

TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

Page # 15 out of 23
State ID: 49-13-949

Typewrite (Black ribbon) or Print Plainly
(soft pencil or black ink)
Do not use ball point pen

Texas Department of Health Laboratories
1100 West 49th Street
Austin, Texas 78756

TDWR ONLY	
Organization No. _____	Lab No. 17
Work No. _____	

CHEMICAL WATER ANALYSIS REPORT

Send report to:
Data Collection and Evaluation Section
Texas Department of Water Resources
P.O. Box 13087
Austin, Texas 78711

County 071
State Well No. 49-13-949
Well No. _____
Date Collected 07-20-84

Owner _____ Send copy to owner Sample No. By _____
Address _____ Well Location _____
Date Drilled _____ Depth _____ ft. WBF _____ Source (type of well) _____
Producing intervals _____ Water level _____ ft. Sample depth ft.
Sampled after pumping _____ hrs. Yield _____ GPM MEAS. EST. Temperature °F 25 °C
Point of collection _____ Appearance clear turbid colored other
Use _____ Remarks _____

(FOR LABORATORY USE ONLY)

CHEMICAL ANALYSIS

KEY PUNCHED

Laboratory No. _____	Date Received _____	Date Reported _____
----------------------	---------------------	---------------------

	MG/L	ME/L	MG/L	ME/L
Silica . . . 00955 . . .	17			
Calcium . . . 00910 . . .	10			
Magnesium . . . 00920 . . .	4			
Sodium . . . 00929 . . .	160			
Total				
<input type="checkbox"/> Potassium . . . 00937 . . .	3.8			
<input type="checkbox"/> Manganese . . . 01055 . . .				
<input type="checkbox"/> Boron . . . 01022 . . .				
<input type="checkbox"/> Total Iron . . . 01045 . . .				
<input type="checkbox"/> (other) _____	MG/L			
Specific Conductance (micromhos/cm ³) 00095 _____				
Diluted Conductance (micromhos/cm ³): _____				
x _____			884	
" <input type="checkbox"/> " items will be analyzed if checked.				
<small>¹ The bicarbonate reported in this analysis can be converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure used in the computation of dissolved solids. ² Nitrogen cycle requires separate sample. ³ Total Iron and Manganese require separate sample.</small>				

	MG/L	ME/L
Carbonate . . . 00445 . . .	7	24
Bicarbonate . . . 00440 . . .	167	
Sulfate . . . 00945 . . .	96	
Chloride . . . 00940 . . .	97	
Fluoride . . . 00951 . . .	1.0	
Nitrate . . . 71850 . . .	8.40	
pH 00403 . . .	8.3	
Total		
¹ Dissolved Solids (residue at 180°C) . . . 70300 . . .		554
Phenolphthalein Alkalinity as CaCO ₃ . . . 00415 . . .		6
Total Alkalinity as CaCO ₃ 00410 . . .		149
Total Hardness as CaCO ₃ 00900 . . .		40
Ammonia - N ² Nitrogen Cycle 00610 . . .		
Nitrite - N 00615 . . .		
Nitrate - N 00620 . . .		
Organic Nitrogen 00605 . . .		

Analyst _____ Checked By _____

TDWR-0148 (Rev. 9-26-83)



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TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

Page # 16 out of 23
State ID: 49-13-949

EL PASO WATER UTILITIES
PUBLIC SERVICE BOARD

WATER ANALYSIS DATA SHEET

Well Number: #1 Lab. Number: 20584-6
Texas Hwy DPT.

Location: EL PASO

DATE SAMPLE COLLECTED	7-20-84
DATE RECEIVED AT LABORATORY	7-23-84
DATE ANALYSIS COMPLETED	7-26-84

ELEMENT	SEWAGE LIMITS	POTABLE LIMITS	SAMPLE (Mg/l)
ARSENIC	1.0	0.05	
BARIUM	5.0	1.0	
CADMIUM	0.05	0.010	< 0.01
CHROMIUM	5.0	0.05	< 0.05
COPPER	1.0	1.0	< 1.0
IRON	-	0.30	< 0.30
LEAD	1.0	0.05	< 0.05
MANGANESE	5.0	0.05	< 0.05
MERCURY	0.005	0.002	
NICKEL	5.0	-	< 0.10
SELENIUM	0.02	0.01	
SILVER	0.10	0.05	< 0.05
ZINC	5.0	5.0	< 0.10

MILLIGRAMS PER LITER	
TOTAL DISSOLVED SOLIDS	435
PHENOL ALKALINITY AS Ca CO ₃	6
TOTAL ALKALINITY AS Ca CO ₃	165
TOTAL HARDNESS AS Ca CO ₃	53
CHLORIDES AS Cl	58
SULFATES AS SO ₄	44
FLUORIDES AS F	1.0
SILICA AS Si O ₂	22
NITRATE AS NO ₃	6.6
TOTAL PHOSPHATES AS PO ₄	< 0.03
CALCIUM AS Ca	14
MAGNESIUM AS Mg	4.3
SODIUM AS Na	110
POTASSIUM AS K	4.0

LANGELIER INDEX	0.1826
AGGRESSIVITY INDEX	12.2008
% Na OF TOTAL CATIONS	80.6
TOTAL ORGANIC CARBONS (Mg/l)	
TOTAL INORGANIC CARBONS (Mg/l)	
TOTAL CARBONS (Mg/l)	

CHLORINE RESIDUAL (Mg/l)	-
TURBIDITY (N.T.U.)	5.5
TEMPERATURE (°C)	25
pH	8.26

ANION - CATION BALANCE		
ANIONS	Mg/l	Meg/l
PHENOL ALKALINITY	6	0.2398
TOTAL ALKALINITY	165	3.0612
CHLORIDES	58	1.6356
SULFATES	44	0.9152
FLUORIDES	1.0	0.0526
NITRATES	6.6	0.1063
PHOSPHATES	< 0.03	-
TOTAL		6.0106
CATIONS	Mg/l	Meg/l
CALCIUM	14	0.6986
MAGNESIUM	4.3	0.3539
SODIUM	110	4.7850
POTASSIUM	4.0	0.1024
TOTAL		5.9399

ORGANICS BY G.C. (Mg/l)	
CHLOROFORM	
BROMODICHLOROMETHANE	
DIBROMOCHLOROMETHANE	
BROMOFORM	
TOTAL THM'S	
LINDANE	
ENDRIN	
METHOXYCHLOR	
2, 4 - D	
SILVEX	
TOXAPHENE	

CHECKING CORRECTNESS OF ANALYSIS	
MEASURED DILUTED E.C.	641
CALCULATED DILUTED E.C.	647
% ERROR	0.9

TOTAL ANIONS - TOTAL CATIONS =
± 0.1065 + 0.0155 (TOTAL ANIONS)
0.0708 = ± 1SD = 0.1477

Remarks: DEPTH = 500' - 520'
SC = 620 uMHOS



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TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

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State ID: 49-13-949

EL PASO WATER UTILITIES
PUBLIC SERVICE BOARD

WATER ANALYSIS DATA SHEET

Well Number: #2 Lab. Number: 20584-7

Location: EL PASO

DATE SAMPLE COLLECTED	7-20-84
DATE RECEIVED AT LABORATORY	7-22-84
DATE ANALYSIS COMPLETED	7-26-84

ELEMENT	SEWAGE LIMITS	POTABLE LIMITS	SAMPLE (Mg/l)
ARSENIC	1.0	0.05	
BARIUM	5.0	1.0	
CAESIUM	0.05	0.010	< 0.01
CHROMIUM	5.0	0.05	< 0.05
COPPER	1.0	1.0	< 1.0
IRON	-	0.30	< 0.30
LEAD	1.0	0.05	< 0.05
MANGANESE	5.0	0.05	< 0.05
MERCURY	0.005	0.002	
NICKEL	5.0	-	< 0.10
SELENIUM	0.02	0.01	
SILVER	0.10	0.05	< 0.05
ZINC	5.0	5.0	< 0.10

MILLIGRAMS PER LITER	
TOTAL DISSOLVED SOLIDS	567
PHENOL ALKALINITY AS Ca CO ₃	0
TOTAL ALKALINITY AS Ca CO ₃	151
TOTAL HARDNESS AS Ca CO ₃	37
CHLORIDES AS Cl	97
SULFATES AS SO ₄	96
FLUORIDES AS F	1.0
SILICA AS Si O ₂	27
NITRATE AS NO ₃	8.9
TOTAL PHOSPHATES AS PO ₄	0.04
CALCIUM AS Ca	10
MAGNESIUM AS Mg	2.9
SODIUM AS Na	163
POTASSIUM AS K	3.8

LANGELIER INDEX	-0.0934
AGGRESSIVITY INDEX	11.9279
% Na OF TOTAL CATIONS	89.5
TOTAL ORGANIC CARBONS (Mg/l)	
TOTAL INORGANIC CARBONS (Mg/l)	
TOTAL CARBONS (Mg/l)	

CHLORINE RESIDUAL (Mg/l)	-
TURBIDITY (N.T.U.)	21
TEMPERATURE (°C)	25
pH	8.18

ANION - CATION BALANCE

ORGANICS BY G.C. (Mg/l)	
CHLOROFORM	
BROMODICHLOROMETHANE	
DIBROMOCHLOROMETHANE	
BROMOFORM	
TOTAL THM'S	
LINDANE	
ENDRIN	
METHOXYCHLOR	
2, 4 - D	
SILVEX	
TOXAPHENE	

ANIONS	Mg/l	Meg/l
PHENOL ALKALINITY	0	-
TOTAL ALKALINITY		3.0212
CHLORIDES		2.7354
SULFATES		1.9768
FLUORIDES		0.0526
NITRATES		0.1433
PHOSPHATES		0.0013
TOTAL		7.9506
CATIONS	Mg/l	Meg/l
CALCIUM		0.4990
MAGNESIUM		0.2387
SODIUM		7.0905
POTASSIUM		0.0973
TOTAL		7.9253

CHECKING CORRECTNESS OF ANALYSIS	
MEASURED DILUTED E.C.	879
CALCULATED DILUTED E.C.	888
% ERROR	1.0

TOTAL ANIONS - TOTAL CATIONS =
= 0.1065 + 0.0155 (TOTAL ANIONS)
0.0251 = < ± ISD = 0.2297

Remarks: DEPTH = 545' - 567'
S.C. = 880

TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

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EL PASO WATER UTILITIES
PUBLIC SERVICE BOARD

WATER ANALYSIS DATA SHEET

Well Number: 2 Lab. Number: 20584-8
TEXAS HWY DEPT.

Location: EL PASO

DATE SAMPLE COLLECTED	7-20-84
DATE RECEIVED AT LABORATORY	7-23-84
DATE ANALYSIS COMPLETED	7-26-84

ELEMENT	SEWAGE LIMITS	POTABLE LIMITS	SAMPLE (Mg/l)
ARSENIC	1.0	0.05	
BARIUM	5.0	1.0	
CADMIUM	0.05	0.010	<0.01
CHROMIUM	5.0	0.05	<0.05
COPPER	1.0	1.0	<1.0
IRON	-	0.30	<0.30
LEAD	1.0	0.05	<0.05
MANGANESE	5.0	0.05	<0.05
MERCURY	0.005	0.002	
NICKEL	5.0	-	<0.10
SELENIUM	0.02	0.01	
SILVER	0.10	0.05	<0.05
ZINC	5.0	5.0	<0.10

MILLIGRAMS PER LITER	
TOTAL DISSOLVED SOLIDS	554
PHENOL ALKALINITY AS Ca CO ₃	6
TOTAL ALKALINITY AS Ca CO ₃	149
TOTAL HARDNESS AS Ca CO ₃	40
CHLORIDES AS Cl	97
SULFATES AS SO ₄	96
FLUORIDES AS F	0.96
SILICA AS Si O ₂	17
NITRATE AS NO ₃	8.4
TOTAL PHOSPHATES AS PO ₄	<0.03
CALCIUM AS Ca	10
MAGNESIUM AS Mg	3.6
SODIUM AS Na	160
POTASSIUM AS K	3.8

LANGELIER INDEX	-0.0182
AGGRESSIVITY INDEX	12.0350
% Na OF TOTAL CATIONS	88.6
TOTAL ORGANIC CARBONS (Mg/l)	
TOTAL INORGANIC CARBONS (Mg/l)	
TOTAL CARBONS (Mg/l)	

CHLORINE RESIDUAL (Mg/l)	-
TURBIDITY (N.T.U.)	15
TEMPERATURE (°C)	25
pH	8.26

ANION - CATION BALANCE		
ANIONS	Mg/l	Meg/l
PHENOL ALKALINITY		0.2398
TOTAL ALKALINITY		2.7411
CHLORIDES		2.7354
SULFATES		1.9968
FLUORIDES		0.0505
NITRATES		0.1352
PHOSPHATES	<0.03	-
TOTAL		7.8988
CATIONS	Mg/l	Meg/l
CALCIUM		0.4990
MAGNESIUM		0.2963
SODIUM		6.9600
POTASSIUM		0.0973
TOTAL		7.8526

ORGANICS BY G.C. (Mg/l)	
CHLOROFORM	
BROMODICHLOROMETHANE	
DIBROMOCHLOROMETHANE	
BROMOFORM	
TOTAL THM's	
LINDANE	
ENDRIN	
METHOXYCHLOR	
2, 4 - D	
SILVEX	
TOXAPHENE	

CHECKING CORRECTNESS OF ANALYSIS	
MEASURED DILUTED E.C.	884
CALCULATED DILUTED E.C.	892
% ERROR	0.9

TOTAL ANIONS - TOTAL CATIONS =
 $0.1065 + 0.0155$ (TOTAL ANIONS)
 $0.0462 = < \pm$ ISD = 0.2287

Remarks: DEPTH - 59.6' - 6.11'
SC = 800' meters

Analyst: Shirley Smith D.D.I.L.



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TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

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EL PASO WATER UTILITIES
PUBLIC SERVICE BOARD

WATER ANALYSIS DATA SHEET

49-13-949
596-616'
20'

Well Number: 3 Lab. Number: 20584-8

Location: EL PASO

DATE SAMPLE COLLECTED	7-20-84
DATE RECEIVED AT LABORATORY	7-23-84
DATE ANALYSIS COMPLETED	7-26-84

ELEMENT	SEWAGE LIMITS	POTABLE LIMITS	SAMPLE (Mg/l)
ARSENIC	1.0	0.05	
BARIUM	5.0	1.0	
CADMIUM	0.05	0.010	< 0.01
CHROMIUM	5.0	0.05	< 0.05
COPPER	1.0	1.0	< 1.0
IRON	-	0.30	< 0.30
LEAD	1.0	0.05	< 0.05
MANGANESE	5.0	0.05	< 0.05
MERCURY	0.005	0.002	
NICKEL	5.0	-	< 0.10
SELENIUM	0.02	0.01	
SILVER	0.10	0.05	< 0.05
ZINC	5.0	5.0	< 0.10

MILLIGRAMS PER LITER	
TOTAL DISSOLVED SOLIDS	554
PHENOL ALKALINITY AS Ca CO ₃	6
TOTAL ALKALINITY AS Ca CO ₃	149
TOTAL HARDNESS AS Ca CO ₃	40
CHLORIDES AS Cl	97
SULFATES AS SO ₄	96
FLUORIDES AS F	0.96
SILICA AS Si O ₂	17
NITRATE AS NO ₃	8.4
TOTAL PHOSPHATES AS PO ₄	< 0.03
CALCIUM AS Ca	10
MAGNESIUM AS Mg	3.6
SODIUM AS Na	160
POTASSIUM AS K	3.8

LANGELIER INDEX	-0.0182
AGGRESSIVITY INDEX	12.0350
% Na OF TOTAL CATIONS	88.6
TOTAL ORGANIC CARBONS (Mg/l)	
TOTAL INORGANIC CARBONS (Mg/l)	
TOTAL CARBONS (Mg/l)	

CHLORINE RESIDUAL (Mg/l)	-
TURBIDITY (N.T.U.)	15
TEMPERATURE (°C)	25
pH	8.26

ANION - CATION BALANCE		
ANIONS	Mg/l	Meg/l
PHENOL ALKALINITY		0.2398
TOTAL ALKALINITY		2.7411
CHLORIDES		2.7254
SULFATES		1.9968
FLUORIDES		0.0505
NITRATES		0.1352
PHOSPHATES	< 0.03	-
TOTAL		7.8988
CATIONS	Mg/l	Meg/l
CALCIUM		0.4990
MAGNESIUM		0.2963
SODIUM		6.9600
POTASSIUM		0.0973
TOTAL		7.8526

ORGANICS BY G.C. (Mg/l)	
CHLOROFORM	
BROMODICHLOROMETHANE	
DIBROMOCHLOROMETHANE	
BROMOFORM	
TOTAL THM'S	
LINDANE	
ENDRIN	
METHOXYCHLOR	
2,4-D	
SILVEX	
TOXAPHENE	

CHECKING CORRECTNESS OF ANALYSIS	
MEASURED DILUTED E.C.	884
CALCULATED DILUTED E.C.	892
% ERROR	0.9

TOTAL ANIONS - TOTAL CATIONS =
= 0.1065 + 0.0155 (TOTAL ANIONS)
0.0462 = < ± ISD = 0.2287

Remarks: DEPTH - 596' - 616'
SC = 800 meters
49-13-949

Analyst: Frank Scott Divil



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TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

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EL PASO WATER UTILITY
PUBLIC SERVICES BOARD

WATER ANALYSIS DATA SHEET

TL-48-13-849
545-565'

Well Number: #2 Lab. Number: 20584-7

Location: EL PASO

DATE SAMPLE COLLECTED	7-20-84
DATE RECEIVED AT LABORATORY	7-22-84
DATE ANALYSIS COMPLETED	7-26-84

ELEMENT	SEWAGE LIMITS	POTABLE LIMITS	SAMPLE (Mg/l)
ARSENIC	1.0	0.05	
BARIUM	5.0	1.0	
CADMIUM	0.05	0.010	< 0.01
CHROMIUM	5.0	0.05	< 0.05
COPPER	1.0	1.0	< 1.0
IRON	-	0.30	< 0.30
LEAD	1.0	0.05	< 0.05
MANGANESE	5.0	0.05	< 0.05
MERCURY	0.005	0.002	
NICKEL	5.0	-	< 0.10
SELENIUM	0.02	0.01	
SILVER	0.10	0.05	< 0.05
ZINC	5.0	5.0	< 0.10

MILLIGRAMS PER LITER	
TOTAL DISSOLVED SOLIDS	567
PHENOL ALKALINITY AS Ca CO ₃	0
TOTAL ALKALINITY AS Ca CO ₃	151
TOTAL HARDNESS AS Ca CO ₃	37
CHLORIDES AS Cl	97
SULFATES AS SO ₄	96
FLUORIDES AS F	1.0
SILICA AS Si O ₂	27
NITRATE AS NO ₃	8.9
TOTAL PHOSPHATES AS PO ₄	0.04
CALCIUM AS Ca	10
MAGNESIUM AS Mg	2.9
SODIUM AS Na	163
POTASSIUM AS K	3.8

LANGELIER INDEX	-0.0934
AGGRESSIVITY INDEX	11.9279
% Na OF TOTAL CATIONS	89.5
TOTAL ORGANIC CARBONS (Mg/l)	
TOTAL INORGANIC CARBONS (Mg/l)	
TOTAL CARBONS (Mg/l)	

CHLORINE RESIDUAL (Mg/l)	-
TURBIDITY (N.T.U.)	21
TEMPERATURE (°C)	25
pH	8.18

ANION - CATION BALANCE		
ANIONS	Mg/l	Meg/l
PHENOL ALKALINITY	0	
TOTAL ALKALINITY		3.0212
CHLORIDES		2.7354
SULFATES		1.9968
FLUORIDES		0.0526
NITRATES		0.1433
PHOSPHATES		0.0013
TOTAL		7.9506
CATIONS	Mg/l	Meg/l
CALCIUM		0.4990
MAGNESIUM		0.2387
SODIUM		7.6905
POTASSIUM		0.0973
TOTAL		7.9255

ORGANICS BY G.C. (Mg/l)	
CHLOROFORM	
BROMODICHLOROMETHANE	
DIBROMOCHLOROMETHANE	
BROMOFORM	
TOTAL THM'S	
LINDANE	
ENDRIN	
METHOXYCHLOR	
2, 4 - D	
SILVEX	
TOXAPHENE	

CHECKING CORRECTNESS OF ANALYSIS	
MEASURED DILUTED E.C.	879
CALCULATED DILUTED E.C.	888
% ERROR	1.0

TOTAL ANIONS - TOTAL CATIONS =
± 0.1065 + 0.0155 (TOTAL ANIONS)
0.0251 = < ± 1SD = 0.2297

Remarks: DEPTH = 545' - 565'
S.C. = 800 20'

Analyst Frank Scott DPL



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TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

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WATER ANALYSIS DATA SHEET

49-13-949
500-5201
201

Well Number: 21 Lab. Number: 20584-6

Location: EL PASO

DATE SAMPLE COLLECTED	7-20-84
DATE RECEIVED AT LABORATORY	7-23-84
DATE ANALYSIS COMPLETED	7-26-84

ELEMENT	SEWAGE LIMITS	POTABLE LIMITS	SAMPLE (Mg/l)
ARSENIC	1.0	0.05	
BARIUM	5.0	1.0	
CADMIUM	0.05	0.010	< 0.01
CHROMIUM	5.0	0.05	< 0.05
COPPER	1.0	1.0	< 1.0
IRON	-	0.30	< 0.30
LEAD	1.0	0.05	< 0.05
MANGANESE	5.0	0.05	< 0.05
MERCURY	0.005	0.002	
NICKEL	5.0	-	< 0.10
SELENIUM	0.02	0.01	
SILVER	0.10	0.05	< 0.05
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MILLIGRAMS PER LITER	
TOTAL DISSOLVED SOLIDS	435
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MAGNESIUM AS Mg	4.3
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LANGELIER INDEX	0.1826
AGGRESSIVITY INDEX	12.2008
% Na OF TOTAL CATIONS	80.6
TOTAL ORGANIC CARBONS (Mg/l)	
TOTAL INORGANIC CARBONS (Mg/l)	
TOTAL CARBONS (Mg/l)	

CHLORINE RESIDUAL (Mg/l)	-
TURBIDITY (N.T.U.)	5.5
TEMPERATURE (°C)	25
pH	8.26

ANION - CATION BALANCE		
ANIONS	Mg/l	Meg/l
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FLUORIDES	1.0	0.0526
NITRATES	6.6	0.1063
PHOSPHATES	< 0.03	-
TOTAL	6.0106	
CATIONS	Mg/l	Meg/l
CALCIUM	14	0.6986
MAGNESIUM	4.3	0.3539
SODIUM	110	4.7850
POTASSIUM	4.0	0.1624
TOTAL	5.9399	

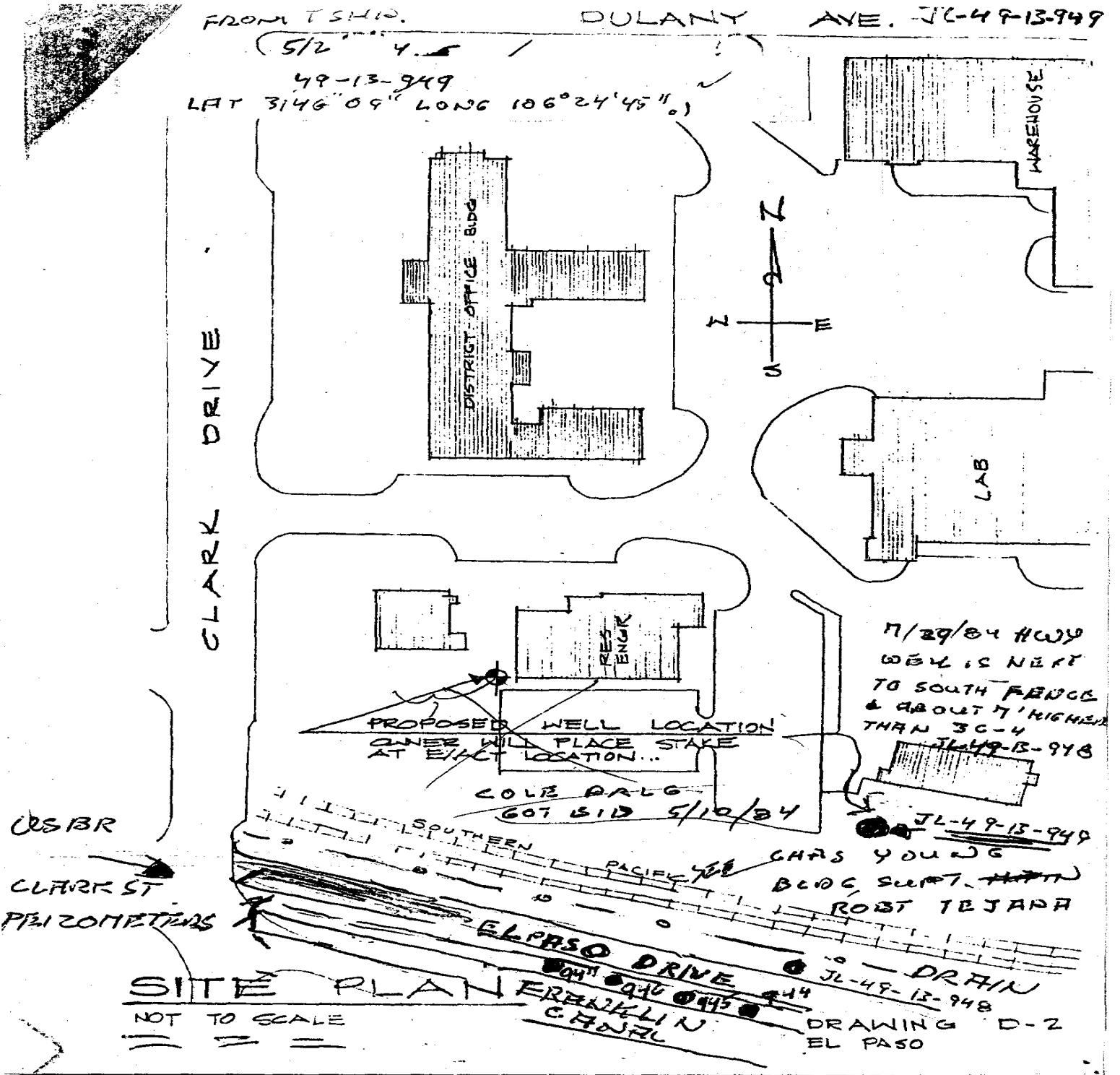
ORGANICS BY G.C. (Mg/l)	
CHLOROFORM	
BROMODICHLOROMETHANE	
DIBROMOCHLOROMETHANE	
BROMOFORM	
TOTAL THM'S	
LINDANE	
ENDRIN	
METHOXYCHLOR	
2, 4 - D	
SILVEX	
TOXAPHENE	

TOTAL ANIONS - TOTAL CATIONS =
 $\geq 0.1065 + 0.0155$ (TOTAL ANIONS)
 $0.0708 = < \pm$ ISD = 0.1497

CHECKING CORRECTNESS OF ANALYSIS	
MEASURED DILUTED E.C.	641
CALCULATED DILUTED E.C.	647
% ERROR	0.9

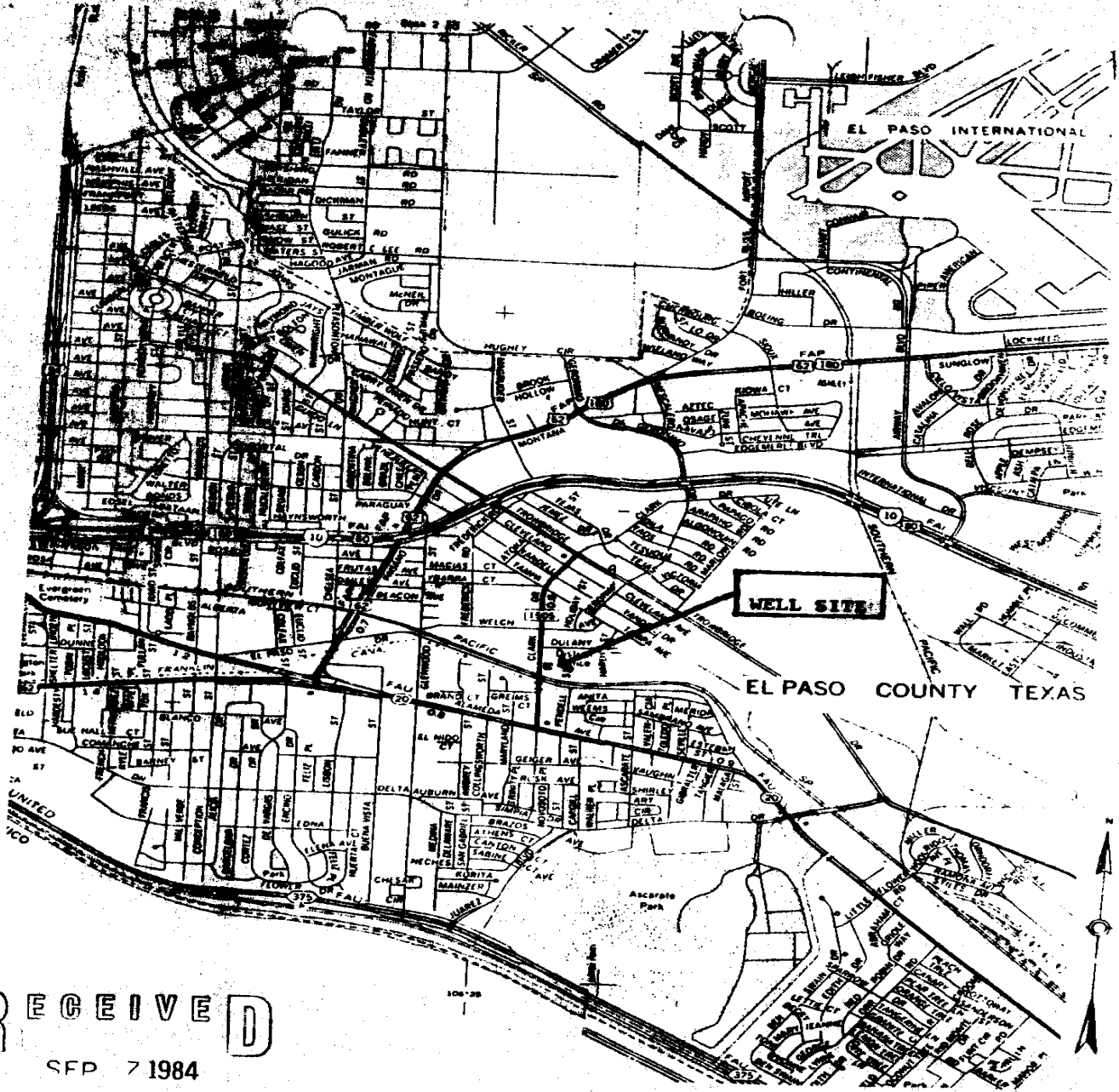
Remarks: DEPTH = 500' - 520'
SC = 620.11105

Analyst: Frank Scott



TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

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State ID: 49-13-949



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DEPT. OF
WATER RESOURCES

LOCATION MAP

DRAWING D-1
EL PASO

MAP ID# 19 Distance from Property: 0.87 mi. E

REPORTING AGENCY: **US GEOLOGICAL SURVEY**

SITE NUMBER: **31463210**

STATION NAME: **JL-49-13-938**

SITE TYPE: **WELL**

LATITUDE: **31.77566418** LONGITUDE: **-106.41331870**

DATE DRILLED: **05/25/1976**

WELL DEPTH: **215'**

HOLE DEPTH: **238'**

LOCAL AQUIFER: **RIO GRANDE ALLUVIUM**

TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

MAP ID# 19 Distance from Property: 0.87 mi. E

STATE ID: 49-13-938
OWNER'S NAME: EL PASO WATER UTILITY/
DATE DRILLED: 05251976
DEPTH DRILLED: 215.00000'
WATER USAGE: UNUSED
LONGITUDE: -106.41333000
LATITUDE: 31.775550000
SOURCE: TWDB



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TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

Page # 1 out of 9
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TEXAS WATER DEVELOPMENT BOARD
WELL SCHEDULE

Transition Zone
Alluvium -
Aquifer Huaco Bolson

Field No. _____
Owner's Well No. V-212

State Well No. JL 49-13-938
County EL PASO

1. Location: 1/4, 1/4 Sec., Block, Survey LAT 31 46 32 N
LONG 106 24 46 AT City 401 WEBSITE
2. Owner: EPWU & USGS Address: EL PASO, TEXAS
- Tenant: _____ Address: _____
- Driller: TWDB Address: AUSTIN, TEXAS
3. Elevation of ESTD is 3774.6 ft. above msl, determined by _____
4. Drilled: 5-25 1976; Dag, Cable Tool, Rotary
5. Depth: Rept. _____ ft. Mean 215 ft.
6. Completion: Open Hole, Straight Wall, Underreamed, Gravel Packed
7. Pump: Mfr. NONE Type _____
No. Stages _____, Bore Dia. _____ in., Setting _____ ft.
Column Dia. _____ in., Length Tailpipe _____ ft.
8. Motor: Fuel NONE Make & Model _____ HP
9. Yield: Flow 13 gpm, Pump _____ gpm, Meas., Rept., Est. JETTED 6-2-76
10. Performance Test: Date _____ Length of Test _____ Made by _____
Static Level _____ ft. Pumping Level _____ ft. Drawdown _____ ft.
Production _____ gpm Specific Capacity _____ gpm/ft.

CASING & BLANK PIPE		
Cemented From _____ ft. to _____ ft.		Setting, ft.
Diam. (in.)	Type	from to
6"	Steel	0 TO 0.5
4"	PVC	0 TO 215

11. Water Level: 116.47 ft. rept. 6-2 1976 above MP (top 6" casing) which is 0.5 ft. above surface.
_____ ft. meas. 19 above _____ ft. above surface.
_____ ft. rept. 19 below _____ ft. above surface.
_____ ft. meas. _____ below _____ ft. below surface.
_____ ft. rept. 19 above _____ ft. above surface.
_____ ft. meas. _____ below _____ ft. below surface.
12. Use: Dom., Stock, Public Supply, Ind., Irr., Waterflooding, Observation, Not Used.
13. Quality: (Remarks on taste, odor, color, etc.) _____
Temp. _____ °F, Date sampled for analysis 6-2-76 Laboratory EPWU & USGS (G-27)
Temp. _____ °F, Date sampled for analysis _____ Laboratory _____
Temp. _____ °F, Date sampled for analysis _____ Laboratory _____

WELL SCREEN		
Screen Openings		Setting, ft.
Diam. (in.)	Type	from to
4"	PVC	135 165
4"	PVC	205 215
Slot 0.01 in.		

14. Other data available as circled: Driller's Log, Radioactivity Log, Electric Log, Formation Samples, Pumping Test.
15. Record by: Don White (USGS) Date 5-27 1976
Source of Data DBS & Log
16. Remarks:
Sample Log (TWDB) & Drilling Time 0-238
F-log (Tom Chitt EPWU) 60-234
Orig. Deld to 238. Plugged back to 215
2 yds Houston #5 Gravel

Drilled as part of EPWU, USGS & TWDB Cooperative Program.

TWDBE-WD-2

(Sketch)

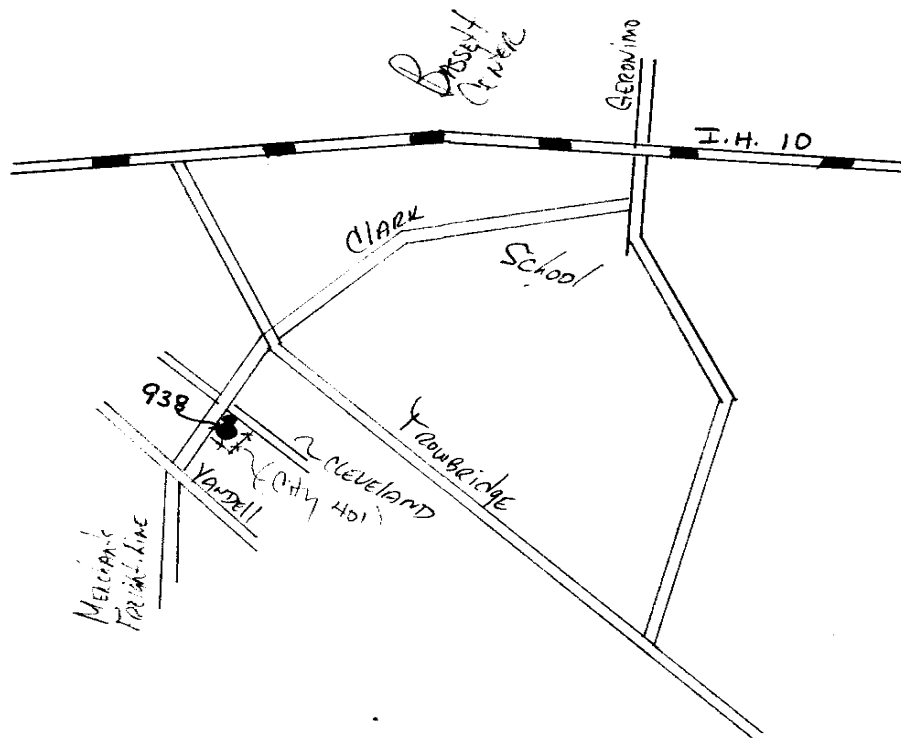
(own)

49-13-938

TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

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State ID: 49-13-938

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Central Records
Texas Dept. of Water Resources

TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

Page # 3 out of 9
State ID: 49-13-938

Typewrite (Black ribbon) or Print Plainly
(soft pencil or black ink)
Do not use ball point pen

Texas Department of Health Laboratories
1100 West 49th Street
Austin, Texas 78756

TDWR ONLY	
Organization No. _____	Lab No. 02
Work No. _____	

CHEMICAL WATER ANALYSIS REPORT

Send report to:
Data Collection and Evaluation Section
Texas Department of Water Resources
P.O. Box 13087
Austin, Texas 78711

County 071
State Well No. 49-13-938
Well No. _____
Date Collected 09-08-82

Owner _____ Send copy to owner Sample No. By _____
Address _____ Well Location _____
Date Drilled _____ Depth _____ ft. WBF _____ Source (type of well) _____
Producing intervals _____ Water level _____ ft. Sample depth ft. _____
Sampled after pumping _____ hrs. Yield _____ GPM meas. est. Temperature °F °C
Point of collection _____ Appearance clear turbid colored other
Use _____ Remarks _____

(FOR LABORATORY USE ONLY)

CHEMICAL ANALYSIS

KEY PUNCHED

Laboratory No.	MG/L	ME/L	Date Received	MG/L	ME/L	Date Reported
Silica . . . 00955 . . .	 33					
Calcium . . . 00910 . . .	 110	 5.50				
Magnesium . . . 00920 . . .	 31	 2.55				
Sodium . . . 00929 . . .	290	12.64				
Total						
<input type="checkbox"/> Potassium . 00937 . . .	 15.0	+ 0.39				
<input type="checkbox"/> Manganese . 01055 . . .		%Na _____				
<input type="checkbox"/> Boron . . . 01022 . . .		SAR _____				
<input type="checkbox"/> Total Iron . 01045 . . .		RSC _____				
<input type="checkbox"/> (other) _____	MG/L					

Specific Conductance (micromhos/cm³) 00095 _____
Diluted Conductance (micromhos/cm³): _____
_____ X _____ = 1950

" items will be analyzed if checked.

¹ The bicarbonate reported in this analysis can be converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure used in the computation of dissolved solids.
² Nitrogen cycle requires separate sample.
³ Total Iron and Manganese require separate sample.

Carbonate . . . 00445 . . .	 0	 0.00
Bicarbonate . 00440 . . .	293	 4.81
Sulfate . . . 00945 . . .	410	 8.57
Chloride . . . 00940 . . .	290	 8.20
Fluoride . . . 00951 . . .	 9	 0.05
Nitrate . . . 71850 . . .	2.26	 0.04
pH 00403 . . .	7.8	Total
¹ Dissolved Solids (residue at 180°C) . . . 70300 . . .	1330	
Phenolphthalein Alkalinity as CaCO ₃ . 00415 . . .		 0
Total Alkalinity as CaCO ₃ 00410 . . .		240
Total Hardness as CaCO ₃ 00900 . . .		160
Ammonia - N ² Nitrogen Cycle . 00610 . . .		
Nitrite - N 00615 . . .		
Nitrate - N 00620 . . .		
Organic Nitrogen 00605 . . .		

Analyst _____ Checked By _____

TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

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State ID: 49-13-938

FY 89 A 28

~~HOUSTON PARK~~
PARK & CLAYLAND

JL-49-13-938
6/30/89

JUL 25 1989 AT 072. NWIS 88.1 PROGRAM QWENIER TRANSACTION NO.: 106

RECORD NO.: 98902887
 SITE ID: 314632106244601
 STATION NAME: JL-49-13-938
 BEGIN DATE: 06-20-1989 AT 1205
 GEOLOGIC UNIT:
 STATUS: H SOURCE: 9 HYD. CONDITION: 9 TYPE: 9 HYD. EVENT: 9
 MEDIUM: 6
 SAMPLE COST: \$65.95
 SCHEDULES USED: 1022
 NO. PARAMETERS: 22

LAB ID NO.: 1770352 PROJECT: 46480020
 STATE: 48
 COUNTY: 14

DATA TYPES:
 REMARKS TO LAB:
 REMARKS FROM LAB:
 PROCESSING STATUS: R

CODE	PARAMETER NAME	UNITS	VALUE	R E M	M A T	S E T
	00010 WATER TEMPERATURE	(DEGREES)	23.0		A	
	00027 COLLECTING AGENCY	(CODE NUMBER)	1028		A	
NEW-->	03028 ANALYZING AGENCY	(CODE NUMBER)	80020		H	
	00095 SPECIFIC CONDUCTANCE	US/CM @ 25C	3250		A	
	00400 PH	(STANDARD UNITS)	7.80		A	
NEW-->	00403 PH LABORATORY	(UNITS)	7.90		H	A
	00410 ALKALINITY,WH,FET,F	(MG/L AS CAC03)	317		A	
NEW-->	00631 NO2 + NO3 DISSOLVED	(MG/L AS N)	1.30		H	B
COMPUTED	00900 HARDNESS TOTAL	(MG/L AS CA03)	450			
COMPUTED	00902 NONCARBONATE HARD, F	(MG/L AS CAC03)	130			
NEW-->	00915 CALCIUM DISSOLVED	(MG/L AS CA)	100		H	C
NEW-->	00925 MAGNESIUM DISSOLVED	(MG/L AS MG)	48		H	B
NEW-->	00930 SODIUM DISSOLVED	(MG/L AS NA)	560		H	B
COMPUTED	00931 SODIUM ADSORPTION R.	(RATIO)	12			
COMPUTED	00932 SODIUM, PERCENT	PERCENT	73			
NEW-->	00935 POTASSIUM DISSOLVED	(MG/L AS K)	19		H	B
NEW-->	00940 CHLORIDE DISSOLVED	(MG/L AS CL)	620		H	E
NEW-->	00945 SULFATE DISSOLVED	(MG/L AS S04)	430		H	F
NEW-->	00950 FLUORIDE DISSOLVED	(MG/L AS F)	1.4		H	B
NEW-->	00955 SILICA DISSOLVED	(MG/L AS SI02)	48		H	C
NEW-->	01020 BORON DISSOLVED	(UG/L AS B)	600		H	B
COMPUTED	70301 DISSOLVED SOLIDS SUM	MG/L	2020			
	72002 DEPTH-TOP-WATER ZONE	FT	155		A	
	72003 DEPTH-BOT-WATER ZONE	FT	215		A	
	72004 PUMP PERIOD (MIN)	MIN	30		A	
	72008 DEPTH OF WELL IN FT.	FT	215.00		A	
NEW-->	90095 SPECIFIC CONDUCTANCE	MICROSIEMENS/CM	3250		H	A

3220 - BUSTIN LAB

KEY PUNCHER



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TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

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 State ID: 49-13-938

RECORD NUMBER: 989028
 STATION ID: USGS 314632106244601
 STATION NAME: JL-49-13-938
 COLLECTION DATE: 06-20-1989 1205 - -

CATIONS				ANIONS			
		(MG/L)	(MEQ/L)			(MG/L)	(MEQ/L)
LCIUM,	DISS. MG/L	100.001	4.991	CHLORIDE,	DISS. MG/L	620.000	17.491
GNESIUM,	DISS. MG/L	48.000	3.950	SULFATE,	DISS. MG/L	430.000	8.953
DIUM,	DISS. MG/L	560.000	24.361	FLUORIDE,	DISS. MG/L	1.401	0.074
PASSIUM,	DISS. MG/L	19.000	0.487	ALKALINITY, FET, FLD		317.000	6.334
				NO2 + NO3, DISS. AS N		1.300	0.093
TOTAL		33.786		TOTAL		32.944	
PERCENT DIFFERENCE = 1.27							

KEY PUNCHED

TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE (TWDB)

JL-49-13-938

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY WMO
CENTRAL LABORATORY, DENVER, COLORADO

LABORATORY ANALYTICAL SHEET FOR LAB-ID 3010065 RECORD-N 21988

STATION_ID: J146210244601 COLLECTION DATE: 02/08/83
 NAME: JL-49-13-938
 COMMENTS: (* INDICATES LAB-CODE CHANGE)
 UNIQUE NUMBER REQUESTED: SCHEDULES USED: 21 COST
 WAITSTORE STORAGE REQUESTED: 0 0 TOTAL PARAMETERS: 21
 PRINTED ON 01/28/83 FIRST METH: E1V1/28/83 EPRU-USGS OBSERVATION WELL AT CLARK & CLEVELAND. SAMPLE BAILED BY
 R. SPERRA, EPRU AND G. HAVIN, TDW.

LATITUDE: 314632 102446 01
 COUNTY: 141 GEO. UNIT: REARLISN
 PROJECT/ACCT-N: 464801103

NAME	MMK/VALUE	UNITS	METHOD	W-CODE	LC	NAME	MMK/VALUE	UNITS	METHOD	W-CODE	LC
ALK TOT FIELD CACO3	240	MG/L	-	410	2	ALK TOT FIELD CACO3	240	MG/L	-	410	2
ANALYZING AGENCY	80020					ANALYZING AGENCY	80020				
CALCIUM, DISSOLVED	110	MG/L	1-1472-79	915	659*	CALCIUM, DISSOLVED	110	MG/L	1-1586-77	400	51
CHLORIDE, DISSOLVED	290	MG/L	1-2187-78	940	15	RESIDUE DIS CALC SUM	1330	MG/L	1-1630-78	935	57
DEPTH LOC VERT IN FT	215					SILICA, DISSOLVED	33	MG/L	1-1751-78	70301	28
FLUORIDE, DISSOLVED	0.9	MG/L	1-2327-78	950	31	SODIUM, ABSORP RATIO	6.7		1-1472-79	955	667*
HARDNESS	400	MG/L	1-1340-78	900	33	SODIUM, DISSOLVED	290	MG/L	-	931	57
HARDNESS NONCARB FLD	100	MG/L	1-1344-78	902	32	SODIUM, PERCENT	60	%	1-1740-78	932	60
MAGNESIUM, DISSOLVED	31	MG/L	1-1472-79	925	663*	SP, CONDUCTANCE FLD	1950	UMHOS	1-1780-77	95	21
NITR DIS NO2+NO3 -N	0.51	MG/L	1-2545-78	631	228	SP, CONDUCTANCE LAB	2140	UMHOS	1-2781-81	80005	69
						SULFATE, DISSOLVED	410	MG/L	1-2822-78	945	63

CATIONS	(MG/L)	(MEQ/L)	ANIONS	(MG/L)	(MEQ/L)
POTASSIUM, DISSOLVED	15	0.385	ALK TOT FIELD CACO3	240	4.912
CALCIUM, DISSOLVED	110	5.499	CHLORIDE, DISSOLVED	290	8.204
MAGNESIUM, DISSOLVED	31	2.552	FLUORIDE, DISSOLVED	0.9	0.047
SODIUM, DISSOLVED	290	12.638	SULFATE, DISSOLVED	410	8.565
			NITR DIS NO2+NO3 -N	0.51	0.036
TOTAL	21.074		TOTAL	21.665	

PERCENT DIFFERENCE = -1.38

49-13-938