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Chief Engineer

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General Counsel

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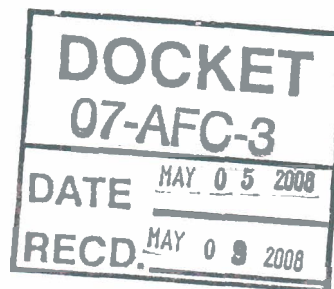
## DESERT WATER



Desert Water Agency  
1200 Gene Autry Trail South  
P.O. Box 1710  
Palm Springs, CA 92263-1710  
Telephone 760 323-4971  
Fax 760 325-6505  
www.dwa.org

May 5, 2007

Mr. Bill Pfanner  
California Energy Commission  
1516 Ninth St.  
Sacramento, CA 95814



Dear Mr. Pfanner,

This letter is in response to the request from your staff for additional information from Desert Water Agency (DWA) for your use in preparation of the Preliminary Staff Assessment for the CPV Sentinel power plant.

### **WATER QUALITY INFORMATION**

You asked for information on Well 14 and how representative the water quality is of water in the basin.

We selected Well 14 as the closest DWA well to the Palm Springs National Golf Course well to show representative water quality. The well log showing where Well 14 is screened is attached. Also attached are additional water quality samples from the well. Since this well is in conformance with all water quality standards, the well is only sampled every few years.

In addition, I have attached the DWA Water Quality Annual Reports for 2006 and 2007. As you will see, the water quality in DWA's wells is quite consistent. Also, note that the water quality is consistently higher than water quality from the Mission Creek Sub-basin.

Finally, DWA reviewed the water quality that the applicant had presented for the Palm Springs Waste Water Treatment Plant and the DWA Water Recycling Plant. The water quality previously submitted did not sample for all constituents of concern and seemed to understate the benefits to water quality from the proposed conversion of the Palm Springs National Golf Course to recycled water use. I have included samples from the influent and effluent of the DWA Recycling Plant. (The influent from the DWA plant is the effluent from the Palm Springs Waste Water Treatment Plant, and represents the water currently percolated into the groundwater basin.) As you will note from review of the data, the Palm Springs effluent exceeds drinking water standards for total nitrogen, which was not shown in the prior sampling because of the incomplete nature of the analyses.



### **RECLAIMED WATER PLANS**

DWA will continue to expand its recycled water system as supplies become available and additional customers are ready to connect. The DWA tertiary-treatment plant will likely be expanded from 10 MGD to 15 MGD when more than 10 MGD is available from the Palm Springs Waste Water Treatment Plant. The timing of this expansion will likely not be affected by the connection of the Palm Springs National Golf Course or the system demands on DWA's system but instead related to the availability of effluent. As more than 10 MGD becomes available, expansion of the DWA Treatment Plant adds reliability to our system, which is valuable even before summer-period demands require this expansion.

With respect to the summer period demands, it is reasonable to assume that the Palm Springs National Golf Course summer period demands will be met with recycled water before other customers would compete for these summer period flows. Part of the incentive for the golf course to connect to the recycled system is the cost savings that would accrue from an ability to stop maintaining the on-site well at the golf course. Accordingly, the golf course's summer period demands would be satisfied as soon as additional effluent becomes available from the City of Palm Springs. This is consistent with the assumptions used by CPV Sentinel in their recent responses to data requests from the CEC.

DWA is providing this information directly to the CEC in order to speed the delivery of this information. If you have any additional questions regarding DWA's operations or require clarification, please call me directly at (760) 323-4971.

Sincerely,

**DESERT WATER AGENCY**

A handwritten signature in blue ink that reads "David K. Luker". The signature is fluid and cursive, with the first name being the most prominent.

David K. Luker  
General Manager-Chief Engineer

DKL/kam

Enclosures

# Clinical Laboratory of San Bernardino, Inc.



Analysis Report: Lab Job M81961

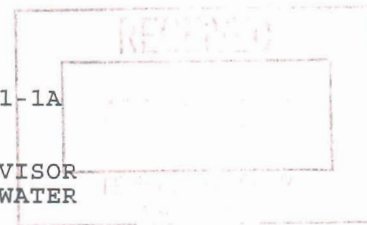
Client: Desert Water Agency  
 Attn: Water Quality Supervisor  
 P O Box 1710  
 Palm Springs, CA 92263

Project No.:  
 Contact: Beth Amheiser  
 Phone: (760) 323-4971

Project:

Sampled By: NOT LISTED  
 Date Sampled: 04/16/08 09:10:00  
 Date Received: 04/16/08 15:50:00  
 Date Started: 04/17/08  
 Date Completed: 04/24/08  
 Date Reported: 04/24/08 16:59:44

Lab Contact:  
 Job No.:  
 COC Log No.:  
 Lab ID No.: M81961-1A  
 Batch No.:  
 Instrument ID: VAR  
 Analyst ID: SUPERVISOR  
 Matrix: WASTEWATER



Sample: EFF SAMPLE

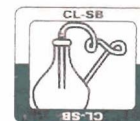
Analyte		CAS No.	Results	DLR	Method
Ammonia as N (NH3-N)	mg/L	N/A	0.80	0.50	EPA 350.1
Biochemical Oxygen Demand	mg/L	N/A	ND	5.0	SM 5210-B
Chemical Oxygen Demand	mg/L	N/A	10	5.0	HACH 8000
Fluoride (F)	mg/L	N/A	0.33	0.10	EPA 300.0
MBAS (LAS Mole. Wt 326.5)	mg/L	N/A	0.30	0.10	SM 5540-C
Magnesium (Mg)	mg/L	7439-95-4	9.0	1.0	EPA 200.7
Phosphorus (Total as PO4)	mg/L	7723-14-0	0.59	0.020	HACH 8190
Total Hardness (as CaCO3)	mg/L	N/A	180	5.0	SM 2340-C
Total Kjeldahl Nitrogen	mg/L	N/A	2.1	1.0	EPA 351.2
Total Organic Carbon	mg/L	N/A	8.4	0.30	SM 5310-B
Calcium (Ca)	mg/L	7440-70-2	56	1.0	SM 3500-Ca
Chloride (Cl)	mg/L	N/A	110	1.0	EPA 300.0
Sodium (Na)	mg/L	7440-23-5	72	1.0	EPA 200.7
Total Filterable Residue/TDS	mg/L	N/A	550	5.0	SM 2540-C
Mercury (Hg)	ug/L	7439-97-6	ND	1.0	EPA 245.1
Nitrate (NO3)	mg/L	N/A	45	2.0	EPA 300.0
Potassium (K)	mg/L	7440-09-7	15	1.0	EPA 200.7
Total Alkalinity (as CaCO3)	mg/L	N/A	45	5.0	SM 2320-B
Copper (Cu)	ug/L	7440-50-8	ND	50	EPA 200.7
Hydroxide (OH)	mg/L	N/A	ND	5.0	SM 2320-B
Sulfate (SO4)	mg/L	N/A	120	0.50	EPA 300.0
Carbonate (CO3)	mg/L	N/A	ND	5.0	SM 2320-B
Manganese (Mn)	ug/L	7439-96-5	ND	20	EPA 200.7
Nitrite as N (NO2-N)	ug/L	N/A	ND	400	EPA 353.2
Bicarbonate (HCO3)	mg/L	N/A	55	5.0	SM 2320-B
Boron (B)	ug/L	7440-42-8	180	100	EPA 200.7
Nitrate + Nitrite (as N)	ug/L	N/A	10000	400	SUMMATION
Iron (Fe)	ug/L	7439-89-6	ND	100	EPA 200.7
pH (Laboratory)	StdUnits	N/A	6.4		EPA 150.1
Specific Conductance (E.C.)	umhos/cm	N/A	770	2.0	SM 2510-B
Zinc (Zn)	ug/L	7440-66-6	ND	50	EPA 200.7
Arsenic (As)	ug/L	7440-38-2	ND	2.0	SM 3113-B
Cyanide (CN)	ug/L	57-12-5	ND	100	SM 4500-CN
Aluminum (Al)	ug/L	7429-90-5	290	50	EPA 200.7
Chromium (Total Cr)	ug/L	7440-47-3	ND	10	SM 3113-B
Silver (Ag)	ug/L	7440-22-4	ND	10	SM 3113-B
Beryllium (Be)	ug/L	7440-41-7	ND	1.0	SM 3113-B
Thallium (Tl)	ug/L	7440-28-0	ND	1.0	EPA 200.9
Selenium (Se)	ug/L	7783-00-8	ND	5.0	SM 3113-B
Barium (Ba)	ug/L	7440-39-3	ND	100	EPA 200.7
Cadmium (Cd)	ug/L	7440-43-9	ND	1.0	SM 3113-B
Lead (Pb)	ug/L	7439-92-1	ND	5.0	SM 3113-B
Antimony (Sb)	ug/L	7440-36-0	ND	6.0	SM 3113-B
Nickel (Ni)	ug/L	7440-02-0	ND	10	SM 3113-B
Vanadium (V)	ug/L	7440-62-2	7.7	3.0	EPA 200.9

ND = Not detected at or above indicated DLR; Detection Limit for Reporting

Manager: \_\_\_\_\_

Director: \_\_\_\_\_

# Clinical Laboratory of San Bernardino, Inc.



Analysis Report: Lab Job M81961

Client: Desert Water Agency  
 Attn: Water Quality Supervisor  
 P O Box 1710  
 Palm Springs, CA 92263

Project No.:  
 Contact: Beth Amheiser  
 Phone: (760) 323-4971

Project:

Sampled By: NOT LISTED  
 Date Sampled: 04/16/08 00:00:00  
 Date Received: 04/16/08 15:50:00  
 Date Started: 04/17/08  
 Date Completed: 04/24/08  
 Date Reported: 04/25/08 10:38:33

Lab Contact:  
 Job No.:  
 COC Log No.:  
 Lab ID No.: M81961-2A  
 Batch No.:  
 Instrument ID: VAR  
 Analyst ID: SUPERVISOR  
 Matrix: WASTEWATER

Sample: INF SAMPLE 24HR COMP

Analyte	CAS No.	Results	DLR	Method	
Ammonia as N (NH3-N)	mg/L	N/A	3.7	0.50	EPA 350.1
Biochemical Oxygen Demand	mg/L	N/A	14	5.0	SM 5210-B
Chemical Oxygen Demand	mg/L	N/A	54	5.0	HACH 8000
Fluoride (F)	mg/L	N/A	0.57	0.10	EPA 300.0
MBAS (IAS Mole. Wt 326.5)	mg/L	N/A	ND	0.10	SM 5540-C
Magnesium (Mg)	mg/L	7439-95-4	9.3	1.0	EPA 200.7
Phosphorus (Total as PO4)	mg/L	7723-14-0	9.5	0.020	HACH 8190
Total Hardness (as CaCO3)	mg/L	N/A	170	5.0	SM 2340-C
Total Kjeldahl Nitrogen	mg/L	N/A	6.8	1.0	EPA 351.2
Total Organic Carbon	mg/L	N/A	15	0.30	SM 5310-B
Calcium (Ca)	mg/L	7440-70-2	55	1.0	SM 3500-Ca
Chloride (Cl)	mg/L	N/A	81	1.0	EPA 300.0
Sodium (Na)	mg/L	7440-23-5	79	1.0	EPA 200.7
Total Filterable Residue/TDS	mg/L	N/A	520	5.0	SM 2540-C
Mercury (Hg)	ug/L	7439-97-6	ND	1.0	EPA 245.1
Nitrate (NO3)	mg/L	N/A	41	2.0	EPA 300.0
Potassium (K)	mg/L	7440-09-7	18	1.0	EPA 200.7
Total Alkalinity (as CaCO3)	mg/L	N/A	130	5.0	SM 2320-B
Copper (Cu)	ug/L	7440-50-8	ND	50	EPA 200.7
Hydroxide (OH)	mg/L	N/A	ND	5.0	SM 2320-B
Sulfate (SO4)	mg/L	N/A	81	0.50	EPA 300.0
Carbonate (CO3)	mg/L	N/A	ND	5.0	SM 2320-B
Manganese (Mn)	ug/L	7439-96-5	ND	20	EPA 200.7
Nitrite as N (NO2-N)	ug/L	N/A	ND	400	EPA 353.2
Bicarbonate (HCO3)	mg/L	N/A	150	5.0	SM 2320-B
Boron (B)	ug/L	7440-42-8	200	100	EPA 200.7
Nitrate + Nitrite (as N)	ug/L	N/A	9300	400	SUMMATION
Iron (Fe)	ug/L	7439-89-6	ND	100	EPA 200.7
pH (Laboratory)	Std Units	N/A	7.3		EPA 150.1
Specific Conductance (E.C.)	umhos/cm	N/A	760	2.0	SM 2510-B
Zinc (Zn)	ug/L	7440-66-6	56	50	EPA 200.7
Arsenic (As)	ug/L	7440-38-2	2.0	2.0	SM 3113-B
Cyanide (CN)	ug/L	57-12-5	ND	100	SM 4500-CN
Aluminum (Al)	ug/L	7429-90-5	390	50	EPA 200.7
Chromium (Total Cr)	ug/L	7440-47-3	ND	10	SM 3113-B
Silver (Ag)	ug/L	7440-22-4	ND	10	SM 3113-B
Beryllium (Be)	ug/L	7440-41-7	ND	1.0	SM 3113-B
Thallium (Tl)	ug/L	7440-28-0	ND	1.0	EPA 200.9
Selenium (Se)	ug/L	7783-00-8	ND	5.0	SM 3113-B
Barium (Ba)	ug/L	7440-39-3	ND	100	EPA 200.7
Cadmium (Cd)	ug/L	7440-43-9	ND	1.0	SM 3113-B
Lead (Pb)	ug/L	7439-92-1	ND	5.0	SM 3113-B
Antimony (Sb)	ug/L	7440-36-0	ND	6.0	SM 3113-B
Nickel (Ni)	ug/L	7440-02-0	ND	10	SM 3113-B
Vanadium (V)	ug/L	7440-62-2	4.5	3.0	EPA 200.9

ND = Not detected at or above indicated DLR; Detection Limit for Reporting

Manager: Bob Shuf

Director: \_\_\_\_\_

Post Office Box 329 • San Bernardino, CA 92402 • (909) 825-7693 • Fax (909) 825-7696 • ELAP Number 1088





QUADRUPPLICATE  
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# WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

Do Not Fill In  
No. 88958

STATE OF CALIFORNIA

State Well No. \_\_\_\_\_  
Other Well No. \_\_\_\_\_

### (1) OWNER:

Name Palm Springs Water Co. #14  
Address Drawer 22, Palm Springs

### (2) LOCATION OF WELL:

County Imperial Owner's number, if any—  
R. F. D. or Street No. \_\_\_\_\_

NE 1/4 of NE 1/4 Sec. 26 T4S, R5E

### (3) TYPE OF WORK (check):

New well  Deepening  Reconditioning  Abandon   
If abandonment, describe material and procedure in Item 11.

### (4) PROPOSED USE (check):

Domestic  Industrial  Municipal  Rotary   
Irrigation  Test Well  Other  Cable   
Dug Well

### (5) EQUIPMENT:

### (6) CASING INSTALLED:

SINGLE <input type="checkbox"/> DOUBLE <input type="checkbox"/>				Gage or Wall	If gravel packed		
From	ft. to	ft.	Diam.		Diameter of Bore	from	to
0	700	10"	10 5/16"				

Type and size of shoe or well ring \_\_\_\_\_  
Describe joint \_\_\_\_\_

### (7) PERFORATIONS:

Type of perforator used		Size of perforations		in., length, by		in.	
From	ft. to	ft.	ft.	Perf. per row	Rows per ft.		
450	700	1/8"	2"				
450	760						

### (8) CONSTRUCTION:

Was a surface sanitary seal provided?  Yes  No To what depth \_\_\_\_\_ ft.  
Were any strata sealed against pollution?  Yes  No If yes, note depth of strata \_\_\_\_\_  
From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Method of Sealing 4 1/2" Conductor Pipe

### (9) WATER LEVELS:

Depth at which water was first found \_\_\_\_\_ ft.  
Standing level before perforating \_\_\_\_\_ ft.  
Standing level after perforating 239' ft.

### (10) WELL TESTS:

Was a pump test made?  Yes  No If yes, by whom? \_\_\_\_\_  
Yield: 2380 gal./min. with 22' ft. draw down after \_\_\_\_\_ hrs.  
Temperature of water \_\_\_\_\_ Was a chemical analysis made?  Yes  No

### (11) WELL LOG:

Total depth 800 ft. Depth of completed well 700 ft.

Formation: Describe by color, character, size of material, and structure.

ft. to	ft. to	Description
0	16	Silt & fine to med. sand
16	40	gravel and some rock
40	49	rock
49	81	fine to coarse sand, gravel and boulders
81	85	fine to coarse tight sand with boulders
85	101	fine to coarse sand & gr.
101	242	fine to cor. sand and gravel tight
242	275	fine to cor. sand & grav.
275	305	fine to cor. tight sand
305	304	hard gravel cemented sand
304	304	breaks
304	304	fine to cor. tight sand & gravel into cemented sand
304	304	breaks
304	316	fine to cor. sand & gravel
316	700	fine to cor. tight sand and gravel with rock
700	700	fine to cor. sand & gravel
700	800	tight cemented sand & rock

Work started 2/20/54 19 \_\_\_\_\_ Completed 6/10/54 19 \_\_\_\_\_

WELL DRILLER'S STATEMENT:  
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME \_\_\_\_\_ (Person, firm, or corporation) (Type or printed)  
Address \_\_\_\_\_

[SIGNED] J. H. Brown  
License No. \_\_\_\_\_ Dated \_\_\_\_\_, 19 \_\_\_\_\_



21881 BARTON ROAD  
 GRAND TERRACE, CA 92313

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Date of Report: 07/05/30

Sample ID No. M72237-1A

Laboratory

Signature Lab

Name: CLINICAL LABORATORIES OF SAN BERNARDINO

Director: \_\_\_\_\_

Name of Sampler: BILL CHILDRESS

Employed By: D.W.A.

Date/Time Sample

Date/Time Sample

Date Analyses

Collected: 07/05/17/0950

Received @ Lab: 07/05/17/1530

Completed: 07/05/30

System

System

Name: DESERT WATER AGENCY

Number: 3310005

Name or Number of Sample Source: WELL 14

\*\*\*\*\*  
 \* User ID: WAT Station Number: 3310005-017 \*  
 \* Date/Time of Sample: |07|05|17|0950| Laboratory Code: 3761 \*  
 \* YY MM DD TTTT YY MM DD \*  
 \* Date Analysis completed: |07|05|30| \*  
 \* Submitted by: \_\_\_\_\_ Phone #: \_\_\_\_\_ \*  
 \*\*\*\*\*

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	240	5.0
	mg/L	Calcium (Ca) (mg/L)	00916	77	1.0
	mg/L	Magnesium (Mg) (mg/L)	00927	13	1.0
	mg/L	Sodium (Na) (mg/L)	00929	32	1.0
	mg/L	Potassium (K) (mg/L)	00937	4.1	1.0
Total Cations		Meq/L Value: 6.41			
	mg/L	Total Alkalinity (as CaCO3) (mg/L)	00410	170	5.0
	mg/L	Hydroxide (OH) (mg/L)	71830	ND	5.0
	mg/L	Carbonate (CO3) (mg/L)	00445	ND	5.0
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	200	5.0
*	mg/L+	Sulfate (SO4) (mg/L)	00945	91	0.50
*	mg/L+	Chloride (Cl) (mg/L)	00940	24	1.0
45	mg/L	Nitrate (as NO3) (mg/L)	71850	13	2.0
2.0	mg/L	Fluoride (F) (Natural-Source)	00951	0.38	0.10
Total Anions		Meq/L Value: 6.08			
	Std.Units+	PH (Laboratory) (Std.Units)	00403	7.5	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	570	2.0
****	mg/L+	Total Filterable Residue@180C (TDS) (mg/L)	70300	380	5.0
15	Units	Apparent Color (Unfiltered) (Units)	00081	ND	3
3	TON	Odor Threshold at 60 C (TON)	00086	1	1
5	NTU	Lab Turbidity (NTU)	82079	0.2	0.1
0.5	mg/L+	MBAS (mg/L)	38260	ND	0.10

\* 250-500-600 \*\* 0.6-1.7 \*\*\* 900-1600-2200 \*\*\*\* 500-1000-1500



MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR <sup>1</sup>
1000	ug/L	Aluminum (Al) (ug/L)	01105	ND	50
6	ug/L	Antimony (ug/L)	01097	ND	6.0
10	ug/L	Arsenic (As) (ug/L)	01002	ND	2.0
1000	ug/L	Barium (Ba) (ug/L)	01007	120	100
4	ug/L	Beryllium (ug/L)	01012	ND	1.0
5	ug/L	Cadmium (Cd) (ug/L)	01027	ND	1.0
50	ug/L	Chromium (Total Cr) (ug/L)	01034	ND	10
1000	ug/L+	Copper (Cu) (ug/L)	01042	ND	50
300	ug/L+	Iron (Fe) (ug/L)	01045	ND	100
	ug/L	Lead (Pb) (ug/L)	01051	ND	5.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	ND	20
2	ug/L	Mercury (Hg) (ug/L)	71900	ND	1.0
100	ug/L	Nickel (ug/L)	01067	ND	10
50	ug/L	Selenium (Se) (ug/L)	01147	ND	5.0
100	ug/L+	Silver (Ag) (ug/L)	01077	ND	10
2	ug/L	Thallium (ug/L)	01059	ND	1.0
5000	ug/L+	Zinc (Zn) (ug/L)	01092	ND	50

## ADDITIONAL ANALYSES

	ug/L	Boron (ug/L)	01020	ND	100
10000	ug/L	Nitrate + Nitrite as Nitrogen(N) (ug/L)	A-029	3000	40
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	ND	40
150	ug/L	Cyanide (ug/L)	01291	ND	100
	ug/L	Vanadium (ug/L)	01087	3.6	3.0

+ Indicates Secondary Drinking Water Standards

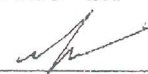






21881 BARTON ROAD  
 GRAND TERRACE, CA 92313

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Date of Report: 04/04/09 Sample ID No. M42033-1A  
 Laboratory Signature Lab  
 Name: CLINICAL LABORATORIES OF SAN BERNARDINO Director:   
 Name of Sampler: B CHILDRESS Employed By: D.W.A.  
 Date/Time Sample Date/Time Sample Date Analyses  
 Collected: 04/04/01/0825 Received @ Lab: 04/04/01/1700 Completed: 04/04/07

System System  
 Name: DESERT WATER AGENCY Number: 3310005  
 Name or Number of Sample Source: WELL 14

\*\*\*\*\*  
 \* User ID: WAT Station Number: 3310005-017 \*  
 \* Date/Time of Sample: |04|04|01|0825| Laboratory Code: 3761 \*  
 \* YY MM DD TTTT YY MM DD \*  
 \* Submitted by: Date Analysis completed: |04|04|07| \*  
 \* Phone #: \*  
 \*\*\*\*\*

MCL	REPORTING	CHEMICAL	ENTRY	ANALYSES	DLR
	UNITS		#	RESULTS	
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	210	2.0
	mg/L	Calcium (Ca) (mg/L)	00916	70	1.0
	mg/L	Magnesium (Mg) (mg/L)	00927	12	1.0
	mg/L	Sodium (Na) (mg/L)	00929	28	1.0
	mg/L	Potassium (K) (mg/L)	00937	3.4	1.0
Total Cations		Meq/L Value: 5.79			
	mg/L	Total Alkalinity (as CaCO3) (mg/L)	00410	150	1.0
	mg/L	Hydroxide (OH) (mg/L)	71830	ND	1.0
	mg/L	Carbonate (CO3) (mg/L)	00445	ND	1.0
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	180	1.0
*	mg/L+	Sulfate (SO4) (mg/L)	00945	65	0.50
*	mg/L+	Chloride (Cl) (mg/L)	00940	25	1.0
45	mg/L	Nitrate (as NO3) (mg/L)	71850	22	2.0
**	mg/L	Fluoride (F) Temp. Depend. (mg/L)	00951	0.24	0.10
Total Anions		Meq/L Value: 5.38			
	Std.Units+	PH (Laboratory) (Std.Units)	00403	7.2	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	530	10
****	mg/L+	Total Filterable Residue@180C(TDS) (mg/L)	70300	350	1.0
	Units	Apparent Color (Unfiltered) (Units)	00081	ND	3
	TON	Odor Threshold at 60 C (TON)	00086	1	1
	NTU	Lab Turbidity (NTU)	82079	0.1	0.1
0.5	mg/L+	MBAS (mg/L)	38260	ND	0.020

\* 250-500-600 \*\* 0.6-1.7 \*\*\* 900-1600-2200 \*\*\*\* 500-1000-1500



AGE 2 OF 2

## INORGANIC CHEMICALS

M42033-1A

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DI
1000	ug/L	Aluminum (Al) (ug/L)	01105	ND	50
6	ug/L	Antimony (ug/L)	01097	ND	6.0
50	ug/L	Arsenic (As) (ug/L)	01002	ND	2.0
1000	ug/L	Barium (Ba) (ug/L)	01007	120	100
4	ug/L	Beryllium (ug/L)	01012	ND	1.0
5	ug/L	Cadmium (Cd) (ug/L)	01027	ND	1.0
50	ug/L	Chromium (Total Cr) (ug/L)	01034	ND	10
1000	ug/L+	Copper (Cu) (ug/L)	01042	ND	50
300	ug/L+	Iron (Fe) (ug/L)	01045	ND	100
	ug/L	Lead (Pb) (ug/L)	01051	ND	5.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	ND	20
2	ug/L	Mercury (Hg) (ug/L)	71900	ND	1.0
100	ug/L	Nickel (ug/L)	01067	ND	10
50	ug/L	Selenium (Se) (ug/L)	01147	ND	5.0
100	ug/L+	Silver (Ag) (ug/L)	01077	ND	10
2	ug/L	Thallium (ug/L)	01059	ND	1.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	ND	50

## ADDITIONAL ANALYSES

	C	Source Temperature C	00010	19.4	
①	→	Langelier Index Source Temp.	71814	0.24	
		Langelier Index at 60 C	71813	0.48	
	Std. Units	Field PH	00400	7.3	
		Agressiveness Index	82383	11.71	
	ug/L	Boron (ug/L)	01020	ND	100
10000	ug/L	Nitrate + Nitrite as Nitrogen(N) (ug/L)	A-029	5000	400
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	ND	400
150	ug/L	Cyanide (ug/L)	01291	ND	100
	ug/L	Vanadium (ug/L)	01087.	3.4	3.0

+ Indicates Secondary Drinking Water Standards

21881 BARTON ROAD  
 GRAND TERRACE, CA 92313

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Date of Report: 03/06/20

Sample ID No. M34573-9A

Laboratory

Signature Lab

Name: CLINICAL LABORATORIES OF SAN BERNARDINO

Director: 

Name of Sampler: B CHILDRESS

Employed By: D.W.A.

Date/Time Sample

Date/Time Sample

Date Analyses

Collected: 03/06/06/1310

Received @ Lab: 03/06/06/1700

Completed: 03/06/16

System

System

Name: DESERT WATER AGENCY

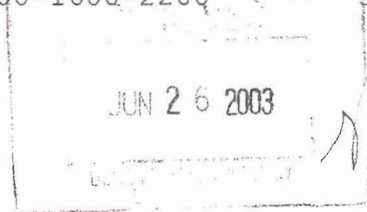
Number: 3310005

Name or Number of Sample Source: WELL 14

\*\*\*\*\*  
 \* User ID: WAT Station Number: 3310005-017 \*  
 \* Date/Time of Sample: |03|06|06|1310| Laboratory Code: 3761 \*  
 \* YY MM DD TTTT YY MM DD \*  
 \* Date Analysis completed: |03|06|16| \*  
 \* Submitted by: Phone #: \*  
 \*\*\*\*\*

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900		2.0
	mg/L	Calcium (Ca) (mg/L)	00916		1.0
	mg/L	Magnesium (Mg) (mg/L)	00927		1.0
	mg/L	Sodium (Na) (mg/L)	00929		1.0
	mg/L	Potassium (K) (mg/L)	00937		1.0
Total Cations		Meq/L Value: 0.00			
	mg/L	Total Alkalinity (as CaCO3) (mg/L)	00410		1.0
	mg/L	Hydroxide (OH) (mg/L)	71830		1.0
	mg/L	Carbonate (CO3) (mg/L)	00445		1.0
	mg/L	Bicarbonate (HCO3) (mg/L)	00440		1.0
*	mg/L+	Sulfate (SO4) (mg/L)	00945		0.50
*	mg/L+	Chloride (Cl) (mg/L)	00940		1.0
45	mg/L	Nitrate (as NO3) (mg/L)	71850	22	2.0
**	mg/L	Fluoride (F) Temp. Depend. (mg/L)	00951		0.10
Total Anions		Meq/L Value: 0.35			
	Std.Units+	PH (Laboratory) (Std.Units)	00403		
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095		10
****	mg/L+	Total Filterable Residue@180C(TDS) (mg/L)	70300		1.0
	Units	Apparent Color (Unfiltered) (Units)	00081		3
	TON	Odor Threshold at 60 C (TON)	00086		1
	NTU	Lab Turbidity (NTU)	82079		0.1
0.5	mg/L+	MBAS (mg/L)	38260		0.020

\* 250-500-600 \*\* 0.6-1.7 \*\*\* 900-1600-2200 \*\*\*\* 500-1000-1500



MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	D'
	C	Source Temperature C	00010	20.6	
	Std. Units	Field PH	00400	7.1	
	ug/L	Perchlorate (ug/L)	A-031	ND	4.0
+ Indicates Secondary Drinking Water Standards					



CLINICAL LABORATORY OF SAN BERNARDINO, INC.

21881 BARTON ROAD

GRAND TERRACE, CA 92313

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Date of Report: 03/12/17

Sample ID No.M39782-3A

Laboratory

Signature Lab

Name: CLINICAL LABORATORIES OF SAN BERNARDINO

Director: 

Name of Sampler:M ABDELNOUR

Employed By: D.W.A.

Date/Time Sample

Date/Time Sample

Date Analyses

Collected:03/11/21/1400

Received @ Lab:03/11/21/1700

Completed:03/12/11

System

System

Name:DESERT WATER AGENCY

Number: 3310005

Name or Number of Sample Source:WELL 14

\*\*\*\*\*

\* User ID: WAT

Station Number: 3310005-017

\*

\* Date/Time of Sample: |03|11|21|1400|

Laboratory Code: 3761

\*

\* YY MM DD TTTT

YY MM DD

\*

\* Date Analysis completed: |03|12|11|

\*

\* Submitted by: \_\_\_\_\_

Phone #: \_\_\_\_\_

\*

\*\*\*\*\*

PAGE 1 OF 1

ADDITIONAL ANALYSES

MCL	REPORTING	CHEMICAL	ENTRY	ANALYSES	DLR
	UNITS		#	RESULTS	
C	Source Temperature C		00010	19.4	
Std. Units	Field PH		00400	7.7	
ug/L	Perchlorate (ug/L)		A-031	ND	4.0

+ Indicates Secondary Drinking Water Standards





CLINICAL LABORATORY OF SAN BERNARDINO, INC.  
 21881 BARTON ROAD  
 GRAND TERRACE, CA 92313

EDT

GENERAL MINERAL & PHYSICAL, & INORGANIC ANALYSIS (4/95)

Date of Report: 03/04/02

Sample ID No.M21056-13A

Laboratory

Signature Lab

Name: CLINICAL LABORATORIES OF SAN BERNARDINO Director: \_\_\_\_\_

Name of Sampler: B CHILDRESS

Employed By: D.W.A.

Date/Time Sample

Date/Time Sample

Date Analyses

Collected: 02/02/08/1325

Received @ Lab: 02/02/08/1700

Completed: 02/02/19

System

System

Name: DESERT WATER AGENCY

Number: 3310005

Name or Number of Sample Source: WELL 14

\*\*\*\*\*  
 \* User ID: WAT Station Number: 04S/04E-26A01 S \*  
 \* Date/Time of Sample: |02|02|08|1325| Laboratory Code: 3761 \*  
 \* YY MM DD TTTT YY MM DD \*  
 \* Date Analysis Completed: |02|02|19| \*  
 \* Submitted by: Phone #: \*  
 \*\*\*\*\*

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Hardness, (Total) as CaCO3	00900		2.0
	mg/L	Calcium (Ca)	00916		1.0
	mg/L	Magnesium (Mg)	00927		1.0
	mg/L	Sodium (Na)	00929		1.0
	mg/L	Potassium (K)	00937		1.0
Total Cations Meq/L Value: 0.0					
	mg/L	Alkalinity, (Total) as CaCO3	00410		1.0
	mg/L	Hydroxide (OH)	71830		1.0
	mg/L	Carbonate (CO3)	00445		1.0
	mg/L	Bicarbonate (HCO3)	00440		1.0
*	mg/L+	Sulfate (SO4)	00945		0.5
*	mg/L+	Chloride (Cl)	00940		1.0
45	mg/L	Nitrate (as NO3)	71850	21	2.0
**	mg/L	Fluoride (F) Temp. Depend.	00951		0.1
Total Anions Meq/L Value: 0.3					
	Std.Units+	pH, Laboratory	00403		
***	uS +	Specific Conductance (E.C.)	00095		10
****	mg/L+	Total Filterable Residue at 180C (TDS)	70300		1.0
	Units	Color, Apparent (Unfiltered)	00081		3
	TON	Odor Threshold at 60 C	00086		1
	NTU	Turbidity, Laboratory	82079		0.1
0.5	mg/L+	MBAS	38260		0.02

\* 250-500-600 \*\* 1.4-2.4 \*\*\* 900-1600-2200 \*\*\*\* 500-1000-1500



MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	C	Source Temperature C	00010	20.0	
	Std. Units	pH, Field	00400	7.5	

+ Indicates Secondary Drinking Water Standards



# 2007 Water Quality Report

## Desert Water

### **About Your Water Supply**

Desert Water Agency serves a 325-square-mile area including all of Palm Springs, some adjacent County areas and parts of Cathedral City.

The Whitewater River Subbasin provides groundwater in a continuous process. Mountain streams also bring water by way of Chino Creek, Snow Creek, and Falls Creek.

Natural groundwater replenishment is supplemented with Colorado River water imported through the Colorado River Aqueduct to our recharge basins near Windy Point.

Desert Water Agency obtains 95 percent of its drinking water supply from deep wells that pump groundwater. The remaining 5 percent is from local mountain stream sources.

Desert Water Agency is a public non-profit agency. A five member board of directors elected by the public sets policy and represents the customer taxpayer.

All data presented in this report is from the most recent monitoring done in compliance with regulations, and unless otherwise noted, was obtained between January 1, 2007 and December 31, 2007. In some cases, the California Department of Public Health has allowed Desert Water Agency to monitor for certain contaminants less than once a year because the Agency's system is not vulnerable to these contaminants or because they were not expected to vary significantly from year to year.

In 2007, the Desert Water Agency conducted more than 5200 tests in accordance with California Department of Public Health (CDPH) and U.S. Environmental Protection Agency's (USEPA) regulations for numerous regulated and unregulated contaminants. Results of these tests indicate that your tap water meets all State and USEPA drinking water health standards. This report is a summary of our most current tests for each of our active sources. Included are details about what your water contains and how it compares to the standards.

An assessment of the drinking water sources for Desert Water Agency was updated in October 2007 due to the addition of a new pumping well. The sources are considered vulnerable to activities normally associated with residential, commercial and industrial development; however, all water provided by Desert Water Agency meets or exceeds all guidelines established by the USEPA and the CDPH.

New regulations for perchlorate went into effect in October 2007. The Agency has been testing for perchlorate, a component of rocket fuel, since 1996. In 2007, no perchlorate was found in samples taken by the Agency.

In 2001 the USEPA adopted new standards for arsenic in drinking water. Initial monitoring was completed in December 2007. The Agency has received a 9 year waiver for arsenic monitoring due to its absence in both surface and groundwater.

## **Learning About Drinking Water**

(same as last years report)

## **Contaminants That May Be Present in Water Include:**

(same as last years report)

## **Limitations on Contaminants**

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency and California Department of Public Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. California Department of Public Health regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

## **More Information About Contaminants**

(same as last years report)

## **How to Read the Table**

Drinking water standards are established by the United States Environmental Protection Agency and California Department of Public Health. In order to be called safe, water supplies must stay within the United States Environmental Protection Agency and State maximums when measured for certain contaminants.

The Water Source Analysis establishes whether or not there is a detectable presence of a contaminant in our water supply.

The following terms and abbreviations define words used in this educational section as well as the terms used in the Source Analysis Table.

You can review the groundwater, surface water, and distribution system data by comparing the columns on the left with the columns on the right, which show our water's average amount and range of detectable contaminants.

These test results reflect all of our groundwater wells and mountain stream sources.

## **Terms & Abbreviations**

(same as last year)



## **How to Reach Us**

(same as last years report)

Your elected Board of Directors:

President	F. Thomas Kieley, III
Vice President	Ronald E. Starrs
Secretary/Treasurer	F. Gillar Boyd, Jr.
Director	Patricia G. Oyggar
<b>Director</b>	<b>Craig A. Ewing</b>

The Desert Water Agency Board of Directors meets each month on the first and third Tuesday at 8:00 AM in the Agency's board room at 1200 Gene Autry Trail South, Palm Springs. Board meetings are open to the public and we invite your participation.

**ANNUAL CONSUMER CONFIDENCE REPORT  
2007 WATER SOURCE ANALYSIS**  
revised Jan. 2008

REGULATED CONTAMINANTS WITH PRIMARY MCL'S	GROUNDWATER SOURCES			SURFACEWATER SOURCES			DISTRIBUTION SYSTEM			MAJOR ORIGINS IN WATER		
	MCL	PHG (MCLg) (average)	AVERAGE AMOUNT DETECTED	RANGE OF DETECTION	SAMPLE DATE	AVERAGE AMOUNT DETECTED	RANGE OF DETECTION	SAMPLE DATE	AVERAGE AMOUNT DETECTED		RANGE OF DETECTION	SAMPLE DATE
<b>INORGANICS</b>												
BARIUM (mg/L)	1.00	2.00	0.01	ND-0.12.00	2007	-	-	-	-	-	-	Erosion of natural deposits.
FLUORIDE (mg/L)	2.00	1.00	0.48	0.10-1.00	2007	0.07	ND-0.11	2007	-	-	-	Erosion of natural deposits. Water additive. Runoff/leaching from fertilizer use. Leaching from septic tanks and sewage. Erosion of natural deposits.
NITRATE (AS NO <sub>3</sub> ) (mg/L)	45.00	45.00	5.53	ND-17.00	2007	-	-	-	-	-	-	-
<b>DISINFECTION BYPRODUCTS</b>												
TOTAL TRIHALOMETHANES (THM5) (µg/L)	80 (average)	NA	-	-	-	-	-	-	7.50	ND-20.2	2007	By-Product of drinking water disinfection.
HALOACETIC ACIDS (HAA5) (µg/L)	80 (average)	NA	-	-	-	-	-	-	4.50	ND-15.5	2007	By-Product of drinking water disinfection.
<b>LEAD AND COPPER</b> (40 sites sampled)												
LEAD (µg/l)	AL=15	AL=2	-	-	-	-	-	-	ND	0	2006	Internal corrosion of household plumbing systems.
COPPER (mg/L)	AL=1.3	AL=0.17	-	-	-	-	-	-	0.14	0	2006	Internal corrosion of household plumbing systems.
<b>RADIOACTIVITY</b>												
GROSS ALPHA (pCi/L)	15	NONE	7.00	1.80-15.00	2004	5.00	0.80-13.00	2004	-	-	-	Erosion of natural deposits.
URANIUM (pCi/L)	20	0.43	13.00	10.00-15.00	2007	6.75	ND-6.75	2004	-	-	-	Erosion of natural deposits.
<b>MICROBIOLOGICAL</b>												
TOTAL COLIFORM BACTERIA	MCL=FOR SYSTEMS COLLECTING ≥ 40 SAMPLES/MONTH. MCL IS VIOLATED IF >6% OF SAMPLES ARE TOTAL COLIFORM POSITIVE											
TURBIDITY (NTU)	TT = 5	NA					Highest Value Detected	0.51			2007	Naturally present in the environment.
<b>REGULATED CONTAMINANTS WITH SECONDARY MCL'S</b>												
CHLORIDE (mg/L)	500	500	27.50	8.30-85.00	2007	4.40	4.20-4.60	2007	-	-	-	Runoff/leaching from natural deposits. Industrial wastes.
SULFATE (mg/L)	500	NA	80.35	21.00-210.00	2007	5.60	4.00-8.70	2007	-	-	-	Runoff/leaching from natural deposits. Industrial wastes.
TOTAL DISSOLVED SOLIDS TDS (mg/L)	1000	NA	303.04	140.00-580.00	2007	84.70	59.00-130.00	2007	-	-	-	Runoff/leaching from natural deposits.
ODOR THRESHOLD (TON)	3	NA	1.00	1.00	2007	1.00	1.00	2007	-	-	-	Naturally occurring organic materials.
TURBIDITY (NTU)	5	NA	0.21	0.10-0.60	2007	0.20	0.20-0.20	2007	0.19	0.08-0.51	2007	Soil runoff
SPECIFIC CONDUCTANCE (µS/cm)	1800	NA	475.65	270.00-820.00	2007	131.00	94.00-200.00	2007	-	-	-	Substances that form ions in water
AGGRESSIVE INDEX	non-aggressive	NA	11.86 moderately aggressive	11.40-12.28	2007	10.84 moderately aggressive	10.85-11.19	2007	-	-	-	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water, affected by temperature and other factors

ANNUAL CONSUMER CONFIDENCE REPORT  
2007 WATER SOURCE ANALYSIS  
revised Jan. 2008

REGULATED CONTAMINANTS W/O SECONDARY MCL'S	GROUNDWATER SOURCES				SURFACEWATER SOURCES				DISTRIBUTION SYSTEM			
	MCL	PHG (MCLG)	AVERAGE AMOUNT DETECTED	RANGE OF DETECTION	SAMPLE DATE	AVERAGE AMOUNT DETECTED	RANGE OF DETECTION	SAMPLE DATE	AVERAGE AMOUNT DETECTED	RANGE OF DETECTION	SAMPLE DATE	MAJOR ORIGINS IN WATER
HARDNESS (mg/L)	NA	NA	186.50	81.50-330.00	2007	52.00	38.00-54.00	2007	-	-	-	NA
SODIUM (mg/L)	NA	NA	33.80	22.00-73.00	2007	9.80	7.30-12.00	2007	-	-	-	NA
CALCIUM (mg/L)	NA	NA	62.00	28.00-100.00	2007	18.00	12.00-29.00	2007	-	-	-	NA
MAGNESIUM (mg/L)	NA	NA	11.20	1.50-20.00	2007	1.30	ND-2.80	2007	-	-	-	NA
BICARBONATE (mg/L)	NA	NA	161.40	130.00-200.00	2007	89.70	67.00-130.00	2007	-	-	-	NA
ALKALINITY (mg/L)	NA	NA	132.80	110.00-170.00	2007	74.70	55.00-110.00	2007	-	-	-	NA
UNREGULATED CONTAMINANTS W/O MCL'S	MCL	PHG (MCLG)	AVERAGE AMOUNT DETECTED	RANGE OF DETECTION	SAMPLE DATE	AVERAGE AMOUNT DETECTED	RANGE OF DETECTION	SAMPLE DATE	AVERAGE AMOUNT DETECTED	RANGE OF DETECTION	SAMPLE DATE	MAJOR ORIGINS IN WATER
POTASSIUM (mg/L)	NA	NA	4.10	2.80-7.10	2007	3.30	2.00-5.50	2007	-	-	-	NA
P.H.	NA	NA	7.60	7.40-7.80	2007	7.40	7.30-7.40	2007	-	-	-	NA
HEXAVALENT CHROMIUM (CR-VI) (ug/L)	NA	NA	2.00	ND-5.00	2001	-	-	-	-	-	-	Related to activities that include automobile, appliance, and other consumer product manufacturing, chromium plating and welding
VANADIUM (ug/L)	NA	NL = 50	10.00	4.00-24.00	2007	2.00	ND-3.00	2007	-	-	-	Naturally occurring, primarily associated with steel manufacturing, but also utilized in the manufacturing of chemicals