

Form 5500-SF Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Short Form Annual Return/Report of Small Employee Benefit Plan This form is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA), and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). ▶ Complete all entries in accordance with the instructions to the Form 5500-SF.	OMB Nos. 1210-0110 1210-0089 2023 This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023	
A	This return/report is for: ☒ a single-employer plan ☐ a multiple-employer plan (not multiemployer) (Pension Plan filers checking this box must attach Schedule MEP. Other plans must attach a list of participating employer information in accordance with the form instructions.)
B	This return/report is ☐ the first return/report ☐ the final return/report ☐ an amended return/report ☐ a short plan year return/report (less than 12 months)
C	Check box if filing under: ☒ Form 5558 ☐ automatic extension ☐ DFVC program ☐ special extension (enter description)
D	If the plan is a collectively-bargained plan, check here ▶ ☐
E	If this is a retroactively adopted plan permitted by SECURE Act section 201, check here ▶ ☐

Part II	Basic Plan Information—enter all requested information	
1a	Name of plan RETIREMENT PLAN FOR EMPLOYEES OF QUARTZ SCIENTIFIC, INC.	1b Three-digit plan number (PN) ▶ 001
		1c Effective date of plan 01/01/1974
2a	Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) QUARTZ SCIENTIFIC INC. CHRISTOPHER ATWELL 819 EAST ST. FAIRPORT HARBOR, OH 44077	2b Employer Identification Number (EIN) 34-0907959
		2c Sponsor's telephone number 440-354-2186
		2d Business code (see instructions) 327210
3a	Plan administrator's name and address ☒ Same as Plan Sponsor.	3b Administrator's EIN
		3c Administrator's telephone number
4	If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report. a Sponsor's name c Plan Name	4b EIN
		4d PN
5a	Total number of participants at the beginning of the plan year	5a 55
b	Total number of participants at the end of the plan year	5b 46
c(1)	Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item)	5c(1)
c(2)	Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	5c(2)
d(1)	Total number of active participants at the beginning of the plan year	5d(1) 6
d(2)	Total number of active participants at the end of the plan year	5d(2) 5
e	Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	5e 0

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/15/2024	CHRISTOPHER ATWELL
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor

- 6a** Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.)..... ☒ Yes ☐ No
- b** Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? (See instructions on waiver eligibility and conditions.)..... ☒ Yes ☐ No
- If you answered "No" to either line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.**
- c** If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? ☒ Yes ☐ No ☐ Not determined
- If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 507837. (See instructions.)

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	1190017	1120619
b Total plan liabilities	7b	0	0
c Net plan assets (subtract line 7b from line 7a)	7c	1190017	1120619
8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from:			
(1) Employers	8a(1)	23247	
(2) Participants	8a(2)	0	
(3) Others (including rollovers)	8a(3)	0	
b Other income (loss)	8b	179323	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		202570
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	266109	
e Certain deemed and/or corrective distributions (see instructions) ..	8e	0	
f Administrative service providers (salaries, fees, commissions)	8f	5859	
g Other expenses	8g	0	
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		271968
i Net income (loss) (subtract line 8h from line 8c)	8i		-69398
j Transfers to (from) the plan (see instructions)	8j	0	

Part IV Plan Characteristics

- 9a** If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions:
1A 1I 3D
- b** If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

Part V Compliance Questions

10 During the plan year:		Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program)	10a		X	
b Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.)	10b		X	
c Was the plan covered by a fidelity bond?	10c	X		340000
d Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	10d		X	
e Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service, or other organization that provides some or all of the benefits under the plan? (See instructions.)	10e		X	
f Has the plan failed to provide any benefit when due under the plan?	10f		X	
g Did the plan have any participant loans? (If "Yes," enter amount as of year-end.)	10g		X	
h If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	10h			
i If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3	10i			

Part VI Pension Funding Compliance

11 Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500) and lines 11a and b below.) If this is a defined contribution pension plan, leave line 11 blank and complete line 12 below.	☒ Yes ☐ No
a Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40	11a 58198
b PBGC missed contribution reporting requirements. If the plan is covered by PBGC and the amount reported on line 11a is greater than \$0, has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:	
☒ Yes.	
☐ No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.	
☐ No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.	
☐ No. Other. Provide explanation _____	

12 Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? (If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.) If this is a defined benefit pension plan, leave line 12 blank and complete line 11 above.	☐ Yes ☐ No
a If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions, and enter the date of the letter ruling granting the waiver. Month Day Year	
If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.	
b Enter the minimum required contribution for this plan year	12b
c Enter the amount contributed by the employer to the plan for this plan year	12c
d Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount)	12d
e Will the minimum funding amount reported on line 12d be met by the funding deadline?	
☐ Yes ☐ No ☐ N/A	

Part VII Plan Terminations and Transfers of Assets

13a Has a resolution to terminate the plan been adopted in any plan year?	☐ Yes ☒ No
a If "Yes," enter the amount of any plan assets that reverted to the employer this year.....	13a
b Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	
☐ Yes ☒ No	
c If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)	
13c(1) Name of plan(s):	13c(2) EIN(s)
13c(3) PN(s)	

Part VIII IRS Compliance Questions

14a Does the plan satisfy the coverage and nondiscrimination tests of Code sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules? ☐ Yes ☒ No	
14b If this is a Code section 401(k) plan, check all boxes that apply to indicate how the plan is intended to satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under Code sections 401(k)(3) and 401(m)(2).	
☐ Design-based safe harbor method	
☐ "Prior year" ADP test	
☐ "Current year" ADP test	
☐ N/A	
15 If the plan sponsor is an adopter of a pre-approved plan that received a favorable IRS Opinion Letter, enter the date of the Opinion Letter <u>03 / 30 / 2018</u> (MM/DD/YYYY) and the Opinion Letter serial number <u>J501331A</u> .	

SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2023 This Form is Open to Public Inspection
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For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023	
Round off amounts to nearest dollar.	
Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.	
A Name of plan RETIREMENT PLAN FOR EMPLOYEES OF QUARTZ SCIENTIFIC, INC.	B Three-digit plan number (PN) 001
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF QUARTZ SCIENTIFIC INC.	D Employer Identification Number (EIN) 34-0907959
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B	F Prior year plan size: ☒ 100 or fewer ☐ 101-500 ☐ More than 500

Part I	Basic Information			
1	Enter the valuation date: Month 01 Day 01 Year 2023			
2	Assets:			
a	Market value	2a	1187199	
b	Actuarial value	2b	1187199	
3	Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a	For retired participants and beneficiaries receiving payment	3	292717	292717
b	For terminated vested participants	46	1196846	1196846
c	For active participants	6	281932	281932
d	Total	55	1771495	1771495
4	If the plan is in at-risk status, check the box and complete lines (a) and (b) ☐			
a	Funding target disregarding prescribed at-risk assumptions	4a		
b	Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b		
5	Effective interest rate	5	5.03 %	
6	Target normal cost			
a	Present value of current plan year accruals	6a	0	
b	Expected plan-related expenses	6b	24644	
c	Target normal cost	6c	24644	

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE	Signature of actuary BRANDT WONG, EA Type or print name of actuary FUTUREPLAN BY ASCENSUS Firm name PO BOX 426 FORT WASHINGTON, PA 19034-9998 Address of the firm	09/27/2024 Date 23-08767 Most recent enrollment number 609-632-9101 Telephone number (including area code)
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Part II Beginning of Year Carryover and Prefunding Balances		
	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	7862
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9 Amount remaining (line 7 minus line 8)	0	7862
10 Interest on line 9 using prior year's actual return of <u>-16.27</u> %	0	-1279
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		719
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>5.42</u> %		39
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance		758
d Portion of (c) to be added to prefunding balance		0
12 Other reductions in balances due to elections or deemed elections	0	0
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	6583

Part III Funding Percentages		
14 Funding target attainment percentage	14	66.64 %
15 Adjusted funding target attainment percentage	15	66.64 %
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	87.28 %
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	67.01 %

Part IV Contributions and Liquidity Shortfalls					
18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
08/03/2023	23247	0			
			Totals ▶	18(b)	23247
				18(c)	0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:		
a Contributions allocated toward unpaid minimum required contributions from prior years.	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	22331
20 Quarterly contributions and liquidity shortfalls:		
a Did the plan have a "funding shortfall" for the prior year? ☒ Yes ☐ No		
b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☒ No		
c If line 20a is "Yes," see instructions and complete the following table as applicable:		
Liquidity shortfall as of end of quarter of this plan year		
(1) 1st	(2) 2nd	(3) 3rd

Part V	Assumptions Used to Determine Funding Target and Target Normal Cost
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21 Discount rate:			
a Segment rates:	1st segment: 4.75 %	2nd segment: 5.00 %	3rd segment: 5.74 %
	☐ N/A, full yield curve used		
b Applicable month (enter code).....	21b	0	
22 Weighted average retirement age	22	65	
23 Mortality table(s) (see instructions) ☒ Prescribed - combined ☐ Prescribed - separate ☐ Substitute			

Part VI	Miscellaneous Items
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24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.		☐ Yes ☒ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.		☐ Yes ☒ No
26 Demographic and benefit information		
a Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.		☒ Yes ☐ No
b Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...		☐ Yes ☒ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment.....	27	

Part VII	Reconciliation of Unpaid Minimum Required Contributions For Prior Years
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28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a).....	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII	Minimum Required Contribution For Current Year
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31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6c).....	31a	24644	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment	590879	55885	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	34	80529	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0
36 Additional cash requirement (line 34 minus line 35).....	36	80529	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....	37	22331	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	0	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	0	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	58198	
40 Unpaid minimum required contributions for all years	40	58198	

Part IX	Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)
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41 If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. ☐ 2019 ☐ 2020 ☐ 2021

Years of Credited Service

[illegible]

Schedule SB, Part V

Statement of Actuarial Assumptions/Methods

Retirement Plan for Employees of Quartz Scientific, Inc.

34-0907959 / 001

For the plan year 01/01/2023 through 12/31/2023

Valuation Date: 01/01/2023

Funding Method: As prescribed in IRC Section 430

Age - Eligibility age at last birthday and other ages at nearest birthday

New participants are included in current year's valuation

Retrospective Compensation - Highest 3 consecutive years of participation

Form of Payment - Assumed form of payment for funding is lump sum equivalent of normal form. Funding Target for lump sum is the greater of the present value of accrued benefit computed using funding segment rates and 417(e) Applicable Mortality Table or lump sum at the assumed retirement date of accrued benefit using plan actuarial equivalence discounted using appropriate segment rate. Lump sum on plan actuarial equivalence rates will not exceed 415 maximum allowable distribution, which is the lesser amount computed using a) 5.5% interest and the Applicable Mortality Table or b) the greater of plan actuarial equivalence interest and mortality or 417(e) Minimum

Interest Rates -

Segment rates for the Valuation Date as permitted under IRC 430(h)(2)(C)

Segment #	Year	Rate %
Segment 1	0 - 5	2.13
Segment 2	6 - 20	3.62
Segment 3	> 20	3.93

Segment rates as of September 30, 2022 As permitted under IRC 430(h)(2)(C)(iv)(II) - ARP

Segment #	Year	Rate %
Segment 1	0 - 5	4.75
Segment 2	6 - 20	5.00
Segment 3	> 20	5.74

Pre-Retirement - Mortality Table - 23C - 2023 Combined

Early Retirement Table - None

Turnover Table - T09 - Actuary's Table T9

Disability Table - None

Salary Scale - None

Expense Load - \$24,644

Ancillary Ben Load - None

Post-Retirement - Mortality Table - 23C - 2023 Combined

Cost of Living - None

Lump Sum - 23E - 2023 Applicable Mortality Table for 417(e) (unisex) at 5%

Asset Valuation Method: Fair market value of assets adjusted for contributions under IRC 430(g)(4)

Discrimination Test Assumptions:

HCE Determination - Based on all employees

Otherwise Excludable - Otherwise Excludable HCEs are included with the Not Otherwise Excludable employees

410(b)/401(a)(4) Testing:

Pre-Retirement - Interest - 8.5%

Post-Retirement - Interest - 8.5%

Mortality Table - U84 - 1984 Unisex

Permissively Aggregated Plans - Not tested As Single Plan

Compensation - Use current compensation to calculate the benefit accrual rate (annual method)

Testing Age - Normal retirement age or attained age, if older

Normal Form for MVAR - Joint with 100% Survivor Benefits

Schedule SB, Part V
Statement of Actuarial Assumptions/Methods

Retirement Plan for Employees of Quartz Scientific, Inc.

34-0907959 / 001

For the plan year 01/01/2023 through 12/31/2023

401(a)(26) Testing:

Compensation - Use current compensation to calculate the benefit accrual rate for 401(a)(26)

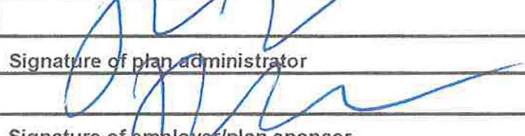
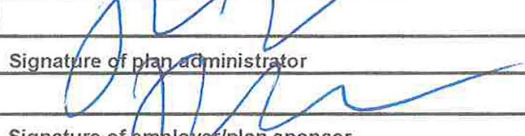
Testing Age - Normal retirement age or attained age, if older

Form 5500-SF Department of the Treasury Internal Revenue Service	Short Form Annual Return/Report of Small Employee Benefit Plan This form is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA), and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).	OMB Nos. 1210-0110 1210-0089
Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	2023 This Form is Open to Public Inspection	
Complete all entries in accordance with the instructions to the Form 5500-SF.		

Part I Annual Report Identification Information		
For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023		
A This return/report is for:	☒ a single-employer plan ☐ a multiple-employer plan (not multiemployer) (Pension Plan filers checking this box must attach Schedule MEP. Other plans must attach a list of participating employer information in accordance with the form instructions.)	
B This return/report is	☐ the first return/report ☐ the final return/report ☐ an amended return/report ☐ a short plan year return/report (less than 12 months)	
C Check box if filing under:	☒ Form 5558 ☐ automatic extension ☐ DFVC program ☐ special extension (enter description)	
D If the plan is a collectively-bargained plan, check here	☐	
E If this is a retroactively adopted plan permitted by SECURE Act section 201, check here	☐	

Part II Basic Plan Information—enter all requested information		
1a Name of plan RETIREMENT PLAN FOR EMPLOYEES OF QUARTZ SCIENTIFIC, INC.		1b Three-digit plan number (PN) 001
		1c Effective date of plan 01/01/1974
2a Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) QUARTZ SCIENTIFIC INC. Walter Nadrag 819 East St. Fairport Harbor OH 44077		2b Employer Identification Number (EIN) 34-0907959
		2c Sponsor's telephone number 440-354-2186
		2d Business code (see instructions) 327210
3a Plan administrator's name and address ☒ Same as Plan Sponsor.		3b Administrator's EIN
		3c Administrator's telephone number
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report. a Sponsor's name c Plan Name		4b EIN
		4d PN
5a Total number of participants at the beginning of the plan year		5a 55
b Total number of participants at the end of the plan year		5b 46
c(1) Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item)		5c(1)
c(2) Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)		5c(2)
d(1) Total number of active participants at the beginning of the plan year		5d(1) 6
d(2) Total number of active participants at the end of the plan year		5d(2) 5
e Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested		5e 0

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.
Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE		15.Oct.2024	Walter Nadrag
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE		15.Oct.2024	Walter Nadrag
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor

- 6a** Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.) ☒ Yes ☐ No
- b** Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? (See instructions on waiver eligibility and conditions.) ☒ Yes ☐ No
- If you answered "No" to either line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.
- c** If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? ☒ Yes ☐ No ☐ Not determined
- If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 507837. (See instructions.)

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets.....	7a	1,190,017	1,120,619
b Total plan liabilities.....	7b	0	0
c Net plan assets (subtract line 7b from line 7a).....	7c	1,190,017	1,120,619
8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from:			
(1) Employers.....	8a(1)	23,247	
(2) Participants.....	8a(2)	0	
(3) Others (including rollovers).....	8a(3)	0	
b Other income (loss).....	8b	179,323	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b).....	8c		202,570
d Benefits paid (including direct rollovers and insurance premiums to provide benefits).....	8d	266,109	
e Certain deemed and/or corrective distributions (see instructions).....	8e	0	
f Administrative service providers (salaries, fees, commissions).....	8f	5,859	
g Other expenses.....	8g	0	
h Total expenses (add lines 8d, 8e, 8f, and 8g).....	8h		271,968
i Net income (loss) (subtract line 8h from line 8c).....	8i		-69,398
j Transfers to (from) the plan (see instructions).....	8j	0	

Part IV Plan Characteristics

- 9a** If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions:
1A 1I 3D
- b** If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

Part V Compliance Questions

10 During the plan year:		Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program).....	10a		X	
b Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.).....	10b		X	
c Was the plan covered by a fidelity bond?.....	10c	X		340,000
d Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?.....	10d		X	
e Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service, or other organization that provides some or all of the benefits under the plan? (See instructions.).....	10e		X	
f Has the plan failed to provide any benefit when due under the plan?.....	10f		X	
g Did the plan have any participant loans? (If "Yes," enter amount as of year-end.).....	10g		X	
h If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.).....	10h			
i If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.....	10i			

Part VI Pension Funding Compliance

11 Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500) and lines 11a and b below.) If this is a defined contribution pension plan, leave line 11 blank and complete line 12 below. ☒ Yes ☐ No

a Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40. **11a** 58,198

b PBGC missed contribution reporting requirements. If the plan is covered by PBGC and the amount reported on line 11a is greater than \$0, has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

☒ Yes.

☐ No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.

☐ No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.

☐ No. Other. Provide explanation _____

12 Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? (If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.) If this is a defined benefit pension plan, leave line 12 blank and complete line 11 above. ☐ Yes ☐ No

a If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions, and enter the date of the letter ruling granting the waiver. Month _____ Day _____ Year _____

If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.

b Enter the minimum required contribution for this plan year **12b**

c Enter the amount contributed by the employer to the plan for this plan year **12c**

d Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount) **12d**

e Will the minimum funding amount reported on line 12d be met by the funding deadline? ☐ Yes ☐ No ☐ N/A

Part VII Plan Terminations and Transfers of Assets

13a Has a resolution to terminate the plan been adopted in any plan year? ☐ Yes ☒ No

a If "Yes," enter the amount of any plan assets that reverted to the employer this year **13a**

b Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC? ☐ Yes ☒ No

c If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

13c(1) Name of plan(s):	13c(2) EIN(s)	13c(3) PN(s)

Part VIII IRS Compliance Questions

14a Does the plan satisfy the coverage and nondiscrimination tests of Code sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules? ☐ Yes ☒ No

14b If this is a Code section 401(k) plan, check all boxes that apply to indicate how the plan is intended to satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under Code sections 401(k)(3) and 401(m)(2).

☐ Design-based safe harbor method

☐ "Prior year" ADP test

☐ "Current year" ADP test

☐ N/A

15 If the plan sponsor is an adopter of a pre-approved plan that received a favorable IRS Opinion Letter, enter the date of the Opinion Letter 03/30/2018 (MM/DD/YYYY) and the Opinion Letter serial number J501331a.

SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2023 This Form is Open to Public Inspection
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For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

Round off amounts to nearest dollar.
Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan RETIREMENT PLAN FOR EMPLOYEES OF QUARTZ SCIENTIFIC, INC.		B Three-digit plan number (PN)	001
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF QUARTZ SCIENTIFIC INC.		D Employer Identification Number (EIN) 34-0907959	
E Type of plan:	F Prior year plan size:		
☒ Single ☐ Multiple-A ☐ Multiple-B	☒ 100 or fewer ☐ 101-500 ☐ More than 500		

Part I Basic Information			
1 Enter the valuation date: Month 01 Day 01 Year 2023			
2 Assets:			
a Market value.....	2a	1,187,199	
b Actuarial value	2b	1,187,199	
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	3	292,717	292,717
b For terminated vested participants.....	46	1,196,846	1,196,846
c For active participants.....	6	281,932	281,932
d Total	55	1,771,495	1,771,495
4 If the plan is in at-risk status, check the box and complete lines (a) and (b).....			
a Funding target disregarding prescribed at-risk assumptions.....		4a	
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor		4b	
5 Effective interest rate.....	5	5.03%	
6 Target normal cost			
a Present value of current plan year accruals.....	6a	0	
b Expected plan-related expenses	6b	24,644	
c Target normal cost.....	6c	24,644	

Statement by Enrolled Actuary
To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE Brandt Wong Signature of actuary Brandt Wong, EA Type or print name of actuary FuturePlan by Ascensus Firm name P0 Box 426 Fort Washington PA 19034-9998 Address of the firm	9/27/2024 Date 2308767 Most recent enrollment number 609-632-9101 Telephone number (including area code)
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Part II Beginning of Year Carryover and Prefunding Balances		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	7,862
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	7,862
10	Interest on line 9 using prior year's actual return of <u>-16.27</u> %	0	-1,279
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		719
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>5.42</u> %		39
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		758
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	6,583

Part III Funding Percentages			
14	Funding target attainment percentage	14	66.64 %
15	Adjusted funding target attainment percentage	15	66.64 %
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	87.28 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	67.01 %

Part IV Contributions and Liquidity Shortfalls					
18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
08/03/2023	23,247	0			
Totals ►			18(b)	23,247	18(c)
					0

19	Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:		
	a Contributions allocated toward unpaid minimum required contributions from prior years	19a	0
	b Contributions made to avoid restrictions adjusted to valuation date.	19b	0
	c Contributions allocated toward minimum required contribution for current year adjusted to valuation date.	19c	22,331
20	Quarterly contributions and liquidity shortfalls:		
	a Did the plan have a "funding shortfall" for the prior year?	☒ Yes	☐ No
	b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?	☐ Yes	☒ No
	c If line 20a is "Yes," see instructions and complete the following table as applicable:		

Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.75 %	2nd segment: 5.00 %	3rd segment: 5.74 %	☐ N/A, full yield curve used
b Applicable month (enter code).....				21b 0
22 Weighted average retirement age				22 65
23 Mortality table(s) (see instructions)	☒ Prescribed - combined ☐ Prescribed - separate ☐ Substitute			

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
26 Demographic and benefit information	
a Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
b Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...	☐ Yes ☒ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years.....	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6c).....	31a	24,644	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment	590,879	55,885	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	34	80,529	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement.....	0	0	0
36 Additional cash requirement (line 34 minus line 35)	36	80,529	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	22,331	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	0	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	0	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	58,198	
40 Unpaid minimum required contributions for all years.....	40	58,198	

Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)

41 If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. ☐ 2019 ☐ 2020 ☐ 2021

Schedule SB, line 19 -
Discounted Employer Contributions

Retirement Plan for Employees of Quartz Scientific, Inc.

34-0907959 / 001

For the plan year 01/01/2023 through 12/31/2023

Valuation Date: 01/01/2023

	Date	Amount	Adjusted Contribution	Adjusted Prior Year Contribution	Adjusted Quarterly	Effective Rate	Penalty Rate
Deposited Contribution	08/03/2023	\$23,247					
Applied to Quarterly Contribution	04/15/2023	18,119	17,360	0	18,119	5.03	10.03
Applied to Quarterly Contribution	07/15/2023	5,128	4,971	0	5,128	5.03	10.03
Totals for Deposited Contribution		\$23,247	\$22,331	\$0	\$23,247		

**Schedule SB, line 22 -
Description of Weighted Average Retirement Age**

Retirement Plan for Employees of Quartz Scientific, Inc.

34-0907959 / 001

For the plan year 01/01/2023 through 12/31/2023

The age reported is the weighted average of the assumed retirement ages for all active participants as of the valuation date based on their funding target or target normal cost should the funding target of the plan be zero rounded to the nearest whole age. For an active late retiree, the assumed retirement age may be later than the Plan's normal retirement age. Each participant's rate of retirement is assumed to be 100% of his/her assumed retirement age.

Schedule SB, Part V

Summary of Plan Provisions

Retirement Plan for Employees of Quartz Scientific, Inc. 34-0907959 / 001

For the plan year 01/01/2023 through 12/31/2023

<u>Employer:</u>	Quartz Scientific, Inc.
Type of Entity -	S Corporation
EIN: 34-0907959	TIN: Plan #: 001 Plan Type: Defined Benefit
<u>Dates:</u>	Effective - 01/01/1974 Valuation - 01/01/2023
<u>Eligibility:</u>	All employees excluding members of an excluded class
	Minimum age - 21 Months of service - 12
Hours Required for -	Eligibility - 1000 Benefit accrual - 1000 Vesting - 1000
Plan Entry -	Anniversary date nearest eligibility satisfaction
<u>Retirement:</u>	Normal - First of month coincident with or next following attainment of age 65 and completion of 5 years of participation
	Early - Attainment of age 55 and completion of 5 years of participation
<u>Average Compensation:</u>	Highest 3 consecutive years of participation
Top Heavy Minimum Benefit -	Highest 5 consecutive top heavy years of participation
<u>Plan Benefits:</u>	Retirement - Frozen benefit formula
	Accrued Benefit - Frozen accrued benefit as of 04/30/2002
	Maximum allowable distribution is lump sum equivalent of normal form not to exceed 415 maximum allowable distribution, which is the lesser amount computed using a) 5.5% interest and the Applicable Mortality Table or b) the greater of plan actuarial equivalence interest and mortality or 417(e) Minimum
Early Retirement -	Accrued Benefit actuarially reduced for early commencement
Death Benefit -	Present Value of Accrued Benefit
Disability Benefit -	Accrued Benefit payable at Disability Date
<u>Top Heavy Minimum:</u>	Frozen Top-Heavy benefit
<u>IRS Limitations:</u>	415 Limits - Percent: 100 Dollar: \$160,000
	Maximum 401(a)(17) compensation - \$330,000
<u>PBGC:</u>	Plan is covered by Pension Benefit Guaranty Corporation
<u>Normal Form:</u>	Life Annuity
<u>Optional Forms:</u>	Lump Sum
	Life Annuity Guaranteed for 10 Years
	Joint with 50% or 75% Survivor Benefit
<u>Vesting Schedule:</u>	100% Vested immediately
	Service is calculated using all years of service
<u>Present Value of Accrued Benefit:</u>	Based on the greater of 417(e) or Actuarial Equivalence

417(e):

Interest Rates -	Third Month Prior to Plan Yr Beg		
	Segment #	Years	Rate %
	Segment 1	0 - 5	5.10
	Segment 2	6 - 20	5.83
	Segment 3	> 20	5.68

Mortality Table - 23E - 2023 Applicable Mortality Table for 417(e) (unisex)

Schedule SB, Part V

Summary of Plan Provisions

Retirement Plan for Employees of Quartz Scientific, Inc.

34-0907959 / 001

For the plan year 01/01/2023 through 12/31/2023

Actuarial Equivalence:

Pre-Retirement -	Interest -	5%
	Mortality Table -	None
Post-Retirement -	Interest -	5%
	Mortality Table -	23E - 2023 Applicable Mortality Table for 417(e) (unisex)

Schedule SB, line 32 -
Schedule of Amortization Bases
Retirement Plan for Employees of Quartz Scientific, Inc.
34-0907959 / 001
For the plan year 01/01/2023 through 12/31/2023

Date Base Established	Original Base Amount	Type of Base	Present Value of Remaining Installments	Years Remaining Amortization Period	Amortization Installment
01/01/2021	173,720	Shortfall	160,100	13	16,198
01/01/2022	55,209	Shortfall	53,134	14	5,102
01/01/2023	377,645	Shortfall	377,645	15	34,585
Totals:			\$590,879		\$55,885