

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 section 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; text-align: center; padding: 5px; font-weight: bold; font-size: 1.2em;">2010</div> This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2010 or fiscal plan year beginning <u>01/01/2010</u> and ending <u>12/31/2010</u>	
A This return/report is for:	☒ single-employer plan ☐ multiple-employer plan (not multiemployer) ☐ one-participant plan
B This return/report is for:	☐ first return/report ☐ final return/report ☐ an amended return/report ☐ 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 ZIRCOA, INC. SALARIED EMPLOYEES PENSION PLAN		1b Three-digit plan number (PN) ►	002
2a Plan sponsor's name and address (employer, if for single-employer plan) ZIRCOA, INC. 31501 SOLON ROAD SOLON, OH 44139-3526		1c Effective date of plan 03/01/1988	
		2b Employer Identification Number (EIN) <u>34-1570175</u>	
		2c Plan sponsor's telephone number 440-248-0500	
		2d Business code (see instructions) 327100	
3a Plan administrator's name and address (if same as Plan sponsor, enter "Same") ZIRCOA, INC. 31501 SOLON ROAD SOLON, OH 44139-3526		3b Administrator's EIN 34-1570175	
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. Sponsor's name		3c Administrator's telephone number 440-248-0500	
		4b EIN	
		4c PN	
5a Total number of participants at the beginning of the plan year		5a	94
b Total number of participants at the end of the plan year		5b	94
c Total number of participants with account balances as of the end of the plan year (defined benefit plans do not complete this item).....		5c	
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 6a or 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.

Part III	Financial Information		
7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	8267480	9176544
b Total plan liabilities	7b	0	0
c Net plan assets (subtract line 7b from line 7a)	7c	8267480	9176544
8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from:			
(1) Employers	8a(1)	110000	
(2) Participants	8a(2)	0	
(3) Others (including rollovers)	8a(3)	0	
b Other income (loss)	8b	1252850	1362850
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	437226	
e Certain deemed and/or corrective distributions (see instructions)	8e	0	
f Administrative service providers (salaries, fees, commissions)	8f	0	
g Other expenses	8g	16560	
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		
i Net income (loss) (subtract line 8h from line 8c)	8i		909064
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 1G 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)		X	
b	Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.)		X	
c	Was the plan covered by a fidelity bond?	X		5000000
d	Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?		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.)		X	
f	Has the plan failed to provide any benefit when due under the plan?		X	
g	Did the plan have any participant loans? (If "Yes," enter amount as of year end.)		X	
h	If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)			
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			

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))..... ☒ Yes ☐ No**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 12a or 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 during the plan year or any prior year? ☐ Yes ☒ NoIf "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)

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.	10/11/2011	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

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 2010 This Form is Open to Public Inspection
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For calendar plan year 2010 or fiscal plan year beginning 01/01/2010 and ending 12/31/2010

▶ **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>ZIRCOA, INC. SALARIED EMPLOYEES 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>ZIRCOA, INC.</u>	D Employer Identification Number (EIN) <u>34-1570175</u>
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 <u>01</u> Day <u>01</u> Year <u>2010</u>
2	Assets:
a	Market value 2a <u>8235090</u>
b	Actuarial value 2b <u>8442018</u>
3	Funding target/participant count breakdown
	(1) Number of participants (2) Funding Target
a	For retired participants and beneficiaries receiving payment 3a <u>29</u> <u>4711067</u>
b	For terminated vested participants 3b <u>31</u> <u>968438</u>
c	For active participants:
(1)	Non-vested benefits 3c(1) <u>123781</u>
(2)	Vested benefits 3c(2) <u>3721245</u>
(3)	Total active 3c(3) <u>34</u> <u>3845026</u>
d	Total 3d <u>94</u> <u>9524531</u>
4	If the plan is at-risk, check the box and complete items (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 at-risk for fewer than five consecutive years and disregarding loading factor 4b
5	Effective interest rate 5 <u>6.60</u> %
6	Target normal cost 6 <u>324279</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	<u>10/10/2011</u>
Signature of actuary <u>SETH H. PITASKY, EA, MAAA</u>	Date <u>11-07321</u>
Type or print name of actuary <u>SUMMIT RETIREMENT PLAN SERVICES INC</u>	Most recent enrollment number <u>330-983-0538</u>
Firm name <u>13680 CLEVELAND AVENUE NW</u> <u>UNIONTOWN, OH 44685</u>	Telephone number (including area code)
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 ☐

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

Schedule SB (Form 5500) 2010
v.092308.1

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 (Item 13 from prior year)	0	0
8 Portion used to offset prior year's funding requirement (Item 35 from prior year)	0	0
9 Amount remaining (Item 7 minus item 8).....	0	0
10 Interest on item 9 using prior year's actual return of <u>10.96</u> %	0	0
11 Prior year's excess contributions to be added to prefunding balance:		
a Excess contributions (Item 38 from prior year)		544536
b Interest on (a) using prior year's effective rate of <u>8.15</u> %		44380
c Total available at beginning of current plan year to add to prefunding balance		588916
d Portion of (c) to be added to prefunding balance.....		588916
12 Reduction in balances due to elections or deemed elections.....	0	0
13 Balance at beginning of current year (item 9 + item 10 + item 11d – item 12).....	0	588916

Part III Funding percentages		
14 Funding target attainment percentage.....	14	82.45 %
15 Adjusted funding target attainment percentage.....	15	82.45 %
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	105.36 %
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
12/28/2010	75000	0			
05/10/2011	35000	0			
Totals ►			18(b)	110000	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 contribution 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	102503

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No

b If 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No

c If 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: 4.60 %	2nd segment: 6.65 %	3rd segment: 6.76 %	☐ 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 eligible for (and is using) 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 contribution for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (item 19a).....	29	0
30 Remaining amount of unpaid minimum required contributions (item 28 minus item 29)	30	0

Part VIII Minimum required contribution for current year

31 Target normal cost, adjusted, if applicable (see instructions).....	31	324279
32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	1290448	215668
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 (item 31 + item 32a + item 32b – item 33).....	34	539947
	Carryover balance	Prefunding balance
35 Balances used to offset funding requirement	0	539947
36 Additional cash requirement (item 34 minus item 35).....	36	0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (Item 19c).....	37	102503
38 Interest-adjusted excess contributions for current year (see instructions).....	38	102503
39 Unpaid minimum required contribution for current year (excess, if any, of item 36 over item 37).....	39	0
40 Unpaid minimum required contribution for all years	40	0

Plan Name: Zircoa, Inc. Salaried Employees' Pension Plan
EIN: 34-1570175
Plan Number: 002

Schedule SB, Line 26--Schedule of Active Participant Data

YEARS OF CREDITED SERVICE

[illegible]

Plan Name: Zircoa, Inc. Salaried Employees' Pension Plan
EIN: 34-1570175
Plan Number: 002
Schedule SB, Part V - Statement of Actuarial Assumptions/Methods

ACTUARIAL COST METHODS

Traditional Unit Credit

The actuarial cost method used in the valuation was the unit credit cost method.

The normal cost is the sum of all the individual normal costs for each participant. For active participants, the individual normal cost is the present value of the benefit earned during the year being valued. For active participants whose credited service equals or exceeds the plan maximum, if any, and for non-active participants, the normal cost is zero.

The actuarial accrued liability is the sum of the individual accrued liabilities for all participants. The individual accrued liability for an active participant is the present value of the accrued benefit as of the valuation date. The unfunded liability is the actuarial accrued liability less the valuation assets.

The total annual cost of the plan is the normal cost plus an amount to amortize the shortfall amount.

Projected Unit Credit

The actuarial cost method used in the development of the maximum contribution and the at-risk liabilities was the projected unit credit cost method.

Under this method, the normal cost is the sum of the individual normal costs for all participants. For an active participant, the individual normal cost is the present value at the current age of the projected benefit at the assumed retirement age, based on the actuarial assumptions, divided by the participant's expected years of credited service at that age. For a non-active participant, the normal cost is zero.

The actuarial accrued liability is the sum of the individual accrued liabilities for all plan participants. For an active participant, the individual accrued liability is the product of the normal cost and the total years of credited service at the current age. For non-active participants, the individual accrued liability is the present value at the current age of future benefits. The unfunded actuarial accrued liability equals the actuarial accrued liability less the valuation assets.

Plan Name: Zircoa, Inc. Salaried Employees' Pension Plan
EIN: 34-1570175
Plan Number: 002
Schedule SB, Part V - Statement of Actuarial Assumptions/Methods

ACTUARIAL METHOD AND ASSUMPTIONS

A summary of the actuarial assumptions used in the valuation is presented below:

Valuation Assets - Assets averaged over a two-year period, adjusted for expected earnings and principal transactions, as prescribed under the Pension Protection Act of 2006.

Mandated Discount Rates

1. PPA funding - segment 1	4.600%
2. PPA funding - segment 2	6.650%
3. PPA funding - segment 3	6.760%

Plan's Effective Interest Rate: 6.602%

Salary Scale - A constant increase of 3.50% was assumed. Shown below are the salaries at age 65 expressed as a percent of the salary at sample ages as follows:

<u>Age</u>	<u>Males</u>	<u>Females</u>
20	470%	470%
25	396%	396%
30	333%	333%
35	281%	281%
40	236%	236%
45	199%	199%
50	168%	168%
55	141%	141%
60	119%	119%

Taxable Wage Base Increase Assumption - Increases to the taxable wage base were not assumed.

Retirement Rates - Zircoa Reduced Early Retirement Rates - Employees were assumed to retire in accordance with the rates shown below:

<u>Age</u>	<u>Males</u>	<u>Females</u>
55	0.0100	0.0100
56	0.0100	0.0100
57	0.0100	0.0100
58	0.0100	0.0100
59	0.0100	0.0100
60	0.0250	0.0250
61	0.0250	0.0250
62	0.1500	0.1500
63	0.1500	0.1500
64	0.2000	0.2000
65	1.0000	1.0000

Plan Name: Zircoa, Inc. Salaried Employees' Pension Plan
EIN: 34-1570175
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Schedule SB, Part V - Statement of Actuarial Assumptions/Methods

Termination - ESTIMATED SOA 1971-1975 for Zircoa - Termination rates were assumed in the valuation. Employees were assumed to terminate in accordance with the rates shown below:

<u>Age</u>	<u>Males</u>	<u>Females</u>
20	0.1750	0.1750
25	0.1750	0.1750
30	0.0850	0.0850
35	0.0850	0.0850
40	0.0580	0.0580
45	0.0400	0.0400
50	0.0100	0.0100
55	0.0100	0.0100
60	0.0100	0.0100

Pre-retirement Mortality - IRS 2010 P.V. M Non-annuitants (1.430(h) and IRS 2010 P.V. F Non-annuitants (1.430(h) - Pre-retirement mortality was assumed in the valuation. Sample rates are as follows:

<u>Age</u>	<u>Males</u>	<u>Females</u>
20	0.0002	0.0001
25	0.0003	0.0001
30	0.0004	0.0002
35	0.0007	0.0004
40	0.0009	0.0005
45	0.0011	0.0008
50	0.0014	0.0011
55	0.0019	0.0021
60	0.0033	0.0035

Post-retirement Mortality - IRS 2010 P.V. M Annuitants (1.430(h)(3)- and IRS 2010 P.V. F Annuitants (1.430(h)(3)- - Post-retirement mortality was assumed in the valuation. Sample rates are as follows:

<u>Age</u>	<u>Males</u>	<u>Females</u>
65	0.0106	0.0095
70	0.0172	0.0154
75	0.0298	0.0245
80	0.0543	0.0407
85	0.0983	0.0699
90	0.1713	0.1251
95	0.2585	0.1880
100	0.3387	0.2335
105	0.3979	0.2931

Rates of Disablement - Rates of disablement were not assumed.

Plan Name: Zircoa, Inc. Salaried Employees' Pension Plan
EIN: 34-1570175
Plan Number: 002
Schedule SB, Part V - Statement of Actuarial Assumptions/Methods

Post-Disablement Mortality - IRS 2010 P.V. M Annuitants (1.430(h)(3)- and IRS 2010 P.V. F Annuitants (1.430(h)(3)- - Post-disablement mortality was assumed in the valuation. Sample rates are as follows:

<u>Age</u>	<u>Males</u>	<u>Females</u>
65	0.0106	0.0095
70	0.0172	0.0154
75	0.0298	0.0245
80	0.0543	0.0407
85	0.0983	0.0699
90	0.1713	0.1251
95	0.2585	0.1880
100	0.3387	0.2335
105	0.3979	0.2931

Administrative Expenses - Expenses of \$ 11,295 per annum were assumed.

Percent Married - 85% of males and 65% of females were assumed to be married.

Age of Spouse - The female spouse is assumed to be 3 years younger than the male spouse.

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration 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.	OMB No. 1210-0110 2010 This Form is Open to Public Inspection
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For calendar plan year 2010 or fiscal plan year beginning 01/01/2010 and ending 12/31/2010

▶ **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 ☐ Other		
F Prior year plan size: ☐ 100 or fewer ☒ 101-500 ☐ More than 500		

Part I Basic Information			
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2010</u>			
2 Assets:			
a Market value	2a	8235090	
b Actuarial value	2b	8442018	
3 Funding target/participant count breakdown		(1) Number of participants	(2) Funding Target
a For retired participants and beneficiaries receiving payment	3a	29	4711067
b For terminated vested participants	3b	31	968438
c For active participants:			
(1) Non-vested benefits	3c(1)		123781
(2) Vested benefits	3c(2)		3721245
(3) Total active	3c(3)	34	3845026
d Total	3d	94	9524531
4 If the plan is at-risk, check the box and complete items (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 at-risk for fewer than five consecutive years and disregarding loading factor	4b		
5 Effective interest rate	5	6.60%	
6 Target normal cost	6	324279	

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	SETH H. PITASKY, EA, MAAA <div style="text-align: center;"> Signature of actuary SETH H. PITASKY, EA, MAAA Type or print name of actuary SUMMIT RETIREMENT PLAN SERVICES INC Firm name 13680 CLEVELAND AVENUE NW UNIONTOWN OH 44685 Address of the firm </div>	<div style="text-align: center;"> <u>10/01/11</u> Date 1107321 Most recent enrollment number 330-983-0538 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 ☐

Part II Beginning of year carryover and prefunding balances

Part II		Beginning of your current and preceding plan years	
		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (Item 13 from prior year)	0	0
8	Portion used to offset prior year's funding requirement (Item 35 from prior year)	0	0
9	Amount remaining (Item 7 minus item 8)	0	0
10	Interest on item 9 using prior year's actual return of <u>10.96%</u>	0	0
11	Prior year's excess contributions to be added to prefunding balance:		
a	Excess contributions (Item 38 from prior year)		544536
b	Interest on (a) using prior year's effective rate of <u>8.15%</u>		44380
c	Total available at beginning of current plan year to add to prefunding balance		588916
d	Portion of (c) to be added to prefunding balance		588916
12	Reduction in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (Item 9 + item 10 + item 11d – item 12)	0	588916

Part III Funding percentages

14	Funding target attainment percentage.....	14	82.45%
15	Adjusted funding target attainment percentage.....	15	82.45%
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	105.36%
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
12/28/2010	75000	0			
05/10/2011	35000	0			
Totals ▶			18(b)	110000	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 contribution 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	102503

20 Quarterly contributions and liquidity shortfalls:

- a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No
- b If 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No
- c If 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: 4.60%	2nd segment: 6.65%	3rd segment: 6.76%	☐ 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 eligible for (and is using) 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 contribution for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (item 19a).....	29	0
30 Remaining amount of unpaid minimum required contributions (item 28 minus item 29).....	30	0

Part VIII Minimum required contribution for current year

31 Target normal cost, adjusted, if applicable (see instructions).....	31	324279
32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	1290448	215668
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 (item 31 + item 32a + item 32b - item 33).....	34	539947
	Carryover balance	Prefunding balance
35 Balances used to offset funding requirement	0	539947
36 Additional cash requirement (item 34 minus item 35).....	36	0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (Item 19c).....	37	102503
38 Interest-adjusted excess contributions for current year (see instructions).....	38	102503
39 Unpaid minimum required contribution for current year (excess, if any, of item 36 over item 37).....	39	0
40 Unpaid minimum required contribution for all years	40	0

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

EIN: 34-1570175

Plan Number: 002

Schedule SB, Part V - Summary of Plan Provisions.

SUMMARY OF PLAN PROVISIONS

A summary of the major plan provisions used in the valuation is presented below:

Plan effective date: March 1, 1988.

Latest plan amendment: January 1, 2005.

Eligibility requirements: None.

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.

Accrued benefit: The accrued benefit is determined as follows:

2.000% of average compensation times years of service.

Normal retirement eligibility: Upon the attainment of age 65 and completion of 5 years of participation service.

Normal retirement benefit: Unreduced accrued benefit payable immediately.

Normal form of benefit:

Married members - A pension payable for life with the first 6 years guaranteed. Upon the death of the member and after the guarantee period, the surviving spouse will receive 50.00% continuance of the pension for life.

Single members - A pension payable for life with the first 6 years guaranteed.

Early retirement eligibility: Upon the attainment of age 55 and completion of 5 years of service.

Early retirement benefit: The accrued benefit is reduced 6.67% for each of the first 5 years and 3.33% for the next 5 years that commencement precedes age 65.

Death benefit eligibility: Upon death after completion of vesting eligibility criteria.

Death benefit: 50.000% of the accrued benefit reduced for early commencement and for form of payment. Said pension shall commence at normal retirement age.

Vesting eligibility: Accrued benefit is 100% vested upon completion of 5 years of service.

Vested benefit: The vested benefit is payable upon attainment of normal retirement age.

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

EIN: 34-1570175

Plan Number: 002

Schedule SB, Line 32 – Schedule of Amortization Bases

Type of base	Present Value of Remaining Installment	Valuation Date Established	Years Remaining in Amortization Period	Amortization Installment
Shortfall	\$1,290,448	01/01/2010	7	\$215,668
Total	\$1,290,448			\$215,668

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

EIN: 34-1570175

Plan Number: 002

Schedule SB, line 19 – Discounted Employer Contributions

Total
Contributed: **\$110,000**
Total
Discounted to
Valuation
Date: **\$102,503**

Date	Amount	Plan Year	Effective Rate of Interest	Discounted Amount	Penalty Rate of Interest	Additional Discounted Amount	Value As of Valuation Date
12/28/2010	\$ 75,000	2010	6.60%	\$ 70,404	11.60%	\$ -	\$ 70,404
05/10/2011	\$ 35,000	2010	6.60%	\$ 32,099	11.60%	\$ -	\$ 32,099

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

EIN: 34-1570175

Plan Number: 002

Schedule SB, Line 24 - Change in Actuarial Assumptions

The discount rates were changed from using Full Yield Curve – November 2008 to PPA funding segmented rates with the applicable month containing the valuation date.

This change has been elected by the plan sponsor. Under final funding regulations issued October 15, 2009, the change is automatically approved by the IRS.

The retirement rate assumption was changed to better reflect future anticipated experience.

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