-	0.011	-	0.395	0.407
2886	-	0.011	-	0.395	0.406
2887	-	0.011	-	0.395	0.406
2888	-	0.011	-	0.394	0.405
2889	-	0.011	-	0.394	0.405
2890	-	0.011	-	0.393	0.404
2891	-	0.011	-	0.393	0.404
2892	-	0.011	-	0.392	0.403
2893	-	0.011	-	0.392	0.403
2894	-	0.011	-	0.391	0.402
2895	-	0.011	-	0.391	0.402
2896	-	0.011	-	0.390	0.402
2897	-	0.011	-	0.390	0.401
2898	-	0.011	-	0.389	0.401
2899	-	0.011	-	0.389	0.400
2900	-	0.011	-	0.388	0.400
2901	-	0.011	-	0.388	0.399
2902	-	0.011	-	0.387	0.399
2903	-	0.011	-	0.387	0.398
2904	-	0.011	-	0.387	0.398
2905	-	0.011	-	0.386	0.397
2906	-	0.011	-	0.386	0.397
2907	-	0.011	-	0.385	0.396
2908	-	0.011	-	0.385	0.396
2909	-	0.011	-	0.384	0.395
2910	-	0.011	-	0.384	0.395
2911	-	0.011	-	0.383	0.394
2912	-	0.011	-	0.383	0.394
2913	-	0.011	-	0.382	0.393
2914	-	0.011	-	0.382	0.393
2915	-	0.011	-	0.381	0.392
2916	-	0.011	-	0.381	0.392
2917	-	0.011	-	0.380	0.391
2918	-	0.011	-	0.380	0.391
2919	-	0.011	-	0.380	0.391
2920	-	0.011	-	0.379	0.390
2921	-	0.011	-	0.379	0.390
2922	-	0.011	-	0.378	0.389
2923	-	0.011	-	0.378	0.389
2924	-	0.011	-	0.377	0.388
2925	-	0.011	-	0.377	0.388
2926	-	0.011	-	0.376	0.387
2927	-	0.011	-	0.376	0.387
2928	-	0.011	-	0.375	0.386
2929	-	0.011	-	0.375	0.386
2930	-	0.011	-	0.375	0.385
2931	-	0.011	-	0.374	0.385
2932	-	0.011	-	0.374	0.385
2933	-	0.011	-	0.373	0.384
2934	-	0.011	-	0.373	0.384

2935	-	0.011	-	0.372	0.383
2936	-	0.011	-	0.372	0.383
2937	-	0.011	-	0.372	0.382
2938	-	0.011	-	0.371	0.382
2939	-	0.011	-	0.371	0.381
2940	-	0.011	-	0.370	0.381
2941	-	0.011	-	0.370	0.380
2942	-	0.011	-	0.369	0.380
2943	-	0.011	-	0.369	0.379
2944	-	0.011	-	0.368	0.379
2945	-	0.011	-	0.368	0.379
2946	-	0.011	-	0.368	0.378
2947	-	0.011	-	0.367	0.378
2948	-	0.011	-	0.367	0.377
2949	-	0.011	-	0.366	0.377
2950	-	0.011	-	0.366	0.376
2951	-	0.011	-	0.365	0.376
2952	-	0.011	-	0.365	0.375
2953	-	0.011	-	0.364	0.375
2954	-	0.011	-	0.364	0.374
2955	-	0.011	-	0.364	0.374
2956	-	0.010	-	0.363	0.374
2957	-	0.010	-	0.363	0.373
2958	-	0.010	-	0.362	0.373
2959	-	0.010	-	0.362	0.372
2960	-	0.010	-	0.361	0.372
2961	-	0.010	-	0.361	0.371
2962	-	0.010	-	0.361	0.371
2963	-	0.010	-	0.360	0.371
2964	-	0.010	-	0.360	0.370
2965	-	0.010	-	0.359	0.370
2966	-	0.010	-	0.359	0.369
2967	-	0.010	-	0.358	0.369
2968	-	0.010	-	0.358	0.368
2969	-	0.010	-	0.358	0.368
2970	-	0.010	-	0.357	0.367
2971	-	0.010	-	0.357	0.367
2972	-	0.010	-	0.356	0.367
2973	-	0.010	-	0.356	0.366
2974	-	0.010	-	0.355	0.366
2975	-	0.010	-	0.355	0.365
2976	-	0.010	-	0.355	0.365
2977	-	0.010	-	0.354	0.364
2978	-	0.010	-	0.354	0.364
2979	-	0.010	-	0.353	0.364
2980	-	0.010	-	0.353	0.363
2981	-	0.010	-	0.352	0.363
2982	-	0.010	-	0.352	0.362
2983	-	0.010	-	0.352	0.362
2984	-	0.010	-	0.351	0.361
2985	-	0.010	-	0.351	0.361
2986	-	0.010	-	0.350	0.360
2987	-	0.010	-	0.350	0.360
2988	-	0.010	-	0.350	0.360
2989	-	0.010	-	0.349	0.359

2990	-	0.010	-	0.349	0.359
2991	-	0.010	-	0.348	0.358
2992	-	0.010	-	0.348	0.358
2993	-	0.010	-	0.347	0.358
2994	-	0.010	-	0.347	0.357
2995	-	0.010	-	0.347	0.357
2996	-	0.010	-	0.346	0.356
2997	-	0.010	-	0.346	0.356
2998	-	0.010	-	0.345	0.355
2999	-	0.010	-	0.345	0.355
3000	-	0.010	-	0.345	0.355
3001	-	0.010	-	0.344	0.354
3002	-	0.010	-	0.344	0.354
3003	-	0.010	-	0.343	0.353
3004	-	0.010	-	0.343	0.353
3005	-	0.010	-	0.343	0.352
3006	-	0.010	-	0.342	0.352
3007	-	0.010	-	0.342	0.352
3008	-	0.010	-	0.341	0.351
3009	-	0.010	-	0.341	0.351
3010	-	0.010	-	0.340	0.350
3011	-	0.010	-	0.340	0.350
3012	-	0.010	-	0.340	0.350
3013	-	0.010	-	0.339	0.349
3014	-	0.010	-	0.339	0.349
3015	-	0.010	-	0.338	0.348
3016	-	0.010	-	0.338	0.348
3017	-	0.010	-	0.338	0.348
3018	-	0.010	-	0.337	0.347
3019	-	0.010	-	0.337	0.347
3020	-	0.010	-	0.337	0.346
3021	-	0.010	-	0.336	0.346
3022	-	0.010	-	0.336	0.346
TOTALS		17.962		468.953	486.915