

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 <div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold;">2014</div> This Form is Open to Public Inspection
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Part I Annual Report Identification Information	
For calendar plan year 2014 or fiscal plan year beginning <u>01/01/2014</u> and ending <u>12/31/2014</u>	
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	☐ a one-participant plan ☐ a foreign plan ☐ 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)

Part II Basic Plan Information —enter all requested information													
1a Name of plan <u>ZIRCOA, INC. SALARIED EMPLOYEES PENSION PLAN</u>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">1b Three-digit plan number (PN) ▶</td> <td style="width:40%; text-align: center;"><u>002</u></td> </tr> <tr> <td colspan="2">1c Effective date of plan <u>03/01/1988</u></td> </tr> </table>	1b Three-digit plan number (PN) ▶	<u>002</u>	1c Effective date of plan <u>03/01/1988</u>									
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2a Plan sponsor's name and address; include room or suite number (employer, if for a single-employer plan) <u>ZIRCOA, INC.</u> <u>31501 SOLON ROAD</u> <u>SOLON, OH 44139-3526</u>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">2b Employer Identification Number (EIN) <u>34-1570175</u></td> <td style="width:40%;"></td> </tr> <tr> <td>2c Sponsor's telephone number <u>440-248-0500</u></td> <td></td> </tr> <tr> <td>2d Business code (see instructions) <u>327100</u></td> <td></td> </tr> </table>	2b Employer Identification Number (EIN) <u>34-1570175</u>		2c Sponsor's telephone number <u>440-248-0500</u>		2d Business code (see instructions) <u>327100</u>							
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2d Business code (see instructions) <u>327100</u>													
3a Plan administrator's name and address ☒ Same as Plan Sponsor.	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">3b Administrator's EIN</td> <td style="width:40%;"></td> </tr> <tr> <td>3c Administrator's telephone number</td> <td></td> </tr> </table>	3b Administrator's EIN		3c Administrator's telephone number									
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3c Administrator's telephone number													
4 If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN, and the plan number from the last return/report. a Sponsor's name	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">4b EIN</td> <td style="width:40%;"></td> </tr> <tr> <td>4c PN</td> <td></td> </tr> </table>	4b EIN		4c PN									
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5a Total number of participants at the beginning of the plan year	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">5a</td> <td style="width:40%; text-align: right;"><u>82</u></td> </tr> <tr> <td>5b Total number of participants at the end of the plan year.....</td> <td style="text-align: right;"><u>79</u></td> </tr> <tr> <td>5c Number of participants with account balances as of the end of the plan year (defined benefit plans do not complete this item)</td> <td></td> </tr> <tr> <td>5d(1) Total number of active participants at the beginning of the plan year.....</td> <td style="text-align: right;"><u>22</u></td> </tr> <tr> <td>5d(2) Total number of active participants at the end of the plan year.....</td> <td style="text-align: right;"><u>21</u></td> </tr> <tr> <td>5e Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested.....</td> <td style="text-align: right;"><u>0</u></td> </tr> </table>	5a	<u>82</u>	5b Total number of participants at the end of the plan year.....	<u>79</u>	5c Number of participants with account balances as of the end of the plan year (defined benefit plans do not complete this item)		5d(1) Total number of active participants at the beginning of the plan year.....	<u>22</u>	5d(2) Total number of active participants at the end of the plan year.....	<u>21</u>	5e Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested.....	<u>0</u>
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5e Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested.....	<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	Filed with authorized/valid electronic signature.	10/15/2015	RONNE PROCH
	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
Preparer's name (including firm name, if applicable) and address (include room or suite number) (optional)			Preparer's telephone number (optional)

- 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

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	9829816	9752748
b Total plan liabilities	7b	0	0
c Net plan assets (subtract line 7b from line 7a)	7c	9829816	9752748
8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from:			
(1) Employers	8a(1)	500000	
(2) Participants	8a(2)	0	
(3) Others (including rollovers)	8a(3)	0	
b Other income (loss)	8b	434522	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		934522
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	975016	
e Certain deemed and/or corrective distributions (see instructions)	8e	0	
f Administrative service providers (salaries, fees, commissions)	8f	0	
g Other expenses	8g	36574	
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		1011590
i Net income (loss) (subtract line 8h from line 8c)	8i		-77068
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 3H
- 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	☒	
b Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.)	10b	☒	
c Was the plan covered by a fidelity bond?	10c	☒	500000
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	☒	
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	☒	
f Has the plan failed to provide any benefit when due under the plan?	10f	☒	
g Did the plan have any participant loans? (If "Yes," enter amount as of year end.)	10g	☒	
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 line 11a below) ☒ Yes ☐ No
- 11a** Enter the unpaid minimum required contribution for current year from Schedule SB (Form 5500) line 39 **11a** 0
- 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.)
- 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)

Part VIII Trust Information (optional)

14a Name of trust	14b Trust's EIN

<div>SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation</div>	<div>Single-Employer Defined Benefit Plan Actuarial Information</div> <div>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).</div> <div>File as an attachment to Form 5500 or 5500-SF.</div>	<div>OMB No. 1210-0110</div> <div>2014</div> <div>This Form is Open to Public Inspection</div>
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For calendar plan year 2014 or fiscal plan year beginning 01/01/2014 and ending 12/31/2014

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 ZIRCOA, INC. SALARIED EMPLOYEES 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 ZIRCOA, INC.		D Employer Identification Number (EIN) 34-1570175	
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 2014			
2 Assets:			
a Market value	2a	9829816	
b Actuarial value	2b	9409264	
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	36	5213503	5213503
b For terminated vested participants	24	873884	873884
c For active participants	22	3570680	3582283
d Total	82	9658067	9669670
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	6.47%	
6 Target normal cost	6	26718	

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.

<div>SIGN HERE</div>	<div>Signature of actuary</div> <div>MICHAEL M. SPICKARD, EA, MSPA</div> <div>Type or print name of actuary</div> <div>CBIZ RETIREMENT PLAN SERVICES</div> <div>Firm name</div> <div>13680 CLEVELAND AVE NW UNIONTOWN, OH 44685</div> <div>Address of the firm</div>	<div>10/13/2015</div> <div>Date</div> <div>14-05310</div> <div>Most recent enrollment number</div> <div>330-644-2044</div> <div>Telephone number (including area code)</div>
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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

☐

For Paperwork Reduction Act Notice and OMB Control Numbers, see the instructions for Form 5500 or 5500-SF.

Schedule SB (Form 5500) 2014
v. 140124

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	241019
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	241019
10 Interest on line 9 using prior year's actual return of <u>11.42</u> %	0	27524
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		63380
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>6.31</u> %		3999
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		67379
d Portion of (c) to be added to prefunding balance		67379
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	335922

Part III Funding Percentages		
14 Funding target attainment percentage	14	93.83 %
15 Adjusted funding target attainment percentage	15	93.83 %
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	87.02 %
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
12/22/2014	500000	0			
			Totals ▶	18(b)	500000
				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? ☒ 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
0	0	0
		(4) 4th
		0

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

21 Discount rate:				
a Segment rates:	1st segment: 4.99 %	2nd segment: 6.32 %	3rd segment: 6.99 %	☐ N/A, full yield curve used
b Applicable month (enter code).....				21b 0
22 Weighted average retirement age				22 64
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 Is the plan required to provide a Schedule of Active Participants? 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 6).....	31a	26718	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment.....	596328	248016	
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	274734	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement.....	0	276054	276054
36 Additional cash requirement (line 34 minus line 35).....	36	0	
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	0	
40 Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected	☐ 2 plus 7 years ☐ 15 years		
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011		
42 Amount of acceleration adjustment	42		
43 Excess installment acceleration amount to be carried over to future plan years	43		

SCHEDULE SB ATTACHMENT

Line 26 - Schedule of Active Participant Data

Plan Name: Zircoa, Inc. Salaried Employees' Pension Plan

EIN/PN: 34-1570175/002

Valuation Date: January 1, 2014

Att. Age:	Years of Credited Service													Total
	Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 to 29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	-	2	-	-	-	-	-	-	-	2
45 to 49	-	-	-	-	-	2	-	1	1	-	-	-	-	4
50 to 54	-	-	-	-	-	-	-	-	-	2	-	-	-	2
55 to 59	-	-	-	-	-	-	2	1	1	1	3	-	-	8
60 to 64	-	-	-	-	-	-	1	-	-	3	-	-	-	4
65 to 69	-	-	-	-	-	2	-	-	-	-	-	-	-	2
70 & Up	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	6	3	2	2	6	3	-	-	22

CENSUS and ASSUMPTIONS

Valuation Census Date

Census data was provided by the Plan Sponsor as of January 01, 2014. We have reviewed the data for consistency and have no reason to doubt its substantial accuracy.

Valuation Interest Rates

IRS-Prescribed Three-Segment Rates, for the month that includes the valuation date (Jan).

	24-Month Segment Rates	
	Unadjusted	Limited to 25 Year Corridor
Segment I:	1.25%	4.99%
Segment II:	4.06%	6.32%
Segment III:	5.08%	6.99%

The Effective Interest Rate (EIR) is the single rate of interest which, if used to determine the funding target, would equal the funding target determined using the plan sponsor's above elected discount rates. The EIR is used to discount contributions for minimum funding requirements and to accumulate excess contributions to the end of the year.

The effective rate for the 2014 Plan Year was 6.47%. For the prior Plan year, this rate was 6.31%.

PBGC Discount Rates

The segment rates used to calculate the PBGC vested liabilities are as follows:

	(month prior to valuation)	(Unadjusted funding rates)
Segment I:	1.25%	1.25%
Segment II:	4.57%	4.06%
Segment III:	5.60%	5.08%

Mortality Table Elected

IRS Prescribed Mortality with Separate Annuitant and Non-Annuitant Rates, for Males and Females for the Current Plan Year.

Valuation Assets

Two-Year smoothing using a long-term rate of return of 7.50%, limited by the prior year third segment rate of 6.76%, per IRS Notice 2009-22. Actuarial Assets are held to a minimum of 90% and a maximum of 110% of Fair Market Value.

CENSUS and ASSUMPTIONS

Expenses

Administrative expenses for the current year are assumed to equal the actual expenses for the prior year, unless larger expenses can be anticipated. Under this assumption, expenses of \$26,718 were included in the Normal Cost.

Salary Scale

None. Plan accruals are Frozen.

**Taxable Wage Base
Increases**

The Social Security Taxable Wage Base is assumed to increase at 3.00% per year.

Inflation

The consumer price index is assumed to increase at 3.00% per year.

Marriage

85% of Males and 65% of Females are assumed to be married. Females are assumed to be 3 years younger than males. This assumption is expected to reflect actual plan experience but a formal analysis has not been conducted due to the lack of credible experience.

CENSUS and ASSUMPTIONS

Retirement Rates

The Zircoa Unreduced Early Retirement Rates Table for males, and the Zircoa Reduced Early Retirement Rates Table for females. Below is a table of representative rates.

Age	Rates (M)	Rates (F)
55	0.010000	0.010000
56	0.010000	0.010000
57	0.010000	0.010000
58	0.050000	0.010000
59	0.050000	0.010000
60	0.050000	0.025000
61	0.050000	0.025000
62	0.300000	0.150000
63	0.300000	0.150000
64	0.300000	0.200000
65	1.000000	1.000000
66	1.000000	1.000000
67	1.000000	1.000000
68	1.000000	1.000000
69	1.000000	1.000000
70	1.000000	1.000000

100% of future retirements are assumed to take lump sum. The valuation of participants in pay status is based on the actual form of payment elected by the participant, as provided in the census data.

CENSUS and ASSUMPTIONS

Withdrawal Rates

ESTIMATED SOA 1971-1975 for Zircoa. Below is a table of representative rates.

Age	Rates
20	0.175000
25	0.175000
30	0.085000
35	0.085000
40	0.058000
45	0.040000
50	0.010000
55	0.010000
60	0.010000

Commencement of future deferred vested participants is assumed paid as a lump sum. Commencement is assumed at this age 65 since there is not enough credible experience to assume otherwise.

Disability Incidence

None assumed.

Disability Mortality

IRS Prescribed Mortality with Separate Annuitant and Non-Annuitant Rates, for Males and Females for the Current Plan Year. Below is a table of representative rates.

Age	Rates (M)	Rates (F)
30	0.000384	0.000197
40	0.000855	0.000455
50	0.003651	0.001635
60	0.005841	0.005581
70	0.016167	0.015069
80	0.052121	0.039587

Changes in non-required assumptions since the prior valuation

None.

ACTUARIAL METHODS

Minimum Funding Cost Method

The actuarial cost method used to determine the liabilities for minimum funding calculations is the Traditional Unit Credit method. The objective under this method is to fund each participant's benefits under the plan as they accrue. Under this cost method, the actuarial accrued liability is the sum of the individual accrued liabilities for all participants and the normal cost is the sum of the individual normal costs for each participant. The individual accrued liability for a participant is the present value of the accrued benefit as of the valuation date taking into account service and/or pay as of the valuation date. The individual normal cost for a participant is the present value of the benefit expected to accrue in the plan year being valued.

If a plan is frozen, there is no normal cost attributable to benefit accruals.

Maximum deductible contribution method

The actuarial cost method used to determine the liabilities for maximum deductible calculations is the Projected Unit Credit method. The objective under this method is to fund each participant's benefits under the plan as they accrue, taking into consideration expected future compensation increases. Under this cost method, the actuarial accrued liability is the sum of the individual accrued liabilities for all participants and the normal cost is the sum of the individual normal costs for all participant. The individual accrued liability for a participant is the sum of 1) the present value of the accrued benefit earned as of the valuation date taking into account service and/or pay as of the valuation date; plus 2) the present value of the accrued benefit expected to be earned because of any expected future compensation increases.

The individual normal cost for a participant is the sum of the present value of the benefit expected to accrue in the plan year being valued taking into account any expected future compensation increases.

Asset Method

We used financial data submitted by the trustee as of the valuation date without further audit. This information was not be verified by a plan's actuary. We have reviewed the information for internal consistency, and we have no reason to doubt is substantial accuracy.

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 2014 This Form is Open to Public Inspection
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For calendar plan year 2014 or fiscal plan year beginning 01/01/2014 and ending 12/31/2014

▶ **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 ZIRCOA, INC. SALARIED EMPLOYEES 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 ZIRCOA, INC.	D Employer Identification Number (EIN) 34-1570175
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 2014			
2 Assets:			
a Market value		2a	9829816
b Actuarial value		2b	9409264
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.....	36	5213503	5213503
b For terminated vested participants.....	24	873884	873884
c For active participants.....	22	3570680	3582283
d Total.....	82	9658067	9669670
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	6.47%	
6 Target normal cost.....	6	26718	

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	MICHAEL M. SPICKARD, EA, MSPA 	10/13/2015
MICHAEL M. SPICKARD, EA, MSPA Signature of actuary		Date
CBIZ RETIREMENT PLAN SERVICES Type or print name of actuary		1405310
Firm name		Most recent enrollment number
13680 CLEVELAND AVE NW UNIONTOWN OH 44685 Address of the firm		330-644-2044
		Telephone number (including area code)

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 ☐

For Paperwork Reduction Act Notice and OMB Control Numbers, see the instructions for Form 5500 or 5500-SF.

Schedule SB (Form 5500) 2014
v. 140124

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	241019
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	241019
10 Interest on line 9 using prior year's actual return of <u>11.42</u> %	0	27524
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year).....		63380
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>6.31</u> %		3999
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		67379
d Portion of (c) to be added to prefunding balance.....		67379
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	335922

Part III Funding Percentages

14 Funding target attainment percentage	14	93.83%
15 Adjusted funding target attainment percentage	15	93.83%
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	87.02%
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
12/22/2014	500000	0			
Totals ▶			18(b)	500000	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?	☒ 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
0	0	0	0

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

21 Discount rate:				
a Segment rates:	1st segment: 4.99%	2nd segment: 6.32%	3rd segment: 6.99%	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 0
22 Weighted average retirement age				22 64
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 Is the plan required to provide a Schedule of Active Participants? 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 6)	31a	26718	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment	596328	248016	
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	274734	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	276054	276054
36 Additional cash requirement (line 34 minus line 35)	36	0	
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	0	
40 Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected	☐ 2 plus 7 years ☐ 15 years		
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011		
42 Amount of acceleration adjustment	42		
43 Excess installment acceleration amount to be carried over to future plan years	43		

Plan Name: Zircoa, Inc. Salaried Employees' Pension Plan
Plan EIN: 34-1570175
Plan Number: 002
Schedule SB, Line 22 – Description of Weighted Average Retirement Age

The average retirement age for Line 22 was computed by creating a hypothetical life table decremented only with retirement, and then calculating table's average retirement age.

Age	Weight	Weighted Retirement Age
55	1.00%	0.55
56	0.99%	0.55
57	0.98%	0.56
58	0.97%	0.56
59	0.96%	0.57
60	2.38%	1.43
61	2.32%	1.41
62	13.56%	8.41
63	11.53%	7.26
64	13.06%	8.36
65	52.25%	33.96
Average Retirement Age		63.63
Line 22, Rounded		64

SCHEDULE SB ATTACHMENT

Line 19 - Discounted Employer Contributions

Plan Name: Zircoa, Inc. Salaried Employees' Pension Plan

EIN/PN: 34-1570175/002

Valuation Date: January 1, 2014

Total Contributed: \$500,000.00

Total Discounted to Valuation Date: \$470,423.00

Date	Amount	Plan Year Beginning	Effective Rate of Interest	Amount Discounted	Penalty Rate of Interest	Additional Amount Discounted	Present Value on Date of Valuation
12/22/2014	500,000	01/2014	6.47%	29,577			470,423

SUMMARY of PLAN BENEFITS

Plan Effective Date	March 1, 1988. The plan was recently amended effective December 31, 2012 for required regulatory purposes as a result of certain provisions of the Pension Protection Act of 2006 and IRS Notice 2011-96.
Status of Plan	The plan was frozen as of December 31, 2012 and no further entrants and no further benefit accruals are granted.
Vesting	100% vesting upon earning 5 Years of Vesting Service.
Accrued Benefit Formula	Each Participant's monthly Accrued Benefit will be an amount equal to the Accrued Benefit as of December 31, 2010 based on the terms of Plan in effect prior to this amendment. No additional benefits will accrue after December 31, 2010.
Average Compensation	The average of the pensionable earnings during all years of service of the participant. In no event shall pensionable earnings exceed the limitation specified in Section 401(a)(17) of the Internal Revenue Code.
Normal Retirement Age	Upon attainment of 65 and five Years of Service.
Early Retirement	<p><u>Eligibility:</u> Upon attainment of age 55 and completion of 5 Years of Service.</p> <p><u>Benefit:</u> The accrued benefit is reduced $1/180^{\text{th}}$ for each of the first 60 complete calendar months and $1/360^{\text{th}}$ for each additional month that commencement precedes age 65.</p> <p><u>Eligibility:</u> Upon attainment of age 55 and 30 Years of Benefit Service.</p> <p><u>Benefit:</u> Unreduced Normal Retirement Benefit.</p>
Disability Retirement	<p><u>Eligibility:</u> Upon completion of 10 Years of Benefit Service and eligible to receive disability benefits under the Federal Social Security Act.</p> <p><u>Benefit:</u> Accrued Normal Retirement Benefit as of date of Disability.</p>

SUMMARY of PLAN BENEFITS

Pre-Retirement Death

Eligibility: Upon completion of vesting eligibility

Benefit: The spouse is eligible for 50% of the benefit that would have been payable, if the Participant had lived to Early Retirement Eligibility and elected a 50% Qualified Joint and Survivor Annuity. The benefit is payable upon the Participant's Early Retirement Eligibility date.

Normal Form of Payment

Unless otherwise elected, the benefit payable for a married participant is an actuarially equivalent 50% Joint and Survivor benefit with the first 6 years guaranteed. For unmarried participants, the Normal Form is a straight-life annuity with the first 6 years guaranteed.

Optional Forms

Benefits may be elected from:

- 50%, 75% and 100% Joint and Survivor with the first 6 years guaranteed
- Social Security Level Income
- Straight Life Annuity with the first 6 years guaranteed

Changes in Plan Provisions since the last valuation

None.

SCHEDULE SB ATTACHMENT

Line 32 - Amortization Bases Used in the Valuation

Plan Name: Zircoa, Inc. Salaried Employees' Pension Plan

EIN/PN: 34-1570175/002

Valuation Date: January 1, 2014

<u>Original Valuation</u>	<u>Remaining Years</u>	<u>Amortization Type</u>	<u>Outstanding Balance</u>	<u>Current Year Amortization</u>
1/1/2014	7	7 year	(544,946)	(91,202)
1/1/2013	6	7 year	311,350	58,936
1/1/2012	5	7 year	(151,499)	(33,320)
1/1/2011	4	7 year	364,683	97,934
1/1/2010	3	7 year	616,740	215,668