

**ENVIRONMENTAL ENGINEERING LABORATORY**3538 HANCOCK STREET, SAN DIEGO, CALIF. 92110 • PHONE: 298-6131
P. O. BOX 81789, SAN DIEGO, CALIF. 92138Sample Source: Well # 4Borrego Springs Water CompanyDate October 11, 1976Box B

Date Collected

Borrego Springs, CaliforniaDate Received September 30, 1976Conductivity
pH

micromhos/cm @ 25°C

Principal Constituents

Cations		mg/l	me/l			mg/l		
Calcium	Ca			Aluminum	Al		Barium	Ba
Magnesium	Mg			Zinc	Zn		Cadmium	Cd
Sodium	Na			Hexavalent Chromium	Cr		Silver	Ag
Potassium	K			Total Chromium	Cr		Mercury	Hg
Ammonia	NH ₄			Arsenic	As		Gold	Au
Sulfur				Lead	Pb			
				Copper	Cu			
				Selenium	Se			
				Nickel	Ni			
				Cyanide	CN			
				Phenols				
				M B A S				
				Grease & Oil				
				Sulfides				
				Volatile Acids				
				Suspended Solids				
				Volatile Suspended Solids				
				Dissolved Solids				
				Volatile Dissolved Solids				
				Settleable Solids				
				BOD, 5 day 20°C				
				Oxygen Consumed				
				Coliform, MPN/100 ml				
				Plate Count/ml				
				Plankton Count/ml				
				Radioactivity Picocuries/ml				
Boron	B							
Silica	SiO ₂							
Iron	Fe							
Manganese	Mn							
Total Phosphate	PO ₄							
Ortho Phosphate	PO ₄							
Nitrite	N							
Nitrate	N							
Ammonia	N	49						
Total Organic Nitrogen	N							
Total Kjeldahl Nitrogen	N							
Total Alkalinity	CaCO ₃							
Total Hardness	CaCO ₃							
Dissolved Solids								
Turbidity, Units								
Remarks								

Approved Water Laboratory, California State Department of Public Health

Reported By

Robert L. Chamber



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P. O. BOX 81789, SAN DIEGO, CALIF. 92138

Borrego Springs Water Co.
Box B
Borrego Springs, Ca

Date March 31, 1980
Date Collected _____
Date Received March 12, 1980

Sample Source: Well #8

Conductivity 500 micromhos/cm @ 25°C
pH 7.68

Principal Constituents

Cations:			mg/l	me/l		mg/l		mg/l	
Calcium	Ca	32		Aluminum	Al		Barium	Ba	< 0.2
Magnesium	Mg	1.7		Zinc	Zn	< 0.01	Cadmium	Cd	< 0.010
Sodium	Na	70		Hexavalent Chromium	Cr		Silver	Ag	< 0.01
Potassium	K			Total Chromium	Cr	< 0.01	Mercury	Hg	0.0005
Ammonia	NH ₄			Arsenic	As	< 0.01	Gold	Au	
% Sodium				Lead	Pb	< 0.01			
				Copper	Cu	< 0.01			
				Selenium	Se	< 0.005			
				Nickel	Ni				
				Cyanide	CN				
				Phenols					
				M B A S		0.04			
				Grease & Oil					
				Sulfides					
				Volatile Acids					
				Suspended Solids					
				Volatile Suspended Solids					
				Dissolved Solids					
				Volatile Dissolved Solids					
				Settleable Solids					
				BOD, 5 day 20°C					
				Oxygen Consumed					
				Coliform, MPN/100 ml					
				Plate Count/ml					
				Plankton Count/ml					
				Radioactivity Picocuries/ml					
Boron	B								
Silica	SiO ₂								
Iron	Fe	0.06							
Manganese	Mn	< 0.01							
Total Phosphate	PO ₄								
Ortho Phosphate	PO ₄								
Nitrite	N								
Nitrate	N	0.80							
Ammonia	N								
Total Organic Nitrogen	N								
Total Kjeldahl Nitrogen	N								
Total Alkalinity	CaCO ₃	67							
Total Hardness	CaCO ₃	86							
Dissolved Solids		322							
Turbidity, Units									
Remarks	cc Lin Burzell								

Robert L. Chambers

Rec'd SEP 27 1979

Sample Source: Well # 4

Borrego Springs Water Co.
Box B
Borrego Springs, Ca

Date September 26, 1979
 Date Collected _____
 Date Received September 7, 1979

Conductivity 520 micromhos/cm @ 25°C
 pH 7.84

Principal Constituents

Cations:		mg/l	me/l		mg/l		mg/l
Calcium	Ca	41		Aluminum	Al	Barium	Ba
Magnesium	Mg	9.0		Zinc	Zn	Cadmium	Cd
Sodium	Na	57		Hexavalent Chromium	Cr	Silver	Ag
Potassium	K	5.3		Total Chromium	Cr	Mercury	Hg
Ammonia	NH ₄			Arsenic	As	Gold	Au
% Sodium				Lead	Pb		
				Copper	Cu		
				Selenium	Se		
				Nickel	Ni		
				Cyanide	CN		
				Phenols			
				M B A S			
				Grease & Oil			
				Sulfides			
				Volatile Acids			
Boron	B			Suspended Solids			
Silica	SiO ₂	15		Volatile Suspended Solids			
Iron	Fe	< 0.01		Dissolved Solids			
Manganese	Mn	< 0.01		Volatile Dissolved Solids			
Total Phosphate	PO ₄			Settleable Solids			
Ortho Phosphate	PO ₄	0		BOD, 5 day 20°C			
Nitrite	N			Oxygen Consumed			
Nitrate	N	0.79		Coliform, MPN/100 ml			
Ammonia	N			Plate Count/ml			
Total Organic Nitrogen	N			Plankton Count/ml			
Total Kjeldahl Nitrogen	N			Radioactivity Picocuries/ml			
Total Alkalinity	CaCO ₃	80					
Total Hardness	CaCO ₃	140					
Dissolved Solids		360					
Turbidity, Units							
Remarks							

May 9, 1979



3538 HANCOCK STREET
SAN DIEGO, CALIF. 92110
P. O. BOX 81789
SAN DIEGO, CALIF. 92138
PHONE: 298-6131

Borrego Springs Water Co.
Box B
Borrego Springs, CA

LABORATORY REPORT

Water samples received May 4, 1979

<u>Sample</u>	<u>NITRATE (N) mg/L</u>	<u>ALKALINITY (CaCO3) mg/L</u>
475 Ft.	2.0	75
550 Ft.	0.46	75
575 Ft.	1.2	110
450 Ft.	1.2	80
525 Ft.	1.4	110
600 Ft.	0.84	90
500 Ft.	2.0	70
Well #2 DeAnza	5.0	
Well #20 Digorgi Farm	10	
Well Rancho Bonito	67	

Submitted by,

Robert L. Chambers

Robert L. Chambers
Director

May 8, 1979

To: Linden Burzell

From: Victor Lugo

Re: Results of Water Samples taken from Well #4.

<u>Depth</u>	<u>Alkalinity</u>	<u>Nitrate</u>
225'		7.4
250'		0.10
275'		0.32
300'		6.8
359'		3.6
362'		2.8
375'		0.11
400'		0.11
425'		0.15

Well #4-A.

450'	80	1.2
475'	75	2.0
500'	70	2.0
525'	110	1.4
550'	75	0.46
575'	110	1.2
600'	90	0.84

Rancho Bonito Well	67.
DeAnza Well No. 2	5.0
DiGiorgio Farm	10.

HORNKOHL LABORATORIES

CHEMICAL AND TESTING ENGINEERS

714 TRUXTON AVENUE

BAKERSFIELD, CALIFORNIA

105/6E-29B1

Laboratory No. 79504

October 8, 1954

Sample Water

Marked Well #8

Received September 25, 1954

Submitted by A. F. Peterson

1603 California Avenue

Bakersfield, California

IRRIGATION WATER ANALYSIS

CONSTITUENTS			PARTS PER MILLION	GRAINS PER GALLON	IRRIGATION WATER CLASSIFICATION
CARBONATES	(ALKALI)	(CO ₃)	7.2	0.45	Good
BICARBONATES		(HCO ₃)	114.7	6.71	Good
CHLORIDES	(SALT)	(Cl)	129.1	7.55	Good
SULPHATES		(SO ₄)	427.7	25.01	Good
SULPHIDES		(S)	0.0	0.00	Good
NITRATES		(NO ₃)	6.4		Good
CALCIUM	(LIME)	(Ca)	192.8	11.27	Good
MAGNESIUM		(Mg)	21.0	1.23	Good
SODIUM		(Na)	75.9	4.44	Good
BORON		(B)	.05		Good
IRON		(Fe)	.1		Good
HARDNESS AS CaCO ₃			568.0	33.22	Good
TOTAL SOLIDS @ 105°C			917.5	53.65	
TOTAL SOLIDS @ RED HEAT			869.8	50.87	
pH (HYDROGEN ION CONCENTRATION)			8.3		
SODIUM PERCENTAGE			22.5%		
COLOR	Water White				
ODOR	None				
TURBIDITY	Clear				
CONDUCTIVITY, MHOS/CM ² X10 ³ @25°C.			155.7		

Theoretical Analysis

Calcium Carbonate	12.0	0.70
Calcium Bicarbonate	152.4	8.91
Calcium Sulfate	511.9	29.94
Magnesium Sulfate	83.1	4.86
Magnesium Chloride	16.2	0.95
Sodium Chloride	192.9	11.28

Remarks: As noted by the last column above this sample would be classified as excellent for irrigation use.