

Janice K. Brewer Governor April 22, 2013 ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007 (602) 771-2300 • www.azdeq.gov



Henry R. Darwin Director

Rim Trail DWID Attn: Harry Jones 240 E Box Elder Lane Payson, AZ 85541

RE: Rim Trail DWID, Payson, Arizona Public Water System (PWS) AZ0404035 ICE Database Inspection Identification Number 195279

Dear Mr. Jones:

The Water Quality Utility Field Services Unit (WQUFSU) of the Arizona Department of Environmental Quality (ADEQ) has enclosed an inspection report regarding the inspection conducted at the above referenced facility on March 13, 2013. The inspection was conducted to determine compliance with Arizona Revised Statute (A.R.S.) §49-351 et seq. and Arizona Administrative Codes A.A.C. R18-4-101 et seq and A.A.C. R18-5-101 et seq.

As indicated in the enclosed "Inspection Report" no significant deficiencies were observed during the inspection and during the review of ADEQ records by WQUFSU staff. No ADEQ action will result from this inspection.

If you have any questions regarding this letter, please feel free to contact me at (602) 771-2225, or by e-mail at DS11@azdeq.gov.

Sincerely

Deborah Schadewald-Kohler Environmental Engineering Specialist Water Quality Utility Field Services Unit

- Encl: Inspection Checklist/Report Sanitary Survey System Grade Worksheet
- cc: Patrick Carpenter, Operator, PO Box 264, Williams, AZ 86046 Gila County Health Department, 1400 East Ash Street, Globe, Arizona 85501 Donna Calderon, Manager, Drinking Water Monitoring and Protection Unit WQUFSU Reading File Regenter 1988 PWS File AZ0404035

Southern Regional Office 400 West Congress Street • Suite 433 • Tucson, AZ 85701 (520) 628–6733 Printed on recycled paper



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY SURFACE WATER DRINKING WATER SYSTEM INSPECTION

1. FACILI	TY NAM	E, ADDRESS	Rim Ti	Rim Trail DWID, 289 E. Box Elder Lane, Payson, AZ 85541											
R/P NAI	ME, ADD	RESS	Harry J	Harry Jones, 240 E. Box Elder Lane, Payson, AZ 85541											
PWS ID	AZ04040	135 Inspec	ction ID	19527	9	Place ID	1387 R/P Phone		928-595-1111						
RP E-mail		harryjoneshdj	@msn.com	m	10 121150	SM NOCIDER	200 000011 (C 110 00 00	r maizzzano.	e IA-Esquele Intaks single pre 1910, Ohino 2, C.						
Facility Con	Facility Contact / Harry Jones				Ing house	ation as a	od gritegel a	.0ap 2.0.6.	7 Source.protection (810.0						
Phone		928-595-1111			N.Y. MILL	nere persona	166 2008)	, Skel briod	p6 "NGARGARATA" (b-4-d-8) mana-bi amatana anifana						
System Type A.R.S. § 41-	System Type A.R.S. § 41-1092			1 199	Systen (R18-5	n Grade 5-115)	Treatmer	nt 2	Distribution 2						
Population 24 Res 180 Tra		dential/ nsient	Co	onnections	90	Source	E Verde River 3 wells	EPDSs	3 TPs 1 2 CL2						

2. OPERATOR INFORMATION (Lead)		
Lead Operator's Name / ID	Patrick Carpenter /	OP007600
Certification / Grade	Treatment 3	Distribution 2
Certification Expiration	31MAR14	31MAR14

3. INSPECTION TYPE	Sanitary Survey	X	Follow-up	C	omplaint	Sampling	Inspection Rights	X
INSPECTION DATE	13MAR	13	IN	PECTO	R Deborah	Schadewald-Kohler	A least the determinent the ar	

4. SYSTEM INFORMATION

This is a non-community system that serves second homes north of Payson, Arizona. The system is composed of one siphon from the East Verde River, three wells, one surface water treatment plant, three chlorinators, one 10,000 gallon storage tank, one 30,000 gallon storage tank, one 40,000 gallon storage tank, and distribution system.

Rim Trail uses alternative filtration including slow sand, cartridge, bag, and ceramic filtering to one micron.

Drinking Water Sanitary Survey Inspection Authority: A.A.C. R18-4-208 to determine compliance with A.R.S. Title 49, Ch. 2, Art. 9; A.A.C. Title 18, Ch. 4 & 5 Revised 21FEB13

5. SURFACE WATER INSPECTION CHECKLIST System # 04035 System Name Rim Trail DWID

"Y" - Yes, "N" - No, "N/A" - Not Applicable "N/E" - Not Evaluated Details narrated in 6. Inspection Summary

1	Approved source (R18-5-507.A; B10 Chap.2.A.1)	Y	2	Safe yield (B10 Chap. 2.A.4)	Y	3	Suction lines protected (B10, Chap 3. H)	Y
4	Adequate intake structure or system (B10, Chap.2.C.2)	Y	5	Flood protection measures in place (B10, Chap. 2.B.5)	Y	6	Controlled catchment to contain runoff (B10, Chap. 2.B.6.a)	NA
7	Source protection (B10, Chap. 2.B.6. a-b-c-d) [a-catchment, b-pond/lake, c-surface streams, d-canals]	Y	8	Spring box or infiltration gallery using approved materials. (R18-4- 213)	NA	9	Hazard free (B10, Chap. 2.B.3.c)	Y
10	System uses both SW and GW (complete section C)	Y	11	Other deficiencies (see Section A in narrative if checked)			141	

Section A. Spring and Surface Water Sources (if system combines SW and GW please complete Section C. Wells)

*B10-ADEQ Engineering Bulletin No.10 is incorporated by reference in R18-5-502

Section B. Water Treatment and Disinfection Facilities (SW and GW)

1	Efficient surface water treatment (R18-4-212)	Y	2	Required filtration provided (40 CFR 141.73; R18-4-212; B10, Chap.4.F)	Y	3	Adequate turbidity monitoring (R18-4-302F)	Y
4	Turbidity meets acceptable levels (R18-4-302B thru E)	Y	5	Adequate pretreatment (B10, Chap.4.F)	NA	6	Adequate filtration, micro-screening (B10, Chap.4.F)	Y
7	Adequate aeration (B10, Chap.4.C.4-6)	NA	8	Adequate coagulation and flocculation (B10, Chap.4.D)	NA	9	Adequate sedimentation (B10, Chap.4.E.1b-h)	NA
10	Backwash water circulates back to head works (B10, Chap.4.F.2.n)	NA	11	Sludge / backwash / surface wash discharge to ground or surface water is permitted (R18-9-301.A. 2.h)(B10, Chap.4.B.1.k or F.2.p)	NA	12	Separation between potable water and backwash water (R18-4-115A)	NA
13	Adequate detention time and overflow rate for clarifier (B10, Chap.4.F.3.c-e)	NA	14	Safety features installed in treatment facilities (B10, Chap.4.F.3)	Y	15	Manufacturer's operating and maintenance instructions adhered to (B10, Chap.4.F.2.i)	Y
16	Minimum flow control appurtenances (B10, Chap.4.F.4.r. (1-6)) or B10, Chap.4.F.5.g)	Y	17	Softening (B10, Chap.4.G)	NA	18	Brine or wet-salt storage (B10, Chap.4.G.3.b. (11))	NA
19	Separate salt housing (B10, Chap.4.G.3.b. (16))	NA	20	Corrosion/Scale control (B10, Chap.4.H)	NA	21	Blending to achieve compliance (R18-4-217)	NA
22	Disinfection equipment (R18-4- 213.B)	Y	23	Disinfection compound ANSI / NSF approved (R18-4-213.A)	Y	24	Label disinfectant container (R18-4- 213.B)	Y
25	Adequate disinfectant monitoring (R18-4-303B)	Y	26	Proper chlorine levels 0.2-4.0 with 30 minute contact time (40 CFR.141.54) (B8, Part II.F)	Y	27	Adequate disinfection (chlorine, ozone, etc) (40 CFR.141.72 / 141.403)	Y
28	Dosing cylinder/chlorine feed tank filled (R18-4-303B)	Y	29	Structure properly vented, lighted, accessible (B10, Chap 4.A.1.b)	Y	30	Water lines disinfected prior to put into service, per bulletin 8 or AWWA C651-92 or 86 (R18-5-508.C)	Y
31	Chemical storage separate (B10, Chap 4.A.1.b.10)	Y	32	Water and chemical lines labeled (B10, Chap 4.A)	Y	33	Operation and maintenance manual on site (Chap 4.A.5)	Y
34	Staff on duty or available when treatment plant in operation (.B10, Chap 4.A.7)	Y	35	Other treatment (see Section B in narrative if checked)				

*B10-ADEQ Engineering Bulletin No.10 is incorporated by reference in R18-5-502 *B8-ADEQ Engineering Bulletin No. 8

Section C. Well(s) (If system also uses wells)

200	thom e. them (b) (in b) sterm also ases t	10110)						
1	Water supply is outside of flood zone (R18-5-501.2)	Y	2	Well is at least 50 ft. from sewer (R18-5-502D)	Y	3	Well at least 100ft. from Septic, UST or APP Discharge/HAZ waste (R18-5- 502.D)	Y
4	Ground Water Under the Influence (GUDI) of surface water (R18-4-212)	NA	5	Filtration and chlorination for GUDI (R18-4-212G) (B10, Chap 4.F.1.a)	NA	6	State well number posted (B10, Chap 2.E.1)	Y
7	Approved water source (R18-5- 507.A)	Y	8	Source Protection (B10, Chap 2.D.5)	Y	9	Sampling tap installed at well (B10, Chap. 3.G.1)	Y
10	Adequate drainage away from the well (B10, Chap. 2.E.6)	Y	11	Sanitary slab (B 10, Chap. 2.E.9)	Y	12	Well casing, cover, sanitary seal (R18-2-15-811.B.1, B10, Chap. 2.E.9)	Y
13	Casing extends 12" above slab (R18- 2-15-811.B.1; B10 Chap.2.E.8)	Y	14	ANSI/NSF approved additives (R18-4-213.B & C)	Y	15	Vent turns down and terminates 2 feet above slab with #16 mesh screen (B10, Chap. 3.G.2)	Y
16	Check valve on pipe from well (B10, Chap. 3.C.4)	Y	17	Well enclosed or fenced with lock (B10 Chap 2, G.18)	Y	18	Abandon well (B10 Chap 2, G.22)	NA
19	Spring or infiltration collection box (B10, Chap 2.F)	NA	20	Consecutive connection (R18-4- 124) [40DFR 141.402(a)(4)]	NA	21	Other deficiencies (see Section C in narrative if checked)	J
Sec	tion D. Storage Tank(s)	a.	*B1	0-ADEQ Engineering Bulletin No.	10 is i	ncor	porated by reference in R18-5-502	
1	Meets minimum storage capacity for C or NC water system (R18-5-503.A) (B10, Chap 6.D)	Y	2	Evidence that products conform to ANSI/NSF (R18-4-213.C) (AWWA Standard D102)	Y	3	Drain not directly connected to sanitary sewer, storm drain or irrigation conveyance (B10, Chap 6.E.4)	Y
4	Lead free (R18-5-504)	NA	5	ANSI exempt concrete storage tank (R18-4-213.E.1)	NA	6	ANSI exempt earthen reservoir upstream of treatment (R18-4-213.E.2)	NA
7	ANSI exempt. Galvanized tank <15,000 gallons/population <500 (R18-4-213.E.3)	NA	8	Vents protected with #16 mesh non-corrodible screen (B10, Chap 6.E.9)	Y	9	Located clear of or protected from 100 year flood (B10, Chap 6.E.1.a)	Y
10	Hatch has gasket or seal (<i>R18-5-502)</i> and locking device (B10, Chap.6.E.8)	Y	11	All finished water storage has water tight cover or roof (B10, Chap 6.E.2, 10, 11)	Y	12	Proper disinfection methods used (B10, Chap. 6.E.18)	Y
13	Area within 100 ft. of tank graded to provide drainage away from tank (B10, Chap. 6.E.14) Foundation (B10, Chap 6.E.5)	Y	14	Can be isolated from system for maintenance and cleaning (B10, Chap 6.E.4)	Y	15	Working mechanical, automatic gauge or alarm (R18-5-502)(B10, Chap 6.E.7)	Y
16	Automatic or remote controlled stations (B10, Chap 3.I)	NA	17	Overflow pipe with #16 mesh non-corrodible screen (R18-5- 502)(B10 Chap 6.E.6)	Y	18	Documented maintenance and service (B10, Chap 6.)	N
19	Operation and maintenance manual including manufacturers' specifications and manuals (R18-5- 507.B.3) (B10, Chap 1.M)	NE	20	Other deficiencies (see Section D in narrative if checked)			entitied at correct grade (2016-10-10) millied at correct grade (2016-10-10) (20	

Section E. Pressure Tank(s) none

*B10-ADEQ Engineering Bulletin No.10 is incorporated by reference in R18-5-502

500	cion L. 1 ressure runk(s) none	 				-
1	Correct size, minimum of two pumps for demand over 105gpm (B10, Chap 5.C.2)	2	Operational pressure gauge (B10, Chap 5.D.1)	3	Operational water level or site gauge (B10, Chap 5.D.4)	
4	Operational pressure relief valve (B10, Chap 5.D.2)	5	Operational air relief valve (B10, Chapter 5.D.3)	6	Operational drain valve (B10, Chap 5.D.5	
7	Other deficiencies (see Section E in narrative if checked)					

*B10-ADEQ Engineering Bulletin No.10 is incorporated by reference in R18-5-502

Section F. Distribution System

1	System pressure >20 <100psi throughout system (R18-5-502.B) (B10, Chap 7.C.2)	Y	2	No leaks in distribution system (R18-5-502.C.5.a & b) (B10, Chap 7.L.2)	Y	3	Water main at least six feet from sewer main (R18-5-502.C)	Y
4	No cross-connection exist (R18-4- 215A) (B10, Chap 7.H)	Y	5	ANSI/NSF approved material (R18-5-502.C.6)	Y	6	Shutoff valves, pressure reducing valves, relief valves (B10, Chap 7, D)	Y
7	Hydrants or connectable standpipes (B10, Chap 7.E)	NA	8	Backflow prevention devices (B10, Chap 7.H.2)	Y	9	Water loading station (B10, Chap 7.K)	NA
10	Separate non potable system with connections labeled (B10, Chap 7.M.2 & 3)	NA	11	Blow off valves at dead ends (B10, Chap 7.C. 6)	NA	12	Surface water crossing (B10, Chap 7.G)	NA
13	Other deficiencies (see Section F in narrative if checked)			 Analysis addition Analysis addition 	A 4		anna antarais 13° amara na 57 kiša 1881 M. A. Man Charles (1887	EI

Section G. General Deficiencies

*B10-ADEQ Engineering Bulletin No.10 is incorporated by reference in R18-5-502

1	Approval to Construct (R18-5- 505B)	NA	2	Operating with a Approval of Construction (R18-5-507A)	NA	3	Safe water supply / new source tested (R18-4-209)/(R18-4-602.B & 606.F)	NA
4	Construction conforms to approved plans (R18-5-506)	NA	5	ANSI/NSF approved additives or equipment (R18-4-213 A or B)	Y	6	Components enclosed by a building or security fencing at least 6 feet high with locking gate (B10, Chap.3.E)	Y
7	Operation and maintenance manuals on site (B10, Chap 1.M)	NE	8	Emergency Plan for community system (R18-4-204) R18-4-116	Y	9	Water vending machine logs show required maintenance and sampling R18-4-216	NA
10	Technical capacity requirements (R18-4-603)	NE	11	Managerial capacity requirements (R18-4-604)	NE	12	Financial capacity requirements (R18-4-605)	NE
13	Good house keeping (R18-4-203)	Y	14	Repeat deficiencies (see Section G in narrative if checked	54 8	15	Other deficiencies (see Section G in narrative if checked)	2

Section H. Operator

*B10-ADEQ Engineering Bulletin No.10 is incorporated by reference in R18-5-502

1	Hired certified operator (R18-4-202)	Y	2	Remote operator grade adequate (R18-5-104)	Y	3	Remote operator available (R18-5- 104.E.4)	Y
4	Relief operator certificate no lower than 1 grade below system grade (R18-5-104.A.5)	Y	5	Remote operator contact number available to customers (Grade 1<100 population only) (R18-5- 104.E.8.a)	Y	6	Onsite operator for Grade 3 or 4 facility (R18-5-104.E) (R18-5- 104.E.1)	NA
7	Remote operator <200 road miles from facility (R18-5-104.E.5)	Y	8	Remote operator visits grade 1 and 2 systems at least monthly (R18-5-104.E.7.a)	Y	9	Written instructions provided (R18-5- 104.E.3)	Y
10	Operator in direct responsible charge certified at correct grade (R18-5-104 A.2)	Y	11	Other deficiencies (see Section H in narrative if checked)	O m	3	Source the maint waves manual strengt in a second strength of the second s	

Section I. Sampling* details in narration

1	Total Coliform	Y	2	Nitrate/Nitrite	Y	3	Lead and Copper	Y
4	Chlorine residual (MRDL)	Y	5	DBPs TTHM/HAA5	Y	6	MAP participant (A.R.S. § 49-360)	NA
7	Increased monitoring participant		8	Reduced monitoring participant		9	Additional sampling (see Section I. in narration if checked)	Y

*R18-4-205 through 217, and 307 through 314.

Section J. Monitoring/Reporting/Records

1	Sampling reporting to ADEQ (R18- 4-106)	Y	2	Consumer Confidence Report delivered in community systems (R18-4-117)	Y	3	Microbiological site sampling plan (40CFR Part 141.21; RI8-4-218.D)	Y
4	Public Notices compliance (R18-4- 119) (40CFR Part 141.201)	NA	5	No cross connections (R18-4- 211)	Y	6	Backflow Prevention Program (R18- 4-215.G)	Y
7	Records retained (40CFR Part 141.33) (RI8-4-115.G)	Y	8	Other deficiencies (see Section J in narrative if checked)				

6. INSPECTON SUMMARY FOR System # 04035 System Name Rim Trail DWID

Based On: Inspection of physical facilities, review of ADEQ M & R data and facility file review

The system was in good condition.

Section I. Sampling

- Turbidity continuous monitoring, submitted monthly Compliance
- 1. Coliform one monthly) Compliance
- 2. Nitrate Annually Compliance
- Nitrite one every nine years next sample due by 2020 Compliance

4. Maximum Residual Disinfectant Level (MRDL) - one monthly with coliform - Compliance

Treatment

Plant Characteristics	Points	1
Population	1 per 5000	1
Max Design Capacity	1 per MGD up to 10	1
Groundwater Source	3	1
GUDI	5	1
Carbon Dioxide	2]
pH Adjustment	3]
Packed Tower Aeration	6]
Air Stripping	6]
Stability or Corrosion Control	3]
Taste and Oder	8]
Iron/Maganese Removal	8]
Ion Exchange Softening	10	
Chemical Precipitation Softenir	15]
Coagulant Addition	6]
Flocculation	4	1
Sedimentation	4	
Upflow Clarification	2	1
Fluoridation	5	1
Activated Alumina	6	
Blending	5	
Residual Waste Stream	5	
Control Systems Technology	2	
Biologically Active Filter	20	
Granular Media Filter	15	
Pressure Filter	15	
Gravity Sand Filter	10	
Membrane Filtration	15	
Chlorine Gas	6	
Hypochlorite Liquid	2	
Hypochlorite Solid	2	
Chloamine	9	
Chlorine Dioxide	9	
Ozone	12	
Ultraviolet	3	
		Point Total

	4035
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Grade	Point Range	
Grade 1	1 to 25	
Grade 2	26 to 50	
Grade 3	51 to 70	
Grade 4	More than 70	

Distribution

System Characteristics	Points		4035
Population(>501)	1 per 5000		1
Max Design Capacity	1 per MGD up to 10		1
Pressure Zones	5		0
Booster Stations	5		5
Storage Tanks	3		3
Blending	5		0
Fire Protection Systems/			
Testable Backflow			
Prevention Assemblies*	5		5
Cathodic Protection	3		0
Control Systems			
Technology	2		0
Chlorine Gas	6		0
Hypochlorite Liquid	2		2
Hypochlorite Solid	2		0
Chloramine	9		0
Chlorine Dioxide	9		0
		Point Total	17

Grade	Point Range
Grade 1	0
Grade 2	1 to 20
Grade 3	21 to 35
Grade 4	more than 35

*The presence of one or both of these devices earns five points for the facility.

2. No points are added for Grade 1 small systems that:

a. Only distribute groundwater;

b. Serve fewer than 501 persons;

c. Have no disinfection or disinfect by chlorine gas or hypochlorite only; and

d. Do not store water or store water only in storage tanks.

3. The Department shall assign a grade by the total number of points assigned to the facility. R18-5-115(B)(1-2)