

Form 5500-SFDepartment of the Treasury
Internal Revenue ServiceDepartment 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**2022****This Form is Open to
Public Inspection****Part I Annual Report Identification Information**For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022

- A** This return/report is for: a single-employer plan a multiple-employer plan (not multiemployer) (Filers checking this box 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 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 PRECISION NUCLEAR DIAGNOSTICS, INC. CASH BALANCE PENSION PLAN		1b Three-digit plan number (PN) ▶	002
		1c Effective date of plan	01/01/2019
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) PRECISION NUCLEAR DIAGNOSTICS, INC. 102 ELDEN STREET HERNDON, VA 20170		2b Employer Identification Number (EIN)	20-8649922
		2c Sponsor's telephone number	703-629-9046
		2d Business code (see instructions)	621111
3a Plan administrator's name and address <input checked="" type="checkbox"/> 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	2
b Total number of participants at the end of the plan year		5b	1
c Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)		5c	
d(1) Total number of active participants at the beginning of the plan year		5d(1)	0
d(2) Total number of active participants at the end of the plan year.....		5d(2)	0
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.	10/13/2023	NADEEM QAZI
	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

For Paperwork Reduction Act Notice, see the Instructions for Form 5500-SF.

Form 5500-SF (2022)
v.220413

- 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 _____ (See instructions.)

Part III Financial Information			
7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets.....	7a	443013	3558
b Total plan liabilities.....	7b		
c Net plan assets (subtract line 7b from line 7a).....	7c	443013	3558
8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from:			
(1) Employers.....	8a(1)	0	
(2) Participants.....	8a(2)		
(3) Others (including rollovers).....	8a(3)		
b Other income (loss).....	8b	-25874	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b).....	8c		-25874
d Benefits paid (including direct rollovers and insurance premiums to provide benefits).....	8d	410181	
e Certain deemed and/or corrective distributions (see instructions).....	8e		
f Administrative service providers (salaries, fees, commissions).....	8f	3400	
g Other expenses.....	8g		
h Total expenses (add lines 8d, 8e, 8f, and 8g).....	8h		413581
i Net income (loss) (subtract line 8h from line 8c).....	8i		-439455
j Transfers to (from) the plan (see instructions).....	8j		

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: 1C 3D 1I	
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? (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	
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** 206444

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? Yes No
 (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.

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

If "Yes," enter the amount of any plan assets that reverted to the employer this year..... **13a** 0

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)

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	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.	<small>OMB No. 1210-0110</small> 2022 This Form is Open to Public Inspection
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For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022

▶ **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 <u>PRECISION NUCLEAR DIAGNOSTICS, INC. CASH BALANCE PENSION PLAN</u>	B Three-digit plan number (PN) ▶	<u>002</u>
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF <u>PRECISION NUCLEAR DIAGNOSTICS, INC.</u>	D Employer Identification Number (EIN) <u>20-8649922</u>	
E Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	F Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500	

Part I Basic Information			
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2022</u>			
2 Assets:			
a Market value.....	2a	<u>436338</u>	
b Actuarial value.....	2b	<u>436338</u>	
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	<u>0</u>	<u>0</u>	<u>0</u>
b For terminated vested participants.....	<u>2</u>	<u>556608</u>	<u>556608</u>
c For active participants.....	<u>0</u>	<u>0</u>	<u>0</u>
d Total	<u>2</u>	<u>556608</u>	<u>556608</u>
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>			
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	<u>4.79 %</u>	
6 Target normal cost			
a Present value of current plan year accruals.....	6a	<u>0</u>	
b Expected plan-related expenses	6b	<u>0</u>	
c Total (line 6a + line 6b)	6c	<u>0</u>	

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	<u>10/11/2023</u> Date
	<u>ERIN M. HERRMANN, MSEA, EA</u> Type or print name of actuary	<u>20-08602</u> Most recent enrollment number
	<u>KRAVITZ, LLC</u> Firm name	<u>818-995-6100</u> Telephone number (including area code)
	<u>C/O FUTUREPLAN P.O. BOX 219073 KANSAS CITY, MO 64121</u> Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions

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	0
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	0
10	Interest on line 9 using prior year's actual return of <u>3.76</u> %	0	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year).....		0
	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>4.81</u> %.....		0
	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.....		0
	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	0

Part III Funding Percentages			
14	Funding target attainment percentage	14	78.39 %
15	Adjusted funding target attainment percentage	15	78.39 %
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	70.97 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

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		
			Totals ▶	18(b)		18(c)	

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	0
20	Quarterly contributions and liquidity shortfalls:		
	a Did the plan have a "funding shortfall" for the prior year?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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
0	0	0	0

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

21 Discount rate:

a Segment rates:	1st segment: 4.75 %	2nd segment: 5.18 %	3rd segment: 5.92 %	<input type="checkbox"/> N/A, full yield curve used
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b Applicable month (enter code)..... **21b** 0

22 Weighted average retirement age **22** 62

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	201641
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	201641

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):

a Target normal cost (line 6c).....	31a	0
b Excess assets, if applicable, but not greater than line 31a	31b	0

32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	120270	4803
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** 4803

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement.....			0
36 Additional cash requirement (line 34 minus line 35).....			4803
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....			0

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** 4803

40 Unpaid minimum required contributions for all years..... **40** 206444

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

**PRECISION NUCLEAR DIAGNOSTICS, INC.
CASH BALANCE PENSION PLAN
EIN 20-8649922 Plan Number 002**

Schedule SB, Line 22 - Description of Weighted Average Retirement Age.

The assumed average retirement age is 62.

Participants are assumed to retire at the plan's Normal Retirement Age,
or at the end of the current plan year if later.

**PRECISION NUCLEAR DIAGNOSTICS, INC.
CASH BALANCE PENSION PLAN
EIN 20-8649922 Plan Number 002**

Schedule SB, Part V -- Summary of Plan Provisions

Effective Date	January 1, 2019 as amended through May 31, 2022.
Plan Status	Benefits were frozen as of May 31, 2022. Eligibility was frozen as of May 31, 2022 (i.e. no new participants). The Plan was terminated effective May 31, 2022.
Definitions	
- Plan Year	January 1 through December 31.
- Compensation	Total compensation paid during Plan Year.
- Years of Service	Service for eligibility is based upon the entire period of service. The elapsed time method is used in measuring this service. Service for benefits is based upon years of participation where 1000 hours of service is required in order to accrue a benefit.
- Accrued Pension	Actuarial equivalent of the balance of the Participant's Cash Balance Account as of Valuation Date projected to his Normal Retirement Date.
- Actuarial Equivalence	Based on the interest rate of 4% and mortality in accordance with the Applicable Mortality table.
- Cash Balance Account	Hypothetical account established for each participant. Each plan year, the account is credited with participant's Contribution Credit in accordance with the plan. Account accumulates guaranteed earnings based on the interest rate of 4%.
- Contribution Credit	Contribution for all participants is \$0.

Eligibility	<p>Employees become eligible upon attainment of age 21 and completion of 6 months of service, and enter the plan on the January 1 or July 1 following completion of the eligibility requirements.</p> <p>Employees not listed in the Appendix of Eligible Employees are excluded from the Plan.</p> <p>However, no new participants enter the plan after May 31, 2022.</p>
Normal Retirement	
- Age	The later of age 62 and the third anniversary of the Participant's entry date.
- Annual Pension	The participant's Accrued Benefit determined as of his Normal Retirement Date based on the actuarial equivalent value of the Cash Balance Account.
- Payment of Pensions	Straight life annuity for single employees. Reduced Joint and 100% Survivor annuity for married employees. Optional forms of benefits include single sum and annuities.
Early Retirement Benefit	Same as Severance Benefit.
Late Retirement Benefit	Actuarial equivalent of the Cash Balance Account as of the participant's late retirement date.
Disability Benefit	Actuarial equivalent value of normal retirement pension.
Severance Benefit	Accrued Benefit times Vested Percentage. The Vested Percentage is 100%.

Death Benefit Before Retirement

- Active Participants Actuarial equivalent value of accrued pension.
- Former Participants 100% of the value of the vested deferred pension.

Top-Heavy Provisions

- Minimum Benefit For employees also participating in the Precision Nuclear Diagnostics, Inc. 401(k) Profit Sharing Plan, contribution of 5% of total compensation to be provided under that plan.

Voluntary Contributions Not Permitted.

Rollover Contributions Not Permitted.

Loans to Participants Not Permitted.

**PRECISION NUCLEAR DIAGNOSTICS, INC.
CASH BALANCE PENSION PLAN
EIN 20-8649922 Plan Number 002**

Schedule SB, Line 32a -- Schedule of Shortfall Amortization Bases

(1) Date <u>Established</u>	(2) <u>Source</u>	(3) Original <u>Balance</u>	(4) remain. Amort Period <u>Years</u>	(5) Minimum Amort. Payment <u>(BOY)</u>	(6) Unamortized Balance as of <u>1/1/2022</u>
1/1/2021	Initial Funding Shortfall	97,374	14	9,079	93,769
1/1/2022	Additional Funding Shortfal	26,501	15	2,449	26,501
	Net			11,528	120,270
	Total pro-rated due to plan termination			4,803	

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	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.	<small>OMB No. 1210-0110</small> 2022 This Form is Open to Public Inspection
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For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022

▶ **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 Precision Nuclear Diagnostics, Inc. Cash Balance Pension Plan	B Three-digit plan number (PN) ▶	002
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF Precision Nuclear Diagnostics, Inc.	D Employer Identification Number (EIN) 20-8649922	
E Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	F Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500	

Part I Basic Information			
1 Enter the valuation date:	Month <u>01</u>	Day <u>01</u>	Year <u>2022</u>
2 Assets:			
a Market value	2a		436,338
b Actuarial value	2b		436,338
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	0	0	0
b For terminated vested participants	2	556,608	556,608
c For active participants	0	0	0
d Total	2	556,608	556,608
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>			
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		4.79%
6 Target normal cost			
a Present value of current plan year accruals	6a		0
b Expected plan-related expenses	6b		0
c Total (line 6a + line 6b)	6c		0

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		<u>10/11/2023</u> <small>Date</small> <u>2308602</u> <small>Most recent enrollment number</small> <u>818-995-6100</u> <small>Telephone number (including area code)</small>
	<small>Signature of actuary</small> <u>Erin M. Herrmann, EA, MSEA</u> <small>Type or print name of actuary</small> <u>Kravitz, LLC</u> <small>Firm name</small> <u>c/o FuturePlan</u> <u>P.O. Box 219073</u> <u>Kansas City MO 64121</u> <small>Address of the firm</small>	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions

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	0
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	0
10	Interest on line 9 using prior year's actual return of <u>3.76</u> %	0	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		0
	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>4.81</u> %		0
	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		0
	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	0

Part III		Funding Percentages	
14	Funding target attainment percentage	14	78.39 %
15	Adjusted funding target attainment percentage	15	78.39 %
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	70.97 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	%

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	
Totals ▶			18(b)	0	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	0
20	Quarterly contributions and liquidity shortfalls:		
	a Did the plan have a "funding shortfall" for the prior year?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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	
0	0	0	0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost				
21 Discount rate:				
a Segment rates:	1st segment: 4.75 %	2nd segment: 5.18 %	3rd segment: 5.92 %	<input type="checkbox"/> N/A, full yield curve used
b Applicable month (enter code)				21b 0
22 Weighted average retirement age				22 62
23 Mortality table(s) (see instructions)	<input checked="" type="checkbox"/> Prescribed - combined <input type="checkbox"/> Prescribed - separate <input type="checkbox"/> 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.....	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.....	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.....	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
b Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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				28 201,641
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).....				30 201,641

Part VIII Minimum Required Contribution For Current Year				
31 Target normal cost and excess assets (see instructions):				
a Target normal cost (line 6c)				31a 0
b Excess assets, if applicable, but not greater than line 31a				31b 0
32 Amortization installments:	Outstanding Balance		Installment	
a Net shortfall amortization installment	120,270		4,803	
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 4,803
	Carryover balance	Prefunding balance	Total balance	
35 Balances elected for use to offset funding requirement			0	
36 Additional cash requirement (line 34 minus line 35)				36 4,803
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)				37 0
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 4,803
40 Unpaid minimum required contributions for all years				40 206,444

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. <input type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input type="checkbox"/> 2021				

**PRECISION NUCLEAR DIAGNOSTICS, INC.
CASH BALANCE PENSION PLAN
EIN 20-8649922 Plan Number 002**

Schedule SB, Line 22 - Description of Weighted Average Retirement Age.

The assumed average retirement age is 62.

Participants are assumed to retire at the plan's Normal Retirement Age,
or at the end of the current plan year if later.

**PRECISION NUCLEAR DIAGNOSTICS, INC.
CASH BALANCE PENSION PLAN
EIN 20-8649922 Plan Number 002**

Schedule SB, Part V -- Statement of Actuarial Assumptions/Methods

Valuation Date First day of the plan year.
Current valuation date is January 1, 2022.

Actuarial Method Unit credit.

Actuarial Assumptions

- Interest Rates per annum, compounded annually
(use the rate for each participant based upon the date of payment being valued)

	95% of 25-Year averages <u>(minimum funding)</u>	24-month averages <u>(maximum)</u>
-- First 5 Years after valuation date	4.75%	0.88%
Next 15 Years	5.18%	2.61%
More than 20 years after val date	5.92%	3.27%

First column, based on 25-year averages, is used to determine AFTAP and minimum contributions.
Second column, based on 24-month averages, is used to determine maximum deductible contributions.

The interest rates above are from the set of interest rates prescribed in the Pension Protection Act of 2006, and the American Rescue Plan Act of 2021.

- Interest Crediting Rate (for account earnings) 4% per annum compounded annually, for current and all future years.
- Actuarial Equivalent (for converting balances to annuities) 4% interest and Applicable Mortality table are used to convert balances to annuities.

- Experience - Active Employees
 - Retirement Normal Retirement Age.
 - Death None.
 - Other Separation None.
 - Earnings Progression None.
Compensation is based on expected Pay for the current year.
- Retired Mortality
 - Conversion to Annuities Applicable Mortality table.
 - Funding RP-2014 combined Mortality tables for males and females, projected to 2022.

The mortality rates for Funding are from the mortality tables prescribed in federal regulations and notices, as authorized by the Pension Protection Act of 2006.
- Form of Payment Lump Sum.
- Expense Loading None.
- Asset Valuation Basis Market Value, including discounted contributions receivable.

Notice to Plan Sponsor about the selection of Interest Rate assumptions and Asset valuation:

The Pension Protection Act of 2006 prescribes that the above segment interest rates will be used as a default unless the Plan Sponsor notifies the actuary that he elects to use different assumptions:

- a. The above segment interest rates represent the rates for the month prior to the valuation date. The Plan Sponsor may elect to use rates applicable to 1 to 4 months prior to the latest month.
- b. Assets are valued at fair market value, without any averaging. The Plan Sponsor may ask the actuary to use an average asset value over up to 24 months.

The Plan Sponsor should notify us immediately if any of these alternative elections are desired.

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

2022

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022

A This return/report is for: a single-employer plan a multiple-employer plan (not multiemployer) (Filers checking this box 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 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
Precision Nuclear Diagnostics, Inc. Cash Balance Pension Plan

1b Three-digit plan number (PN) ▶ 002

1c Effective date of plan 01/01/2019

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)
Precision Nuclear Diagnostics, Inc.

102 Elden Street
Herndon VA 20170

2b Employer Identification Number (EIN) 20-8649922

2c Sponsor's telephone number (703) 629-9046

2d Business code (see instructions)
621111

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	<u>2</u>
b Total number of participants at the end of the plan year	5b	<u>1</u>
c Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item).....	5c	
d(1) Total number of active participants at the beginning of the plan year	5d(1)	<u>0</u>
d(2) Total number of active participants at the end of the plan year	5d(2)	<u>0</u>
e Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	5e	<u>0</u>

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		<u>12/13/23</u>	NADEEM QAZI
	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 _____ (See instructions.)

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	443,013	3,558
b Total plan liabilities	7b		
c Net plan assets (subtract line 7b from line 7a)	7c	443,013	3,558
8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from:			
(1) Employers	8a(1)	0	
(2) Participants	8a(2)		
(3) Others (including rollovers)	8a(3)		
b Other income (loss)	8b	-25,874	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		-25,874
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	410,181	
e Certain deemed and/or corrective distributions (see instructions) .	8e		
f Administrative service providers (salaries, fees, commissions)	8f	3,400	
g Other expenses	8g		
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		413,581
i Net income (loss) (subtract line 8h from line 8c)	8i		-439,455
j Transfers to (from) the plan (see instructions)	8j		

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:
 1C 3D 1I
- 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? (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	
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.....	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a	Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40	11a 206,444
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:	
<input type="checkbox"/>	Yes.	
<input type="checkbox"/>	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.	
<input type="checkbox"/>	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.	
<input type="checkbox"/>	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.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?.....	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

Part VII Plan Terminations and Transfers of Assets

13a	Has a resolution to terminate the plan been adopted in any plan year?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	If "Yes," enter the amount of any plan assets that reverted to the employer this year.....	13a 0
b	Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)	13c(2)	13c(3)
Name of plan(s):	EIN(s)	PN(s)