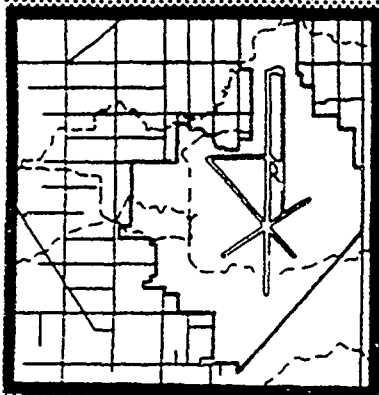


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**INSTALLATION RESTORATION PROGRAM (IRP)
STAGE 3**

McCLELLAN AIR FORCE BASE

PREPARED BY:
Radian Corporation
10395 Old Placerville Road
Sacramento, California 95827

AUGUST 1990

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**DATA SUMMARY
JANUARY - MARCH 1990**

FINAL

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PREPARED FOR:
McCLELLAN AFB/EM
McCLELLAN AFB, CALIFORNIA 95652-5990

United States Air Force
Human Systems Division (AFSC)
IRP Program Office (HSD/YAQC)
Brooks Air Force Base, Texas 78235-5000

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1. Attached is the Data Summary Report for the period of Jan - Mar 90 (Atch 1).

2. As outlined in the Data Summary, groundwater was collected and analyzed from 107 monitoring wells, six Area B extraction wells, and four Area C extraction wells. Analytical results for this reporting period were similar to results obtained during the previous sampling period (Oct - Dec 89). Thirty-nine (39) monitoring wells and ten extraction wells had concentrations of analytes exceeding drinking water standards this quarter.

3. If there are any questions regarding this data summary, please contact Mr Dale Dietzel, S4-ALC/EMR, (916) 643-1250.

8/633

- Dale out until Tues, 4 Sept 90

Keith G. Findley
KEITH G. FINDLEY, Colonel, USAF
Director, Environmental Management

1 Atch
Data Summary

Henry Robbins may call
- called 8/25/90 at 12:40



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INSTALLATION RESTORATION PROGRAM (IRP)
STAGE 3

GROUNDWATER SAMPLING AND ANALYSIS PROGRAM
JANUARY THROUGH MARCH 1990
DATA SUMMARY

FINAL

FOR

McCLELLAN AFB/EM
McCLELLAN AFB, CALIFORNIA 95652-5990

AUGUST 1990

PREPARED BY:

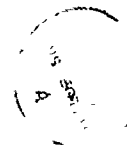
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HSD/YAQC
Mr. Patrick Haas
TECHNICAL PROJECT MANAGER (TPM)

HUMAN SYSTEMS DIVISION (AFSC)
IRP PROGRAM OFFICE (HSD/YAQI)
BROOKS AIR FORCE BASE, TEXAS 78235-5000



NOTICE

This Data Summary has been prepared for the Air Force for the purpose of aiding in the implementation of a final remedial action plan under the Air Force Installation Restoration Program (IRP). As the Data Summary relates to actual or possible releases of potentially hazardous substances, its release prior to an Air Force final decision on remedial action is in the public interest. The limited objectives of this Data Summary, the ongoing nature of the IRP, and the evolving knowledge of site conditions and chemical effects on the environment and human health, all must be considered when evaluating this Data Summary since subsequent facts may become known which may make this Data Summary premature or inaccurate. Acceptance of this Data Summary in performance of the contract under which it was prepared does not mean that the Air Force adopts the conclusions, recommendations, or other views expressed herein, which are those of the contractor only and do not necessarily reflect the official position of the Air Force.

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✓ This Data Summary presents the results of groundwater sampling activities conducted on and in the vicinity of McClellan Air Force Base from the sampling period of January through March 1990. Concentrations of purgeable halocarbons and aromatic compounds detected in 49 wells (39 monitoring wells and 10 extraction wells) exceeded state and/or federal drinking water standards. These wells are located on-base in Areas A, B, C, D and adjacent on-base areas and off-base in the Northwest and Southwest areas. The Area D extraction system is effectively operating to change hydraulic gradients, so groundwater in Area D flows toward the extraction wells. Samples from two middle zone monitoring wells located in Area D also show decreases in contaminant concentration during this sampling period. Decreasing contaminant concentrations have stabilized in shallow zone monitoring wells located off-base, west of Area D. <i>R. J.</i>			
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PREFACE

Radian Corporation is the contractor for the Installation Restoration Program (IRP), Stage 3 Remedial Investigation/Feasibility Study (RI/FS) at McClellan Air Force Base (AFB), California. The work is being performed for the Human Systems Division (AFSC), Installation Restoration Program Office (HSD/YAQC) under Air Force Contract No. F33615-87-D-4023, Delivery Order 0003.

This Data Summary summarizes and presents the results of the Groundwater Sampling and Analysis Program for the period of January through March 1990. The data presented include analytical results for groundwater samples collected from monitoring and extraction wells, and groundwater-level data measured from wells on and in the vicinity of McClellan AFB. These data are used to evaluate current interim remedial measures and to identify the need for future remedial measures.

Key Radian project personnel were:

Nelson Lund, P.E.--Contract Program Manager
Jack D. Gouge--Delivery Order Manager
William C. Knight--Project Manager
Kirk Henning--Project Director

Radian acknowledges the cooperation of the McClellan AFB Office of Environmental Management. In particular, Radian acknowledges the assistance of Mr. Mario Ierardi, Mr. Bud Hoda, Mr. Dale Dietzel, and Mr. Patrick Haas/Capt. H. Thompson.

The work presented herein was accomplished between 08 January 1990 and 30 March 90. Mr. Patrick Haas/Capt. H. Thompson, Human Systems Division (AFSC), Installation Restoration Program Office (HSD/YAQC) was the Technical Project Manager.

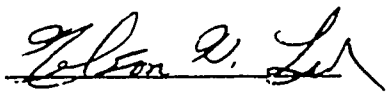
Approved: 
Nelson H. Lund, P.E.
Contract Program Manager

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EXECUTIVE SUMMARY

In support of ongoing Remedial Investigation/Feasibility Study (RI/FS) activities at McClellan Air Force Base (AFB), California, Radian personnel measure groundwater levels, and collect and analyze groundwater samples from selected on- and off-base wells on a quarterly basis. These activities identify the direction of groundwater flow and identify the presence of groundwater contaminants. This Data Summary presents the sampling and analytical results for data collected during the sampling period of January through March 1990. Evaluations of trends in groundwater flow and changing levels of contaminant concentrations, which may be developing with respect to time, will be presented in a subsequent technical report.

Groundwater levels were measured in 157 wells, and the data was used to generate water-level maps. Groundwater flow patterns at McClellan AFB were identified as follows:

- Area A - toward the southwest
- Area B - toward the south when base production well 18 is not operating
- Area C - radially toward the extraction wells, but overall groundwater flow direction is toward the south.
- Area D - radially toward the extraction system.

Groundwater was collected and analyzed from 103 monitoring wells, 6 Area D extraction wells, and 4 Area C extraction wells. Four extraction wells were also sampled during February and March 1990. Groundwater samples were analyzed by SW-846 methods for volatile organics (Methods 8010, 8020, and 8240), metals (Method 6010), and hexavalent chromium (Method 7196).

Analytical results for the January through March 1990 period of groundwater sampling and analyses are similar to results obtained during the previous sampling period (October through December, 1989). During the January through March sampling period, samples from 49 wells contained concentrations of analytes that exceeded drinking water standards. During the previous sampling period, 45 wells contained concentrations of analytes that exceeded drinking water standards.

The results from each well that was sampled and analyzed during the First Quarter 1990 were evaluated to determine if the recent sampling history of the well indicates any increasing or decreasing patterns in concentrations. The results of the evaluation are summarized in Table S-1.

The analytical results for all samples were evaluated on the basis of Quality Assurance/Quality Control (QA/QC) criteria specified in the McClellan AFB Quality Assurance Project Plan (QAPP) (August 1989). This evaluation ensures all analytical results meet the applicable acceptance criteria, and the reported data have acceptable quality. Data acceptability was determined by evaluating field and laboratory blanks, field duplicates, matrix spikes, matrix spike duplicates, analytical spikes, and surrogate spikes. The objectives for accuracy, precision, and completeness for the data were met, and overall analytical and sampling performance was acceptable. No overall adverse qualification or rejection of the data was necessary. Any data outside stated objectives were qualified. The completeness objective of having more than 90 percent usable data was met. Greater than 98 percent of the data were validated and met the data quality objectives of the program.

The Area D extraction system was evaluated based on hydraulic gradients between monitoring wells and the changes of contaminant concentrations detected in groundwater samples collected from shallow, middle, and deep "A" zone monitoring wells. The Area D extraction system is effective in containing contaminants because hydraulic gradients between specific pairs of monitoring wells remain at the recommended magnitudes. In addition, water-quality data from shallow zone monitoring wells outside of the well field indicate that TCE concentrations have decreased to below the MCL or have stabilized since the extraction system began operating in July 1987.

The Area C extraction system was designed as an interim remedial measure to remove contaminated groundwater near the contaminant source. At the present time, the influence of the Area C extraction system cannot be evaluated using the existing array of monitoring wells. More well pairs or piezometers are needed to measure the effects of the extraction wells on the hydraulic gradients and on local groundwater flow patterns. The extraction system has been operating for 19 months (August 1988 to March 1990), which is not a sufficient length of time to cause notable changes in contaminant concentrations. Trichloroethene concentration trends at monitoring wells located upgradient and downgradient of the extraction wells will continue to be evaluated to determine if contaminants migrating toward the extraction wells are being captured.

TABLE S-1. NOTABLE CHANGES FROM PREVIOUS SAMPLING EVENT
 January - March 1990

Well ID	Last Quarter Sampled	Analyte	Concentration Change (µg/L)
Area A			
MW-71	4Q89	Trichloroethene	↑ from 0.59 (1Q89) to 3.5
Area B			
MW-7	4Q89	Trichloroethene	↑ from 36 to 47
		total 1,2-Dichloroethene	↑ from 24 to 34
MW-41S	4Q89	Tetrachloroethene	↓ from 200 to 130
		Trichloroethene	↓ from 3500 to 1800
MW-151	4Q89	Tetrachloroethene	↑ from ND to 6.1 (1)
MW-153	4Q89	Trichloroethene	↑ from 52 to 150
MW-156	----	Trichloroethene	↑ from 78 to 100 (2)
		total 1,2-Dichloroethene	↑ from 48 to 52 (2)
MW-157	----	Tetrachloroethene	↑ from 390 to 2300 (2)
		Trichloroethene	↑ from 4800 to 5400 (2)
MW-158	----	Trichloroethene	↑ from 1000 to 1500
		total 1,2-Dichloroethene	↑ from 28 to 42
		Tetrachloroethene	↑ from 80 to 210
Southwest			
MW-1046	4Q89	1,2-Dichloroethane	↑ detected at 0.60 (MCL = 0.50 µg/L)
MW-1049	4Q89	Trichloroethene	↑ from 8.5 to 13
Area C			
MW-129	4Q89	Trichloroethene	↑ from 140 to 290
MW-131	4Q89	Trichloroethene	↑ from 27 (3Q89) to 49
MW-136	4Q89	Trichloroethene	↑ from 170 to 690
Area D			
MW-10	4Q89	1,2-Dichloroethane	↓ from 7000 to 250
		Aluminum	4.3 mg/L (3)
MW-11	4Q89	Trichloroethene	↑ from 3200 to 3900
		1,1,1-Trichloroethane	↑ from 3400 to 3700
		1,1-Dichloroethene	↓ from 20,000 to 17,000
MW-72	4Q89	1,1-Dichloroethene	↓ from 530 to 260

ND = Not detected

(1) = Previously detected at 9.9 µg/L (3Q89)

(2) = Sampled under PGOURI or EE/CA prior to 1Q90

(3) = Not previously analyzed for this metal

A complete evaluation of the Groundwater Sampling and Analysis Program (GSAP) was performed in December 1989 and reported in the "Letter of Recommendations for the Continuance of the Groundwater Sampling and Analysis Program" (Radian, 1990). The report provides the rationale for proposed revisions to the program, including changes in sampling frequencies, analytical methods, and sampling schedules. The recommendations will become effective to the GSAP in the second quarter (April - June 1990) sampling effort.

Three new wells in the southwest area, MW-1054, MW-1055, and MW-1057, could not be sampled during the First Quarter 1990 sampling period due to muddy conditions at the site. Two attempts were made to sample these wells. These three wells are scheduled for sampling during Second Quarter 1990. Radian recommends that alternatives be explored to access these wells during the wet season.

1.0 GROUNDWATER SAMPLING AND ANALYSIS PROGRAM

The purposes of the field sampling activities are to obtain groundwater-level measurements and to obtain representative groundwater samples for chemical analyses. Groundwater-level measurements were taken in 157 wells on 08, 09, and 10 January 1990. These measurements provide data for evaluation of the groundwater flow directions beneath McClellan Air Force Base (AFB) and adjacent areas. Groundwater samples were collected from a total of 113 wells between 12 January and 02 March 1990. Locations of wells on and off base are shown on Plate 1, in the Plates Section of this report. The wells sampled included 103 monitoring wells, 6 Area D extraction wells, and 4 Area C extraction wells. Four extraction wells were also sampled during February and March 1990. Of the 113 monitoring wells sampled, 83 are located on base and 30 are located off base. Five wells were newly installed under the EE/CA Program and were sampled for the first time under the Groundwater Sampling and Analysis Program.

Beginning in January 1989, the sampling frequency for 42 monitoring wells was reduced from quarterly to annually. A reduction in sampling frequency was recommended by Radian Corporation (Radian) and approved by all concerned regulatory agencies. The reduction in sampling frequency for the 42 monitoring wells was based on the analytical history of the wells, location of the wells, and estimated groundwater velocities near the wells. The 42 wells included in the annual sampling schedule had shown a consistent history of either no analytes detected or relatively stable concentrations of analytes. Each of the wells reduced to annual sampling are located more than 1,000 feet from active water supply wells and from the two on-base extraction systems. Groundwater velocities in areas near the wells are estimated to range from 10 to 20 feet/month, a relatively slow velocity calculated from existing data on gradients and hydraulic conductivities. Because of their locations and relatively slow groundwater velocities, annual sampling of these wells is an adequate frequency to monitor data on groundwater quality. The wells now scheduled for annual sampling and the specific reasons for reducing sampling of each of these wells from quarterly to annually are listed in Appendix A-1. Wells scheduled for annual sampling were sampled during Fourth Quarter 1989.

During the January through March 1990 sampling period, Radian was unable to collect groundwater samples from eight wells that were selected for First Quarter sampling as follows:

- MW-114, MW-1013, and MW-1014: For the third consecutive quarter, the groundwater in these wells was very muddy, and there was very little water; a representative sample could not be taken.
- MW-120: This well has a bent casing, and sampling equipment could not be lowered to the water surface. This well was dry during Fourth Quarter 1989.
- MW-122: This well has a bent casing and a malfunctioning dedicated pump system. The bent casing prevents sampling equipment from being lowered into the well.
- MW-1054, MW-1055, and MW-1057: These wells were inaccessible due to muddy conditions at the well location. Another attempt to sample these wells was made two weeks after the end of the first quarter sampling effort. However, the wells were still inaccessible. These three wells are scheduled for sampling during Second Quarter 1990.

All groundwater samples collected were analyzed using U.S. Environmental Protection Agency (U.S. EPA) Solid Waste 846 (SW-846) Methods (U.S. EPA Third Edition, 1986). All samples were analyzed for halogenated volatile organic compounds (VOCs) using U.S. EPA Method 8010. Selected samples were analyzed for: aromatic VOCs using U.S. EPA Method 8020; VOCs using U.S. EPA Method 8240, metals using U.S. EPA Method 6010; and hexavalent chromium using U.S. EPA Method 7196.

A list of wells sampled and analyses performed during January through March 1990 is presented in Table 1-1 on page 1-20. Locations of the wells are shown on Plate 1. MW-61 was inadvertently analyzed for U.S. EPA Method 6010 only; no analysis for volatile organic compounds was performed for this well during the First Quarter 1990.

A summary of the analytical results from the sampling period of January through March 1990 is presented in Tables 1-2 and 1-3. Contaminant levels in 49 wells exceeded California Department of Health Services (DHS) Maximum Contaminant Levels (MCLs), DHS Action Levels, and/or U.S. EPA Primary Maximum Contaminant Levels. Of the 49 wells, 31 are on-base monitoring wells located in Areas A, B, C, and D; 10 are extraction wells located in Areas C and D; and 8 are off-base monitoring wells located in the Northwest and Southwest Areas. During the previous sampling

TABLE 1-2. SUMMARY OF RESULTS FOR METHOD 8010,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY THROUGH MARCH 1990, MCCLELLAN AIR FORCE BASE

ON-BASE MONITORING AND EXTRACTION WELLS				
Total Wells Sampled	Wells - Nothing Detected	Wells Containing Analytes Below Maximum Contaminant Level Or Action Level	Wells Containing Analytes Exceeding Or Equal To Maximum Contaminant Level Or Action Level	
Area A and Adjacent On-Base Areas	3	0	2	MW-26D
Area B and Adjacent On-Base Areas	23	5	7	MW-7, MW-41S, MW-63, MW-65, MW-132, MW-148, MW-151, MW-153, MW-156, MW-157, MW-158
Area C and Adjacent On-Base Areas	25	5	7	EW-137, EW-140, EW-141, EW-144, MW-33S, MW-44S, MW-75, MW-128, MW-129, MW-131, MW-135, MW-136, MW-139
Area D and Adjacent On-Base Areas	29	6	7	EW-73, EW-83, EW-84, EW-85, EW-86, EW-87, MW-10, MW-11, MW-12, MW-14, MW-15, MW-55, MW-57, MW-72, MW-89, MW-91
Other On-Base Areas	1	1	0	
Totals:	81	17	23	41

EW = Extraction Well MW = Monitoring Well

TABLE 1-2 (Continued.)

OFF-BASE MONITORING WELLS

	Total Wells Sampled	Wells - Nothing Detected	Wells Containing Analytes		Wells Containing Analytes Exceeding Or Equal To Maximum Contaminant Level Or Action Level
			Below Maximum Contaminant Level Or Action Level	Exceeding Or Equal To Maximum Contaminant Level Or Action Level	
NORTHWEST Area	8	2	3		MW-74, MW-1004, MW-1005
SOUTHEAST Area	4	3	1		
SOUTHWEST Area	19	5	9		MW-1021, MW-1022, MW-1045, MW-1046, MW-1049
Totals:	31	10	13		8

EW = Extraction Well MW = Monitoring Well

TABLE 1-3. SUMMARY OF RESULTS FOR OTHER ANALYSES,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY THROUGH MARCH 1990, MCCLELLAN AIR FORCE BASE

Method	Total Wells Sampled	ON- AND OFF-BASE MONITORING AND EXTRACTION WELLS			Wells Containing Analytes Exceeding Or Equal To Maximum Contaminant Level Or Action Level
		Wells - Nothing Detected	Wells Containing Analytes Below Maximum Contaminant Level Or Action Level		
8020, Volatile Aromatic Compounds	21	20	1		
8240, Purgeable Organic Compounds	8	0	2		EW-73, EW-83, EW-84, EW-85, EW-86, EW-87
6010, Priority Pollutant Metals and Other Inorganic Compounds	44	0	43		MW-10
7196, Chromium VI	18	18	0		

MW = Monitoring Wells EW = Extraction Wells

period, 45 wells contained contaminants at concentrations above DHS Action Levels and/or U.S. EPA PMCLs. The reason for the increase in the number of wells exceeding drinking water standards will be discussed in Section 1.2.

1.1 Results of Field Activities

Field activities included measuring groundwater levels, monitoring three water quality parameters during purging of the wells, and collecting water quality samples for chemical analyses. The detailed procedures used to measure groundwater-levels and to collect water samples are described in the Quality Assurance Project Plan (QAPP) (Radian, August 1989). Sampling procedures include purging a minimum of three well volumes from each well and the measurement of pH, temperature, and conductivity of groundwater to verify that stagnant water in the well has been removed and fresh formation water will be sampled. When the pH, temperature, and conductivity have stabilized after repeated measurements of purged water, the well is considered ready for sampling.

The results of field data collected during January through March 1990 are discussed in the following subsections.

1.1.1 Groundwater Levels

The results of groundwater-level measurements for January 1990 are presented in Table 1-4 beginning on page 1-24. These water-level data were used to generate potentiometric surface maps for the four zones monitored quarterly at McClellan AFB. The four monitoring zones are as follows: the shallow monitoring zone (above -55 feet mean sea level [msl]); middle monitoring zone (between -55 and -100 feet msl); deep "A" monitoring zone (between -100 and -150 feet msl); and deep "B" monitoring zone (below -150 feet msl). One potentiometric surface map is constructed from water-level measurements representing each zone. Potentiometric surface maps at a larger scale are prepared for two zones beneath Area D. The maps are presented on Plates 2 through 7.

An evaluation of the potentiometric maps for the four monitoring zones (Plates 2 through 7) indicates that the flow patterns across the base are similar to those from previous quarters except in Area B. In Area B, groundwater flow is greatly influenced by the pumping of Base Production Well (BW) 18. When the well is pumping, groundwater in all four monitoring zones flows toward the cone of depression

created by BW-18. However, during early January 1990 BW-18 was not pumping, thus the groundwater flow direction in all four monitoring zones within Area B was not toward the well but instead toward the south. Water levels measured during January in wells near BW-18 are from four to eight feet higher than in October 1989. In other portions of the base, groundwater flow directions have not changed since the last quarter. In Area D, the effect of extraction well pumping can be seen as cones of depression on the maps for the shallow and middle monitoring zones. The shallow, middle, and deep "A" maps show groundwater flow toward the south/southeast from the West Area, across Area C to Area B. The shallow and middle zone maps for the southeastern part of McClellan AFB and Area A continue to show flow toward the southwest.

1.1.2 Field Parameters

Results of pH, conductivity, and temperature measurements taken during the January through March 1990 sampling period are presented in Table 1-5 beginning on page 1-29.

1.2 Analytical Results

Samples collected from monitoring and extraction wells during this sampling period were analyzed using U.S. EPA Methods 8010, 8020, 8240, 6010, and 7196. Samples collected from 49 wells contained contaminants at concentrations above DHS Action Levels, DHS MCLs, and/or U.S. EPA PMCLs. Analytical results from these 49 wells are listed in Table 1-6 on page 1-32. Three new wells, MW-156, MW-157, and MW-158, were added to the GSAP this quarter. During the Fourth Quarter 1989 sampling period, samples from 45 wells contained concentrations above state and federal drinking water standards. Some of the 49 wells listed in Table 1-6 are different than those that were above drinking water standards during the last sampling period (October 1989). These differences are summarized below:

- Concentrations in one well, MW-131, were detected above drinking water standards during this sampling period. This well was above drinking water standards when last sampled during Second Quarter 1990.
- Concentrations in one well, MW-150, decreased below drinking water standards during this sampling period.

- Concentrations in three new wells, MW-156, MW-157, and MW-158, that had not been previously sampled under this program had concentrations above drinking water standards.

Trichloroethene (TCE) was the contaminant that exceeded the DHS MCLs concentration in 43 of the 49 wells containing contaminants above state and federal drinking water standards. Concentrations of TCE detected in wells sampled during this sampling period are shown by monitoring zone on Plates 8, 9, 10, and 11 representing the shallow, middle, deep "A," and deep "B" monitoring zones, respectively.

The results from each well sampled and analyzed during the First Quarter 1990 were evaluated to determine if the recent sampling history of the well indicates any apparent trend of increasing or decreasing contaminant concentrations. The results were also evaluated to determine if there was a wide variation in concentrations from those detected during the Fourth Quarter 1989. The results of this evaluation are summarized below.

In Area A, the concentration of trichloroethene (TCE) in MW-71 has shown a pattern of increasing concentration over the last four quarters. The TCE concentration in MW-71 increased from 0.59 $\mu\text{g/L}$ in the First Quarter 1989 to 3.5 $\mu\text{g/L}$ in the First Quarter 1990. The MCL for TCE is 5.0 $\mu\text{g/L}$.

Four wells in Area B, including MW-7, MW-41S, MW-151, and MW-153 showed notable changes in the First Quarter 1990.

- | | | |
|----------|--------------------------|--|
| • MW-7 | Trichloroethene | ↑ from 36 to 47 $\mu\text{g/L}$ |
| | Total 1,2-Dichloroethene | ↑ from 24 to 34 $\mu\text{g/L}$ |
| • MW-41S | Tetrachloroethene | ↓ from 200 to 130 $\mu\text{g/L}$ |
| | Trichloroethene | ↓ from 3500 to 1800 $\mu\text{g/L}$ |
| • MW-151 | Tetrachloroethene | ↑ from below MCL of 5 $\mu\text{g/L}$ to 6.1 $\mu\text{g/L}$.
Previously detected at 9.9 $\mu\text{g/L}$ (3Q89). |
| • MW-153 | Trichloroethene | ↑ from 52 to 150 $\mu\text{g/L}$ |

Three wells, previously sampled under ABGOURI and EE/CA, had compounds detected above drinking water standards.

- MW-156 Trichloroethene † from 78 (9/89) to 100 $\mu\text{g/L}$
total 1,2-Dichloroethene † from 48 to 52 $\mu\text{g/L}$
- MW-157 Trichloroethene † from 4800 to 5400 $\mu\text{g/L}$
Tetrachloroethene † from 390 to 2300 $\mu\text{g/L}$
- MW-158 Trichloroethene † from 1000 to 1500 $\mu\text{g/L}$
Tetrachloroethene † from 80 to 210 $\mu\text{g/L}$
total 1,2-Dichloroethene † from 28 to 42 $\mu\text{g/L}$

In the Southwest Area, MW-1046 had 1,2-dichloroethane detected at 0.60 $\mu\text{g/L}$, above the DHS MCL of 0.50 $\mu\text{g/L}$. Trichloroethene (TCE) in this well remained at 20 $\mu\text{g/L}$. Additionally, TCE in MW-1049 increased from 8.5 to 13 $\mu\text{g/L}$.

Three wells in Area C including MW-129, MW-136, and MW-131, showed changes in the First Quarter 1990. Variations in analyte concentrations are expected in wells near the Area C extraction system, such as MW-129 and MW-136.

- MW-129 Trichloroethene † from 140 to 290 $\mu\text{g/L}$
- MW-131 Trichloroethene † from 27 (3Q89) to 49 $\mu\text{g/L}$
- MW-136 Trichloroethene † from 170 to 690 $\mu\text{g/L}$

Three wells in Area D, MW-10, MW-11, and MW-72, had notable changes in the First Quarter 1990.

- MW-10 1,2-Dichloroethane † from 7000 to 250 $\mu\text{g/L}$
(250 $\mu\text{g/L}$ is the historical range)
Aluminum detected at 4.3 mg/L (MCL is 1.0 mg/L; not previously analyzed for this metal)
- MW-11 Trichloroethene † from 3200 to 3900 $\mu\text{g/L}$

1,1,1-Trichloroethene	↑ from 3400 to 3700 µg/L
1,2-Dichloroethene	↓ from 20,000 to 17,000 µg/L
• MW-72 1,1-Dichloroethene	↓ from 530 to 260 µg/L (260 is the historical range)

1.2.1 Summary of QA/QC Data

This section presents a summary of the Quality Assurance/Quality Control (QA/QC) data, qualified data, and corrective actions taken during January, February, and March 1990.

The QA/QC data presented in this report have been evaluated with respect to the quality assurance objectives specified in Section 4.0 of the Final McClellan Air Force Base Quality Assurance Project Plan (QAPP) (Radian, August 1989). These objectives specify acceptable accuracy and precision performance for each method. In addition, objectives are specified for completeness, representativeness, and comparability.

The quality assurance objectives for precision are: a relative percent difference (RPD) of less than or equal to 50 percent for field duplicate sample results, and an RPD of less than or equal to 30 percent for laboratory duplicate results. The objectives for accuracy are analyte-specific and are listed in each method standard operating procedure. The objective for completeness is to have greater than 90 percent of all data reported as valid. The objective for comparability and representativeness are more a function of the sampling program and can be evaluated only in terms of the program objectives. However, comparability is achieved by using standard methods of sampling and analysis, reporting in standard units, and using standard and comprehensive reporting formats.

There were no significant problems that affected the overall data quality reported for the period of January, February, and March 1990, as shown in the summary of QA/QC procedures presented in this report. Although data from several wells required qualification, the majority of the data met the data quality objectives. Summaries of the QC data for blanks, and for duplicates and spikes are presented in Tables 1-7 and 1-8, beginning on pages 1-12 and 1-14, respectively. Table 1-9, beginning

on page 1-16, contains a list of the qualified data. Table 1-10, beginning on page 1-39 shows the holding times for each sample.

More than 98 percent of the data were valid, fulfilling the project objectives for accuracy and precision; the exceptions are noted in Table 1-9. From a total of 6284 individual analyte-measurement results (both detected and nondetected), 76 detected results were qualified. The completeness objective of 90 percent valid data was attained.

Some analytical results in this report are flagged with letters or symbols. A "C" flag indicates that the analyte was confirmed by analysis on a second chromatographic column. A "P" flag indicates that the compound had been confirmed in previous quarters by a second-column confirmation run; therefore, a second-column confirmation was not performed. A "B" flag indicates that the compound was reported in the reagent blank analyzed the day the sample was analyzed. A "U" flag appears when either methylene chloride or toluene were detected at a concentration less than five times the detection limit. No confirmation is required for these two analytes at these low concentrations and the data are flagged as unconfirmed.

There were wells in which the quantitation of certain compounds were affected by interferences on the first column for analyses by Method 8010. Because the deviation concentrations were not within a factor of two, the compounds for both the first and second column were reported as unconfirmed. As indicated by past history, these compounds have already been previously confirmed. This data is being reported and flagged with one of three letters [(a), (b), or (c)] to describe the analytical consideration that causes qualification of the result, as well as the flag, (2), which indicates that the second column result was reported. All Method 8010 data with these flags should be interpreted as an estimated or approximate value.

A subset of Method 8010 analytical data initially were reported with a high bias in the results for compounds of interest due to a laboratory calibration error. One of 5 calibration standards did not meet the laboratory acceptance criterion, and use of the resulting linear regression equation introduced a high bias (11 to 39 percent) in the data for all except 1 of 28 method analytes detected in this sampling period. The EPA method requires either use of a 5 point calibration to within a relative standard difference of 20%, or the use of a calibration curve. The linear regression equation used to calculate the sample results meet Radian's quality assurance objectives if the

TABLE 1-7. SUMMARY OF QUALITY CONTROL RESULTS FOR BLANKS, GROUNDWATER
 SAMPLING AND ANALYSIS PROGRAM, JANUARY - MARCH 1990,
 McCLELLAN AFB

U.S. EPA SW-846 Method	Number Performed	Compound (Number of Occurrences)	Range of Results
<u>Reagent Blanks</u>			
8010	43	ND	NA
8020	16	ND	NA
8240	4	Acetone (1) Methylene chloride (3)	1.6 * ug/L 1.6 - 5.3* ug/L
6010	15	Aluminum (3) Boron (7) Sodium (3) Molybdenum (3) Zinc (5) Iron (5) Calcium (4) Silicon (3)	0.065 * mg/L 0.012 - 0.016 * mg/L 0.75 * mg/L 0.009 - 0.010 * mg/L 0.003 - 0.004 mg/L 0.011 - 0.016 * mg/L 0.018 - 0.019 * mg/L 0.29 mg/L
7196	15	ND	NA
<u>Trip Blanks</u>			
8010	8	Methylene chloride (2) Tetrachloroethene (2)	0.60 - 0.86 * ug/L 0.25 - 0.31 * ug/L
<u>Ambient Blanks</u>			
8010	9	1,1,1-Trichloroethane (1) Methylene chloride (2) Trichloroethene (1)	0.35 * ug/L 0.58 - 0.66 * ug/L 0.60 C * ug/L
8020	1	No Analytes Detected	NA
<u>Equipment Blanks</u>			
8010	12	1,1,1-Trichloroethane (2) Methylene chloride (4) Trichloroethene (1)	0.28 - 0.65 * ug/L 0.84 - 3.1 * ug/L 0.32 * C ug/L

continued

Table 1-7. (Continued)

U.S. EPA SW-846 Method	Number Performed	Compound (Number of Occurrences)	Range of Results
8020	4	No Analytes Detected	NA
6010	1	Boron (1)	0.29 mg/L
		Calcium (1)	0.064 mg/L
		Iron (1)	0.067 mg/L
		Silicon (1)	0.30 mg/L
		Sodium (1)	0.43 mg/L
		Zinc (1)	0.0030 * mg/L
7196	1	No Analytes Detected	NA

NA = Not applicable.

C = Confirmed on second column.

* = Detected at less than five times the detection limit.

TABLE 1-8. SUMMARY OF QUALITY CONTROL RESULTS FOR DUPLICATES
 AND SPIKES, GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
 JANUARY - MARCH 1990, McCLELLAN AFB

U.S. EPA SW-846 Method	Number Performed	Compound	Range of Results (%)	Acceptance Criteria ^a (%)	Results Not Meeting Criteria ^b
<u>Duplicate Samples</u>					
8010	11	Varies	0 - 86	50	2
8020	3	No Analytes Detected	NC	50	0
8240	1	Varies	6 - 17	50	0
6010	4	Varies	0 - 127	50	3
7196	2	Hexavalent chromium	NC	50	0
<u>Matrix Spike Duplicates</u>					
8010	10	3 compounds	1 - 53	30	2
8020	3	3 compounds	2 - 82	30	1
8240	1	5 compounds	6 - 97	30	0
6010	3	Varies	0 - 16	30	0
7196	1	Hexavalent chromium	12	30	0
<u>Matrix Spikes</u>					
8010	20	Chlorobenzene	75 - 101	38 - 150	0
	18	1,1-Dichloroethene	43 - 99	28 - 167	0
	18	Trichloroethene	49 - 102	35 - 146	0
8020	6	Benzene	50 - 120	39 - 150	0
	6	Toluene	63 - 85	46 - 148	0
	6	Chlorobenzene	57 - 73	55 - 135	0
8240	2	Benzene	85 - 90	76 - 127	0
	2	Toluene	88 - 97	76 - 125	0
	2	Chlorobenzene	86 - 94	75 - 130	0
	2	1,1-Dichloroethene	158 - 210	65 - 145	2
	2	Trichloroethene	97 - 113	71 - 120	0
6010	6	Varies	96 - 164	75 - 125	2
7196	2	Hexavalent chromium	87 - 98	75 - 125	0

continued

Table 1-8 (Continued)

U.S. EPA SW-846 Method	Number Performed	Compound	Range of Results (%)	Acceptance Criteria ^a (%)	Results Not Meeting Criteria ^b
Analytical Spikes					
6010	varies by metal analyte	Varies	62 - 118	75 - 125	12
Surrogate Spikes					
8010	196	1-Bromo-4-fluorobenzene	64 - 172	40 - 140	7
8020	196	1-Bromo-4-fluorobenzene	80 - 124	40 - 140	0
10	12	1,2-Dichloroethane-d ₄	86 - 100	76 - 114	0
		1-Bromo-4-fluorobenzene	95 - 104	86 - 115	0
		Toluene-d ₈	98 - 104	88 - 110	0

^a The acceptance criteria represent the upper acceptable bound of the RPD (%) for duplicates and the range in percent recovery for the spikes.

^b Refers to individual analytical results, not overall sample results.

NC = Not Calculated

TABLE 1-9. SUMMARY OF QUALIFIED DATA, GROUNDWATER SAMPLING AND ANALYSIS PROGRAM, JANUARY THROUGH MARCH 1990, McCLELLAN AFB

Sample Number	U.S. EPA Method	Analyte(s)	Type of Qualification	Reason
EW-73	8240	1,1-Dichloroethene	PL	High matrix spike recovery
	8010	1,1-Dichloroethene	M	High matrix spike recovery
EW-84	8240	Methylene Chloride	R	Detected in reagent blank
EW-85	8240	Methylene Chloride	R	Detected in reagent blank
	6010	Zinc	R	Detected in reagent blank
	8010	Tetrachloroethene	E	Estimated - poor confirmation
EW-86	8010	Tetrachloroethene	E	Estimated - poor confirmation
EW-137	6010	Zinc	R	Detected in reagent blank
EW-140	6010	Zinc	R	Detected in reagent blank
EW-141	6010	Zinc	R	Detected in reagent blank
EW-144	8010	1,1,1-Trichloroethane	E	Estimated - poor confirmation
	6010	Zinc	R	Detected in reagent blank
MW-7	8010	Methylene Chloride	E	Estimated - poor confirmation
MW-21D	6010	Zinc/Iron	R	Detected in reagent blank
MW-22	8010	Trichloroethene	E	Estimated - poor confirmation
MW-26D	8010	Chloroform	E	Estimated - poor confirmation
MW-33S	6010	Zinc/Iron	R	Detected in reagent blank
MW-44S	6010	Zinc/Iron	R	Detected in reagent blank
	8010	Trichloroethene	E	Estimated - poor confirmation
MW-54	6010	Iron	R	Detected in reagent blank
MW-57	8010	1,2-Dichloroethane	E	Estimated - poor confirmation

(Continued)

TABLE 1-9. (Continued)

Sample Number	U.S. EPA Method	Analyte(s)	Type of Qualification	Reason
MW-60	6010	Zinc/Iron	R	Detected in reagent blank
	8010	Trichloroethene	E	Estimated - poor confirmation
MW-62	6010	Iron	M, PF	High matrix spike recovery
MW-70	8010	Tetrachloroethene	E	Estimated - poor confirmation
MW-71	8010	Chloroform	E	Estimated - poor confirmation
MW-88	8010	Tetrachloroethene	E	Estimated - poor confirmation
MW-89	6010	Zinc/Iron	R	Detected in reagent blank
	8010	1,1-Dichloroethene	E	Estimated - poor confirmation
MW-92	6010	Zinc	PF	High RPD in duplicate sample
MW-104	6010	Zinc/Iron	R	Detected in reagent blank
	8010	Trichloroethane	E	Estimated - poor confirmation
MW-128	8020	Benzene	PL	High RPD in MS/MSD
	6010	Zinc/Iron	R	Detected in reagent blank
	8010	1,1,2,2-Tetrachloroethane	E	Estimated - poor confirmation
MW-135	8020	total-1,2-Dichloroethene	PF	High RPD in duplicate sample
	6010	Iron	PF	High RPD in duplicate sample
MW-136	6010	Zinc/Iron	R	Detected in reagent blank
MW-138	6010	Zinc/Iron	R	Detected in reagent blank
MW-142	6010	Zinc/Iron	R	Detected in reagent blank
MW-147	6010	Zinc/Iron	R	Detected in reagent blank
MW-150	8240	Methylene Chloride	R	Detected in reagent blank
MW-153	8010	Trichloroethene	PL	High RPD in MS/MSD
MW-155	8010	total-1,2-Dichloroethane	E	Estimated - poor confirmation

(continued)

TABLE 1-9. (Continued)

Sample Number	U.S. EPA Method	Analyte(s)	Type of Qualification	Reason
MW-157	8010	Tetrachloroethene	M	High surrogate recovery
MW-1000	8010	Methylene chloride	O	Detected in ambient blank
MW-1001	6010	Zinc/Iron	R	Detected in reagent blank
MW-1003	6010	Zinc/Iron	R	Detected in reagent blank
MW-1004	8010	Trichloroethene	PF	High RPD in duplicate sample
	8010	1,2-Dichloroethane	E	Estimated - poor confirmation
MW-1019	8010	Chloroform	E	Estimated - poor confirmation
MW-1021	8010	Trichloroethene	PL	High RPD in MS/MSD
MW-1022	8010	Tetrachloroethene	E	Estimated - poor confirmation
MW-1023	8010	1,1,1-Trichloroethane	E	Estimated - poor confirmation
MW-1039	8010	1,1,1-Trichloroethane	E	Estimated - poor confirmation
MW-1045	8240	Methylene chloride	R	Detected in reagent blank
	8010	Trichloroethene	E	Estimated - poor confirmation
MW-1046	8010	1,2-Dichloroethane	E	Estimated - poor confirmation
MW-1047	6010	Boron	O	Detected in equipment blank
		Iron	O	Detected in equipment blank
		Zinc	O	Detected in equipment blank
MW-1050	8010	Methylene chloride	E	Estimated - poor confirmation
	8010	Trichloroethene	E	Estimated - poor confirmation

PL = Qualified as estimated due to high laboratory variability as measured by laboratory matrix spikes/matrix spike duplicates.

PF = Qualified as estimated due to high total variability as measured by field duplicates.

RPD = Relative percent difference.

R = Detected in reagent blank.

O = Detected in blank other than reagent blank.

M = Qualified as inaccurate due to matrix spike or surrogate recoveries outside the control limits.

E = Qualified as estimated due to poor second column confirmation because of coelution, interference, or random error.

highest standard is removed. Therefore, the regression equations were recalculated using the remaining 4 standards. The corrected regression equations were used to recalculate all affected sample results. All corrected sample results calculated from the four-point calibration curve are reported with an "I" flag. Because the highest concentration standard has been removed from the calibration curve, the quantitation range for analyses performed on the affected instrument is reduced from 30 ppb to 15 ppb. In one sample, the field duplicate taken at MW-11, the results for 1,1-dichloroethene exceeded the calibration range of the instrument after recalculation. The result is flagged in data tables with a "G". This sample is considered a quality assurance sample, therefore it is not included in Table 1-9.

Method 8010 data from seven monitoring wells and nine extraction wells were affected. Seventy-five individual analytical results were recalculated and flagged. Nine analytes were affected, including trichloroethene and tetrachloroethene. The corrected sample results are considered valid, unqualified, and meet project objectives for usability for the following reasons:

- The calibration curve and linear regression equations meet method requirements;
- A review of historical data from these samples indicates that the recalculated data is within normal range for previous values; and
- Only data that was within the calibration range of the instrument has been reported without qualification.

1.2.2 Presentation of Analytical Data

This section presents the results of the chemical analyses for groundwater samples collected during January through March 1990. The analytical results are presented by area and by analytical method. Tables 1-11 through 1-12 present the results for Area A and Adjacent On-Base Areas. Table 1-13 presents the results for the Southeast Area. Tables 1-14 through 1-18 present the results for Area B and Adjacent On-Base Areas. Tables 1-19 through 1-22 present the results for the Southwest Area. Tables 1-23 through 1-26 present the analytical results from wells located in Area C and Adjacent On-Base Areas. The analytical results from Area D and from the Northwest Area are presented in Tables 1-27 through 1-31 and Tables 1-32 through 1-35, respectively. Tables 1-36 through 1-38 present the analytical results from Other On-Base Areas.

TABLE 1-1. WELLS SAMPLED AND ANALYSES PERFORMED,
 GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
 JANUARY THROUGH MARCH 1990, McCLELLAN AIR FORCE BASE

Well (a) Number	Date Sampled	8010	8020	Method 8240	6010	7196
EW-73	23-Jan-90			X		
EW-73	02-Feb-90	X	X			
EW-73	02-Mar-90	X	X			
EW-83	23-Jan-90			X		
EW-83	02-Feb-90	X				
EW-83	02-Mar-90	X				
EW-84	23-Jan-90			X		
EW-84	02-Feb-90	X				
EW-84	02-Mar-90	X				
EW-85	23-Jan-90			X	X	X
EW-85	02-Feb-90	X				
EW-85	02-Mar-90	X				
EW-86	23-Jan-90			X		
EW-86	02-Feb-90	X				
EW-87	23-Jan-90			X		
EW-87	02-Feb-90	X				
EW-87	02-Mar-90	X				
EW-137	23-Jan-90	X	X		X	
EW-137	02-Feb-90	X				
EW-137	02-Mar-90	X	X			
EW-140	23-Jan-90	X	X		X	
EW-140	02-Feb-90	X				
EW-140	02-Mar-90	X	X			
EW-141	23-Jan-90	X	X		X	
EW-141	02-Feb-90	X				
EW-141	02-Mar-90	X	X			
EW-144	23-Jan-90	X	X		X	
EW-144	02-Feb-90	X				
EW-144	02-Mar-90	X	X			
MW-7	07-Feb-90	X				
MW-10	21-Feb-90	X			X	X
MW-11	22-Feb-90	X				
MW-12	20-Feb-90	X				
MW-14	21-Feb-90	X				
MW-15	15-Feb-90	X				
MW-19D	28-Feb-90	X				
MW-20D	23-Jan-90	X			X	
MW-21D	31-Jan-90	X			X	
MW-22D	26-Jan-90	X			X	
MW-23D	16-Jan-90	X				

(Continued.)

(a) - The letters 'S' and 'D' associated with the monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

EW = Extraction Well

MW = Monitoring Well

TABLE 1-1 (Continued.)

Well (a) Number	Date Sampled	8010	8020	Method 8240	6010	7196
MW-24D	16-Jan-90	X			X	X
MW-25D	31-Jan-90	X				
MW-26D	31-Jan-90	X				
MW-28D	24-Jan-90	X				
MW-33S	29-Jan-90	X	X		X	
MW-41S	12-Jan-90	X				
MW-44S	30-Jan-90	X			X	
MW-51	12-Jan-90	X				
MW-52	23-Jan-90	X				
MW-53	18-Jan-90	X				
MW-54	24-Jan-90	X			X	X
MW-55	15-Jan-90	X				
MW-57	25-Jan-90	X				
MW-58	22-Jan-90	X				
MW-59	24-Jan-90	X				
MW-60	30-Jan-90	X			X	
MW-61	23-Jan-90				X	
MW-62	23-Jan-90	X	X		X	X
MW-63	16-Jan-90	X				
MW-64	13-Feb-90	X				
MW-65	28-Feb-90	X				
MW-66	19-Feb-90	X	X		X	
MW-70	25-Jan-90	X			X	X
MW-71	02-Feb-90	X	X			
MW-72	20-Feb-90	X				
MW-74	27-Feb-90	X	X			
MW-75	05-Feb-90	X			X	
MW-76	28-Feb-90	X	X			
MW-88	25-Jan-90	X				
MW-89	29-Jan-90	X			X	X
MW-90	20-Feb-90	X				
MW-91	17-Jan-90	X				
MW-92	17-Jan-90	X			X	X
MW-104	30-Jan-90	X			X	X
MW-105	12-Jan-90	X				
MW-115	18-Jan-90	X				
MW-121	15-Jan-90	X				
MW-128	30-Jan-90	X	X		X	
MW-129	19-Jan-90	X			X	
MW-130	19-Jan-90	X			X	
MW-131	26-Jan-90	X			X	
MW-132	17-Jan-90	X				

(Continued.)

(a) - The letters 'S' and 'D' associated with the monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

EW = Extraction Well

MW = Monitoring Well

TABLE 1-1. (Continued.)

Well (a) Number	Date Sampled	8010	8020	Method 240	6010	7196
MW-133	22-Jan-90	X			X	
MW-134	15-Jan-90	X			X	
MW-135	22-Jan-90	X			X	
MW-136	30-Jan-90	X			X	
MW-138	29-Jan-90	X			X	
MW-139	26-Jan-90	X			X	
MW-142	29-Jan-90	X			X	
MW-143	16-Jan-90	X			X	
MW-145	25-Jan-90	X	X			
MW-146	06-Feb-90	X	X			
MW-147	06-Feb-90	X	X		X	X
MW-148	07-Feb-90	X	X			
MW-149	07-Feb-90	X	X			
MW-150	22-Feb-90	X		X		
MW-151	08-Feb-90	X	X			
MW-152	08-Feb-90	X	X			
MW-153	21-Feb-90	X	X			
MW-154	08-Feb-90	X	X			
MW-155	07-Feb-90	X				
MW-156	26-Feb-90	X				
MW-157	19-Feb-90	X				
MW-158	13-Feb-90	X				
MW-1000	19-Feb-90	X				
MW-1001	31-Jan-90	X			X	X
MW-1002	17-Jan-90	X				
MW-1003	31-Jan-90	X			X	X
MW-1004	31-Jan-90	X				
MW-1005	01-Feb-90	X				
MW-1015	26-Jan-90	X				
MW-1016	26-Jan-90	X				
MW-1019	01-Feb-90	X				
MW-1020	01-Feb-90	X				
MW-1021	01-Feb-90	X				
MW-1022	01-Feb-90	X				
MW-1023	18-Jan-90	X			X	X
MW-1024	18-Jan-90	X			X	X
MW-1025	18-Jan-90	X			X	X
MW-1037	19-Jan-90	X				
MW-1038	19-Jan-90	X				
MW-1039	19-Jan-90	X				
MW-1044	26-Jan-90	X				
MW-1045	12-Feb-90	X		X		

(Continued.)

(a) - The letters 'S' and 'D' associated with the monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

EW = Extraction Well

MW = Monitoring Well

TABLE 1-1. (Continued.)

Well (a) Number	Date Sampled	Method				
		8010	8020	8240	6010	7196
MW-1046	14-Feb-90	X			X	
MW-1047	14-Feb-90	X			X	X
MW-1048	15-Feb-90	X			X	X
MW-1049	09-Feb-90	X				
MW-1050	09-Feb-90	X				
MW-1051	09-Feb-90	X			X	X
MW-1052	12-Feb-90	X				
MW-1053	23-Feb-90	X				

(a) - The letters 'S' and 'D' associated with the monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

EW = Extraction Well

MW = Monitoring Well

TABLE 1-4. QUARTERLY GROUNDWATER LEVEL DATA,
 GROUND WATER SAMPLING AND ANALYSIS PROGRAM,
 JANUARY THROUGH MARCH 1990, McCLELLAN AIR FORCE BASE

=====			
Groundwater Level Elevation (feet above mean sea level)			
Well		Current Measurement	Previous Measurement
Number(a)	Area	1Q90	4Q89

<u>Shallow Zone Monitoring Wells:</u>			
MW-7	B	- 40.21	- 44.13
MW-10	D	- 35.09	- 35.78
MW-11	D	- 34.30	- 36.21
MW-12	D	- 34.74	- 35.38
MW-14	D	- 35.13	- 35.76
MW-15	D	- 34.79	- 35.44
MW-16D	OTHER	- 29.70	- 32.26
MW-33S	C	- 36.48	- 37.44
MW-36S	C	- 33.30	- 33.40
MW-41S	B	- 40.31	- 41.33
MW-44S	C	- 34.24	- 34.57
MW-49S	OTHER	- 30.17	- 32.97
MW-60	C	- 34.70	- 34.96
MW-61	C	- 37.27	- 38.06
MW-62	C	- 33.27	- 34.46
MW-65	B	- 39.89	- 40.92
MW-67	A	- 32.09	- 34.25
MW-68	A	- 35.37	- 37.74
MW-88	D	- 34.07	- 34.27
MW-89	D	- 34.63	- 35.15
MW-90	D	- 34.68	- 35.23
MW-91	D	- 34.39	- 35.50
MW-92	D	- 34.21	- 35.33
MW-101	OTHER	- 30.18	- 33.57
MW-102	OTHER	- 28.26	- 28.87
MW-106	OTHER	- 32.76	- 32.87
MW-107	C	- 33.40	NM (b)
MW-110	C	- 33.53	- 33.57
MW-111	C	- 34.31	- 34.58
MW-114	C	- 36.05	NM (b)
MW-116	OTHER	- 37.92	- 38.24
MW-128	C	- 36.83	- 35.90
MW-131	C	- 37.72	- 38.89
MW-139	C	- 38.35	- 40.05
MW-155	B	- 40.29	NM (e)
MW-157	B	- 40.32	NM (e)
MW-158	B	- 40.36	NM (e)
MW-1002	NORTHWEST	- 33.70	- 34.85

(Continued.)

- NM = Not measured MW = Monitoring Well EW = Extraction Well
 (a) = The letters 'S' and 'D' associated with monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.
 (b) = Well dry (c) = Blocked well access
 (d) = Well under repair (e) = EE/CA well during 4Q89

TABLE 1-4. (Continued.)

		<u>Groundwater Level Elevation (feet above mean sea level)</u>	
Well		Current Measurement	Previous Measurement
Number(a)	Area	1Q90	4Q89
<u>Shallow Zone Monitoring Wells:</u>			
MW-1004	NORTHWEST	- 33.05	- 34.55
MW-1005	NORTHWEST	- 32.83	- 34.63
MW-1009	NORTHWEST	- 31.92	- 32.51
MW-1011	SOUTHWEST	- 36.75	NM (c)
MW-1012	NORTHEAST	- 24.61	- 25.38
MW-1013	SOUTHEAST	- 40.55	NM (b)
MW-1014	SOUTHEAST	- 37.36	- 39.33
MW-1016	SOUTHWEST	- 41.22	- 45.39
MW-1017	WEST	- 35.89	- 35.09
MW-1018	WEST	- 33.82	- 33.69
MW-1019	NORTHWEST	- 31.53	- 31.44
MW-1020	SOUTHWEST	- 40.32	- 44.96
MW-1021	SOUTHWEST	- 40.72	- 46.42
MW-1023	SOUTHWEST	- 41.47	- 44.98
MW-1026	NORTHWEST	- 32.30	- 33.14
MW-1029	NORTHWEST	- 31.04	- 32.38
MW-1033	WEST	- 37.17	- 37.83
MW-1036	WEST	- 31.98	- 31.55
MW-1037	SOUTHEAST	- 28.55	- 30.99
MW-1041	NORTHWEST	- 32.39	- 33.58
MW-1044	SOUTHWEST	- 40.95	- 45.51
MW-1053	SOUTHWEST	- 42.53	NM (e)
<u>Middle Zone Monitoring Wells:</u>			
MW-170	OTHER	- 30.80	- 33.74
MW-180	OTHER	- 31.96	- 33.29
MW-190	D	- 33.90	- 34.60
MW-200	C	- 35.28	- 36.56
MW-210	C	- 35.55	- 35.56
MW-230	B	- 40.61	- 48.20
MW-240	OTHER	- 39.80	- 43.21
MW-250	A	- 37.04	- 38.07
MW-260	A	- 35.42	- 39.18
MW-270	A	- 33.06	- 36.23
MW-280	SOUTHEAST	- 33.03	- 34.95
MW-290	OTHER	- 31.60	- 33.61
MW-52	D	- 33.80	- 34.73
MW-53	D	- 34.83	- 35.54
MW-54	D	- 34.41	- 35.93
MW-55	D	- 35.37	- 35.94

(Continued.)

NM = Not measured

MW = Monitoring Well

EW = Extraction Well

(a) = The letters 'S' and 'D' associated with monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

(b) = Well dry

(c) = Blocked well access

(d) = Well under repair

(e) = EE/CA well during 4Q89

TABLE 1-4. (Continued.)

=====			
Groundwater Level Elevation (feet above mean sea level)			
Well		Current Measurement	Previous Measurement
Number(a)	Area	1Q90	4Q89

<u>Middle Zone Monitoring Wells:</u>			
MW-57	D	- 34.66	- 35.52
MW-69	A	- 35.15	- 38.95
MW-70	D	- 34.06	- 34.94
MW-71	A	- 32.40	- 35.35
MW-72	D	- 35.20	- 35.86
MW-74	NORTHWEST	- 34.64	- 35.42
MW-75	C	- 37.69	- 37.44
MW-76	NORTHWEST	- 34.10	- 35.22
MW-100	OTHER	- 30.47	- 33.58
MW-103	OTHER	- 28.89	- 32.09
MW-108	C	- 33.62	- 34.39
MW-113	C	- 34.83	- 35.01
MW-115	C	- 36.88	- 37.63
MW-121	B	- 38.64	- 41.33
MW-129	C	- 37.24	- 38.34
MW-135	C	- 39.23	- 41.30
MW-145	B	- 39.80	- 43.48
MW-150	B	- 41.32	- 44.84
MW-153	B	- 40.62	- 42.28
MW-1000	SOUTHWEST	- 40.28	NM (c)
MW-1003	NORTHWEST	- 33.06	- 34.56
MW-1010	NORTHWEST	- 32.37	- 33.97
MW-1015	SOUTHWEST	- 42.73	- 44.71
MW-1022	SOUTHWEST	- 40.21	- 51.18
MW-1024	SOUTHWEST	- 43.55	- 45.38
MW-1027	NORTHWEST	- 32.68	- 34.28
MW-1030	NORTHWEST	- 31.72	- 33.39
MW-1032	WEST	- 34.14	- 34.28
MW-1034	WEST	- 37.68	- 37.24
MW-1038	SOUTHEAST	- 42.45	- 38.58
MW-1042	NORTHWEST	- 31.79	- 33.82
MW-1049	SOUTHWEST	- 29.71	- 45.71
<u>Deep A Zone Monitoring Wells:</u>			
MW-220	C	- 37.98	- 39.94
MW-51	D	- 33.89	- 34.81
MW-58	D	- 33.69	- 34.74
MW-59	D	- 33.84	- 34.64
MW-63	B	- 39.14	- 45.78
MW-64	B	- 39.68	- 47.60

(Continued.)

NM = Not measured

MW = Monitoring Well

EW = Extraction Well

(a) = The letters 'S' and 'D' associated with monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

(b) = Well dry

(c) = Blocked well access

(d) = Well under repair

(e) = EE/CA well during 4Q89

TABLE 1-4. (Continued.)

Groundwater Level Elevation (feet above mean sea level)			
Well		Current Measurement	Previous Measurement
Number(a)	Area	1Q90	4Q89

<u>Deep A Zone Monitoring Wells:</u>			
MW-66	B	- 40.33	- 49.98
MW-104	D	- 32.83	- 34.07
MW-105	D	- 32.81	- 34.28
MW-109	C	- 33.76	- 34.61
MW-112	C	- 34.66	- 35.14
MW-122	B	- 37.40	- 42.33
MW-130	C	- 38.72	- 40.55
MW-134	C	- 38.68	- 41.40
MW-142	C	- 38.24	- 40.59
MW-143	C	- 37.43	- 39.22
MW-146	B	- 39.57	- 43.73
MW-151	B	- 40.64	- 46.54
MW-156	B	- 39.25	NM (e)
MW-1001	NORTHWEST	- 32.97	- 34.54
MW-1025	SOUTHWEST	- 45.90	- 46.83
MW-1028	NORTHWEST	- 32.34	- 34.29
MW-1031	NORTHWEST	- 31.93	- 33.24
MW-1035	WEST	- 37.60	- 38.66
MW-1039	SOUTHEAST	- 36.53	- 38.79
MW-1040	NORTHEAST	- 30.69	- 34.60
MW-1043	NORTHWEST	- 32.70	- 33.85
MW-1045	SOUTHWEST	- 40.00	- 47.41
MW-1050	SOUTHWEST	- 41.69	- 45.82
<u>Deep B Zone Monitoring Wells:</u>			
MW-132	B	- 39.43	- 46.95
MW-133	C	- 38.64	- 42.01
MW-136	C	- 38.16	- 40.81
MW-138	C	- 37.09	- 39.95
MW-147	B	- 39.22	- 44.05
MW-148	B	- 37.48	- 43.14
MW-149	B	- 37.05	- 42.36
MW-152	B	- 40.78	- 48.58
MW-154	B	- 38.76	- 47.28
MW-1046	SOUTHWEST	- 39.63	- 48.99
MW-1047	SOUTHWEST	- 37.44	- 43.20
MW-1048	SOUTHWEST	- 44.08	- 43.12
MW-1051	SOUTHWEST	- 41.54	46.17
MW-1052	SOUTHWEST	- 37.97	- 42.37

(Continued.)

- NM = Not measured MW = Monitoring Well EW = Extraction Well
 (a) = The letters 'S' and 'D' associated with monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.
 (b) = Well dry (c) = Blocked well access
 (d) = Well under repair (e) = EE/CA well during 4Q89

TABLE 1-4. (Continued.)

<u>Groundwater Level Elevation (feet above mean sea level)</u>			
Well		Current Measurement	Previous Measurement
Number(a)	Area	1Q90	4Q89
<u>Extraction Wells</u>			
EW-73	D	NM (d)	- 52.46
EW-83	D	- 38.37	- 38.72
EW-84	D	- 41.02	- 40.10
EW-85	D	- 35.02	- 35.05
EW-86	D	- 36.79	- 37.83
EW-87	D	- 36.48	- 37.65

NM = Not measured MW = Monitoring Well EW = Extraction Well
 (a) = The letters 'S' and 'D' associated with monitoring well numbers are part of the well
 identification notation and do not refer to monitoring zones at McClellan AFB.
 (b) = Well dry (c) = Blocked well access
 (d) = Well under repair (e) = EE/CA well during 4Q89

TABLE 1-5. RESULTS OF FIELD MEASUREMENTS (pH, CONDUCTIVITY, AND TEMPERATURE).
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM.
JANUARY THROUGH MARCH 1990, McCLELLAN AIR FORCE BASE

Area A and Adjacent On-Base Areas				Area B and Adjacent On-Base Areas				Area C and Adjacent On-Base Areas				Area D and Adjacent On-Base Areas				Other On-Base Areas			
Well Number	pH (umhos/cm)(Deg. C)	Temp. (Deg. C)	Cond. (umhos/cm)	Well Number	pH (umhos/cm)	Temp. (Deg. C)	Cond. (umhos/cm)	Well Number	pH (umhos/cm)	Temp. (Deg. C)	Cond. (umhos/cm)	Well Number	pH (umhos/cm)	Temp. (Deg. C)	Cond. (umhos/cm)	Well Number	pH (umhos/cm)	Temp. (Deg. C)	Cond. (umhos/cm)
<u>Shallow Zone Monitoring Wells</u>																			
MW-7	7.2	18.0	190	MW-33S	7.3	18.0	610	MW-10	6.8	700	20.0								
MW-41S	7.4	NM	270	MW-44S	6.8	NM	210	MW-11	6.7	520	20.0								
MW-65	7.6	21.0	220	MW-60	6.7	NM	210	MW-12	7.3	270	19.0								
MW-155	7.4	19.0	220	MW-61	7.2	19.0	170	MW-14	6.6	320	19.0								
MW-157	7.4	19.0	190	MW-62	7.5	19.0	250	MW-15	7.8	200	19.0								
MW-158	6.5	19.5	240	MW-128	7.0	NM	600	MW-88	7.2	30	NM								
				MW-131	7.3	NM	200	MW-89	7.5	150	18.0								
				MW-139	7.1	NM	490	MW-90	7.1	170	19.0								
								MW-92	7.2	110	19.0								
<u>Middle Zone Monitoring Wells</u>																			
MW-250	7.2	240	NM	MW-200	7.1	260	19.0	MW-190	7.3	200	20.0								
MW-260	7.2	160	NM	MW-75	7.2	230	18.0	MW-52	7.4	190	NM								
MW-71	7.5	210	18.5	MW-115	7.4	260	NM	MW-53	7.5	220	NM								
				MW-129	7.3	210	NM	MW-54	7.1	230	19.0								
				MW-135	7.9	150	19.0	MW-55	7.7	160	19.5								
								MW-57	7.4	60	NM								
								MW-70	7.9	180	NM								
								MW-72	7.2	460	20.0								
<u>Deep A Zone Monitoring Wells</u>																			
MW-63	6.5	320	18.0	MW-220	7.3	150	19.0	MW-51	7.6	420	NM								
MW-64	7.4	190	19.0	MW-130	7.1	290	NM	MW-58	7.7	190	19.0								
MW-66	7.6	160	20.0	MW-134	7.9	120	NM	MW-104	7.4	240	NM								
MW-146	7.3	280	NM	MW-142	7.4	190	20.0	MW-105	8.1	290	NM								
MW-151	7.6	190	19.0	MW-143	7.4	180	NM												
MW-156	7.3	310	20.0																
<u>Deep B Zone Monitoring Wells</u>																			
MW-132	7.4	270	NM	MW-133	7.4	190	18.5												
MW-147	7.2	280	NM	MW-136	7.5	430	17.0												
MW-148	7.0	230	20.0	MW-138	7.8	260	NM												
MW-149	7.0	240	NM																
MW-152	7.5	220	20.0																
MW-154	8.2	210	19.5																

(Continued.)

NM = Not Measured MW = Monitoring Well EW = Extraction Well

TABLE 1-5. (Continued)

Area A and Adjacent On-Base Areas				Area B and Adjacent On-Base Areas				Area C and Adjacent On-Base Areas				Area D and Adjacent On-Base Areas				Other On-Base Areas			
Well Number	pH	Cond. (umhos/cm)	Temp. (Deg.C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg.C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg.C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg.C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg.C)
Extraction Wells																			
(Area C Extraction Wells are screened in the middle, deep "A" or deep "B" monitoring zones)																			
(Area D Extraction Wells are screened in the shallow and middle monitoring zones)																			
January:																			
				EW-137	6.9	520	19.0	EW-73	6.6	640	19.0								
				EW-140	7.2	370	19.0	EW-83	7.2	220	19.0								
				EW-141	7.2	420	19.0	EW-84	6.6	700	19.5								
				EW-144	7.1	350	19.0	EW-85	7.2	250	21.0								
								EW-86	7.2	220	19.0								
								EW-87	7.3	210	19.0								
February:																			
				EW-137	7.1	480	NM	EW-73	6.8	570	NM								
				EW-140	7.3	370	NM	EW-83	7.5	230	NM								
				EW-141	7.3	400	NM	EW-84	7.0	640	NM								
				EW-144	7.3	320	NM	EW-85	7.5	220	NM								
								EW-86	7.4	210	NM								
								EW-87	7.4	200	NM								
March:																			
				EW-137	7.1	370	19.0	EW-73	7.8	510	18.0								
				EW-140	6.7	620	19.0	EW-83	7.4	220	18.0								
				EW-141	7.1	310	19.0	EW-84	6.8	220	19.0								
				EW-144	7.2	260	19.0	EW-85	7.3	220	18.0								
								EW-87	7.4	210	19.0								

(Continued.)

NM = Not Measured MW = Monitoring Well EW = Extraction Well

TABLE 1-5. (Continued)

Southeast Area				Southwest Area				West Area				Northwest Area				Northeast Area			
Well Number	pH	Cond. (umhos/cm)	Temp. (Deg. C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg. C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg. C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg. C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg. C)
Shallow Zone Monitoring Wells																			
MW-1037	7.0	350	NM	MW-1016	7.3	320	19.0	MW-1002	7.4	120	17.0								
				MW-1020	7.4	230	19.0	MW-1004	6.5	140	19.0								
				MW-1021	7.8	200	18.0	MW-1005	7.8	220	NM								
				MW-1023	NM	180	NM	MW-1019	7.1	510	18.0								
				MW-1044	7.5	320	NM												
				MW-1053	7.7	260	20.0												
Middle Zone Monitoring Wells																			
MW-280	7.3	160	18.0	MW-1000	7.4	180	19.5	MW-74	7.6	190	21.0								
MW-1038	7.0	230	NM	MW-1015	7.7	190	19.0	MW-76	8.3	210	20.0								
				MW-1022	7.5	210	NM	MW-1003	6.4	120	19.0								
				MW-1024	NM	180	NM												
				MW-1049	7.6	260	19.0												
Deep A Zone Monitoring Wells																			
MW-1039	7.2	220	NM	MW-1025	7.4	230	NM	MW-1001	5.4	140	18.0								
				MW-1045	7.2	270	NM												
				MW-1050	7.4	230	19.0												
Deep B Zone Monitoring Wells																			
				MW-1046	8.2	300	NM												
				MW-1047	8.1	380	18.5												
				MW-1048	7.2	310	19.0												
				MW-1051	8.9	200	NM												
				MW-1052	7.9	280	NM												

NM = Not Measured MW = Monitoring Well EW = Extraction Well

TABLE 1-6 WELLS CONTAINING ANALYTES AT CONCENTRATIONS EQUAL TO OR EXCEEDING STATE AND FEDERAL DRINKING WATER STANDARDS, GROUNDWATER SAMPLING AND ANALYSIS PROGRAM, JANUARY THROUGH MARCH 1990, McCLELLAN AIR FORCE BASE

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level
EW-73	23-Jan-90	D	8240	1,1,1-Trichloroethane		RAS	550.	200. MCL
				1,1-Dichloroethene		RAS	6600.	6.0 MCL
				Trichloroethene		RAS	1000.	5.0 MCL
				Vinyl Chloride		RAS	1100.	0.50 MCL
				1,1,1-Trichloroethane	FD	RAS	630.	200. MCL
				1,1-Dichloroethene	FD	RAS	7600.	6.0 MCL
				Trichloroethene	FD	RAS	1100.	5.0 MCL
				Vinyl Chloride	FD	RAS	1300.	0.50 MCL
	02-Feb-90	D	8010	1,1,1-Trichloroethane		RAS	770. C	200. MCL
				1,1,2-Trichloroethane		RAS	140. C	32. MCL
				1,1-Dichloroethene		RAS	6900. GC	6.0 MCL
				1,2-Dichloroethane		RAS	43. C	0.50 MCL
				Total 1,2-Dichloroethene		RAS	390. C	16. AL
				Trichloroethene		RAS	1200. C	5.0 MCL
				Vinyl Chloride		RAS	930. C	0.50 MCL
	02-Mar-90	D	8010	1,1,1-Trichloroethane		RAS	990. PI	200. MCL
				1,1-Dichloroethene		RAS	8300. PI	6.0 MCL
				Total 1,2-Dichloroethene		RAS	910. PI	16. AL
				Trichloroethene		RAS	1200. PI	5.0 MCL
				Vinyl Chloride		RAS	1700. PI	0.50 MCL
EW-83	23-Jan-90	D	8240	1,1-Dichloroethene		RAS	610.	6.0 MCL
				Trichloroethene		RAS	83.	5.0 MCL
	02-Feb-90	D	8010	1,1-Dichloroethene		RAS	560. C	6.0 MCL
				Tetrachloroethene		RAS	28. C	5.0 MCL
				Trichloroethene		RAS	140. C	5.0 MCL
	02-Mar-90	D	8010	1,1-Dichloroethene		RAS	770. CI	6.0 MCL
				Trichloroethene		RAS	79. CI	5.0 MCL
	23-Jan-90	D	8240	1,1-Dichloroethene		RAS	1100.	6.0 MCL
				1,2-Dichloroethane		RAS	130.	0.50 MCL
				Trichloroethene		RAS	970.	5.0 MCL
				Vinyl Chloride		RAS	430.	0.50 MCL
	02-Feb-90	D	8010	1,1-Dichloroethene		RAS	950. C	6.0 MCL

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(2) = Result obtained from secondary column

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(c) = Random error

(Continued.)

C = Confirmed on second column

G = Exceeds calibration range

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RAS = Radian Analytical Services, Sacramento

TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level	
EW-84	02-Feb-90	D	8010	1,2-Dichloroethane		RAS	150. C	0.50 MCL	
				Tetrachloroethene		RAS	23. C	5.0 MCL	
				Total 1,2-Dichloroethene		RAS	360. C	16. AL	
				Trichloroethene		RAS	1200. C	5.0 MCL	
	02-Mar-90	D	8010	1,1,2,2-Tetrachloroethane		RAS	17. CI	1.0 MCL	
				1,1-Dichloroethene		RAS	1300. CI	6.0 MCL	
				1,2-Dichloroethane		RAS	120. CI	0.50 MCL	
				Total 1,2-Dichloroethene		RAS	170. CI	16. AL	
				Trichloroethene		RAS	1100. CI	5.0 MCL	
				Vinyl Chloride		RAS	420. CI	0.50 MCL	
	EW-85	23-Jan-90	D	8240	1,1-Dichloroethene		RAS	610.	6.0 MCL
					1,2-Dichloroethane		RAS	11.	0.50 MCL
					Trichloroethene		RAS	410.	5.0 MCL
		02-Feb-90	D	8010	1,1-Dichloroethene		RAS	450. C	6.0 MCL
Tetrachloroethene						RAS	400. (a)	5.0 MCL	
Trichloroethene						RAS	580. C	5.0 MCL	
02-Mar-90		D	8010	1,1,1-Trichloroethane		RAS	200. CI	200. MCL	
				1,1-Dichloroethene		RAS	720. CI	6.0 MCL	
				1,2-Dichloroethane		RAS	12. CI	0.50 MCL	
				Trichloroethene		RAS	400. CI	5.0 MCL	
EW-86	23-Jan-90	D	8240	1,1-Dichloroethene		RAS	48.	6.0 MCL	
				Trichloroethene		RAS	19.	5.0 MCL	
	02-Feb-90	D	8010	1,1-Dichloroethene		RAS	40. C	6.0 MCL	
				Tetrachloroethene		RAS	23. (a)	5.0 MCL	
				Trichloroethene		RAS	33. C	5.0 MCL	
	EW-87	23-Jan-90	D	8240	1,1-Dichloroethene		RAS	120.	6.0 MCL
Trichloroethene						RAS	59.	5.0 MCL	
02-Feb-90		D	8010	1,1-Dichloroethene		RAS	100. C	6.0 MCL	
				Trichloroethene		RAS	78. C	5.0 MCL	

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(c) = Random error

(Continued.)

C = Confirmed on second column

G = Exceeds calibration range

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RAS = Radian Analytical Services, Sacramento

TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate		Concentration	Maximum Contaminant Level Or Action Level
					Analysis	Lab		
EW-87	02-Mar-90	D	8010	1,1-Dichloroethene Trichloroethene		RAS	130. CI	6.0 MCL
						RAS	63. CI	5.0 MCL
EW-137	23-Jan-90	C	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	22. C	16. AL
						RAS	380. C	5.0 MCL
	02-Feb-90	C	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	19. C	16. AL
						RAS	400. C	5.0 MCL
	02-Mar-90	C	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	26. CI	16. AL
						RAS	300. CI	5.0 MCL
EW-140	23-Jan-90	C	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	39. C	16. AL
						RAS	120. C	5.0 MCL
	02-Feb-90	C	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	48. C	16. AL
						RAS	120. C	5.0 MCL
	02-Mar-90	C	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	45. PI	16. AL
						RAS	110. PI	5.0 MCL
EW-141	23-Jan-90	C	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	19. C	16. AL
						RAS	160. C	5.0 MCL
	02-Feb-90	C	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	22. C	16. AL
						RAS	140. C	5.0 MCL
	02-Mar-90	C	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	21. CI	16. AL
						RAS	130. CI	5.0 MCL
EW-144	23-Jan-90	C	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	21. C	16. AL
						RAS	710. C	5.0 MCL
	02-Feb-90	C	8010	Trichloroethene		RAS	820. C	5.0 MCL
						RAS	540. CI	5.0 MCL
	02-Mar-90	C	8010	Trichloroethene		RAS	540. CI	5.0 MCL
						RAS	540. CI	5.0 MCL
MW-7	07-Feb-90	B	8010	Total 1,2-Dichloroethene		RAS	34. C	16. AL

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(Continued.)

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TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level
MW-7	07-Feb-90	B	8010	Trichloroethene		RAS	47. C	5.0 MCL
MW-10	21-Feb-90	D	8010	1,1-Dichloroethene		RAS	350. C	6.0 MCL
				1,2-Dichloroethene		RAS	250. C	0.50 MCL
				Total 1,2-Dichloroethene		RAS	83. C	16. AL
				Trichloroethene		RAS	780. C	5.0 MCL
			6010	Aluminum		RAS	4300.	1000. MCL
MW-11	22-Feb-90	D	8010	1,1,1-Trichloroethane		RAS	3700. C	200. MCL
				1,1-Dichloroethene		RAS	17000. C	6.0 MCL
				Trichloroethene		RAS	3900. C	5.0 MCL
				1,1,1-Trichloroethane	FD	RAS	4400. CI	200. MCL
				1,1-Dichloroethene	FD	RAS	21000. CGI	6.0 MCL
				Trichloroethene	FD	RAS	3000. CI	5.0 MCL
MW-12	20-Feb-90	D	8010	1,1,1-Trichloroethane		RAS	860. C	200. MCL
				1,1-Dichloroethene		RAS	7800. C	6.0 MCL
				Tetrachloroethene		RAS	140. C	5.0 MCL
				Trichloroethene		RAS	1400. C	5.0 MCL
MW-14	21-Feb-90	D	8010	1,1,1-Trichloroethane		RAS	1700. C	200. MCL
				1,1-Dichloroethene		RAS	1800. C	6.0 MCL
				Trichloroethene		RAS	1900. C	5.0 MCL
MW-15	15-Feb-90	D	8010	1,1-Dichloroethene		RAS	470. C	6.0 MCL
				Trichloroethene		RAS	320. C	5.0 MCL
MW-260	31-Jan-90	A	8010	Trichloroethene		RAS	44. C	5.0 MCL
				Trichloroethene	FD	RAS	50. C	5.0 MCL
MW-33S	29-Jan-90	C	8010	Trichloroethene		RAS	12000. C	5.0 MCL
MW-41S	12-Jan-90	B	8010	Tetrachloroethene		RAS	130. C	5.0 MCL
				Trichloroethene		RAS	1800. C	5.0 MCL
MW-44S	30-Jan-90	C	8010	Trichloroethene		RAS	22. (b)	5.0 MCL

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(Continued.)

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TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level
MW-55	15-Jan-90	D	8010	1,1,2,2-Tetrachloroethane		RAS	2.4 C	1.0 MCL
MW-57	25-Jan-90	D	8010	1,2-Dichloroethane		RAS	0.73 (c)	0.50 MCL
MW-63	16-Jan-90	B	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	43. C	16. AL
						RAS	110. C	5.0 MCL
MW-65	28-Feb-90	B	8010	Trichloroethene		RAS	95. CI	5.0 MCL
MW-72	20-Feb-90	D	8010	1,1-Dichloroethene		RAS	260. C	6.0 MCL
				1,2-Dichloroethane		RAS	140. C	0.50 MCL
				Trichloroethene		RAS	700. C	5.0 MCL
MW-74	27-Feb-90	NW	8010	1,1-Dichloroethene		RAS	9.8 CI	6.0 MCL
MW-75	05-Feb-90	C	8010	Tetrachloroethene		RAS	17. C	5.0 MCL
				Trichloroethene		RAS	5.7 C	5.0 MCL
MW-89	29-Jan-90	D	8010	1,1-Dichloroethene		RAS	14. (2)(b)	6.0 MCL
MW-91	17-Jan-90	D	8010	Trichloroethene		RAS	5.4 C	5.0 MCL
MW-128	30-Jan-90	C	8010	1,1,2,2-Tetrachloroethane		RAS	250. (a)	1.0 MCL
				Trichloroethene		RAS	20000. C	5.0 MCL
				Trichloroethene	FD	RAS	21000. C	5.0 MCL
MW-129	19-Jan-90	C	8010	Trichloroethene		RAS	290. P	5.0 MCL
MW-131	26-Jan-90	C	8010	Trichloroethene		RAS	49. C	5.0 MCL
MW-132	17-Jan-90	B	8010	1,2-Dichloroethane		RAS	2.0 C	0.50 MCL
				Total 1,2-Dichloroethene		RAS	47. C	16. AL
				Trichloroethene		RAS	120. C	5.0 MCL
				Trichloroethene	FD	RAS	130. C	5.0 MCL
MW-135	22-Jan-90	C	8010	1,2-Dichloroethane		RAS	1.0 C	0.50 MCL
				Trichloroethene		RAS	19. C	5.0 MCL
				1,2-Dichloroethane	FD	RAS	2.3 C	0.50 MCL

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NW = Northwest area

(Continued.)

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TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level
MW-135	22-Jan-90	C	8010	Tetrachloroethene	FD	RAS	9.6 C	5.0 MCL
				Trichloroethene	FD	RAS	23. C	5.0 MCL
MW-136	30-Jan-90	C	8010	Trichloroethene		RAS	690. C	5.0 MCL
MW-139	26-Jan-90	C	8010	Total 1,2-Dichloroethene		RAS	28. C	16. AL
				Trichloroethene		RAS	110. C	5.0 MCL
MW-148	07-Feb-90	B	8010	Trichloroethene		RAS	7.2 C	5.0 MCL
MW-151	08-Feb-90	B	8010	Tetrachloroethene		RAS	6.1 P	5.0 MCL
MW-153	21-Feb-90	B	8010	Tetrachloroethene		RAS	6.5 C	5.0 MCL
				Trichloroethene		RAS	150. C	5.0 MCL
				Tetrachloroethene	FD	RAS	9.8 C	5.0 MCL
				Trichloroethene	FD	RAS	140. C	5.0 MCL
MW-156	26-Feb-90	B	8010	Total 1,2-Dichloroethene		RAS	52. IC	16. AL
				Trichloroethene		RAS	100. IC	5.0 MCL
MW-157	19-Feb-90	B	8010	Tetrachloroethene		RAS	1400. C	5.0 MCL
				Trichloroethene		RAS	5400. C	5.0 MCL
MW-158	13-Feb-90	B	8010	Tetrachloroethene		RAS	210. C	5.0 MCL
				Total 1,2-Dichloroethene		RAS	42. C	16. AL
				Trichloroethene		RAS	1500. C	5.0 MCL
MW-1004	31-Jan-90	NW	8010	1,2-Dichloroethene		RAS	0.67 (c)	0.50 MCL
MW-1005	01-Feb-90	NW	8010	1,1-Dichloroethene		RAS	11. C	6.0 MCL
MW-1021	01-Feb-90	SW	8010	Trichloroethene		RAS	13. P	5.0 MCL
				Trichloroethene	FD	RAS	12. C	5.0 MCL
MW-1022	01-Feb-90	SW	8010	Trichloroethene		RAS	5.9 C	5.0 MCL
MW-1045	12-Feb-90	SW	8010	Trichloroethene		RAS	6.4 (c)	5.0 MCL

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(Continued.)

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TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level
MW-1046	14-Feb-90	SW	8010	1,2-Dichloroethane		RAS	0.60 (b)	0.50 MCL
				Trichloroethene		RAS	20. C	5.0 MCL
MW-1049	09-Feb-90	SW	8010	Trichloroethene		RAS	13. C	5.0 MCL

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(c) = Random error

SW = Southwest area

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TABLE 1-10 REPORT OF HOLDING TIMES,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY THROUGH MARCH 1990, MCLELLAN AIR FORCE BASE

WELL	DATE SAMPLED	MAXIMUM HOLDING TIME		LAB ANALYSIS	LAB	METHOD		8010		8020		8240		6010		7196	
		FIELD	ANALYSIS			DATE	ANALYZED	14 days	DATE	14 days	DATE	14 days	DATE	6 months	DATE	24 hours	DATE
EV-73	23-Jan-90			MS	RAS												
EV-73	23-Jan-90			MSD	RAS												
EV-73	23-Jan-90				RAS												
EV-73	23-Jan-90	FD			RAS												
EV-73	02-Feb-90				RAS												
EV-73	02-Feb-90				RAS												
EV-83	23-Jan-90				RAS												
EV-83	02-Feb-90				RAS												
EV-83	02-Feb-90				RAS												
EV-84	23-Jan-90				RAS												
EV-84	02-Feb-90				RAS												
EV-84	02-Feb-90				RAS												
EV-85	23-Jan-90				RAS												
EV-85	23-Jan-90			AS	RAS												
EV-85	02-Feb-90				RAS												
EV-85	02-Feb-90				RAS												
EV-86	23-Jan-90				RAS												
EV-86	02-Feb-90				RAS												
EV-87	23-Jan-90				RAS												
EV-87	02-Feb-90				RAS												
EV-87	02-Feb-90				RAS												
EV-137	23-Jan-90			AS	RAS												
EV-137	23-Jan-90				RAS												
EV-137	02-Feb-90				RAS												
EV-137	02-Feb-90				RAS												
EV-140	23-Jan-90			AS	RAS												
EV-140	23-Jan-90				RAS												
EV-140	02-Feb-90				RAS												
EV-140	02-Feb-90				RAS												
EV-141	23-Jan-90			AS	RAS												
EV-141	23-Jan-90				RAS												
EV-141	02-Feb-90				RAS												
EV-141	02-Feb-90				RAS												
EV-144	23-Jan-90			AS	RAS												
EV-144	23-Jan-90				RAS												
EV-144	23-Jan-90				RAS												
EV-144	02-Feb-90				RAS												
EV-144	02-Feb-90				RAS												

(Continued)

FD = Field duplicate analysis
MS = Matrix spike
TB = Trip blank
EB = Equipment blank
AS = Analytical spike

RAS = Radian Analytical Services, Sacramento
MSD = Matrix spike duplicate
AB = Ambient blank
NA = Well number not applicable to trip blanks

TABLE 1-10 (Continued.)

WELL	METHOD		MAXIMUM HOLDING TIME		8010		8020		8240		6010		7196	
	LAB	ANALYSIS	LAB	ANALYSIS	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED
MW-7	AS	FD	RAS	AS	13-Feb-90									
MW-10	AS		RAS		24-Feb-90									
MW-10	AS		RAS		24-Feb-90									
MW-10	AS	AB	RAS		24-Feb-90									
MW-11	MS		RAS		25-Feb-90									
MW-11	MSD		RAS		25-Feb-90									
MW-11	MSD		RAS		25-Feb-90									
MW-11	AS	FD	RAS		01-Mar-90									
MW-12	AS		RAS		23-Feb-90									
MW-12	AS	EB	RAS		22-Feb-90									
MW-14	AS		RAS		24-Feb-90									
MW-15	AS		RAS		21-Feb-90									
MW-190	AS		RAS		01-Mar-90									
MW-200	AS		RAS		25-Jan-90									
MW-200	AS		RAS		25-Jan-90									
MW-210	AS		RAS		04-Feb-90									
MW-210	AS		RAS		31-Jan-90									
MW-220	AS		RAS		17-Jan-90									
MW-220	AS		RAS		17-Jan-90									
MW-230	AS		RAS		17-Jan-90									
MW-240	AS		RAS		17-Jan-90									
MW-240	AS	AB	RAS		17-Jan-90									
MW-250	AS		RAS		04-Feb-90									
MW-260	MS		RAS		05-Feb-90									
MW-260	MSD		RAS		05-Feb-90									
MW-260	AS	FD	RAS		04-Feb-90									
MW-260	AS		RAS		25-Jan-90									
MW-280	AS		RAS		05-Feb-90									
MW-335	AS		RAS		15-Jan-90									
MW-335	AS		RAS		01-Feb-90									
MW-415	AS		RAS		15-Jan-90									
MW-445	AS		RAS		01-Feb-90									
MW-51	AS		RAS		15-Jan-90									
MW-52	AS		RAS		25-Jan-90									
MW-53	AS		RAS		19-Jan-90									
MW-54	AS		RAS		25-Jan-90									
MW-54	AS		RAS		25-Jan-90									

(Continued)

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 AS = Analytical spike
 RAS = Radian Analytical Services, Sacramento
 MSD = Matrix spike duplicate
 AB = Ambient blank
 NA = Well number not applicable to trip blanks

TABLE 1-10. (Continued)

WELL	MAXIMUM HOLDING TIME		METHOD		8010		8020		8240		6010		7196	
	DATE SAMPLED	FIELD ANALYSIS	LAB ANALYSIS	LAB	DATE ANALYZED	14 days	DATE ANALYZED	14 days	DATE ANALYZED	14 days	DATE ANALYZED	6 months	DATE ANALYZED	24 hours
MV-55	15-Jan-90			RAS	16-Jan-90									
MV-57	25-Jan-90			RAS	28-Jan-90									
MV-58	22-Jan-90			RAS	23-Jan-90									
MV-59	24-Jan-90			RAS	25-Jan-90									
MV-60	30-Jan-90		AS	RAS	01-Feb-90									
MV-61	23-Jan-90		AS	RAS										
MV-62	23-Jan-90		AS	RAS										
MV-62	23-Jan-90		MS	RAS	25-Jan-90									
MV-62	23-Jan-90		MSD	RAS	25-Jan-90									
MV-62	23-Jan-90	FD	AS	RAS	25-Jan-90									
MV-62	23-Jan-90	FD		RAS	25-Jan-90									
MV-63	16-Jan-90			RAS	18-Jan-90									
MV-64	13-Feb-90			RAS	18-Feb-90									
MV-64	13-Feb-90	EB		RAS	18-Feb-90									
MV-65	28-Feb-90			RAS	01-Mar-90									
MV-66	19-Feb-90		AS	RAS										
MV-66	19-Feb-90			RAS	22-Feb-90									
MV-70	25-Jan-90		AS	RAS										
MV-71	02-Feb-90			RAS	28-Jan-90									
MV-71	02-Feb-90			RAS	06-Feb-90									
MV-72	02-Feb-90	AB		RAS	06-Feb-90									
MV-72	20-Feb-90			RAS	24-Feb-90									
MV-74	27-Feb-90			RAS	28-Feb-90									
MV-75	05-Feb-90		AS	RAS										
MV-75	05-Feb-90			RAS	09-Feb-90									
MV-75	05-Feb-90			RAS	10-Feb-90									
MV-75	05-Feb-90			RAS	01-Mar-90									
MV-76	28-Feb-90			RAS	28-Jan-90									
MV-89	29-Jan-90		AS	RAS										
MV-89	29-Jan-90			RAS	05-Feb-90									
MV-90	20-Feb-90			RAS	22-Feb-90									
MV-91	17-Jan-90			RAS	18-Jan-90									
MV-92	17-Jan-90		AS	RAS										
MV-92	17-Jan-90	FD	AS	RAS	18-Jan-90									
MV-92	17-Jan-90	FD	MS	RAS	18-Jan-90									

(Continued)

FD = Field duplicate analysis
MS = Matrix spike
TB = Trip blank
EB = Equipment blank
AS = Analytical spike
RAS = Radian Analytical Services, Sacramento
MSD = Matrix spike duplicate
AB = Ambient blank
NA = Well number not applicable to trip blanks

TABLE 1-10 (Continued)

WELL	DATE SAMPLED	MAXIMUM HOLDING TIME		LAB ANALYSIS	LAB	8010		8020		8240		6010		7196	
		FIELD ANALYSIS	ANALYSIS			DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED
MW-92	17-Jan-90	FD	MSD	RAS	RAS	18-Jan-90									
MW-92	17-Jan-90	FD		RAS	RAS	18-Jan-90									
MW-104	30-Jan-90		AS	RAS	RAS										
MW-104	30-Jan-90			RAS	RAS	01-Feb-90									
MW-105	12-Jan-90			RAS	RAS	15-Jan-90									
MW-115	18-Jan-90			RAS	RAS	19-Jan-90									
MW-121	15-Jan-90			RAS	RAS	16-Jan-90									
MW-128	30-Jan-90		AS	RAS	RAS										
MW-128	30-Jan-90		MS	RAS	RAS	01-Feb-90									
MW-128	30-Jan-90		MSD	RAS	RAS	01-Feb-90									
MW-128	30-Jan-90		AS	RAS	RAS	01-Feb-90									
MW-128	30-Jan-90	FD		RAS	RAS	07-Feb-90									
MW-129	19-Jan-90		AS	RAS	RAS										
MW-130	19-Jan-90		AS	RAS	RAS	21-Jan-90									
MW-130	19-Jan-90		AS	RAS	RAS	21-Jan-90									
MW-131	26-Jan-90		AS	RAS	RAS	31-Jan-90									
MW-132	17-Jan-90		MS	RAS	RAS	20-Jan-90									
MW-132	17-Jan-90		MSD	RAS	RAS	20-Jan-90									
MW-132	17-Jan-90			RAS	RAS	20-Jan-90									
MW-132	17-Jan-90	FD		RAS	RAS	19-Jan-90									
MW-132	17-Jan-90	AB		RAS	RAS	18-Jan-90									
MW-133	22-Jan-90		AS	RAS	RAS	24-Jan-90									
MW-133	22-Jan-90		AS	RAS	RAS										
MW-134	15-Jan-90		AS	RAS	RAS	16-Jan-90									
MW-134	15-Jan-90		AS	RAS	RAS	23-Jan-90									
MW-135	22-Jan-90		AS	RAS	RAS	23-Jan-90									
MW-135	22-Jan-90	FD	AS	RAS	RAS	23-Jan-90									
MW-135	22-Jan-90	FD		RAS	RAS	01-Feb-90									
MW-136	30-Jan-90		AS	RAS	RAS										
MW-136	30-Jan-90		AS	RAS	RAS	04-Feb-90									
MW-138	29-Jan-90		AS	RAS	RAS	31-Jan-90									
MW-139	26-Jan-90		AS	RAS	RAS										
MW-139	26-Jan-90			RAS	RAS										
MW-142	29-Jan-90		AS	RAS	RAS										

(Continued)

FD = Field duplicate analysis
 MS = Matrix spike
 TB = Trip blank
 EB = Equipment blank
 AS = Analytical spike

RAS = Radian Analytical Services, Sacramento
 MSD = Matrix spike duplicate
 AB = Ambient blank
 NA = Well number not applicable to trip blanks

TABLE 1-10 (Continued.)

		METHOD		MAXIMUM HOLDING TIME		8010		8020		8240		6010		7196	
						14 days		14 days		14 days		6 months		24 hours	
WELL	DATE SAMPLED	FIELD ANALYSIS	LAB ANALYSIS	LAB	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED
MV-1015	26-Jan-90			RAS	31-Jan-90										
MV-1016	26-Jan-90			RAS	31-Jan-90										
MV-1019	01-Feb-90			RAS	11-Feb-90										
MV-1019	01-Feb-90	AB		RAS	11-Feb-90										
MV-1020	01-Feb-90			RAS	11-Feb-90										
MV-1021	01-Feb-90			RAS	11-Feb-90										
MV-1021	01-Feb-90	FD	MS	RAS	12-Feb-90										
MV-1021	01-Feb-90	FD	MSD	RAS	12-Feb-90										
MV-1021	01-Feb-90	FD		RAS	12-Feb-90										
MV-1022	01-Feb-90			RAS	11-Feb-90										
MV-1023	18-Jan-90		AS	RAS								29-Jan-90			
MV-1023	18-Jan-90			RAS	19-Jan-90							29-Jan-90		19-Jan-90	
MV-1024	18-Jan-90		AS	RAS								29-Jan-90		19-Jan-90	
MV-1024	18-Jan-90			RAS	19-Jan-90							29-Jan-90		19-Jan-90	
MV-1025	18-Jan-90		AS	RAS								26-Jan-90		19-Jan-90	
MV-1025	18-Jan-90			RAS	19-Jan-90							26-Jan-90		19-Jan-90	
MV-1037	19-Jan-90			RAS	19-Jan-90										
MV-1038	19-Jan-90			RAS	19-Jan-90										
MV-1039	19-Jan-90			RAS	21-Jan-90										
MV-1039	19-Jan-90	AB		RAS	21-Jan-90										
MV-1044	26-Jan-90		MS	RAS	31-Jan-90										
MV-1044	26-Jan-90		MSD	RAS	31-Jan-90										
MV-1044	26-Jan-90			RAS	31-Jan-90										
MV-1045	26-Jan-90	FD		RAS	31-Jan-90										
MV-1045	12-Feb-90			RAS	16-Feb-90					19-Feb-90					
MV-1046	14-Feb-90		AS	RAS								28-Feb-90			
MV-1046	14-Feb-90			RAS	18-Feb-90							28-Feb-90			
MV-1047	14-Feb-90		AS	RAS								28-Feb-90			
MV-1047	14-Feb-90			RAS	21-Feb-90							28-Feb-90		15-Feb-90	
MV-1047	14-Feb-90	EB	AS	RAS								28-Feb-90		15-Feb-90	
MV-1047	14-Feb-90	EB		RAS	21-Feb-90							28-Feb-90		15-Feb-90	
MV-1048	15-Feb-90		AS	RAS								28-Feb-90		16-Feb-90	
MV-1048	15-Feb-90			RAS	21-Feb-90							28-Feb-90			
MV-1049	09-Feb-90			RAS	13-Feb-90										
MV-1049	09-Feb-90	EB		RAS	16-Feb-90										
MV-1050	09-Feb-90			RAS	13-Feb-90										
MV-1051	09-Feb-90		AS	RAS								22-Feb-90		09-Feb-90	
MV-1051	09-Feb-90			RAS	13-Feb-90							22-Feb-90			
MV-1052	12-Feb-90			RAS	16-Feb-90										

(Continued)

RAS = Radian Analytical Services, Sacramento
MSD = Matrix spike duplicate
AB = Ambient blank
NA = Well number not applicable to trip blanks

FD = Field duplicate analysis
MS = Matrix spike
TB = Trip blank
EB = Equipment blank
AS = Analytical spike

TABLE 1-10 (Continued)

WELL	DATE SAMPLED	FIELD ANALYSIS	LAB ANALYSIS	LAB	METHOD MAXIMUM HOLDING TIME			
					8010 14 days	8020 14 days	8240 14 days	6010 6 months
					DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED
MW-1052	12-Feb-90	EB		RAS	16-Feb-90			
MW-1053	23-Feb-90			RAS	27-Feb-90			
MW-1053	23-Feb-90	TB		RAS	27-Feb-90			
MW-1053	23-Feb-90	AB		RAS	27-Feb-90			
NA	17-Jan-90	TB		RAS	18-Jan-90			
NA	17-Jan-90	TB		RAS	18-Jan-90			
NA	23-Jan-90	TB		RAS	24-Jan-90			
NA	23-Jan-90	TB		RAS	25-Jan-90			
NA	01-Feb-90	TB		RAS	11-Feb-90			
NA	01-Feb-90	TB		RAS	11-Feb-90			
NA	07-Feb-90	TB		RAS	12-Feb-90			
NA	26-Feb-90	TB		RAS	28-Feb-90			

ED = Field duplicate analysis
MS = Matrix spike
TB = Trip blank
EB = Equipment blank
AS = Analytical spike

RAS = Radian Analytical Services, Sacramento
MSD = Matrix spike duplicate
AB = Ambient blank
NA = Well number not applicable to trip blanks

TABLE 1-11 MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR AREA A AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-25D			MW-26D			MW-26D			MW-71		
	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	ND	(25)	ND	ND	(25)	ND	ND	(5)
1,1,1-Trichloroethane	200	ND	(0.2)	ND	ND	(1)	ND	ND	(1)	ND	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	ND	(0.75)	ND	ND	(0.75)	ND	ND	(0.15)
1,1,2-Trichloroethane	32	ND	(0.2)	ND	ND	(1)	ND	ND	(1)	ND	ND	(0.2)
1,1-Dichloroethane	NE	ND	(0.5)	ND	ND	(2.5)	ND	ND	(2.5)	ND	ND	(0.5)
1,1-Dichloroethane	6	ND	(0.2)	ND	ND	(1)	ND	ND	(1)	ND	ND	(0.2)
1,2,3-Trichloropropane	NE	ND	(5)	ND	ND	(25)	ND	ND	(25)	ND	ND	(5)
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	ND	(2.5)	ND	ND	(2.5)	ND	ND	(0.5)
1,2-Dichloropropane	0.5	ND	(0.1)	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.1)
1,3-Dichlorobenzene	5	ND	(0.1)	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.1)
1,4-Dichlorobenzene	130	ND	(0.32)	ND	ND	(1.6)	ND	ND	(1.6)	ND	ND	(0.32)
1,4-Dichlorobenzene	5	ND	(0.24)	ND	ND	(1.2)	ND	ND	(1.2)	ND	ND	(0.24)
1-Chlorohexane	NE	ND	(5)	ND	ND	(25)	ND	ND	(25)	ND	ND	(5)
2-Chloroethylvinylether	NE	ND	(0.5)	ND	ND	(2.5)	ND	ND	(2.5)	ND	ND	(0.5)
Benzyl Chloride	NE	ND	(10)	ND	ND	(50)	ND	ND	(50)	ND	ND	(10)
Bromobenzene	NE	ND	(5)	ND	ND	(25)	ND	ND	(25)	ND	ND	(5)
Bromodichloromethane	100	ND	(0.1)	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.1)
Bromoform	100	ND	(0.5)	ND	ND	(2.5)	ND	ND	(2.5)	ND	ND	(0.5)
Carbon Tetrachloride	NE	ND	(1.2)	ND	ND	(5.9)	ND	ND	(5.9)	ND	ND	(1.2)
Chlorobenzene	0.5	ND	(0.12)	ND	ND	(0.6)	ND	ND	(0.6)	ND	ND	(0.12)
Chloroethane	NE	ND	(0.25)	ND	ND	(1.3)	ND	ND	(1.3)	ND	ND	(0.25)
Chloroform	NE	ND	(0.52)	ND	ND	(2.6)	ND	ND	(2.6)	ND	ND	(0.52)
Chloromethane	100	0.83 C	(0.1)	ND	ND	(0.5)	0.67 (a)	ND	(0.5)	0.25 (a)	ND	(0.1)
Dibromochloromethane	NE	ND	(0.3)	ND	ND	(1.5)	ND	ND	(1.5)	ND	ND	(0.3)
Dibromomethane	100	ND	(0.2)	ND	ND	(1)	ND	ND	(1)	ND	ND	(0.2)
Dibromomethane	NE	ND	(5)	ND	ND	(25)	ND	ND	(25)	ND	ND	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations
(a) = Coelution
(b) = Interference
(c) = Random error
B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column
C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-11 (Continued)

Ground Water Zone Date Sampled Sampled by Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER					
	MW-25D		MW-26D		MW-71	
	Middle		Middle		Middle	
	31-Jan-90		31-Jan-90		02-Feb-90	
	RAD		RAD		RAD	
	04-Feb-90		04-Feb-90		06-Feb-90	
	RAS		RAS		RAS	
	NS		FD		NS	
	NS		NS		NS	

Analytes	Maximum Contaminant Level Or Action Level	Detection		Detection		Detection	
		Result	Limit	Result	Limit	Result	Limit
Methylene Chloride	NE	ND	(0.4)	ND	(2)	ND	(0.4)
Tetrachloroethene	5 MCL	ND	(0.1)	ND	(0.5)	ND	(0.1)
Total 1,2-Dichloroethene	16 AL	ND	(0.2)	ND	(1)	ND	(0.2)
Total Chlorotoluene	NE	ND	(25)	ND	(130)	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(1.7)	ND	(0.34)
Trichloroethene	5 MCL	2.8 C	(0.2)	50 C	(1)	3.5 C	(0.2)
Trichlorofluoroethane	150 AL	ND	(0.2)	ND	(1)	ND	(0.2)
Vinyl Chloride	0.5 MCL	ND	(0.2)	ND	(1)	ND	(0.2)
bis(2-Chloroisopropyl) Ether	NE	ND	(10)	ND	(50)	ND	(10)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(1)	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations.
(a) = Coalition
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column
(a), (b), (c) = Result qualified due to one of the following analytical considerations.
(a) = Coalition
(b) = Interference
(c) = Random error

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-12 MASTER LOG OF WELLS SAMPLED FOR METHOD 8020 FOR AREA A AND ADJACENT ON BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

		WELL NUMBER	
Ground Water Zone		MW-71	
Date Sampled	Middle		
Sampled By	02-Feb-90		
Date Analyzed	RAD		
Lab	06-Feb-90		
Field Analysis	RAS		
Lab Analysis	NS		
	NS		
		Maximum Contaminant	
		Level Or Action Level	
		Result	
		Detection	
		Limit	
Analytes			
1,2-Dichlorobenzene		NE	ND (0.4)
1,3-Dichlorobenzene		130	ND (0.4)
1,4-Dichlorobenzene		5	ND (0.3)
Benzene		1	ND (0.2)
Chlorobenzene		30	ND (0.2)
Ethylbenzene		680	ND (0.2)
Toluene		NE	ND (0.2)
Total Xylenes		1750	ND (0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EW = Extraction Well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a),(b),(c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 PD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-13 MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR THE SOUTHEAST AREA,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone	Date Sampled	Sampled By	Date Analyzed	Lab	Field Analysis	Lab Analysis	MW-28D			MW-1037			MW-1038			MW-1039		
							Middle	24-Jan-90	Shallow	19-Jan-90	Middle	21-Jan-90	Middle	19-Jan-90	Deep A	19-Jan-90	Deep A	19-Jan-90
							RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
							RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS
							NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
							NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
1,1,1-Trichloroethane	200	MCL	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	(0 2)
1,1,2,2-Tetrachloroethane	1	MCL	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	(0 15)
1,1,2-Trichloroethane	32	MCL	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	(0 2)
1,1-Dichloroethane	NE	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	(0 5)
1,1-Dichloroethane	6	MCL	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	(0 2)
1,2,3-Trichloropropane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
1,2-Dichlorobenzene	NE	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	(0 5)
1,2-Dichloroethane	0.5	MCL	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	(0 1)
1,2-Dichloropropane	5	PMCL	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	(0 1)
1,3-Dichlorobenzene	130	MCL	(0 32)	ND	(0 32)	ND	(0 32)	ND	(0 32)	ND	(0 32)	ND	(0 32)	ND	(0 32)	ND	(0 32)	(0 32)
1,4-Dichlorobenzene	5	MCL	(0 24)	ND	(0 24)	ND	(0 24)	ND	(0 24)	ND	(0 24)	ND	(0 24)	ND	(0 24)	ND	(0 24)	(0 24)
1-Chlorobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
2-Chloroethylvinylether	NE	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	(0 5)
Benzyl Chloride	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	(10)
Bromobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
Bromodichloromethane	100	PMCL	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	(0 1)
Bromoform	100	PMCL	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	(0 5)
Bromoethane	NE	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(1 2)	(1 2)
Carbon Tetrachloride	0 5	MCL	(0 12)	ND	(0 12)	ND	(0 12)	ND	(0 12)	ND	(0 12)	ND	(0 12)	ND	(0 12)	ND	(0 12)	(0 12)
Chlorobenzene	30	AL	(0 25)	ND	(0 25)	ND	(0 25)	ND	(0 25)	ND	(0 25)	ND	(0 25)	ND	(0 25)	ND	(0 25)	(0 25)
Chloroethane	NE	ND	(0 52)	ND	(0 52)	ND	(0 52)	ND	(0 52)	ND	(0 52)	ND	(0 52)	ND	(0 52)	ND	(0 52)	(0 52)
Chloroform	100	PMCL	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	(0 1)
Chloromethane	NE	ND	(0 3)	ND	(0 3)	ND	(0 3)	ND	(0 3)	ND	(0 3)	ND	(0 3)	ND	(0 3)	ND	(0 3)	(0 3)
Dibromochloromethane	100	PMCL	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	(0 2)
Dibromomethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EV = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Conclusion
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 FL = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-13 (Continued)

WELL NUMBER									
MW-28D			MW-1037			MW-1038			MW-1039
Ground Water Zone			Middle		Shallow		Middle		Deep A
Date Sampled			24-Jan-90		19-Jan-90		19-Jan-90		19-Jan-90
Sampled By			RAD		RAD		RAD		RAD
Date Analyzed			25-Jan-90		21-Jan-90		21-Jan-90		21-Jan-90
Lab			RAS		RAS		RAS		RAS
Field Analysis			NS		NS		NS		NS
Lab Analysis			NS		NS		NS		NS
Maximum Contaminant									
Analytes	Level Or Action Level		Detection Limit		Detection Result		Detection Limit		Detection Result
Methylene Chloride	NE		(0.4)		ND		(0.4)		ND
Tetrachloroethene	5		(0.1)		ND		(0.1)		ND
Total 1,2-Dichloroethene	16		(0.2)		ND		(0.2)		ND
Total Chlorotoluene	NE		(25)		ND		(25)		ND
Trans-1,3-Dichloropropene	NE		(0.34)		ND		(0.34)		ND
Trichloroethene	5		(0.2)		ND		(0.2)		ND
Trichlorofluoroethane	150		(0.2)		ND		(0.2)		ND
Vinyl Chloride	0.5		(0.2)		ND		(0.2)		ND
bis(2-Chloroisopropyl)Ether	NE		(10)		ND		(10)		ND
cis-1,3-Dichloropropene	NE		(0.2)		ND		(0.2)		ND

TABLE 1 14 (Continued)

		WELL NUMBER			
		MW-7	MW-23D	MW-41S	MW-63
Ground Water Zone		Shallow	Middle	Shallow	Deep A
Date Sampled		07-Feb-90	16-Jan-90	12-Jan-90	16-Jan-90
Sampled By		RAD	RAD	RAD	RAD
Date Analyzed		13-Feb-90	17-Jan-90	15-Jan-90	18-Jan-90
Lab		RAS	RAS	RAS	RAS
Field Analysis		NS	NS	NS	NS
Lab Analysis		NS	NS	NS	NS

Analytes	Maximum Contaminant Level Or Action Level	Detection		Detection		Detection		Detection	
		Result	Limit	Result	Limit	Result	Limit	Result	Limit
Methylene Chloride	NE	4.8 (b)	(4)	ND	(0.4)	ND	(40)	ND	(4)
Tetrachloroethene	5	ND	(1)	ND	(0.1)	ND	(10)	ND	(1)
Total 1,2-Dichloroethene	16	34 C	(2)	ND	(0.2)	ND	(20)	43 C	(2)
Total Chloroethene	NE	ND	(250)	ND	(25)	ND	(2500)	ND	(250)
Trans-1,3-Dichloropropene	NE	ND	(3.4)	ND	(0.34)	ND	(34)	ND	(3.4)
Trichloroethene	5	47. C	(2)	ND	(0.2)	1800 C	(20)	110 C	(2)
Trichlorofluoromethane	150	ND	(2)	ND	(0.2)	ND	(20)	ND	(2)
Vinyl Chloride	0.5	ND	(2)	ND	(0.2)	ND	(20)	ND	(2)
bis(2-Chloroisopropyl)Ether	NE	ND	(100)	ND	(10)	ND	(1000)	ND	(100)
cis-1,3-Dichloropropene	NE	ND	(2)	ND	(0.2)	ND	(20)	ND	(2)

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 U = Unconfirmed, second column not requested
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 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 (a),(b),(c) = Result qualified due to one of the following analytical considerations.
 (a) = Coelution
 (b) = Interference
 (c) = Random error

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE i-14 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER				Maximum Contaminant Level Or Action Level	MW-64		MW-65		MW-66		MW-121	
	Deep A		Shallow			Deep A		Middle					
	13-Feb-90	28-Feb-90	19-Feb-90	15-Jan-90									
Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit				
1,1,1,2-Tetrachloroethane	NS	ND	(5)	ND	(50)	ND	(5)	ND	(5)	ND	(5)		
1,1,1-Trichloroethane	200	ND	(0.2)	ND	(2)	ND	(0.2)	ND	(0.2)	0.47	C		
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	(1.5)	ND	(0.15)	ND	(0.15)	ND	(0.15)		
1,1,2-Trichloroethane	12	ND	(0.2)	ND	(2)	ND	(0.2)	ND	(0.2)	ND	(0.2)		
1,1-Dichloroethane		ND	(0.5)	ND	(5)	ND	(0.5)	ND	(0.5)	ND	(0.5)		
1,1-Dichloroethane		ND	(0.2)	ND	(2)	ND	(0.2)	ND	(0.2)	ND	(0.2)		
1,1,1-Dichloroethane		ND	(5)	ND	(50)	ND	(5)	ND	(5)	ND	(5)		
1,2,3-Trichloropropane		ND	(0.5)	ND	(5)	ND	(0.5)	ND	(0.5)	ND	(0.5)		
2,2-Dichlorobenzene	NE	ND	(0.1)	ND	(1)	ND	(0.1)	ND	(0.1)	ND	(0.1)		
1,2-Dichloroethane	0.5	ND	(0.1)	ND	(1)	ND	(0.1)	ND	(0.1)	ND	(0.1)		
1,2-Dichloropropane	5	PMCL	(1)	ND	(1)	ND	(0.1)	ND	(0.1)	ND	(0.1)		
1,3-Dichlorobenzene	130	ND	(0.32)	ND	(3.2)	ND	(0.32)	ND	(0.32)	ND	(0.32)		
1,4-Dichlorobenzene	5	ND	(0.24)	ND	(2.4)	ND	(0.24)	ND	(0.24)	ND	(0.24)		
1-Chlorohexane	NE	ND	(5)	ND	(50)	ND	(5)	ND	(5)	ND	(5)		
2-Chloroethylvinylether	NE	ND	(0.5)	ND	(5)	ND	(0.5)	ND	(0.5)	ND	(0.5)		
Benzyl Chloride	NE	ND	(10)	ND	(100)	ND	(10)	ND	(10)	ND	(10)		
Bromobenzene	NE	ND	(5)	ND	(50)	ND	(5)	ND	(5)	ND	(5)		
Bromodichloromethane	100	PMCL	(0.1)	ND	(1)	ND	(0.1)	ND	(0.1)	ND	(0.1)		
Bromoform	100	PMCL	(0.5)	ND	(5)	ND	(0.5)	ND	(0.5)	ND	(0.5)		
Bromomethane	NE	ND	(1.2)	ND	(12)	ND	(1.2)	ND	(1.2)	ND	(1.2)		
Carbon Tetrachloride	0.5	PMCL	(0.12)	ND	(1.2)	ND	(0.12)	ND	(0.12)	ND	(0.12)		
Chlorobenzene	30	AL	(0.25)	ND	(2.5)	ND	(0.25)	ND	(0.25)	ND	(0.25)		
Chloroethane	NE	ND	(0.52)	ND	(5.2)	ND	(0.52)	ND	(0.52)	ND	(0.52)		
Chloroform	100	PMCL	(0.1)	ND	(1)	ND	(0.1)	ND	(0.1)	ND	(0.1)		
Chloromethane	NE	ND	(0.3)	ND	(3)	ND	(0.3)	ND	(0.3)	ND	(0.3)		
Dibromochloromethane	100	PMCL	(0.2)	ND	(2)	ND	(0.2)	ND	(0.2)	ND	(0.2)		
Dibromomethane	NE	ND	(5)	ND	(50)	ND	(5)	ND	(5)	ND	(5)		
Methylene Chloride	NE	ND	(0.4)	ND	(4)	ND	(0.4)	1.9	C	ND	(0.4)		

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(c) = Random error

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MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-14 (Continued)

		WELL NUMBER							
		MW-64		MW-65		MW-66		MW-121	
Ground Water Zone		Deep A		Shallow		Deep A		Middle	
Date Sampled		13-Feb-90		28-Feb-90		19-Feb-90		15-Jan-90	
Sampled By		RAD		RAD		RAD		RAD	
Date Analyzed		18-Feb-90		01-Mar-90		22-Feb-90		16-Jan-90	
Lab		RAS		RAS		RAS		RAS	
Field Analysis		NS		NS		NS		NS	
Lab Analysis		NS		NS		NS		NS	

Analytes	Maximum Contaminant Level Or Action	Contaminant	Detection		D-tetection		Detection		
			Result	Limit	Result	Limit	Result	Limit	
Tetrachloroethane	5	MCL	ND	(0.1)	ND, I	(1)	ND	(0.1)	ND (0.1)
Total 1,2-Dichloroethane	16	AL	ND	(0.2)	ND	(2)	ND	(0.2)	ND (0.2)
Total Chlorotoluene	NE		ND	(25)	ND	(250)	ND	(25)	ND (25)
Trans-1,3-Dichloropropene	NE		ND	(0.34)	ND	(3.4)	ND	(0.34)	ND (0.34)
Trichloroethane	5	MCL	ND	(0.2)	95	CI	ND	(0.2)	ND (0.2)
Trichlorofluoroethane	150	AL	HD	(0.2)	ND	(2)	ND	(0.2)	ND (0.2)
Vinyl Chloride	0.5	MCL	ND	(0.2)	ND	(100)	ND	(0.2)	ND (0.2)
bis(2-Chloroisopropyl)Ether	NE		ND	(10)	ND	(10)	ND	(10)	ND (10)
cis-1,3-Dichloropropene	NE		ND	(0.2)	HD	(2)	ND	(0.2)	ND (0.2)

TABLE 1-14 (Continued)

		WELL NUMBER					
		MW-132		MW-145		MW-146	
Ground Water Zone		Deep B		Middle		Deep A	
Date Sampled		17-Jan-90		25-Jan-90		06-Feb-90	
Sampled by		RAD		RAD		RAD	
Date Analyzed		19-Jan-90		28-Jan-90		08-Feb-90	
Lab		RAS		PAS		RAS	
Field Analysis		PD		NS		NS	
Lab Analysis		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	

TABLE 1-14 (Continued)

	WELL NUMBER					
	MW-132	MW-132	MW-145	MW-146		
Ground Water Zone	Deep B	Deep B	Middle	Deep A		
Date Sampled	17-Jan-90	17-Jan-90	25-Jan-90	06-Feb-90		
Sampled By	RAD	RAD	RAD	RAD		
Date Analyzed	19-Jan-90	20-Jan-90	28-Jan-90	08-Feb-90		
Lab	RAS	RAS	RAS	RAS		
Field Analysis	FD	NS	NS	NS		
Lab Analysis	NS	NS	NS	NS		
Analytes	Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit	
	Result	Result	Result	Result	Result	Limit
Tetrachloroethene	5 MCL	ND	(1)	(0.5)	ND	(0.1)
Total 1,2-Dichloroethene	16 AL	ND	(2)	(1)	0.51 C	(0.2)
Total Chlorotoluene	NE	ND	(250)	(130)	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	(3.4)	(1.7)	ND	(0.34)
Trichloroethene	5 MCL	130. C	(2)	(1)	1.9 C	(0.2)
Trichlorofluoromethane	150 AL	ND	(2)	(1)	ND	(0.2)
Vinyl Chloride	0.5 MCL	ND	(2)	(1)	ND	(0.2)
bis(2-Chloroisopropyl) Ether	NE	ND	(100)	(50)	ND	(10)
cis-1,3-Dichloropropene	NE	ND	(2)	(1)	ND	(0.2)

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 (2) = Result obtained from secondary column

C = Confirmed on second column
 G = Exceeds calibration range
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 NE = Threshold value not established
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TABLE 1 14 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-147			MW-148			MW-149			MW-150		
	Deep B 06-Feb-90 RAD 08-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Middle 22-Feb-90 RAD 24-Feb-90 RAS NS NS	Middle 22-Feb-90 RAD 24-Feb-90 RAS NS NS	Middle 22-Feb-90 RAD 24-Feb-90 RAS NS NS
WELL NUMBER												
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
1,1,1,2-Tetrachloroethane	NE	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,1,1-Trichloroethane	200	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)
1,1,2-Trichloroethane	32	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1-Dichloroethane	NE	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,1-Dichloroethene	6	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,2,3-Trichloropropane	NE	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,2-Dichlorobenzene	NE	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,2-Dichloroethane	0.5	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,2-Dichloropropane	5	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,3-Dichlorobenzene	130	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)
1,4-Dichlorobenzene	5	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)
1-Chlorohexane	NE	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
2-Chloroethylvinyl ether	NE	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Benzyl Chloride	NE	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)
Bromobenzene	NE	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Bromodichloromethane	100	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Bromoform	100	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Bromomethane	NE	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)
Carbon Tetrachloride	0.5	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)
Chlorobenzene	30	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)
Chloroethane	NE	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)
Chloroform	100	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Chloromethane	NE	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)
Dibromochloromethane	100	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Dibromomethane	NE	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Methylene Chloride	NE	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)

ALL UNITS ARE ug/l.

AL = DHS Action Level
 EW = Extraction well
 ..I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-14 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-147			MW-148			MW-149			MW 150		
	Deep B	06-Feb-90	07-Feb-90	Deep B	07-Feb-90	07-Feb-90	Deep B	07-Feb-90	07-Feb-90	Middle	22-Feb-90	24-Feb-90
	RAD		RAD	RAD		RAD	RAD		RAD			
	08-Feb-90		12-Feb-90	12-Feb-90		12-Feb-90	12-Feb-90		12-Feb-90			
	RAS		RAS	RAS		RAS	RAS		RAS			
	NS		NS	NS		NS	NS		NS			
	NS		NS	NS		NS	NS		NS			
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Tetrachloroethane	5 MCL	ND	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	2.5 C	(0.1)
Total 1,2-Dichloroethane	16 AL	ND	ND	(0.2)	2.5 C	(0.2)	2.5 C	(0.2)	ND	(0.2)	ND	(0.2)
Total Chlorotoluene	NE	ND	ND	(25)	ND	(25)	ND	(25)	ND	(25)	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)
Trichloroethane	5 MCL	ND	ND	(0.2)	7.2 C	(0.2)	7.2 C	(0.2)	0.98 C	(0.2)	ND	(0.2)
Trichlorofluoromethane	150 AL	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Vinyl Chloride	0.5 MCL	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE	ND	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)
cis-1,3-Dichloropropene	NE	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 PD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 F = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 ME = Threshold value not established
 PHCL = US EPA primary maximum contaminant level

TABLE 1-14 (Continued)

Ground Water Zone Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-151			MW-152			MW-153		
	Deep A			Deep B			Middle		
	08-Feb-90			08-Feb-90			21-Feb-90		
	RAD			RAD			RAD		
	12-Feb-90			12-Feb-90			25-Feb-90		
	RAS			RAS			RAS		
	NS			NS			NS		
	NS			NS			NS		
Analytes	Maximum Contaminant Level Or Action Level			Detection			Detection		
	Result			Limit			Limit		
1,1,1,2-Tetrachloroethane	NE			(5)			ND		(50)
1,1,1-Trichloroethane	200	MCL		(0.2)			ND		(2)
1,1,2,2-Tetrachloroethane	1	MCL		(0.15)			ND		(1.5)
1,1,2-Trichloroethane	32	MCL		(0.2)			ND		(2)
1,1-Dichloroethane	NE			(0.5)			ND		(5)
1,1-Dichloroethane	6	MCL		(0.2)			ND		(2)
1,2,3-Trichloropropane	NE			(5)			ND		(50)
1,2-Dichlorobenzene	NE			(0.5)			ND		(5)
1,2-Dichloroethane	0.5	MCL		(0.1)			ND		(1)
1,2-Dichloropropane	5	PMCL		(0.1)			ND		(1)
1,3-Dichlorobenzene	130	MCL		(0.32)			ND		(3.2)
1,4-Dichlorobenzene	5	MCL		(0.24)			ND		(2.4)
1-Chlorohexane	NE			(5)			ND		(50)
2-Chloroethylvinyl ether	NE			(0.5)			ND		(5)
Benzyl Chloride	NE			(10)			ND		(100)
Bromobenzene	NE			(5)			ND		(50)
Bromodichloroethane	100	PMCL		(0.1)			ND		(1)
Bromoform	100	PMCL		(0.5)			ND		(5)
Bromomethane	NE			(1.2)			ND		(12)
Carbon Tetrachloride	0.5	MCL		(0.12)			ND		(1.2)
Chlorobenzene	30	AL		(0.25)			ND		(2.5)
Chloroethane	NE			(0.52)			ND		(5.2)
Chloroform	100	PMCL		(0.1)			ND		(1)
Chloromethane	NE			(0.3)			ND		(3)
Dibromochloroethane	100	PMCL		(0.2)			ND		(2)
Dibromomethane	NE			(5)			ND		(50)
Methylene Chloride	NE			(0.4)			ND		(4)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EH = Extraction Well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 C = Confirmed on second column
 D = Field Duplicate
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

TABLE 1 14 (Continued)

		WELL NUMBER					
		MW-151		MW-152		MW-153	
Ground Water Zone		Deep A		Deep B		Middle	
Date Sampled		08-Feb-90		08-Feb-90		21-Feb-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		12-Feb-90		12-Feb-90		25-Feb-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		NS		NS	
Lab Analysis		NS		NS		NS	
		Maximum Contaminant		Detection		Detection	
		Level Or Action Level		Limit		Limit	
Analytes		Result		Result		Result	
				Limit		Limit	
Tetrachloroethene		5	MCL	6.1 P	ND	(0.1)	ND
Total 1,2-Dichloroethene		16	AL	ND	ND	(0.2)	ND
Total Chlorotoluene		NE		ND	ND	(25)	ND
Trans-1,3-Dichloropropene		5	MCL	ND	ND	(0.34)	ND
Trichloroethene		150	AL	ND	ND	(0.2)	ND
Trichlorofluoroethene		0.5	MCL	ND	ND	(0.2)	ND
Vinyl Chloride		NE		ND	ND	(10)	ND
bis(2-Chloroisopropyl)Ether		NE		ND	ND	(0.2)	ND
cis-1,3-Dichloropropene		NE		ND	ND	(100)	ND
						(2)	(2)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a),(b),(c) = Result qualified due to one of the following analytical considerations.
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1 14 (Continued)

Ground Water Zone Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-154			MW-155			MW-156			MW-157		
	Deep B	Shallow	Deep A	Shallow	Deep A	Shallow	Deep A	Shallow	Deep A	Shallow	Deep A	Shallow
	08-Feb-90	07-Feb-90	26-Feb-90	07-Feb-90	26-Feb-90	07-Feb-90	26-Feb-90	07-Feb-90	26-Feb-90	07-Feb-90	26-Feb-90	07-Feb-90
	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
1,1,1,2-Tetrachloroethane	NE	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(2500)
1,1,1-Trichloroethane	200	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(100)
1,1,2,2-Tetrachloroethane	1	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(75)
1,1,2-Trichloroethane	32	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(100)
1,1-Dichloroethane	NE	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(250)
1,1-Dichloroethane	6	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(100)
1,2,3-Trichloropropane	NE	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(2500)
1,2-Dichlorobenzene	NE	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(250)
1,2-Dichloroethane	0.5	(6.1)	ND	(6.1)	ND	(6.1)	ND	(6.1)	ND	(6.1)	ND	(50)
1,2-Dichloropropane	5	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(50)
1,3-Dichlorobenzene	130	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(160)
1,4-Dichlorobenzene	5	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(126)
1-Chlorohexane	NE	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(2500)
2-Chloroethylvinylether	NE	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(250)
Benzyl Chloride	NE	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(5000)
Bromobenzene	NE	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(2500)
Bromodichloromethane	100	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(50)
Bromoform	NE	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(590)
Bromoethane	NE	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(60)
Carbon Tetrachloride	0.5	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(130)
Chlorobenzene	30	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(260)
Chloroethane	NE	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(50)
Chloroform	100	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(150)
Chloromethane	NE	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(100)
Dibromochloromethane	100	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(2500)
Dibromomethane	NE	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(200)
Methylene Chloride	NE	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(200)

ALL UNITS ARE ug/l.

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 (b) = Interference

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-14 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER							
	MW-154		MW-155		MW-156		MW-157	
	Deep B 08-Feb-90 RAD 12-Feb-90 RAS NS NS	Shallow 07-Feb-90 RAD 13-Feb-90 RAS NS NS	Deep A 26-Feb-90 RAD 01-Mar-90 RAS NS NS	Shallow 19-Feb-90 RAD 23-Feb-90 RAS NS NS				
Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
Analytes								
Tetrachloroethane	5 MCL	ND	(0.1)	ND	(0.1)	ND	1400 C	(50)
Total 1,2-Dichloroethane	16 AL	ND	(0.2)	3.3 (a)	(0.2)	52 IC	ND	(100)
Total Chloroethene	NE	ND	(25)	ND	(25)	ND	ND	(13000)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(0.34)	ND	ND	(170)
Trichloroethane	5 MCL	0.83 C	(0.2)	ND	(0.2)	100 IC	5400 C	(100)
Trichlorofluoromethane	150 AL	ND	(0.2)	ND	(0.2)	ND	ND	(100)
Vinyl Chloride	0.5 MCL	ND	(0.2)	ND	(0.2)	ND	ND	(100)
bis(2-Chloroisopropyl)Ether	NE	ND	(10)	ND	(10)	ND	ND	(5000)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(0.2)	ND	ND	(100)

ALL UNITS ARE ug/l.

AL = DBS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations.
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
PD = Field Duplicate
MCL = DBS maximum contaminant level
MD = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US. EPA primary maximum contaminant level

TABLE 1-14 (Continued)

WELL NUMBER

MW-158

 Ground Water Zone
 Date Sampled
 Sampled By
 Date Analyzed
 Lab
 Field Analysis
 Lab Analysis

 Shallow
 13-Feb-90
 RAD
 19-Feb-90
 RAS
 MS
 MS

Analytes

 Maximum Contaminant
 Level Or Action Level

 Detection
 Limit

1,1,1,2-Tetrachloroethane	NE	ND	(250)
1,1,1-Trichloroethane	200	29. C	(10)
1,1,2,2-Tetrachloroethane	1	ND	(7.5)
1,1,2-Trichloroethane	32	ND	(10)
1,1-Dichloroethane	NE	ND	(25)
1,1-Dichloroethane	6	ND	(10)
1,2,3-Trichloropropane	NE	ND	(250)
1,2-Dichlorobenzene	NE	ND	(25)
1,2-Dichloroethane	0.5	ND	(5)
1,2-Dichloropropane	5	ND	(5)
1,3-Dichlorobenzene	130	ND	(16)
1,4-Dichlorobenzene	5	ND	(12)
1-Chlorohexane	NE	ND	(250)
2-Chloroethylvinyl ether	NE	ND	(25)
Benzyl Chloride	NE	ND	(500)
Bromobenzene	NE	ND	(250)
Bromodichloroethane	100	ND	(5)
Bromoform	100	ND	(25)
Bromoethane	NE	ND	(59)
Carbon Tetrachloride	0.5	ND	(6)
Chlorobenzene	30	ND	(13)
Chloroethane	NE	ND	(26)
Chloroform	100	ND	(5)
Chloromethane	NE	ND	(15)
Dibromochloroethane	100	ND	(10)
Dibromoethane	NE	ND	(250)
Methylene Chloride	NE	22 C	(20)

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 EW = Extraction Well
 I = Result differs from last issue of report
 MA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 following analytical considerations.
 (b) = Interference

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level
 (c) = Random error

TABLE 1-14 (Continued)

WELL NUMBER

MW-158

Ground Water Zone

Date Sampled 13-Feb-90

Sampled By RAD

Date Analyzed 19-Feb-90

Lab RAS

Field Analysis NS

Lab Analysis MS

Maximum Contaminant Level Or Action Level

Detection Limit

Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit
Tetrachloroethene	5 MCL	210. C	(5)
Total 1,2-Dichloroethene	16 AL	42. C	(10)
Total Chloroethene	NE	ND	(1300)
Trans-1,3-Dichloropropene	NE	ND	(17)
Trichloroethene	5 MCL	1500. C	(10)
Trichlorofluoroethene	150 AL	ND	(10)
Vinyl Chloride	0.5 MCL	ND	(10)
bin(2-Chloroisopropyl) Ether	NE	ND	(500)
cis-1,3-Dichloropropene	NE	ND	(10)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EN = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-15 MASTER LOG OF WELLS SAMPLED FOR METHOD 8020 FOR AREA B AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-66			MW-145			MW-146			MW-147		
	Deep A 19-Feb-90 RAD 22-Feb-90 RAS NS NS	Middle 25-Jan-90 RAD 28-Jan-90 RAS NS NS	Deep A 06-Feb-90 RAD 08-Feb-90 RAS NS NS	Deep B 06-Feb-90 RAD 08-Feb-90 RAS NS NS								
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	
1,2-Dichlorobenzene	NE	ND	(0.4)	ND	(0.4)	ND	ND	(0.4)	ND	ND	(0.4)	
1,3-Dichlorobenzene	130	ND	(0.4)	ND	(0.4)	ND	ND	(0.4)	ND	ND	(0.4)	
1,4-Dichlorobenzene	5	MCL	(0.3)	ND	(0.3)	ND	ND	(0.3)	ND	ND	(0.3)	
Benzene	1	MCL	(0.2)	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	
Chlorobenzene	30	AL	(0.2)	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	
Ethylbenzene	680	MCL	(0.2)	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	
Toluene	NE	ND	(0.2)	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	
Total Xylenes	1750	MCL	(0.2)	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations.
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 4-15 (Continued)

		MW-153		MW-154	
Ground Water Zone		Middle	Middle	Deep B	
Date Sampled		21-Feb-90	21-Feb-90	08-Feb-90	
Sampled By		RAD	RAD	RAD	
Date Analyzed		25-Feb-90	25-Feb-90	12-Feb-90	
Lab		RAS	RAS	RAS	
Field Analysis		NS	FD	NS	
Lab Analysis		NS	NS	NS	
		MW-153		MW-154	
		Maximum Contaminant	Detection	Detection	Detection
		Level Or Action Level	Limit	Limit	Limit
Analytes		Result	Result	Result	Result
1,2-Dichlorobenzene	NE	ND	ND	ND	ND
1,3-Dichlorobenzene	130 MCL	ND	ND	ND	ND
1,4-Dichlorobenzene	5 MCL	ND	ND	ND	ND
Benzene	1 MCL	ND	ND	ND	ND
Chlorobenzene	30 AL	ND	ND	ND	ND
Ethylbenzene	680 MCL	ND	ND	ND	ND
Toluene	NE	ND	ND	ND	ND
Total Xylenes	1750 MCL	ND	ND	ND	ND

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a),(b),(c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error
B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
KAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column
C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US. EPA primary maximum contaminant level

TABLE 1-16. MASTER LOG OF WELLS SAMPLED FOR METHOD 8240 FOR AREA B AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

WELL NUMBER

MW-150

Ground Water Zone

Middle

Date Sampled

22-Feb-90

Sampled By

RAD

Date Analyzed

05-Mar-90

Lab

RAS

Field Analysis

NS

Lab Analysis

MS

Analytes

Maximum Contaminant Level Or Action Level

Result

Detection Limit

1,1,1-Trichloroethane 200 MCL ND (3.8)

1,1,2,2-Tetrachloroethane 1 MCL ND (5)

1,1,2,2-Trichloroethane 32 MCL ND (5)

1,1-Dichloroethane NE ND (4.7)

1,1-Dichloroethane 6 MCL ND (2.8)

1,2-Dichloroethane 0.5 MCL ND (2.8)

1,2-Dichloropropane 5 PMCL ND (5)

2-Butanone NE ND (10)

2-Chloroethylether NE ND (10)

2-Hexanone NE ND (10)

4-Methyl-2-Pentanone NE ND (10)

Acetone HE 16. ND (10)

Benzene 1 MCL ND (4.4)

Bromodichloromethane 100 PMCL ND (3.5)

Bromoform 100 PMCL ND (4.7)

Bromomethane NE ND (5)

Carbon Disulfide NE ND (5)

Carbon Tetrachloride 0.5 MCL ND (2.8)

Chlorobenzene 30 AL ND (5)

Chloroethane NE ND (5)

Chloroform 100 PMCL ND (2.5)

Chloromethane NE ND (5)

Dibromochloromethane 100 PMCL ND (3.1)

Ethylbenzene 680 MCL ND (5)

Methylene Chloride NE 6.8 B (5)

Styrene HE ND (5)

ALL UNITS ARE ug/L

AL = DHS Action Level

EW = Extraction well

I = Result differs from last issue of report

NA = Not analyzed

MS = Normal sample

RAD = Radian Corporation, Sacramento

U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected

FD = Field Duplicate

MCL = DHS maximum contaminant level

ND = Not detected at specified detection limit

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column

G = Exceeds calibration range

MW = Monitoring well

NE = Threshold value not established

PMCL = US EPA primary maximum contaminant level

TABLE 1-16 (Continued)

WELL NUMBER

MW-150

Ground Water Zone Middle
Date Sampled 22-Feb-90
Sampled By RAD
Date Analyzed 05-Mar-90
Lab RAS
Field Analysis NS
Lab Analysis NS

Analytes	Maximum Contaminant Level Or Action Level		Result	Detection Limit	
	Level	Or Action Level		Result	Limit
Tetrachloroethene	5	MCL	ND	ND	(4.1)
Toluene	NE		ND	ND	(5)
Total Xylenes	1750	MCL	ND	ND	(5)
Trans-1,3-Dichloropropene	NE		ND	ND	(5)
Trichloroethene	5	MCL	ND	ND	(2.5)
Vinyl Acetate	NE		ND	ND	(6.9)
Vinyl Chloride	0.5	MCL	ND	ND	(5)
cis-1,3-Dichloropropene	NE		ND	ND	(5)
trans-1,2-Dichloroethene	NE		ND	ND	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-17 MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR AREA B AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

		MW-66		MW-147	
Ground Water Zone		Deep A		Deep B	
Date Sampled		19-Feb-90		06-Feb-90	
Sampled By		RAD		RAD	
Date Analyzed		01-Mar-90		20-Feb-90	
Lab		RAS		RAS	
Field Analysis		NS		NS	
Lab Analysis		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	

TABLE 1-18. MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR AREA B AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, McCLELLAN AIR FORCE BASE

WELL NUMBER			
MW-147			

Ground Water Zone	Deep B		
Date Sampled	06-Feb-90		
Sampled By	RAD		
Date Analyzed	07-Feb-90		
Lab	RAS		
Field Analysis	NS		
Lab Analysis	NS		

Analytes	Maximum Contaminant	Detection	
	Level Or Action Level	Result	Limit
Chromium, Hexavalent	50	PMCL	ND (0.02)

ALL UNITS ARE mg/L			
AL	= DHS Action Level		
EW	= Extraction well		
I	= Result differs from last issue of report		
NA	= Not analyzed		
NS	= Normal sample		
RAD	= Radian Corporation, Sacramento		
U	= Unconfirmed, second column not requested		
B	= Detected in blank, result not corrected		
PD	= Field Duplicate		
MCL	= DHS maximum contaminant level		
ND	= Not detected at specified detection limit		
P	= Previously confirmed		
RAS	= Radian Analytical Services, Sacramento		
C	= Confirmed on second column		
G	= Exceeds calibration range		
MW	= Monitoring well		
NE	= Threshold value not established		
PMCL	= US EPA primary maximum contaminant level		
S	= Determined by method of standard addition		

TABLE 1-19 MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR THE SOUTHWEST AREA,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-1000			MW-1015			MW-1016			MW-1020		
	Middle			Middle			Shallow			Shallow		
	19-Feb-90	22-Feb-90	NS	26-Jan-90	31-Jan-90	NS	26-Jan-90	31-Jan-90	NS	01-Feb-90	11-Feb-90	NS
Maximum Contaminant Level Or Action Level	Result			Result			Result			Result		
	Detection Limit			Detection Limit			Detection Limit			Detection Limit		
Analytes	Result			Result			Result			Result		
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND	ND	(5)
1,1,1-Trichloroethane	200	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	ND	(0.15)	ND	ND	(0.15)	ND	ND	(0.15)
1,1,2-Trichloroethane	32	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)
1,1-Dichloroethane	NE	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)
1,1-Dichloroethane	6	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)
1,2,3-Trichloropropane	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND	ND	(5)
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)
1,2-Dichloroethane	0.5	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)
1,2-Dichloropropane	5	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)
1,3-Dichlorobenzene	130	ND	(0.32)	ND	ND	(0.32)	ND	ND	(0.32)	ND	ND	(0.32)
1,4-Dichlorobenzene	5	ND	(0.24)	ND	ND	(0.24)	ND	ND	(0.24)	ND	ND	(0.24)
1-Chlorohexane	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND	ND	(5)
2-Chloroethylvinylether	NE	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)
Benzyl Chloride	NE	ND	(10)	ND	ND	(10)	ND	ND	(10)	ND	ND	(10)
Bromobenzene	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND	ND	(5)
Bromodichloromethane	100	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)
Bromoform	100	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)
Bromomethane	NE	ND	(1.2)	ND	ND	(1.2)	ND	ND	(1.2)	ND	ND	(1.2)
Carbon Tetrachloride	0.5	ND	(0.12)	ND	ND	(0.12)	ND	ND	(0.12)	ND	ND	(0.12)
Chlorobenzene	30	ND	(0.25)	ND	ND	(0.25)	ND	ND	(0.25)	ND	ND	(0.25)
Chloroethane	NE	ND	(0.52)	ND	ND	(0.52)	ND	ND	(0.52)	ND	ND	(0.52)
Chloroform	100	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)
Chloromethane	NE	ND	(0.3)	ND	ND	(0.3)	ND	ND	(0.3)	ND	ND	(0.3)
Dibromochloromethane	100	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)
Dibromomethane	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND	ND	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analysed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a),(b),(c) = Result qualified due to one of the following analytical considerations.
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-19 (Continued)

		WELL NUMBER					
		MW-1000		MW-1015		MW-1016	
Ground Water Zone		Middle		Middle		Shallow	
Date Sampled		19-Feb-90		26-Jan-90		26-Jan-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		22-Feb-90		31-Jan-90		31-Jan-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		NS		NS	
Lab Analysis		NS		NS		NS	
Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit		Detection Limit	
Analytes		Result		Result		Result	
Methylene Chloride	NE	2 1 C	(0.4)	ND	(0.4)	ND	(0.4)
Tetrachloroethene	5	ND	(0.1)	ND	(0.1)	ND	(0.1)
Total 1,2-Dichloroethene	16	ND	(0.2)	ND	(0.2)	ND	(0.2)
Total Chlorotoluene	NE	ND	(25)	ND	(25)	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(0.34)	ND	(0.34)
Trichloroethene	5	ND	(0.2)	ND	(0.2)	ND	(0.2)
Trichlorofluoromethane	150	ND	(0.2)	ND	(0.2)	ND	(0.2)
Vinyl Chloride	0.5	ND	(0.2)	ND	(0.2)	ND	(0.2)
bis(2-Chloroisopropyl) Ether	NE	ND	(10)	ND	(10)	ND	(10)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(0.2)	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EM = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-1021				MW-1022				MW-1023			
	Shallow 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS PD NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS PD NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS PD NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS PD NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS PD NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS PD NS
Analyses	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND
1,1,1-Trichloroethane	200	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND
1,1,2-Trichloroethane	32	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND
1,1-Dichloroethane	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND
1,1-Dichloroethane	6	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND
1,2,3-Trichloropropane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND
1,2-Dichloroethane	0.5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND
1,2-Dichloropropane	5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND
1,3-Dichlorobenzene	130	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND
1,4-Dichlorobenzene	5	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND
1-Chlorobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND
2-Chloroethylvinyl ether	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND
Benzyl Chloride	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND
Bromobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND
Bromodichloromethane	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND
Bromoform	100	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND
Bromomethane	NE	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND
Carbon Tetrachloride	0.5	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND
Chlorobenzene	30	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND
Chloroethane	NE	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND
Chloroform	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND
Chloromethane	NE	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND
Dibromochloromethane	100	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND
Dibromomethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND
Methylene Chloride	NE	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND

ALL UNITS ARE ug/L

AL = DHS Action Level
 EW = Extraction Well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 PD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-1021				MW-1022				MW-1023			
	Shallow 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS FD NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS FD NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS FD NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Shallow 18-Jan-90 RAD 19-Jan-90 RAS NS NS	Shallow 18-Jan-90 RAD 19-Jan-90 RAS NS NS	Shallow 18-Jan-90 RAD 19-Jan-90 RAS NS NS	Shallow 18-Jan-90 RAD 19-Jan-90 RAS NS NS
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Detection Limit
Tetrachloroethane	5 MCL	0.84 P	(0.1)	0.77 C	(0.1)	0.22 (a)	(0.1)	ND	(0.1)	ND	(0.1)	(0.1)
Total 1,2-Dichloroethane	16 AL	ND	(0.2)	0.58 C	(0.2)	0.49 C	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Total Chlorotoluene	NE	ND	(25)	ND	(25)	ND	(25)	ND	(25)	ND	(25)	(25)
Trans-1,3-Dichloropropene	5 MCL	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	(0.34)
Trichloroethane	5	13. P	(0.2)	12 C	(0.2)	5.9 C	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Trichlorofluoroethane	150 AL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Vinyl Chloride	0.5 MCL	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	(10)
bis(2-Chloroisopropyl)Ether	NE	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-1024			MW-1025			MW-1044		
	Middle			Deep A			Shallow		
	18-Jan-90 RAD	19-Jan-90 RAS	NS MS	18-Jan-90 RAD	19-Jan-90 RAS	NS MS	26-Jan-90 RAD	31-Jan-90 RAS	Shallow 26-Jan-90 RAD
WELL NUMBER									
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit		
	Result	Result	Result	Result	Result	Result	Result	Result	Limit
1,1,1,2-Tetrachloroethane	NE	ND	0.84 C	(5)	ND	0.47 C	ND	ND	(5)
1,1,1-Trichloroethane	200	ND	(0.2)	(0.2)	ND	(0.15)	ND	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	(0.15)	ND	(0.2)	ND	ND	(0.15)
1,1,2-Trichloroethane	32	ND	(0.2)	(0.2)	ND	(0.5)	ND	ND	(0.2)
1,1-Dichloroethane	NE	ND	(0.5)	(0.5)	ND	(0.2)	ND	ND	(0.5)
1,1-Dichloroethane	6	ND	(0.2)	(0.2)	ND	(0.5)	ND	ND	(0.2)
1,2,3-Trichloropropane	NE	ND	(5)	(5)	ND	(0.5)	ND	ND	(5)
1,2-Dichlorobenzene	NE	ND	(0.5)	(0.5)	ND	(0.1)	ND	ND	(0.5)
1,2-Dichloroethane	0.5	ND	(0.1)	(0.1)	ND	(0.1)	ND	ND	(0.1)
1,2-Dichloropropane	5	ND	(0.1)	(0.1)	ND	(0.32)	ND	ND	(0.1)
1,3-Dichlorobenzene	130	ND	(0.32)	(0.32)	ND	(0.24)	ND	ND	(0.32)
1,4-Dichlorobenzene	5	ND	(0.24)	(0.24)	ND	(5)	ND	ND	(0.24)
1-Chlorohexane	NE	ND	(5)	(5)	ND	(0.5)	ND	ND	(5)
2-Chloroethylvinylether	NE	ND	(0.5)	(0.5)	ND	(10)	ND	ND	(0.5)
Benzyl Chloride	NE	ND	(10)	(10)	ND	(5)	ND	ND	(10)
Bromobenzene	NE	ND	(5)	(5)	ND	(0.1)	ND	ND	(5)
Bromodichloromethane	100	ND	(0.1)	(0.1)	ND	(0.5)	ND	ND	(0.1)
Bromoform	100	ND	(0.5)	(0.5)	ND	(1.2)	ND	ND	(0.5)
Bromomethane	NE	ND	(1.2)	(1.2)	ND	(0.12)	ND	ND	(1.2)
Carbon Tetrachloride	0.5	ND	(0.12)	(0.12)	ND	(0.25)	ND	ND	(0.12)
Chlorobenzene	30	ND	(0.25)	(0.25)	ND	(0.52)	ND	ND	(0.25)
Chloroethane	NE	ND	(0.52)	(0.52)	ND	(0.1)	ND	ND	(0.52)
Chloroform	100	ND	(0.1)	(0.1)	ND	(0.3)	ND	ND	(0.1)
Chloromethane	NE	ND	(0.3)	(0.3)	ND	(0.2)	ND	ND	(0.3)
Dibromochloromethane	100	ND	(0.2)	(0.2)	ND	(5)	ND	ND	(0.2)
Dibromomethane	NE	ND	(5)	(5)	ND	(0.4)	ND	ND	(5)
Methylene Chloride	NE	ND	(0.4)	(0.4)	ND		ND	ND	(0.4)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
MS = Manual sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a),(b),(c) = Result qualified due to one of the following analytical considerations
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
PD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-19 (Continued)

WELL PURGE											
MW 1024				MW 1025				MW 1044			
Ground Water Zone		Midd's		Deep A		Shallow		Shallow		Shallow	
Date Sampled	18-Jan-90	18-Jan-90	18-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90
Sampled By	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
Date Analyzed	19-Jan-90	19-Jan-90	19-Jan-90	19-Jan-90	19-Jan-90	19-Jan-90	19-Jan-90	19-Jan-90	19-Jan-90	19-Jan-90	19-Jan-90
Lab	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS
Field Analysis	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lab Analysis	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Analytes	Max/Min Conc-minant			Detection		Detection		Detection		Detection	
	Level Or Action	Level	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result
Tetrachloroethane	5	MCL	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND
Total 1,2-Dichloroethane	16	AL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND
Total Chloroethane	ME		ND	(25)	ND	(25)	ND	(25)	ND	(25)	ND
Trans-1,3-Dichloropropene	ME		ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND
Trichloroethane	5	MCL	ND	(0.2)	ND	(0.2)	ND	(0.2)	3 3 C	(0.2)	3 7 C
Trichlorofluoroethane	150	AL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND
Vinyl Chloride	0 5	MCL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND
bis(2-Chloroisopropyl) Ether	ME		ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND
cis-1,3-Dichloropropene	ME		ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND

TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-1045				MW-1046				MW-1047			
	Deep A				Deep B				Deep B			
	12-Feb-90				14 Feb-90				15 Feb-90			
	RAD				RAD				RAD			
	16-Feb-90				18-Feb-90				21-Feb-90			
	RAS				RAS				RAS			
	NS				NS				NS			
	NS				NS				NS			
Analytes	Maximum Contaminant Level Or Action Level				Detection Limit				Detection Limit			
	Result				Result				Result			
1,1,1,2-Tetrachloroethane	NE	ND	(5)	(5)	ND	ND	(5)	(5)	ND	ND	(5)	(5)
1,1,1-Trichloroethane	200	MCL	ND	(0.2)	ND	0.35 C	(0.2)	(0.2)	ND	ND	(0.2)	(0.2)
1,1,2,2-Tetrachloroethane	1	MCL	ND	(0.15)	ND	ND	(0.15)	(0.15)	ND	ND	(0.15)	(0.15)
1,1,2-Trichloroethane	32	MCL	ND	(0.2)	ND	ND	(0.2)	(0.2)	ND	ND	(0.2)	(0.2)
1,1-Dichloroethane	NE	ND	(0.5)	(0.5)	ND	ND	(0.5)	(0.5)	ND	ND	(0.5)	(0.5)
1,1-Dichloroethane	6	MCL	ND	(0.2)	ND	ND	(0.2)	(0.2)	ND	ND	(0.2)	(0.2)
1,2,3-Trichloropropane	NE	ND	(5)	(5)	ND	ND	(5)	(5)	ND	ND	(5)	(5)
1,2-Dichlorobenzene	NE	ND	(0.5)	(0.5)	ND	ND	(0.5)	(0.5)	ND	ND	(0.5)	(0.5)
1,2-Dichloroethane	0.5	MCL	ND	(0.1)	ND	0.60 (b)	(0.1)	(0.1)	ND	ND	(0.1)	(0.1)
1,2-Dichloropropane	5	PMCL	ND	(0.1)	ND	ND	(0.1)	(0.1)	ND	ND	(0.1)	(0.1)
1,3-Dichlorobenzene	130	MCL	ND	(0.32)	ND	ND	(0.32)	(0.32)	ND	ND	(0.32)	(0.32)
1,4-Dichlorobenzene	5	MCL	ND	(0.24)	ND	ND	(0.24)	(0.24)	ND	ND	(0.24)	(0.24)
1-Chlorobenzene	NE	ND	(5)	(5)	ND	ND	(5)	(5)	ND	ND	(5)	(5)
2-Chloroethylvinylether	NE	ND	(0.5)	(0.5)	ND	ND	(0.5)	(0.5)	ND	ND	(0.5)	(0.5)
Benzyl Chloride	NE	ND	(10)	(10)	ND	ND	(10)	(10)	ND	ND	(10)	(10)
Bromobenzene	NE	ND	(5)	(5)	ND	ND	(5)	(5)	ND	ND	(5)	(5)
Bromochloromethane	100	PMCL	ND	(0.1)	ND	ND	(0.1)	(0.1)	ND	ND	(0.1)	(0.1)
Bromoform	100	PMCL	ND	(0.5)	ND	ND	(0.5)	(0.5)	ND	ND	(0.5)	(0.5)
Bromomethane	NE	ND	(1.2)	(1.2)	ND	ND	(1.2)	(1.2)	ND	ND	(1.2)	(1.2)
Carbon Tetrachloride	0.5	MCL	ND	(0.12)	ND	ND	(0.12)	(0.12)	ND	ND	(0.12)	(0.12)
Chlorobenzene	30	AL	ND	(0.25)	ND	ND	(0.25)	(0.25)	ND	ND	(0.25)	(0.25)
Chloroethane	NE	ND	(0.52)	(0.52)	ND	ND	(0.52)	(0.52)	ND	ND	(0.52)	(0.52)
Chloroform	100	PMCL	ND	(0.1)	ND	0.19 C	(0.1)	(0.1)	ND	ND	(0.1)	(0.1)
Chloromethane	NE	ND	(0.3)	(0.3)	ND	ND	(0.3)	(0.3)	ND	ND	(0.3)	(0.3)
Dibromochloromethane	100	PMCL	ND	(0.2)	ND	ND	(0.2)	(0.2)	ND	ND	(0.2)	(0.2)
Dibromomethane	NE	ND	(5)	(5)	ND	ND	(5)	(5)	ND	ND	(5)	(5)
Methylene Chloride	NE	ND	(0.4)	(0.4)	ND	1.5 C	(0.4)	(0.4)	ND	ND	(0.4)	(0.4)

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NA = Not analysed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a),(b),(c) = Result qualified due to one of the following analytical considerations
(a) = Coelution
(b) = Interference
(c) = Random error
B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
U = Unconfirmed, second column not requested
(2) = Result obtained from secondary column
(a),(b),(c) = Result qualified due to one of the following analytical considerations
(a) = Coelution
(b) = Interference
(c) = Random error
C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-1045			MW-1046			MW-1047			MW-1048		
	Deep A			Deep B			Deep B			Deep B		
	12-Feb-90			14-Feb-90			14-Feb-90			15-Feb-90		

TABLE 1 19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER															
	MW-1049				MW-1050				MW 1051				MW-1052			
	Middle 09-Feb-90 RAD 13-Feb-90 RAS NS NS	Deep A 09-Feb-90 RAD 13-Feb-90 RAS NS NS	Deep B 09-Feb-90 RAD 13-Feb-90 RAS NS NS	Deep B 12-Feb-90 RAD 16-Feb-90 RAS NS NS												
Analytes	Maximum Contaminant Level Or Action Level	Result	Limit	Detection	Result	Limit	Detection	Result	Limit	Detection	Result	Limit				
1,1,1,2-Tetrachloroethane	NE	ND	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)	ND	(5)				
1,1,1-Trichloroethane	200	MCL	(0.2)	(0.2)	0.35 C	(0.2)	(0.2)	0.47 C	(0.2)	(0.2)	ND	(0.2)				
1,1,1,2,2-Tetrachloroethane	1	MCL	(0.15)	(0.15)	ND	(0.15)	(0.15)	ND	(0.15)	(0.15)	ND	(0.15)				
1,1,2-Trichloroethane	32	MCL	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)				
1,1-Dichloroethane	NE	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)				
1,1,1-Dichloroethane	6	MCL	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)				
1,2,3-Trichloropropane	NE	ND	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)	ND	(5)				
1,2-Dichlorobenzene	NE	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)				
1,2-Dichloroethane	0.5	MCL	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)				
1,2-Dichloropropane	5	PMCL	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)				
1,1,3-Dichlorobenzene	130	MCL	(0.32)	(0.32)	ND	(0.32)	(0.32)	ND	(0.32)	(0.32)	ND	(0.32)				
1,1,4-Dichlorobenzene	5	MCL	(0.24)	(0.24)	ND	(0.24)	(0.24)	ND	(0.24)	(0.24)	ND	(0.24)				
1-Chlorohexane	NE	ND	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)	ND	(5)				
2-Chloroethylvinylether	NE	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)				
Benzyl Chloride	NE	ND	(10)	(10)	ND	(10)	(10)	ND	(10)	(10)	ND	(10)				
Bromobenzene	NE	ND	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)	ND	(5)				
Bromodichloromethane	100	PMCL	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)				
Bromoform	100	PMCL	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)				
Bromomethane	NE	ND	(1.2)	(1.2)	ND	(1.2)	(1.2)	ND	(1.2)	(1.2)	ND	(1.2)				
Carbon Tetrachloride	0.5	MCL	(0.12)	(0.12)	ND	(0.12)	(0.12)	ND	(0.12)	(0.12)	ND	(0.12)				
Chlorobenzene	30	AL	(0.25)	(0.25)	ND	(0.25)	(0.25)	ND	(0.25)	(0.25)	ND	(0.25)				
Chloroethane	NE	ND	(0.52)	(0.52)	ND	(0.52)	(0.52)	ND	(0.52)	(0.52)	ND	(0.52)				
Chloroform	100	PMCL	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)				
Chloromethane	NE	ND	(0.3)	(0.3)	ND	(0.3)	(0.3)	ND	(0.3)	(0.3)	ND	(0.3)				
Dibromochloromethane	100	PMCL	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)				
Dibromomethane	NE	ND	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)	ND	(5)				
Methylene Chloride	NE	0.41 C	(0.4)	(0.4)	0.54 (b)	(0.4)	(0.4)	ND	(0.4)	(0.4)	ND	(0.4)				

ALL UNITS ARE ug/L

AL = DBS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a),(b),(c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error

8 = Detected in blank, result not corrected
PD = Field Duplicate
MCL = DHS maximum contaminant level
MD = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US. EPA primary maximum contaminant level

TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-1049			MW-1050			MW-1051			MW-1052		
	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	
Middle	Deep A	Deep B	Deep B	Deep B	Deep B	Deep B	Deep B	Deep B	Deep B	Deep B	Deep B	
09-Feb-90	09-Feb-90	09-Feb-90	09-Feb-90	09-Feb-90	09-Feb-90	09-Feb-90	09-Feb-90	09-Feb-90	09-Feb-90	09-Feb-90	12-Feb-90	
RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	
13-Feb-90	13-Feb-90	13-Feb-90	13-Feb-90	13-Feb-90	13-Feb-90	13-Feb-90	13-Feb-90	13-Feb-90	13-Feb-90	13-Feb-90	16-Feb-90	
RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	
NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Analytes												
5 MCL	ND	(0.1)	ND	(0.1)	0.41 C	(0.1)	ND	(0.1)	ND	(0.1)	(0.1)	
16 AL	5.7 C	(0.2)	0.21 C	(0.2)	1.0 C	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	
Tetrachloroethene	ND	(25)	ND	(25)	ND	(25)	ND	(25)	ND	(25)	(25)	
Total 1,2-Dichloroethene	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	(0.34)	
Total Chloro-oluenes	ND	(0.2)	ND	(0.2)	2.0 C	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	
Trans-1,3-Dichloropropene	13. C	(0.2)	0.96 (b)	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	
Trichloroethene	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	
Trichlorofluoromethane	150 AL	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	
Vinyl Chloride	0.5 MCL	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	(10)	
bis(2-Chloroisopropyl) Ether	NE	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	
cis-1,3-Dichloropropene	NE	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	

ALL UNITS ARE UG/L

ALL UNITS ARE ug/L

AL	= DHS Action Level	B	= Detected in blank, result not corrected	C	= Confirmed on second column
EW	= Extraction well	PD	= Field Duplicate	G	= Exceeds calibration range
I	= Result differs from last issue of report	MCL	= DHS maximum contaminant level	MW	= Monitoring well
NA	= Not analysed	ND	= Not detected at specified detection limit	NE	= Threshold value not established
MS	= Normal sample	P	= Previously confirmed	PMCL	= US. EPA primary maximum contaminant level
RAD	= Radon Corporation, Sacramento	RAS	= Radon Analytical Services, Sacramento		
U	= Unconfirmed, second column not requested	(2)	= Result obtained from secondary column		
(a),(b),(c)	= Result qualified due to one of the following analytical considerations.				
(a)	= Coelution	(b)	= Interference	(c)	= Random error.

TABLE 1-19 (Continued)

WELL NUMBER

HW-1053

Ground Water Zone
Date Sampled
Sampled By
Date Analyzed
Lab
Field Analysis
Lab Analysis

Shallow
23-Feb-90
RAD
27-Feb-90
RAS
NS

Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit
1,1,1,2-Tetrachloroethane	NE	ND	(5)
1,1,1-Trichloroethane	200	MD	(0.2)
1,1,2,2-Tetrachloroethane	1	MD	(0.15)
1,1,2-Trichloroethane	32	MD	(0.2)
1,1-Dichloroethane	NE	MD	(0.5)
1,1-Dichloroethane	6	MD	(0.2)
1,2,3-Trichloropropane	NE	MD	(5)
1,2-Dichlorobenzene	NE	MD	(0.5)
1,2-Dichloroethane	0.5	MD	(0.1)
1,2-Dichloropropane	5	MD	(0.1)
1,3-Dichlorobenzene	130	MD	(0.32)
1,4-Dichlorobenzene	5	MD	(0.24)
1-Chlorobenzene	NE	MD	(5)
2-Chloroethylvinylether	NE	MD	(0.5)
Benzyl Chloride	NE	MD	(10)
Bromobenzene	NE	MD	(5)
Bromodichloroethane	100	MD	(0.1)
Bromoform	100	MD	(0.5)
Bromoethane	NE	MD	(1.2)
Carbon Tetrachloride	0.5	MD	(0.12)
Chlorobenzene	30	MD	(0.25)
Chloroethane	NE	MD	(0.52)
Chloroform	100	MD	(0.1)
Chloroethane	NE	MD	(0.3)
Dibromochloroethane	100	MD	(0.2)
Dibromoethane	NE	MD	(5)
Methylene Chloride	NE	MD	(0.4)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations.
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
HM = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-19 (Continued)

WELL NUMBER

MW-1053

Ground Water Zone
Date Sampled
Sampled By
Date Analyzed
Lab
Field Analysis
Lab Analysis

Shallow
23-Feb-90
RAD
27-Feb-90
RAS
NS
NS

Maximum Contaminant
Level Or Action Level

Detection
Limit

Result

Analytes

Tetrachloroethers	5	MCL	ND	(0.1)
Total 1,2-Dichloroethene	16	AL	0.49	IC (0.2)
Total Chlorotoluene	NE		ND	(25)
Trans-1,3-Dichloropropene	NE		ND	(0.34)
Trichloroethene	5	MCL	0.66	IC (0.2)
Trichlorofluoromethane	150	AL	ND	(0.2)
Vinyl Chloride	0.5	MCL	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE		ND	(10)
cis-1,3-Dichloropropene	NE		ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level	B = Detected in blank, result not corrected	C = Confirmed on second column
EW = Extraction well	PD = Field Duplicate	G = Exceeds calibration range
I = Result differs from last issue of report	MCL = DHS maximum contaminant level	MW = Monitoring well
NA = Not analyzed	ND = Not detected at specified detection limit	NE = Threshold value not established
NS = Normal sample	P = Previously confirmed	PHCL = US. EPA primary maximum contaminant level
RAD = Radian Corporation, Sacramento	RAS = Radian Analytical Services, Sacramento	
U = Unconfirmed, second column not requested	(2) = Result obtained from secondary column	
(a),(b),(c) = Result qualified due to one of the following analytical considerations:		
(a) = Coelution	(b) = Interference	(c) = Random error

TABLE 1-20. MASTER LOG OF WELLS SAMPLED FOR METHOD 8240 FOR THE SOUTHWEST AREA,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

WELL NUMBER

MW-1045

Ground Water Zone
Date Sampled
Sampled By
Date Analyzed
Lab
Field Analysis
Lab Analysis

Deep A
12-Feb-90
RAD
19-Feb-90
RAS
MS
MS

Analytes

Maximum Contaminant
Level Or Action Level

Result

Detection
Limit

1,1,1-Trichloroethane	200 MCL	ND	(3.8)
1,1,2,2-Tetrachloroethane	1 MCL	ND	(5)
1,1,2-Trichloroethane	32 MCL	ND	(5)
1,1-Dichloroethane	NE	ND	(4.7)
1,1-Dichloroethane	6 MCL	ND	(2.8)
1,2-Dichloroethane	0.5 MCL	ND	(2.8)
1,2-Dichloropropane	5 PMCL	ND	(5)
2-Butanone	NE	ND	(10)
2-Chloroethylvinylether	NE	ND	(10)
2-Hexanone	NE	ND	(10)
4-Methyl-2-Pentanone	NE	ND	(10)
Acetone	NE	ND	(10)
Benzene	1 MCL	ND	(4.4)
Bromodichloromethane	100 PMCL	ND	(3.5)
Bromoform	100 PMCL	ND	(4.7)
Bromomethane	NE	ND	(5)
Carbon Disulfide	NE	ND	(5)
Carbon Tetrachloride	0.5 MCL	ND	(2.8)
Chlorobenzene	30 AL	ND	(5)
Chloroethane	NE	ND	(5)
Chloroform	100 PMCL	ND	(2.5)
Chloromethane	NE	ND	(5)
Dibromochloromethane	100 PMCL	ND	(3.1)
Ethylbenzene	680 MCL	ND	(5)
Methylene Chloride	NE	ND	(5)
Styrene	NE	ND	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction Well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NL = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-20 (Continued)

		WELL NUMBER	
Ground Water Zone		HW-1045	
Date Sampled		Deep A	
Sampled By		12-Feb-90	
Date Analyzed		RAD	
Lab		19-Feb-90	
Field Analysis		RAS	
Lab Analysis		NS	
		NS	
Analytes		Maximum Contaminant Level Or Action Level	Detection Limit
Tetrachloroethene		5 MCL	ND (4.1)
Toluene		NE	ND (5)
Total Xylenes		1750 MCL	ND (5)
Trans-1,3-Dichloropropene		NE	ND (5)
Trichloroethene		5 MCL	4.0 (2.5)
Vinyl Acetate		NE	ND (6.9)
Vinyl Chloride		0.5 MCL	ND (5)
cis-1,3-Dichloropropene		NE	ND (5)
trans-1,2-Dichloroethene		NE	ND (5)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
PD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
FMCL = US EPA primary maximum contaminant level

TABLE 1-21. MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR THE SOUTHWEST AREA,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, McCELLENN AIR FORCE BASE

Analytes	Maximum Contaminant Level Or Action Level	WELL NUMBER				Ground Water Zone	Date Sampled Sampled By	Date Analyzed Lab	Field Analysis Lab Analysis
		MW-1023	MW-1024	MW-1025	MW-1046				
		Shallow	Middle	Deep A	Deep B				
Aluminum	1 MCL	0.43	0.13	ND	0.049	18-Jan-90	RAD	26-Jan-90	RAS
Antimony	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Arsenic	0.05 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Barium	1 MCL	0.057	0.030	0.044	0.078	18-Jan-90	RAD	26-Jan-90	RAS
Beryllium	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Boron	NE	0.31 B	0.32 B	0.28 B	0.28	18-Jan-90	RAD	26-Jan-90	RAS
Cadmium	0.01 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Calcium	NE	21.	21	15.	24.	18-Jan-90	RAD	26-Jan-90	RAS
Chromium	0.05 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Cobalt	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Copper	NE	0.023	0.024	ND	0.018	18-Jan-90	RAD	26-Jan-90	RAS
Iron	NE	0.34	0.24	0.012	0.96	18-Jan-90	RAD	26-Jan-90	RAS
Lead	0.05 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Magnesium	NE	5.9	5.6	12.	17	18-Jan-90	RAD	26-Jan-90	RAS
Manganese	NE	0.049	0.067	ND	0.057	18-Jan-90	RAD	26-Jan-90	RAS
Molybdenum	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Nickel	NE	0.016	0.040	0.024	0.016	18-Jan-90	RAD	26-Jan-90	RAS
Potassium	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Selenium	0.01 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Silver	NE	17.	18.	38	37	18-Jan-90	RAD	26-Jan-90	RAS
Sodium	0.05 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Sulfur	NE	6.1 B	7.4 B	15. B	18	18-Jan-90	RAD	26-Jan-90	RAS
Thallium	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Vanadium	NE	0.0090	0.0090	0.024	0.026	18-Jan-90	RAD	26-Jan-90	RAS
Zinc	NE	0.012	0.0050	0.0040	0.13	18-Jan-90	RAD	26-Jan-90	RAS

ALL UNITS ARE mg/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
KW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level
S = Determined by method of standard addition

TABLE 1 21 (Continued)

		MW-1047		MW-1048		MW-1051	
Ground Water Zone		Deep B		Deep B		Deep B	
Date Sampled		14-Feb-90		15-Feb-90		09-Feb-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		28-Feb-90		28-Feb-90		22-Feb-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		NS		NS	
Lab Analysis		NS		NS		NS	

	MW-1023	MW-1024	MW-1025	MW-1047
Ground Water Zone	Shallow	Middle	Deep A	Deep B
Date Sampled	18-Jan-90	18-Jan 90	18 Jan 90	14-Feb -90
Sampled By	RAD	RAD	RAD	RAD
Date Analyzed	19-Jan-90	19-Jan 90	19-Jan-90	15-Feb-90
Lab	RAS	RAS	RAS	RAS
Field Analysis	NS	NS	NS	NS
Lab Analysis	NS	NS	NS	NS
Analytes				
	Maximum Contaminant Level Or Action Level	Detection Limit	Detection Limit	Detection Limit
Chromium, Hexavalent	50 PNCL ND (0 02)	ND (0 02)	ND (0 02)	ND (0 02)

ALL UNITS ARE mg/L

AL	Level	B	C
DHS Action	Detected in blank, result not corrected		
Extraction well	Field Duplicate		
Result differs from last issue of report	DHS maximum contaminant level		
Not analysed	Not detected at specified detection limit		
Normal sample	Previously confirmed		
Radian Corporation, Sacramento	Radian Analytical Services, Sacramento		
Unconfirmed, second column not requested			

TABLE 1 22 (Continued)

	WELL NUMBER	
	HW 1048	HW 1051
Ground Water Zone	Deep B	Deep B
Date Sampled	15-Feb-90	09 Feb-90
Sampled By	RAD	RAD
Date Analyzed	16-Feb-90	09-Feb-90
Lab	RAS	RAS
Field Analysis	NS	NS
Lab Analysis	NS	NS
Maximum Contaminant Level Or Action Level		
Analytes	Result	Result
Chromium, Hexavalent	ND	ND
	50	(0.02)
	PHCL	(0.02)
	ND	(0.02)

ALL UNITS ARE mg/L

AL = DHS Action Level
 EW = Extraction Well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
 PD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
 G = Exceeds calibration range
 HW = Monitoring well
 NE = Threshold value not established
 PHCL = US. EPA primary maximum contaminant level
 S = Determined by method of standard addition

TABLE 1-23. MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR AREA C AND ADJACENT ON BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-137			EW-137			EW-140		
	Deep A 23-Jan-90 RAD 24-Jan-90 RAS NS NS	Deep A 07-Feb-90 RAD 08-Feb-90 RAS NS NS	Deep A 07-Feb-90 RAD 08-Feb-90 RAS NS NS	Deep A 23-Jan-90 RAD 24-Jan-90 RAS NS NS	Deep A 07-Feb-90 RAD 08-Feb-90 RAS NS NS	Deep A 07-Feb-90 RAD 08-Feb-90 RAS NS NS	Deep A 23-Jan-90 RAD 24-Jan-90 RAS NS NS	Deep A 07-Feb-90 RAD 08-Feb-90 RAS NS NS	Deep A 07-Feb-90 RAD 08-Feb-90 RAS NS NS
Maximum Contaminant Level Or Action Level	Result	Result	Result	Result	Result	Result	Result	Result	Result
Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit
Analytes	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,1,1,2-Tetrachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	MCL	(4)	(100)	(4)	(10)	(250)	(10)	(50)
1,1,2,2-Tetrachloroethane	1	MCL	(3)	(7.5)	(7.5)	(10)	(7.5)	(10)	(2)
1,1,2-Trichloroethane	32	MCL	(4)	(10)	(4)	(10)	(10)	(10)	(1.5)
1,1-Dichloroethane	NE	ND	(10)	(25)	(25)	(25)	(25)	(25)	(2)
1,1-Dichloroethane	6	MCL	(4)	(10)	(4)	(10)	(10)	(10)	(2)
1,2,3-Trichloropropane	NE	ND	(100)	(250)	(250)	(250)	(250)	(250)	(50)
1,2-Dichlorobenzene	NE	ND	(10)	(25)	(25)	(25)	(25)	(25)	(5)
1,2-Dichloroethane	0.5	MCL	(2)	(5)	(5)	(5)	(5)	(5)	(1)
1,2-Dichloropropane	5	PMCL	(2)	(5)	(5)	(5)	(5)	(5)	(1)
1,3-Dichlorobenzene	130	MCL	(6.4)	(16)	(16)	(16)	(16)	(16)	(3.2)
1,4-Dichlorobenzene	5	MCL	(4.8)	(12)	(12)	(12)	(12)	(12)	(2.4)
1-Chlorohexane	NE	ND	(10)	(250)	(250)	(250)	(250)	(250)	(50)
2-Chloroethylvinylether	NE	ND	(25)	(75)	(75)	(75)	(75)	(75)	(5)
Benzyl Chloride	NE	ND	(10)	(500)	(500)	(500)	(500)	(500)	(100)
Bromobenzene	NE	ND	(100)	(250)	(250)	(250)	(250)	(250)	(50)
Bromodichloromethane	100	PMCL	(2)	(5)	(5)	(5)	(5)	(5)	(1)
Bromoform	100	PMCL	(10)	(25)	(25)	(25)	(25)	(25)	(5)
Bromomethane	NE	ND	(24)	(59)	(59)	(59)	(59)	(59)	(12)
Carbon Tetrachloride	0.5	MCL	(2.4)	(6)	(6)	(6)	(6)	(6)	(1.2)
Chlorobenzene	30	AL	(5)	(13)	(13)	(13)	(13)	(13)	(2.5)
Chloroethane	NE	ND	(10)	(26)	(26)	(26)	(26)	(26)	(5.2)
Chloroform	100	PMCL	(2)	(5)	(5)	(5)	(5)	(5)	(1)
Chloromethane	NE	ND	(6)	(15)	(15)	(15)	(15)	(15)	(3)
Dibromochloromethane	100	PMCL	(4)	(10)	(10)	(10)	(10)	(10)	(2)
Dibromomethane	NE	ND	(100)	(250)	(250)	(250)	(250)	(250)	(50)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
F = Result differs from last issue of report
HA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error
B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column
C = Confirmed on second column
G = Exceeds calibration range
HW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1 23 (Continued)

Analytes	Maximum Contaminant Level Or Action Level	WELL NUMBER			
		EW-137	EW 137	EW 137	EW 140
Ground Water Zone		Deep A	Deep A	Deep A	Deep A
Date Sampled		23-Jan-90	02-Feb-90	02-Mar-90	23-Jan-90
Sampled By		RAD	RAD	RAD	RAD
Date Analyzed		24-Jan-90	08-Feb-90	05-Mar-90	24-Jan-90
Lab		RAS	RAS	RAS	RAS
Field Analysis		NS	NS	NS	NS
Lab Analysis		NS	NS	NS	NS

Analytes	Maximum Contaminant Level Or Action Level	Detection Limit			
		Result	Result	Result	Result
Methylene Chloride	NE	ND	ND	ND	ND
Tetrachloroethene	5 MCL	ND	ND	ND	ND
Total 1,2-Dichloroethene	16 AL	22 C	19. C	26 CI	39 C
Total Chlorotoluene	NE	ND	ND	ND	ND
Trans-1,3-Dichloropropene	NE	ND	ND	ND	ND
Trichloroethene	5 MCL	380. C	400. C	300 CI	120 C
Trichlorofluoromethane	150 AL	ND	ND	ND	ND
Vinyl Chloride	0.5 MCL	ND	ND	ND	ND
bis(2-Chloroisopropyl)Ether	NE	ND	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND	ND

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 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 PD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring Well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-140			EW-141			EW-141		
	Deep A	Deep A	Deep A	Deep A	Deep B	Deep B	Deep B	Deep B	Deep B
	02-Feb-90	02-Feb-90	02-Feb-90	02-Mar-90	23-Jan-90	23-Jan-90	23-Jan-90	02-Feb-90	02-Feb-90
	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
	09-Feb-90	09-Feb-90	09-Feb-90	05-Mar-90	24-Jan-90	24-Jan-90	24-Jan-90	09-Feb-90	09-Feb-90
	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS
Analytes	EW-140			EW-141			EW-141		
	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level
1,1,1,2-Tetrachloroethane	ND	(250)	NE	ND	(50)	200	ND	(50)	200
1,1,1-Trichloroethane	ND	(10)	1	ND	(2)	1	ND	(2)	1
1,1,2,2-Tetrachloroethane	ND	(7.5)	32	ND	(1.5)	32	ND	(1.5)	32
1,1,2-Trichloroethane	ND	(10)	NE	ND	(2)	NE	ND	(2)	NE
1,1-Dichloroethane	ND	(25)	6	ND	(5)	6	ND	(5)	6
1,1-Dichloroethane	ND	(10)	NE	ND	(2)	NE	ND	(2)	NE
1,2,3-Trichloropropane	ND	(250)	NE	ND	(50)	NE	ND	(50)	NE
1,2-Dichlorobenzene	ND	(25)	NE	ND	(5)	NE	ND	(5)	NE
1,2-Dichloroethane	ND	(5)	0.5	ND	(1)	0.5	ND	(1)	0.5
1,2-Dichloropropane	ND	(16)	5	ND	(3.2)	5	ND	(3.2)	5
1,3-Dichlorobenzene	ND	(12)	130	ND	(2.4)	130	ND	(2.4)	130
1,4-Dichlorobenzene	ND	(250)	NE	ND	(50)	NE	ND	(50)	NE
1-Chlorohexane	ND	(25)	NE	ND	(5)	NE	ND	(5)	NE
2-Chloroethylvinyl ether	ND	(500)	NE	ND	(100)	NE	ND	(100)	NE
Benzyl Chloride	ND	(250)	NE	ND	(50)	NE	ND	(50)	NE
Bromobenzene	ND	(5)	NE	ND	(1)	NE	ND	(1)	NE
Bromodichloromethane	ND	(25)	100	ND	(5)	100	ND	(5)	100
Bromoform	ND	(59)	NE	ND	(12)	NE	ND	(12)	NE
Bromooethane	ND	(6)	0.5	ND	(1.2)	0.5	ND	(1.2)	0.5
Carbon Tetrachloride	ND	(13)	30	ND	(2.5)	30	ND	(2.5)	30
Chlorobenzene	ND	(26)	NE	ND	(5.2)	NE	ND	(5.2)	NE
Chloroethane	ND	(5)	100	ND	(1)	100	ND	(1)	100
Chloroform	ND	(15)	NE	ND	(3)	NE	ND	(3)	NE
Dibromochloromethane	ND	(10)	100	ND	(2)	100	ND	(2)	100
Dibromooethane	ND	(250)	NE	ND	(50)	NE	ND	(50)	NE
Methylene Chloride	ND	(20)	NE	ND	(4)	NE	ND	(4)	NE

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U = Unconfirmed, second column not requested
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(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
NE = Monitoring well
MW = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-23 (Continued)

		WELL NUMBER			
		EW-140	EW-140	EW-141	EW-141
Ground Water Zone		Deep A	Deep A	Deep B	Deep B
Date Sampled		02-Feb-90	02-Mar-90	23-Jan-90	02-Feb-90
Sampled By		RAD	RAD	RAD	RAD
Date Analyzed		09-Feb-90	05-Mar-90	24-Jan-90	09-Feb-90
Lab		RAS	RAS	RAS	RAS
Field Analysis		NS	NS	NS	NS
Lab Analysis		NS	NS	NS	NS
		Maximum Contaminant Level Or Action Level			
Analytes		Result	Detection Limit	Result	Detection Limit
Tetrachloroethene	5 MCL	ND	(5)	ND	(1)
Total 1,2-Dichloroethene	16 AL	48. C	(10)	19 C	(2)
Total Chlorotoluene	NE	ND	(1300)	ND	(250)
Trans-1,3-Dichloropropene	5 MCL	ND	(17)	ND	(3 4)
Trichloroethene	150 AL	120. C	(10)	160 C	(2)
Trichlorofluoromethane	0.5 MCL	ND	(10)	ND	(2)
Vinyl Chloride	NE	ND	(10)	ND	(2)
bis(2-Chloroisopropyl)Ether	NE	ND	(500)	ND	(100)
cis-1,3-Dichloropropene	NE	ND	(10)	ND	(2)

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 (a),(b),(c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-23 (Continued)

WELL NUMBER											
EW-141				EW-144				EW-144			
Ground Water Zone				Deep B				Deep A			
Date Sampled				02-Mar-90				02-Jan-90			
Sampled By				RAD				RAD			
Date Analyzed				05-Mar-90				08-Feb-90			
Lab				RAS				RAS			
Field Analysis				NS				NS			
Lab Analysis				NS				NS			
Maximum Contaminant Level Or Action Level				Detection Limit		Result		Detection Limit		Result	
Analytes				Limit		Result		Limit		Result	
1,1,1,2-Tetrachloroethane				NE	(50)	ND	(250)	ND	(250)	ND	(250)
1,1,1-Trichloroethane				200	(2)	ND	(10)	ND	(10)	11. CI	(7 5)
1,1,1,2,2-Tetrachloroethane				1	(1 5)	ND	(7 5)	ND	(7 5)	ND	(7 5)
1,1,1,2-Trichloroethane				32	(2)	ND	(10)	ND	(10)	ND	(10)
1,1,1-Dichloroethane				NE	(5)	ND	(25)	ND	(25)	ND	(25)
1,1,1-Dichloroethene				6	(2)	ND	(10)	ND	(10)	ND	(10)
1,1,2,3-Trichloropropane				NE	(50)	ND	(250)	ND	(250)	ND	(250)
1,2-Dichlorobenzene				NE	(5)	ND	(25)	ND	(25)	ND	(25)
1,1,2-Dichloroethane				0.5	(1)	ND	(5)	ND	(5)	ND	(5)
1,2-Dichloropropane				5	(1)	ND	(5)	ND	(5)	ND	(5)
1,2-Dichlorobenzene				130	(3 2)	ND	(16)	ND	(16)	ND	(16)
1,1,3-Dichlorobenzene				5	(2.4)	ND	(12)	ND	(12)	ND	(12)
1,1,4-Dichlorobenzene				NE	(50)	ND	(250)	ND	(250)	ND	(250)
1-Chlorohexane				NE	(5)	ND	(25)	ND	(25)	ND	(25)
2-Chloroethylvinylether				NE	(100)	ND	(500)	ND	(500)	ND	(500)
Benzyl Chloride				NE	(50)	ND	(250)	ND	(250)	ND	(250)
Bromobenzene				ME	(1)	ND	(5)	ND	(5)	ND	(5)
Bromodichloromethane				100	(5)	ND	(25)	ND	(25)	ND	(25)
Bromoform				100	(12)	ND	(59)	ND	(59)	ND	(59)
Bromomethane				NE	(1 2)	ND	(6)	ND	(6)	ND	(6)
Carbon Tetrachloride				0.5	(2 5)	ND	(13)	ND	(13)	ND	(13)
Chlorobenzene				NS	(5.2)	ND	(26)	ND	(26)	ND	(26)
Chloroethane				NS	(1)	ND	(5)	ND	(5)	ND	(5)
Chloroform				100	(3)	ND	(15)	ND	(15)	ND	(15)
Chloromethane				NE	(2)	ND	(10)	ND	(10)	ND	(10)
Dibromochloromethane				NE	(50)	ND	(250)	ND	(250)	ND	(250)
Dibromomethane				NE	(4)	ND	(20)	ND	(20)	150 CI(c)	(20)
Methylene Chloride				33. CI		ND		ND			

	WELL NUMBER					
	EW-141		EW-144		EW-144	
Ground Water Zone	Deep B		Deep A		Deep A	
Date Sampled	02-Mar-90		23-Jan-90		02-Feb-90	
Sampled By	RAD		RAD		RAD	
Date Analyzed	05-Mar-90		25-Jan-90		08-Feb-90	
Lab	RAS		RAS		RAS	
Field Analysis	NS		NS		NS	
Lab Analysis	NS		NS		NS	

Analytes	Maximum Contaminant Level Or Action Level	Detection Limit		Detection Limit		Detection Limit	
		Result	Limit	Result	Limit	Result	Limit
Tetrachloroethene	5 MCL	ND	(1)	ND	(5)	ND	(5)
Total 1,2-Dichloroethene	16 AL	21. CI	(2)	21. C	(10)	13 CI	(10)
Total Chlorotoluene	NE	ND	(250)	ND	(1300)	ND	(1200)
Trans-1,3-Dichloropropene	NE	ND	(3.4)	ND	(17)	ND	(17)
Trichloroethene	5 MCL	130 CI	(2)	710 C	(10)	820. C	(10)
Trichlorofluoroethane	150 AL	ND	(2)	ND	(10)	ND	(10)
Winyll Chloride	0.5 MCL	ND	(2)	ND	(10)	ND	(10)
bis(2-Chloroisopropyl)Ether	NE	ND	(100)	ND	(500)	ND	(500)
Bis-1,3-Dichloropropene	NE	ND	(2)	ND	(10)	ND	(10)

ALL UNITS ARE ug/L

ALL UNITS ARE US/L

= DHS Action Level
 = Extraction well
 = Result differs from last issue of report
 = Not analysed
 = Normal sample
 = Radon Corporation, Sacramento
 = Unconfirmed, second column not requested
 = Result qualified due to one of the following analytical considerations.
 = Coelution
 B = Detected in blank, result not corrected
 PD = Field Duplicate
 MCL = DHS maximum contaminant level
 HD = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radon Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 (b) = Interference
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PHCL = US. EPA primary maximum contaminant level
 (c) = Random error

(c) = Random error

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-200			MW-21D			MW-22D			MW-33S		
	Middle	Middle	Middle	Middle	Middle	Middle	Deep A	Deep A	Deep A	Shallow	Shallow	Shallow
	23-Jan-90	31-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	29-Jan-90	29-Jan-90	29-Jan-90
	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
	25-Jan-90	04-Feb-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	05-Feb-90	05-Feb-90	05-Feb-90
	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Maximum Contaminant Level Or Action Level												
Analytes	Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Detection Limit
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(10000)	(10000)
1,1,1-Trichloroethane	200	0.42 BC	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(400)	(400)
1,1,2,2-Tetrachloroethane	1	NI	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(300)	(300)
1,1,2-Trichloroethane	32	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(400)	(400)
1,1-Dichloroethane	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(1000)	(1000)
1,1-Dichloroethene	6	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(400)	(400)
1,2,3-Trichloropropane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(10000)	(10000)
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(1000)	(1000)
1,2-Dichloroethane	0.5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(200)	(200)
1,2-Dichloropropene	5	PMCL	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(200)	(200)
1,3-Dichlorobenzene	130	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(640)	(640)
1,4-Dichlorobenzene	5	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(480)	(480)
1-Chlorobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(10000)	(10000)
2-Chloroethylvinylether	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(1000)	(1000)
Benzyl Chloride	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(20000)	(20000)
Bromobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(10000)	(10000)
Bromodichloroethane	100	PMCL	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(200)	(200)
Bromoform	100	PMCL	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(1000)	(1000)
Carbon Tetrachloride	NE	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(2400)	(2400)
Chlorobenzene	0.5	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(240)	(240)
Chloroethane	30	AL	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(500)	(500)
Chloroform	NE	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(1000)	(1000)
Chloromethane	100	PMCL	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(200)	(200)
Dibromochloromethane	NE	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(600)	(600)
Dibromomethane	100	PMCL	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(400)	(400)
Methylene Chloride	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(10000)	(10000)
		ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(800)	(800)

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 (2) = Result obtained from secondary column
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 G = Exceeds calibration range
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TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-20D			MW-21D			MW-22D			MW-33S		
	Middle			Middle			Deep A			Shallow		
	23-Jan-90	31-Jan-90	04-Feb-90	31-Jan-90	04-Feb-90	31-Jan-90	26-Jan-90	31-Jan-90	26-Jan-90	29-Jan-90	05-Feb-90	
Maximum Contaminant Level Or Action Level	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Detection Limit
Analytes	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit
Tetrachloroethane	5 MCL	ND	(0.1)	ND	(0.1)	ND	ND	(0.1)	ND	(0.1)	ND	(200)
Total 1,2-Dichloroethane	16 AL	ND	(0.2)	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)	ND	(400)
Total Chlorotoluene	NE	ND	(25)	ND	(25)	ND	ND	(25)	ND	(25)	ND	(50000)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(0.34)	ND	ND	(0.34)	ND	(0.34)	ND	(680)
Trichloroethene	5 MCL	ND	(0.2)	ND	(0.2)	ND	0.24 (a)	(0.2)	ND	(0.2)	12000. C	(400)
Trichlorofluoromethane	150 AL	ND	(0.2)	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)	ND	(400)
Vinyl Chloride	0.5 MCL	ND	(0.2)	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)	ND	(400)
bis(2-Chloroisopropyl) Ether	NE	ND	(10)	ND	(10)	ND	ND	(10)	ND	(10)	ND	(20000)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)	ND	(400)

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(2) = Result obtained from secondary column
C = Confirmed on second column
G = Exceeds calibration range
HW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-44S			MW-60			MW-62		
	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
	30-Jan-90	30-Jan-90	23-Jan-90	01-Feb-90	01-Feb-90	25-Jan-90	25-Jan-90	25-Jan-90	25-Jan-90
	RAD	RAD	RAD	RAS	RAS	RAS	RAS	RAS	RAS
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit		
	Level	Result	Limit	Result	Limit	Result	Limit	Result	Limit
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,1,1-Trichloroethane	200	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)
1,1,2-Trichloroethane	32	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1-Dichloroethane	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,1-Dichloroethane	6	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,2,3-Trichloropropane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,2-Dichloroethane	0.5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,2-Dichloropropane	5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,3-Dichlorobenzene	130	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)
1,4-Dichlorobenzene	5	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)
1-Chlorohexane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
2-Chloroethylvinyl ether	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Benzyl Chloride	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)
Bromobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Bromodichloroethane	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Bromoform	100	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Bromoethane	NE	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)
Carbon Tetrachloride	0.5	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)
Chloroethane	30	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)
Chloroethane	NE	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)
Chloroform	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Chloroethane	NE	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)
Dibromochloromethane	100	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Dibromomethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Methylene Chloride	NE	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EN = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-44S			MW-60			MW-62			MW-62		
	Shallow	30-Jan-90	Shallow	30-Jan-90	Shallow	23-Jan-90	Shallow	23-Jan-90	Shallow	23-Jan-90	Shallow	23-Jan-90
	RAD		RAD		RAD		RAD		RAD		RAD	
	01-Feb-90		01-Feb-90		01-Feb-90		01-Feb-90		01-Feb-90		01-Feb-90	
	RAS		RAS		RAS		RAS		RAS		RAS	
	NS		NS		NS		NS		NS		NS	
	NS		NS		NS		NS		NS		NS	

Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
Tetrachloroethene	5 MCL	ND	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Total 1,2-Dichloroethene	16 AL	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)	0.23 C	(0.2)	0.23 C	(0.2)
Total Chlorotoluenes	NE	ND	ND	(25)	ND	(25)	ND	(25)	ND	(25)	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)
Trichloroethene	5 MCL	22 (b)	ND	(0.2)	1.9 (c)	(0.2)	1.2 C	(0.2)	1.1 C	(0.2)	1.1 C	(0.2)
Trichlorofluoromethane	150 AL	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Vinyl Chloride	0.5 MCL	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE	ND	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)
cis-1,3-Dichloropropene	NE	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level
 SW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (c), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 PD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	Maximum Contaminant Level Or Action Level	MW-75			MW-115			MW-128			MW-128		
		Analytes	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
1,1,1,2-Tetrachloroethane	NE		(50)	ND	(5)	ND	(5000)	ND	(5000)	ND	(5000)	ND	(5000)
1,1,1-Trichloroethane	200	MCL	(2)	ND	(0 2)	ND	(200)	ND	(200)	ND	(200)	ND	(200)
1,1,2,2-Tetrachloroethane	1	MCL	(1 5)	ND	(0 15)	ND	(150)	250 (a)	(150)	250 (a)	(150)	250 (a)	(150)
1,1,2-Trichloroethane	32	MCL	(2)	ND	(0 2)	ND	(200)	ND	(200)	ND	(200)	ND	(200)
1,1-Dichloroethane	NE		(5)	ND	(0 5)	ND	(500)	ND	(500)	ND	(500)	ND	(500)
1,1-Dichloroethane	6	MCL	(2)	ND	(0 2)	ND	(200)	ND	(200)	ND	(200)	ND	(200)
1,2,3-Trichloropropane	NE		(50)	ND	(5)	ND	(5000)	ND	(5000)	ND	(5000)	ND	(5000)
1,2-Dichlorobenzene	NE		(5)	ND	(0 5)	ND	(500)	ND	(500)	ND	(500)	ND	(500)
1,2-Dichloroethane	0.5	MCL	(1)	ND	(0 1)	ND	(100)	ND	(100)	ND	(100)	ND	(100)
1,2-Dichloropropane	5	PMCL	(1)	ND	(0 1)	ND	(100)	ND	(100)	ND	(100)	ND	(100)
1,3-Dichlorobenzene	130	MCL	(3 2)	ND	(0 32)	ND	(320)	ND	(320)	ND	(320)	ND	(320)
1,4-Dichlorobenzene	5	MCL	(2 4)	ND	(0 24)	ND	(240)	ND	(240)	ND	(240)	ND	(240)
1-Chlorohexane	NE		(50)	ND	(5)	ND	(5000)	ND	(5000)	ND	(5000)	ND	(5000)
2-Chloroethylvinylethane:	NE		(5)	ND	(0 5)	ND	(500)	ND	(500)	ND	(500)	ND	(500)
Benzyl Chloride	NE		(100)	ND	(10)	ND	(10000)	ND	(10000)	ND	(10000)	ND	(10000)
Bromobenzene	NE		(50)	ND	(5)	ND	(5000)	ND	(5000)	ND	(5000)	ND	(5000)
Bromodichloromethane	100	PMCL	(1)	ND	(0 1)	ND	(100)	ND	(100)	ND	(100)	ND	(100)
Bromoform	100	PMCL	(5)	ND	(0 5)	ND	(500)	ND	(500)	ND	(500)	ND	(500)
Bromomethane	NE		(12)	ND	(1 2)	ND	(1200)	ND	(1200)	ND	(1200)	ND	(1200)
Carbon Tetrachloride	0.5	MCL	(1.2)	ND	(0 12)	ND	(120)	ND	(120)	ND	(120)	ND	(120)
Chlorobenzene	30	AL	(2.5)	ND	(0 25)	ND	(250)	ND	(250)	ND	(250)	ND	(250)
Chloroethane	NE		(5 2)	ND	(0 52)	ND	(520)	ND	(520)	ND	(520)	ND	(520)
Chloroform	100	PMCL	(1)	ND	(0 1)	ND	(100)	ND	(100)	ND	(100)	ND	(100)
Chloromethane	NE		(3)	ND	(0 3)	ND	(300)	ND	(300)	ND	(300)	ND	(300)
Dibromochloromethane	100	PMCL	(2)	ND	(0 2)	ND	(200)	ND	(200)	ND	(200)	ND	(200)
Dibromomethane	NE		(50)	ND	(5)	ND	(5000)	ND	(5000)	ND	(5000)	ND	(5000)
Methylene Chloride	NE		(4)	ND	(0 4)	ND	(400)	ND	(400)	ND	(400)	ND	(400)

ALL UNITS ARE ug/L

AL = DHS Action Level;
 TW = Extraction well
 Y = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 ME = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-75				MW-115				MW-128			
	Middle 05-Feb-90 RAD 09-Feb-90 RAS NS NS	Middle 18-Jan-90 RAD 19-Jan-90 RAS NS NS	Middle 05-Feb-90 RAD 09-Feb-90 RAS NS NS	Middle 18-Jan-90 RAD 19-Jan-90 RAS NS NS	Shallow 30-Jan-90 RAD 07-Feb-90 RAS FD NS	Shallow 30-Jan-90 RAD 07-Feb-90 RAS FD NS	Shallow 30-Jan-90 RAD 07-Feb-90 RAS FD NS	Shallow 30-Jan-90 RAD 07-Feb-90 RAS FD NS	Shallow 30-Jan-90 RAD 07-Feb-90 RAS FD NS	Shallow 30-Jan-90 RAD 07-Feb-90 RAS FD NS	Shallow 30-Jan-90 RAD 07-Feb-90 RAS FD NS	Shallow 30-Jan-90 RAD 07-Feb-90 RAS FD NS
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
Tetrachloroethane	5 MCL	(1)	17. C	(0.1)	ND	(0.1)	ND	(100)	ND	(100)	ND	(100)
Total 1,2-Dichloroethane	16 AL	(2)	ND	(2)	ND	(0.2)	ND	(200)	ND	(200)	ND	(200)
Total Chloroethane	NE	(250)	ND	(25)	ND	(25)	ND	(25000)	ND	(25000)	ND	(25000)
Trans-1,3-Dichloropropene	NE	(3.4)	ND	(0.34)	ND	(0.34)	ND	(340)	ND	(340)	ND	(340)
Trichloroethane	5 MCL	(2)	5.7 C	(0.2)	ND	(0.2)	21000 C	(200)	20000 C	(200)	20000 C	(200)
Trichlorofluoromethane	150 AL	(2)	ND	(0.2)	ND	(0.2)	ND	(200)	ND	(200)	ND	(200)
Vinyl Chloride	0.5 MCL	(2)	ND	(0.2)	ND	(0.2)	ND	(200)	ND	(200)	ND	(200)
bis(2-Chloroisopropyl) Ether	NE	(100)	ND	(10)	ND	(10)	ND	(10000)	ND	(10000)	ND	(10000)
cis-1,3-Dichloropropene	NE	(2)	ND	(0.2)	ND	(0.2)	ND	(200)	ND	(200)	ND	(200)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 C = Confirmed on second column
 FD = Field Duplicate
 G = Exceeds calibration range
 MCL = DHS maximum contaminant level
 MW = Monitoring well
 ND = Not detected at specified detection limit
 NE = Threshold value not established
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

TABLE 1-23 (Cont Inued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-129			MW-130			MW-131			MW-133			
	Maximum Contaminant Level Or Action Level	Detection		Maximum Contaminant Level Or Action Level	Detection		Maximum Contaminant Level Or Action Level	Detection		Maximum Contaminant Level Or Action Level	Detection		
		Result	Limit		Result	Limit		Result	Limit		Result	Limit	
1,1,1,2-Tetrachloroethane	NE	ND	(100)	ND	(5)	ND	(25)	ND	(5)	ND	(25)	ND	(5)
1,1,1,1-Trichloroethane	200	ND	(4)	0 20 P	(0 2)	ND	(1)	ND	(0 2)	3 4 C	(1)	ND	(0 2)
1,1,1,2-Tetrachloroethane	1	MCL	(3)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)
1,1,1,2-Trichloroethane	32	MCL	(4)	ND	(0 2)	ND	(1)	ND	(1)	ND	(1)	ND	(0 2)
1,1,1-Dichloroethane	NE	ND	(10)	1 8 P	(0 5)	ND	(2 5)	ND	(2 5)	ND	(2 5)	ND	(0 5)
1,1,1-Dichloroethane	6	MCL	(4)	ND	(0 2)	ND	(1)	ND	(1)	ND	(1)	ND	(0 2)
1,1,2,3-Trichloropropane	NE	ND	(100)	ND	(5)	ND	(25)	ND	(5)	ND	(25)	ND	(5)
1,1,2-Dichlorobenzene	NE	ND	(10)	ND	(0 5)	ND	(2 5)	ND	(2 5)	ND	(2 5)	ND	(0 5)
1,1,2-Dichloroethane	0 5	MCL	(2)	ND	(0 1)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 1)
1,1,2-Dichloropropane	5	PMCL	(2)	ND	(0 1)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 1)
1,1,3-Dichlorobenzene	130	MCL	(6 4)	ND	(0 32)	ND	(1 6)	ND	(1 6)	ND	(1 6)	ND	(0 32)
1,1,4-Dichlorobenzene	5	MCL	(4 8)	ND	(0 24)	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(0 24)
1-Chlorohexane	NE	ND	(100)	ND	(5)	ND	(25)	ND	(25)	ND	(25)	ND	(5)
2-Chloroethylvinylether	NE	ND	(10)	ND	(0 5)	ND	(2 5)	ND	(2 5)	ND	(2 5)	ND	(0 5)
Benzyl Chloride	NE	ND	(200)	ND	(10)	ND	(50)	ND	(10)	ND	(10)	ND	(5)
Bromobenzene	NE	ND	(100)	ND	(5)	ND	(25)	ND	(25)	ND	(25)	ND	(5)
Bromodichloromethane	100	PMCL	(2)	ND	(0 1)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 1)
Bromoform	100	PMCL	(10)	ND	(0 5)	ND	(2 5)	ND	(2 5)	ND	(2 5)	ND	(0 5)
Bromomethane	NE	ND	(24)	ND	(1 2)	ND	(5 9)	ND	(5 9)	ND	(5 9)	ND	(1 2)
Carbon Tetrachloride	0 5	MCL	(2 4)	ND	(0 12)	ND	(0 6)	ND	(0 6)	ND	(0 6)	ND	(0 12)
Chlorobenzene	30	AL	(5)	ND	(0 25)	ND	(1 3)	ND	(1 3)	ND	(1 3)	ND	(0 25)
Chloroethane	NE	ND	(10)	ND	(0 52)	ND	(2 6)	ND	(2 6)	ND	(2 6)	ND	(0 52)
Chloroform	100	PMCL	(2)	ND	(0 1)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 1)
Chloromethane	NE	ND	(6)	ND	(0 3)	ND	(1 5)	ND	(1 5)	ND	(1 5)	ND	(0 3)
Dibromochloromethane	100	PMCL	(4)	ND	(0 2)	ND	(1)	ND	(1)	ND	(1)	ND	(0 2)
Dibromomethane	NE	ND	(100)	ND	(5)	ND	(25)	ND	(25)	ND	(25)	ND	(5)
Methylene Chloride	NE	ND	(8)	ND	(0 4)	ND	(2)	ND	(2)	ND	(2)	ND	(0 4)
ALL UNITS ARE ug/L													

AL	= DHS Action Level	B	= Detected in blank, result not corrected	C	= Confirmed on second column
EW	= Extraction well	FD	= Field Duplicate	G	= Exceeds calibration range
I	= Result differs from last issue of report	NCL	= DHS maximum contaminant level	MW	= Monitoring well
NA	= Not analyzed	ND	= Not detected at specified detection limit	NE	= Threshold value not established
NS	= Normal sample	P	= Previously confirmed	PMCL	= US EPA primary maximum contaminant level
RAD	= Radon Corporation, Sacramento	RAS	= Radon Analytical Services, Sacramento		
U	= Unconfirmed, second column not requested	(2)	= Result obtained from secondary column		
(a), (b), (c)	= Result qualified due to one of the following analytical considerations.				
(a)	= Coelution	(b)	= Interference	(c)	= Random error

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-129				MW-130				MW-131			
	Middle 19-Jan-90 RAD 21-Jan-90 RAS NS NS	Deep A 19-Jan-90 RAD 21-Jan-90 RAS NS NS	Deep A 19-Jan-90 RAD 21-Jan-90 RAS NS NS	Deep A 19-Jan-90 RAD 21-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Detection Limit
Tetrachloroethene	5 MCL	ND	(2)	0.11 P	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	(0.1)
Total 1,2-Dichloroethene	16 AL	ND	(4)	0.65 P	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	(0.2)
Total Chlorotoluene	NE	ND	(500)	ND	(25)	ND	(130)	ND	(25)	ND	(25)	(25)
Trans-1,3-Dichloropropene	NE	ND	(6.8)	ND	(0.34)	ND	(1.7)	ND	(0.34)	ND	(0.34)	(0.34)
Trichloroethene	5 MCL	290. P	(4)	3.4 P	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	(0.2)
Trichlorofluoromethane	150 AL	ND	(4)	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	(0.2)
Vinyl Chloride	0.5 MCL	ND	(4)	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	(0.2)
bis(2-Chloroisopropyl) Ether	NE	ND	(200)	ND	(10)	ND	(50)	ND	(10)	ND	(10)	(10)
cis-1,3-Dichloropropene	NE	ND	(4)	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	(0.2)

ALL UNITS ARE µg/L

AL = DHS Action Level
EW = Extraction Well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations.
(a) = Coelution
(b) = Interference
(c) = Random error
B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column
C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PHCL = US. EPA primary maximum contaminant level

TABLE 1 23 (Continued)

Ground Water Zone Date Sampled Sampled by Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-134			MW-135			MW-135			MW-136		
	Deep A 15-Jan-90 RAD 16-Jan-90 RAS NS NS	Middle 22-Jan-90 RAD 23-Jan-90 RAS NS NS	Middle 22-Jan-90 RAD 23-Jan-90 RAS FD NS	Deep B 30-Jan-90 RAD 01-Feb-90 RAS NS NS								
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit			
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(25)	ND	(100)			
1,1,1-Trichloroethane	200	ND	(0.2)	ND	(0.2)	ND	(1)	ND	(4)			
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	(0.15)	ND	(0.75)	ND	(3)			
1,1,2-Trichloroethane	32	ND	(0.2)	ND	(0.2)	ND	(1)	ND	(4)			
1,1-Dichloroethane	NE	ND	(0.5)	ND	(0.5)	ND	(2.5)	ND	(10)			
1,1-Dichloroethane	6	ND	(0.2)	ND	(0.2)	ND	(1)	ND	(4)			
1,2,3-Trichloropropane	NE	ND	(5)	ND	(5)	ND	(25)	ND	(100)			
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	(0.5)	ND	(2.5)	ND	(10)			
1,2-Dichloroethane	0.5	ND	(0.1)	1.0 C	(0.1)	2.5 C	(0.5)	ND	(2)			
1,2-Dichloropropane	5	PHCL	(0.1)	ND	(0.1)	ND	(0.5)	ND	(2)			
1,3-Dichlorobenzene	130	ND	(0.32)	ND	(0.32)	ND	(1.6)	ND	(6.4)			
1,4-Dichlorobenzene	5	ND	(0.24)	ND	(0.24)	ND	(1.2)	ND	(4.8)			
1-Chloroethane	NE	ND	(5)	ND	(5)	ND	(25)	ND	(100)			
2-Chloroethylvinylether	NE	ND	(0.5)	ND	(0.5)	ND	(2.5)	ND	(10)			
Benzyl Chloride	NE	ND	(10)	ND	(10)	ND	(50)	ND	(200)			
Bromobenzene	NE	ND	(5)	ND	(5)	ND	(25)	ND	(100)			
Bromodichloromethane	100	PHCL	(0.1)	ND	(0.1)	ND	(0.5)	ND	(2)			
Bromoform	100	PHCL	(0.5)	ND	(0.5)	ND	(2.5)	ND	(10)			
Bromochloroethane	NE	ND	(1.2)	ND	(1.2)	ND	(5.9)	ND	(24)			
Carbon Tetrachloride	0.5	ND	(0.12)	ND	(0.12)	ND	(0.6)	ND	(2.4)			
Chlorobenzene	30	AL	(0.25)	ND	(0.25)	ND	(1.3)	ND	(5)			
Chloroethane	NE	ND	(0.52)	ND	(0.52)	ND	(2.6)	ND	(10)			
Chloroform	100	PHCL	(0.1)	0.91 C	(0.1)	ND	(0.5)	ND	(2)			
Chloromethane	NE	ND	(0.3)	ND	(0.3)	ND	(1.5)	ND	(6)			
Dibromochloromethane	NE	ND	(0.2)	ND	(0.2)	ND	(1)	ND	(4)			
Dibromomethane	100	PHCL	(5)	ND	(5)	ND	(25)	ND	(100)			
Methylene Chloride	NE	ND	(0.4)	ND	(0.4)	ND	(2)	ND	(8)			

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a),(b),(c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Result obtained from secondary column
RAS = Radian Analytical Services, Sacramento
P = Previously confirmed
ND = Not detected at specified detection limit
MCL = DHS maximum contaminant level
FD = Field Duplicate
B = Detected in blank, result not corrected
C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PHCL = US EPA primary maximum contaminant level
(c) = Random error

TABLE 1 23 (Continued)

		WELL NUMBER					
		MW-134		MW-135		MW-136	
Ground Water Zone		Deep A		Middle		Middle	
Date Sampled		15-Jan-90		22-Jan-90		22-Jan-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		16-Jan-90		23-Jan-90		23-Jan-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		NS		NS	
Lab Analysis		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		16-Jan-90		23-Jan-90		23-Jan-90	
		RAS		RAS		RAS	
		NS		NS		NS	
		NS		NS		NS	
		NS		NS		NS	
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TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER							
	MW-138		MW-139		MW-142		MW-143	
	Deep B		Shallow		Deep A		Deep A	
	29-Jan-90		26-Jan-90		29-Jan-90		16-Jan-90	
	RAD		RAD		RAD		RAD	
04-Feb-90		11-Jan-90		05-Feb-90		17-Jan-90		
RAS		RAS		RAS		RAS		
NS		NS		NS		NS		
NS		NS		NS		NS		
Maximum Contaminant								
Level Or Action Level								
Analytes	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
1,1,1,2-Tetrachloroethane	NE	(5)	ND	(50)	ND	(5)	ND	(5)
1,1,1-Trichloroethane	200	(0.2)	ND	(2)	ND	(0.2)	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	(0.15)	ND	(1.5)	ND	(0.15)	ND	(0.15)
1,1,2-Trichloroethane	32	(0.2)	ND	(2)	ND	(0.2)	ND	(0.2)
1,1-Dichloroethane	NE	(0.5)	20	(5)	ND	(0.5)	ND	(0.5)
1,1-Dichloroethane	6	(0.2)	ND	(2)	ND	(0.2)	ND	(0.2)
1,2,3-Trichloropropane	NE	(5)	ND	(50)	ND	(5)	ND	(5)
1,2-Dichlorobenzene	NE	(0.5)	ND	(5)	ND	(0.5)	ND	(0.5)
1,2-Dichloroethane	0.5	(0.1)	ND	(1)	ND	(0.1)	ND	(0.1)
1,2-Dichloropropane	5	(0.1)	ND	(1)	ND	(0.1)	ND	(0.1)
1,3-Dichlorobenzene	130	(0.32)	ND	(3.2)	ND	(0.32)	ND	(0.32)
1,4-Dichlorobenzene	5	(0.24)	ND	(2.4)	ND	(0.24)	ND	(0.24)
1-Chlorohexane	NE	(5)	ND	(50)	ND	(5)	ND	(5)
2-Chloroethylvinylether	NE	(0.5)	ND	(5)	ND	(0.5)	ND	(0.5)
Benzyl Chloride	NE	(10)	ND	(100)	ND	(10)	ND	(10)
Bromobenzene	NE	(5)	ND	(50)	ND	(5)	ND	(5)
Bromodichloromethane	100	(0.1)	ND	(1)	ND	(0.1)	ND	(0.1)
Bromoform	100	(0.5)	ND	(5)	ND	(0.5)	ND	(0.5)
Bromomethane	NE	(1.2)	ND	(12)	ND	(1.2)	ND	(1.2)
Carbon Tetrachloride	0.5	(0.12)	ND	(1.2)	ND	(0.12)	ND	(0.12)
Chlorobenzene	30	(0.25)	ND	(2.5)	ND	(0.25)	ND	(0.25)
Chloroethane	NE	(0.52)	ND	(5.2)	ND	(0.52)	ND	(0.52)
Chloroform	100	(0.1)	ND	(1)	ND	(0.1)	ND	(0.1)
Chloromethane	NE	(0.3)	ND	(3)	ND	(0.3)	ND	(0.3)
Dibromochloromethane	100	(0.2)	ND	(2)	ND	(0.2)	ND	(0.2)
Dibromomethane	NE	(5)	ND	(50)	ND	(5)	ND	(5)
Methylene Chloride	NE	(0.4)	ND	(4)	ND	(0.4)	ND	(0.4)

ALL UNITS ARE ug/L

AL = DHS Action Level
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RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations.
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
BD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
U = Unconfirmed, second column not requested
(2) = Result obtained from secondary column
(a), (b), (c) = Result qualified due to one of the following analytical considerations.
(a) = Coelution
(b) = Interference
(c) = Random error

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-138			MW-139			MW-142			MW-143		
	Deep B	Shallow	Deep A	Deep B	Shallow	Deep A	Deep A	Shallow	Deep A	Deep A	Shallow	Deep A
	29-Jan-90	26-Jan-90	29-Jan-90	29-Jan-90	26-Jan-90	29-Jan-90	29-Jan-90	26-Jan-90	29-Jan-90	29-Jan-90	26-Jan-90	29-Jan-90
	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
	04-Feb-90	31-Jan-90	05-Feb-90	04-Feb-90	31-Jan-90	05-Feb-90	05-Feb-90	31-Jan-90	05-Feb-90	05-Feb-90	31-Jan-90	05-Feb-90
	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Analytes	Maximum Contaminant Level Or Action Level			Maximum Contaminant Level Or Action Level			Maximum Contaminant Level Or Action Level			Maximum Contaminant Level Or Action Level		
	Result	Detection Limit	Detection Limit	Result	Detection Limit	Detection Limit	Result	Detection Limit	Detection Limit	Result	Detection Limit	Detection Limit
Tetrachloroethene	5 MCL	ND	(0.1)	ND	(0.1)	(1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)
Total 1,2-Dichloroethene	16 AL	ND	(0.2)	28. C	(2)	(2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
Total Chlorotoluene	NE	ND	(25)	ND	(250)	(25)	ND	(25)	(25)	ND	(25)	(25)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(3.4)	(3.4)	ND	(0.34)	(0.34)	ND	(0.34)	(0.34)
Trichloroethene	5 MCL	ND	(0.2)	110 C	(2)	(2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
Trichlorofluoroethane	150 AL	ND	(0.2)	ND	(2)	(2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
Vinyl Chloride	0.5 MCL	ND	(0.2)	ND	(2)	(2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
bis(2-Chloroisopropyl)Ether	NE	ND	(10)	ND	(100)	(10)	ND	(10)	(10)	ND	(10)	(10)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(2)	(2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level
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I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US. EPA primary maximum contaminant level

TABLE 1-24. MASTER LOG OF WELLS SAMPLED FOR METHOD 8020 FOR AREA C AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, McCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-137			EW-137			EW-140			EW-140		
	Deep A	23-Jan-90	Deep A	02-Mar-90	Deep A	23-Jan-90	Deep A	02-Mar-90	Deep A	02-Mar-90	Deep A	02-Mar-90
	RAD		RAD		RAD		RAD		RAD		RAD	
	RAS	24-Jan-90	RAS	05-Mar-90	RAS	24-Jan-90	RAS	05-Mar-90	RAS	05-Mar-90	RAS	05-Mar-90
	NS		NS		NS		NS		NS		NS	
	NS		NS		NS		NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,2-Dichlorobenzene	NE	ND	ND	(8)	ND	ND	(20)	ND	ND	(4)	ND	(4)
1,3-Dichlorobenzene	130	ND	ND	(8)	ND	ND	(20)	ND	ND	(4)	ND	(4)
1,4-Dichlorobenzene	5	ND	ND	(6)	ND	ND	(15)	ND	ND	(3)	ND	(3)
Benzene	1	ND	ND	(4)	ND	ND	(10)	ND	ND	(2)	ND	(2)
Chlorobenzene	30	ND	ND	(4)	ND	ND	(10)	ND	ND	(2)	ND	(2)
Ethylbenzene	680	ND	ND	(4)	ND	ND	(10)	ND	ND	(2)	ND	(2)
Toluene	NE	ND	ND	(4)	ND	ND	(10)	ND	ND	(2)	ND	(2)
Total Xylenes	1750	ND	ND	(4)	ND	ND	(10)	ND	ND	(2)	ND	(2)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extractor Well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a),(b),(c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-24 (Continued)

	WELL NUMBER					
	EW-141		EW-144		EW-144	
	Deep B	Deep A	Deep B	Deep A	Deep A	Deep A
Ground Water Zone	23-Jan-90	02-Mar-90	23-Jan-90	02-Mar-90	02-Mar-90	02-Mar-90
Date Sampled	RAD	RAD	RAD	RAD	RAD	RAD
Sampled By	24-Jan-90	05-Mar-90	24-Jan-90	05-Mar-90	05-Mar-90	05-Mar-90
Date Analyzed	RAS	RAS	RAS	RAS	RAS	RAS
Lab	NS	NS	NS	NS	NS	NS
Field Analysis	NS	NS	NS	NS	NS	NS
Lab Analysis	NS	NS	NS	NS	NS	NS
Maximum Contaminant Level Or Action Level						
Analytes	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
1,2-Dichlorobenzene	ND	(4)	ND	(4)	ND	(20)
1,3-Dichlorobenzene	ND	(4)	ND	(4)	ND	(20)
1,4-Dichlorobenzene	ND	(3)	ND	(3)	ND	(15)
Benzene	ND	(2)	ND	(2)	ND	(10)
Chlorobenzene	ND	(2)	ND	(2)	ND	(10)
Ethylbenzene	ND	(2)	ND	(2)	ND	(10)
Toluene	ND	(2)	ND	(2)	ND	(10)
Total Xylenes	ND	(2)	ND	(2)	ND	(10)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 MA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a),(b),(c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PHCL = US EPA primary maximum contaminant level

Ground Water Zone	WELL NUMBER					
	MW-33S		MW-62		MW-128	
	Date Sampled	Date Analysed	Date Sampled	Date Analysed	Date Sampled	Date Analysed
Shallow	29-Jan-90	05-Feb-90	Shallow	23-Jan-90	Shallow	30-Jan-90
Field Analysis	NS	NS	Field Analysis	NS	Field Analysis	NS
Lab Analysis	NS	NS	Lab Analysis	NS	Lab Analysis	NS
Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
1,2-Dichlorobenzene	ND	(800)	ND	(0.4)	ND	(400)
1,3-Dichlorobenzene	130	(800)	ND	(0.4)	ND	(400)
1,4-Dichlorobenzene	5	(600)	ND	(0.3)	ND	(300)
Benzene	1	(400)	ND	(0.2)	ND	(200)
Chlorobenzene	30	(400)	ND	(0.2)	ND	(200)
Ethylbenzene	680	(400)	ND	(0.2)	ND	(200)
Toluene	NE	(400)	ND	(0.2)	ND	(200)
Total Xylenes	1750	(400)	ND	(0.2)	ND	(200)

ALL UNITS ARE ug/L

= DHS Action Level
 = Extraction well
 = Result differs from last issue of report
 = Not analysed
 = Normal sample
 = Radon Corporation, Sacramento
 = Unconfirmed, second column not requested
 = Result qualified due to one of the following analytical considerations.
 = Coelution
 = Interference
 = Detected in blank, result not corrected
 = Field Duplicate
 = DHS maximum contaminant level
 = Not detected at specified detection limit
 = Previously confirmed
 = Radon Analytical Services, Sacramento
 = Result obtained from secondary column
 = Interference
 = Confirmed on second column
 = Exceeds calibration range
 = Monitoring well
 = Threshold value not established
 = US. EPA primary maximum contaminant level
 = Random error

TABLE 1-24 (Continued)

		WELL NUMBER	
Ground Water Zone		MW-128	
Date Sampled		Shallow	
Sampled By		30-Jan-90	
Date Analyzed		RAD	
Lab		01-Feb-90	
Field Analysis		RAS	
Lab Analysis		NS	
		NS	
		Maximum Contaminant Level Or Action Level	Detection Limit
Analytes			
1,2-Dichlorobenzene		NE	(400)
1,3-Dichlorobenzene		130 MCL	ND (400)
1,4-Dichlorobenzene		5 MCL	ND (300)
Benzene		1 MCL	ND (200)
Chlorobenzene		30 AL	ND (200)
Ethylbenzene		680 MCL	ND (200)
Toluene		NE	ND (200)
Total Xylenes		1750 MCL	ND (200)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Conclusion
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-25 MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR AREA C AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, McLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-137			EW-140			EW-141			EW-144		
	Deep A	23-Jan-90	Deep A	23-Jan-90	Deep B	23-Jan-90	Deep A	23-Jan-90	Deep B	23-Jan-90	Deep A	23-Jan-90
	RAD		RAD		RAD		RAD		RAD		RAD	
	RAS		RAS		RAS		RAS		RAS		RAS	
	NS		NS		NS		NS		NS		NS	
	NS		NS		NS		NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
Aluminum	1 MCL	ND	(0.045)	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)
Antimony	NE	ND	(0.034)	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)
Arsenic	0.05 MCL	ND	(0.053)	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)
Barium	1 MCL	0.15	(0.002)	(0.002)	0.11	(0.002)	0.10	(0.002)	0.10	(0.002)	0.099	(0.002)
Beryllium	NE	ND	(0.001)	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)
Boron	NE	0.41 B	(0.006)	(0.006)	0.37 B	(0.006)	0.40 B	(0.006)	0.36 B	(0.006)	0.36 B	(0.006)
Cadmium	0.01 MCL	ND	(0.004)	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)
Calcium	NE	37.	(0.01)	(0.01)	31.	(0.01)	26	(0.01)	24.	(0.01)	24.	(0.01)
Chromium	0.05 MCL	0.017	(0.007)	(0.007)	0.021	(0.007)	0.018	(0.007)	0.017	(0.007)	0.017	(0.007)
Cobalt	NE	ND	(0.007)	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)
Copper	NE	0.021	(0.006)	(0.006)	0.014	(0.006)	0.014	(0.006)	0.013	(0.006)	0.013	(0.006)
Iron	NE	0.44	(0.007)	(0.007)	0.14	(0.007)	0.27	(0.007)	0.49	(0.007)	0.49	(0.007)
Lead	0.05 MCL	ND	(0.042)	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)
Magnesium	NE	30.	(0.03)	(0.03)	25	(0.03)	21	(0.03)	19	(0.03)	19	(0.03)
Manganese	NE	ND	(0.002)	(0.002)	ND	(0.002)	0.0030	(0.002)	0.0020	(0.002)	0.0020	(0.002)
Molybdenum	NE	ND	(0.008)	(0.008)	0.013	(0.008)	ND	(0.008)	ND	(0.008)	ND	(0.008)
Nickel	NE	ND	(0.015)	(0.015)	ND	(0.015)	ND	(0.015)	ND	(0.015)	ND	(0.015)
Potassium	NE	ND	(3)	(3)	ND	(3)	ND	(3)	ND	(3)	ND	(3)
Selenium	0.01 MCL	ND	(0.075)	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)
Silicon	NE	38.	(0.058)	(0.058)	39	(0.058)	38	(0.058)	38.	(0.058)	38.	(0.058)
Silver	0.05 MCL	ND	(0.007)	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)
Sodium	NE	24	(0.029)	(0.029)	23.	(0.029)	20	(0.029)	19	(0.029)	19	(0.029)
Thallium	NE	ND	(0.051)	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)
Vanadium	NE	0.026	(0.008)	(0.008)	0.024	(0.008)	0.026	(0.008)	0.028	(0.008)	0.028	(0.008)
Zinc	NE	0.0070 B	(0.002)	(0.002)	0.0040 B	(0.002)	0.0030 B	(0.002)	0.0020 B	(0.002)	0.0020 B	(0.002)

ALL UNITS ARE mg/L

AL = DHS Action Level
EW = Extraction Well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level
S = Determined by method of standard addition

TABLE 1-25 (Continued)

Analytes	Maximum Contaminant Level Or Action Level	WELL NUMBER					
		MW-20D		MW-21D		MW-22D	
		Ground Water Zone	Date Sampled	Date Sampled	Date Sampled	Date Sampled	Date Sampled
Aluminum	1 MCL	Middle	23-Jan-90	Middle	31-Jan-90	Deep A	Shallow
Antimony	NE		RAD		RAD	26-Jan-90	29-Jan-90
Arsenic	0.05 MCL		RAD		RAD	RAS	RAS
Barium	1 MCL		RAS		RAS	05-Feb-90	06-Feb-90
Beryllium	NE		NS		NS	NS	NS
Boron	NE		NS		NS	NS	NS
Cadmium	0.01 MCL		NS		NS	NS	NS
Calcium	NE		NS		NS	NS	NS
Chromium	0.05 MCL		NS		NS	NS	NS
Cobalt	NE		NS		NS	NS	NS
Copper	NE		NS		NS	NS	NS
Iron	NE		NS		NS	NS	NS
Lead	0.05 MCL		NS		NS	NS	NS
Magnesium	NE		NS		NS	NS	NS
Manganese	NE		NS		NS	NS	NS
Molybdenum	NE		NS		NS	NS	NS
Nickel	NE		NS		NS	NS	NS
Potassium	NE		NS		NS	NS	NS
Selenium	0.01 MCL		NS		NS	NS	NS
Silicon	NE		NS		NS	NS	NS
Silver	0.05 MCL		NS		NS	NS	NS
Sodium	NE		NS		NS	NS	NS
Thallium	NE		NS		NS	NS	NS
Vanadium	NE		NS		NS	NS	NS
Zinc	NE		NS		NS	NS	NS

ALL UNITS ARE mg/L

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 1 - Result differs from last issue of report
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 RAD - Radian Corporation, Sacramento
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B - Detected in blank, result not corrected
 FD - Field Duplicate
 MCL - DHS maximum contaminant level
 ND - Not detected at specified detection limit
 P - Previously confirmed
 RAS - Radian Analytical Services, Sacramento

C - Confirmed on second column
 G - Exceeds calibration range
 MW - Monitoring well
 NE - Threshold value not established
 PHCL - US EPA primary maximum contaminant level
 S - Determined by method of standard addition

TABLE 1-25 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER					
	MW-44S		MW-60		MW-61	
	Shallow 30-Jan-90 RAD 02-Feb-90 RAS NS	Shallow 30-Jan-90 RAD 02-Feb-90 RAS NS	Shallow 23-Jan-90 RAD 29-Jan-90 RAS NS	Shallow 23-Jan-90 RAD 29-Jan-90 RAS NS	Shallow 23-Jan-90 RAD 29-Jan-90 RAS NS	Shallow 23-Jan-90 RAD 29-Jan-90 RAS NS
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit	Result	Detection Limit
Aluminum	1 MCL	(0.045)	ND	(0.045)	ND	(0.045)
Antimony	NE	(0.034)	ND	(0.034)	ND	(0.034)
Arsenic	0.05 MCL	(0.053)	ND	(0.053)	ND	(0.053)
Barium	1 MCL	(0.002)	0.023	(0.002)	0.018	(0.002)
Beryllium	NE	(0.001)	ND	(0.001)	ND	(0.001)
Boron	NE	(0.006)	0.25	(0.006)	0.35 B	(0.006)
Cadmium	0.01 MCL	(0.004)	ND	(0.004)	ND	(0.004)
Calcium	NE	(0.01)	12 B	(0.01)	13	(0.01)
Chromium	0.05 MCL	(0.007)	ND	(0.007)	0.0080	(0.007)
Cobalt	NE	(0.007)	ND	(0.007)	ND	(0.007)
Copper	NE	(0.006)	0.012	(0.006)	0.014	(0.006)
Iron	NE	(0.007)	3.7 B	(0.007)	1.2	(0.007)
Lead	0.05 MCL	(0.042)	ND	(0.042)	ND	(0.042)
Magnesium	NE	(0.03)	9.1	(0.03)	9.5	(0.03)
Manganese	NE	(0.002)	0.15	(0.002)	0.037	(0.002)
Molybdenum	NE	(0.008)	ND	(0.008)	ND	(0.008)
Nickel	NE	(0.015)	ND	(0.015)	ND	(0.015)
Potassium	NE	(3)	ND	(3)	ND	(3)
Selenium	0.01 MCL	(0.075)	ND	(0.075)	ND	(0.075)
Silicon	NE	(0.058)	30 B	(0.058)	35	(0.058)
Silver	0.05 MCL	(0.007)	ND	(0.007)	ND	(0.007)
Sodium	NE	(0.029)	16	(0.029)	16	(0.029)
Thallium	NE	(0.051)	ND	(0.051)	ND	(0.051)
Vanadium	NE	(0.008)	0.020	(0.008)	0.020	(0.008)
Zinc	NE	(0.002)	0.0030 B	(0.002)	ND	(0.002)

ALL UNITS ARE mg/L

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B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level
S = Determined by method of standard addition

TABLE 1-25 (Continued)

		WELL NUMBER											
		MW-62				MW-75				MW-128			
		Shallow				Middle				Shallow			
Ground Water Zone		23-Jan-90				05-Feb-90				30-Jan-90			
Date Sampled		RAD				RAD				RAD			
Sampled By													
Date Analyzed		29-Jan-90				08-Feb-90				02-Feb-90			
Lab		RAS				RAS				RAS			
Field Analysis		FD				NS				NS			
Lab Analysis		NS				NS				NS			
		Maximum Contaminant Level Or Action Level											
Analytes		Result			Detection Limit			Result			Detection Limit		

TABLE 1-25 (Cont Innued)

		WELL NUMBER															
		MW-129				MW-130				MW-131				MW-133			
		Middle				Deep A				Shallow				Deep B			
		19-Jan-90				19-Jan-90				26-Jan-90				22-Jan-90			
Ground Water Zone		RAD				RAD				RAD				RAD			
Date Sampled		26-Jan-90				26-Jan-90				05-Feb-90				30-Jan-90			
Sampled By		RAS				RAS				RAS				RAS			
Date Analyzed		NS				NS				NS				NS			
Lab		NS				NS				NS				NS			
Field Analysis		NS				NS				NS				NS			
Lab Analysis		NS				NS				NS				NS			
Analytes		Maximum Contaminant Level Or Action Level		Detection Limit		Result		Detection Limit		Result		Detection Limit		Result		Detection Limit	
Aluminum	1	MCL	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)	
Antimony	ME		ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)	
Arsenic	0.05	MCL	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)	
Barium	1	MCL	0.055	(0.002)	0.10	(0.002)	0.056	(0.002)	0.056	(0.002)	0.055	(0.002)	0.055	(0.002)	0.055	(0.002)	
Beryllium	ME		ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)	
Boron	ME		0.28 B	(0.006)	0.29 B	(0.006)	0.25 B	(0.006)	0.25 B	(0.006)	0.32 B	(0.006)	0.32 B	(0.006)	0.32 B	(0.006)	
Cadmium	0.01	MCL	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)	
Calcium	ME		16.	(0.01)	25.	(0.01)	20.	(0.01)	20.	(0.01)	23	(0.01)	23	(0.01)	23	(0.01)	
Chromium	0.05	MCL	0.017	(0.007)	0.014	(0.007)	0.016	(0.007)	0.016	(0.007)	0.010	(0.007)	0.010	(0.007)	0.010	(0.007)	
Cobalt	ME		ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	
Copper	ME		0.0070	(0.006)	0.0080	(0.006)	0.019	(0.006)	0.019	(0.006)	0.018	(0.006)	0.018	(0.006)	0.018	(0.006)	
Iron	ME		ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	0.067	(0.007)	0.067	(0.007)	0.015	(0.007)	
Lead	0.05	MCL	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	
Magnesium	ME		13.	(0.03)	20	(0.03)	14.	(0.03)	14.	(0.03)	14.	(0.03)	14.	(0.03)	14.	(0.03)	
Manganese	ME		ND	(0.002)	0.0030	(0.002)	0.0030	(0.002)	0.0030	(0.002)	ND	(0.002)	ND	(0.002)	ND	(0.002)	
Molybdenum	ME		ND	(0.008)	ND	(0.008)	ND	(0.008)	ND	(0.008)	ND	(0.008)	ND	(0.008)	ND	(0.008)	
Nickel	ME		ND	(0.015)	0.017	(0.015)	0.10	(0.015)	0.10	(0.015)	ND	(0.015)	ND	(0.015)	ND	(0.015)	
Potassium	ME		ND	(3)	ND	(3)	ND	(3)	ND	(3)	ND	(3)	ND	(3)	ND	(3)	
Selenium	0.01	MCL	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)	
Silicon	ME		37.	(0.058)	37.	(0.058)	36.	(0.058)	36.	(0.058)	39.	(0.058)	39.	(0.058)	39.	(0.058)	
Silver	0.05	MCL	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	
Sodium	ME		16. B	(0.029)	19. B	(0.029)	19.	(0.029)	19.	(0.029)	21. B	(0.029)	21. B	(0.029)	21. B	(0.029)	
Thallium	ME		ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)	
Vanadium	ME		0.031	(0.008)	0.028	(0.008)	0.033	(0.008)	0.033	(0.008)	0.023	(0.008)	0.023	(0.008)	0.023	(0.008)	
Zinc	ME		0.0040	(0.002)	0.0050	(0.002)	0.0020	(0.002)	0.0020	(0.002)	0.010	(0.002)	0.010	(0.002)	0.010	(0.002)	

TABLE 1-25 (Continued)

		WELL NUMBER											
		MW-134				MW-135				MW-136			
Ground Water Zone		Deep A				Middle				Middle			
Date Sampled		15-Jan-90				22-Jan-90				22-Jan-90			
Sampled By		RAD				RAD				RAD			
Date Analyzed		19-Jan-90				30-Jan-90				30-Jan-90			
Lab		RAS				RAS				RAS			
Field Analysis		NS				NS				NS			
Lab Analysis		NS				NS				NS			
		Maximum Contaminant Level Or Action Level											
Analytes		Result			Detection Limit			Result			Detection Limit		
Aluminum	1 MCL	ND	(0.045)	(0.045)	ND	(0.045)	(0.045)	ND	(0.045)	ND	(0.045)	(0.045)	
Antimony	NE	ND	(0.034)	(0.034)	ND	(0.034)	(0.034)	ND	(0.034)	ND	(0.034)	(0.034)	
Arsenic	0.05 MCL	ND	(0.053)	(0.053)	ND	(0.053)	(0.053)	ND	(0.053)	ND	(0.053)	(0.053)	
Barium	1 MCL	0.058	(0.002)	(0.002)	0.054	(0.002)	(0.002)	0.054	(0.002)	0.090	(0.002)	(0.002)	
Beryllium	NE	ND	(0.001)	(0.001)	ND	(0.001)	(0.001)	ND	(0.001)	ND	(0.001)	(0.001)	
Boron	NE	0.048	(0.006)	(0.006)	0.27 B	(0.006)	(0.006)	0.36 B	(0.006)	0.29	(0.006)	(0.006)	
Cadmium	0.01 MCL	ND	(0.004)	(0.004)	ND	(0.004)	(0.004)	ND	(0.004)	ND	(0.004)	(0.004)	
Calcium	NE	20	(0.01)	(0.01)	22	(0.01)	(0.01)	22	(0.01)	38. B	(0.01)	(0.01)	
Chromium	0.05 MCL	ND	(0.007)	(0.007)	0.015	(0.007)	(0.007)	0.015	(0.007)	0.014	(0.007)	(0.007)	
Cobalt	NE	ND	(0.007)	(0.007)	ND	(0.007)	(0.007)	ND	(0.007)	ND	(0.007)	(0.007)	
Copper	NE	0.025	(0.006)	(0.006)	0.017	(0.006)	(0.006)	0.016	(0.006)	0.017	(0.006)	(0.006)	
Iron	NE	0.082	(0.007)	(0.007)	0.015	(0.007)	(0.007)	0.031	(0.007)	0.026 B	(0.007)	(0.007)	
Lead	0.05 MCL	ND	(0.042)	(0.042)	ND	(0.042)	(0.042)	ND	(0.042)	ND	(0.042)	(0.042)	
Magnesium	NE	14.	(0.03)	(0.03)	8.8	(0.03)	(0.03)	8.8	(0.03)	28.	(0.03)	(0.03)	
Manganese	NE	0.0020	(0.002)	(0.002)	ND	(0.002)	(0.002)	ND	(0.002)	0.0030	(0.002)	(0.002)	
Molybdenum	NE	ND	(0.008)	(0.008)	ND	(0.008)	(0.008)	ND	(0.008)	ND	(0.008)	(0.008)	
Nickel	NE	ND	(0.015)	(0.015)	ND	(0.015)	(0.015)	ND	(0.015)	0.028	(0.015)	(0.015)	
Potassium	NE	ND	(3)	(3)	ND	(3)	(3)	ND	(3)	ND	(3)	(3)	
Selenium	0.01 MCL	ND	(0.075)	(0.075)	ND	(0.075)	(0.075)	ND	(0.075)	ND	(0.075)	(0.075)	
Silicon	NE	38.	(0.058)	(0.058)	37.	(0.058)	(0.058)	37.	(0.058)	36. B	(0.058)	(0.058)	
Silver	0.05 MCL	ND	(0.007)	(0.007)	ND	(0.007)	(0.007)	ND	(0.007)	ND	(0.007)	(0.007)	
Sodium	NE	18.	(0.029)	(0.029)	17. B	(0.029)	(0.029)	17. B	(0.029)	26.	(0.029)	(0.029)	
Thallium	NE	ND	(0.051)	(0.051)	ND	(0.051)	(0.051)	ND	(0.051)	ND	(0.051)	(0.051)	
Vanadium	NE	0.025	(0.008)	(0.008)	0.032	(0.008)	(0.008)	0.031	(0.008)	0.022	(0.008)	(0.008)	
Zinc	NE	0.0070	(0.002)	(0.002)	0.0090	(0.002)	(0.002)	0.0060	(0.002)	0.0090 B	(0.002)	(0.002)	

ALL UNITS ARE mg/L

AL = DHS Action Level
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 NA = Not analyzed
 NS = Normal sample
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 C = Confirmed on second column
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 MW = Monitoring well
 NE = Threshold value not established
 PHCL = US EPA primary maximum contaminant level
 S = Determined by method of standard addition

TABLE 1-25. (Continued)

		WELL NUMBER			
		MW-138	MW-139	MW-142	MW-143
Ground Water Zone		Deep B	Shallow	Deep A	Deep A
Date Sampled		29-Jan-90	26-Jan-90	29-Jan-90	16-Jan-90
Sampled By		RAD	RAD	RAD	RAD
Date Analyzed		02-Feb-90	02-Feb-90	02-Feb-90	19-Jan-90
Lab		RAS	RAS	RAS	RAS
Field Analysis		NS	NS	NS	NS
Lab Analysis		NS	NS	NS	NS
		WELL NUMBER			
		MW-138	MW-139	MW-142	MW-143
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit	Result
Aluminum	1 MCL	(0.045)	ND	(0.045)	ND
Antimony	NE	(0.034)	ND	(0.034)	ND
Arsenic	0.05 MCL	(0.053)	ND	(0.053)	ND
Barium	1 MCL	(0.002)	0.14	(0.002)	0.043
Beryllium	NE	(0.001)	ND	(0.001)	ND
Boron	NE	(0.006)	0.30 B	(0.006)	0.39
Cadmium	0.01 MCL	(0.004)	ND	(0.004)	ND
Calcium	NE	(0.01)	54	(0.01)	17. B
Chromium	0.05 MCL	(0.007)	0.0090	(0.007)	0.016
Cobalt	NE	(0.007)	ND	(0.007)	ND
Copper	NE	(0.006)	0.022	(0.006)	0.064
Iron	NE	(0.007)	0.089	(0.007)	0.016 B
Lead	0.05 MCL	(0.042)	ND	(0.042)	ND
Magnesium	NE	(0.03)	41	(0.03)	11
Manganese	NE	(0.002)	0.063	(0.002)	ND
Molybdenum	NE	(0.008)	ND	(0.008)	ND
Nickel	NE	(0.015)	0.23	(0.015)	ND
Potassium	NE	(3)	ND	(3)	ND
Selenium	0.01 MCL	(0.075)	ND	(0.075)	ND
Silicon	NE	(0.058)	39	(0.058)	40. B
Silver	0.05 MCL	(0.007)	ND	(0.007)	ND
Sodium	NE	(0.029)	28	(0.029)	15
Thallium	NE	(0.051)	ND	(0.051)	ND
Vanadium	NE	(0.008)	0.021	(0.008)	0.036
Zinc	NE	(0.002)	0.0030	(0.002)	0.050 B

ALL UNITS ARE mg/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US. EPA primary maximum contaminant level
S = Determined by method of standard addition

TABLE 1-26. MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR AREA C AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

		MW-62		MW-62		MW-62	
Ground Water Zone		Shallow		Shallow		Shallow	
Date Sampled		23-Jan-90		23-Jan-90		23-Jan-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		24-Jan-90		24-Jan-90		24-Jan-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		NS		FD	
Lab Analysis		NS		NS		NS	
Analytes		Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit	
Chromium, Hexavalent		50 PHCL		ND (0 02)		ND (0 02)	

ALL UNITS ARE mg/l

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PHCL = US. EPA primary maximum contaminant level
S = Determined by method of standard addition

TABLE 1-27 MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR AREA D AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

	WELL NUMBER			
	EW-73	EW-83	EW-83	EW-83
Ground Water Zone	Middle	Middle	Middle	Middle
Date Sampled	02-Feb-90	02-Feb-90	02-Mar-90	02-Mar-90
Sampled By	RAD	RAD	RAD	RAD
Date Analyzed	14-Feb-90	05-Mar-90	08-Feb-90	05-Mar-90
Lab	RAS	RAS	RAS	RAS
Field Analysis	NS	NS	NS	NS
Lab Analysis	NS	NS	NS	NS

Analytes	Maximum Contaminant Level Or Action Level	Detection		Detection		Detection	
		Result	Limit	Result	Limit	Result	Limit
1,1,1,2-Tetrachloroethane	NE	ND	(500)	ND	(500)	ND	(250)
1,1,1-Trichloroethane	200	770. C	(20)	990. PI	(200)	ND	(10)
1,1,2,2-Tetrachloroethane	1	ND	(15)	ND	(150)	ND	(7.5)
1,1,2-Trichloroethane	32	MCL	(20)	ND	(20)	ND	(10)
1,1-Dichloroethane	NE	420. C	(50)	1000. PI	(500)	ND	(25)
1,1-Dichloroethane	6	MCL	(20)	8300. PI	(20)	560 C	(10)
1,2,3-Trichloropropane	NE	ND	(500)	ND	(5000)	ND	(250)
1,2-Dichlorobenzene	NE	ND	(50)	ND	(500)	ND	(25)
1,2-Dichloroethane	0.5	MCL	(10)	ND	(100)	ND	(5)
1,2-Dichloropropane	5	PMCL	(10)	ND	(100)	ND	(5)
1,3-Dichlorobenzene	130	MCL	(32)	ND	(320)	ND	(16)
1,4-Dichlorobenzene	5	MCL	(24)	ND	(240)	ND	(12)
1-Chlorohexane	NE	ND	(500)	ND	(5000)	ND	(250)
2-Chloroethylvinylether	NE	ND	(50)	ND	(50)	ND	(25)
Benzyl Chloride	NE	ND	(1000)	ND	(10000)	ND	(500)
Bromobenzene	NE	ND	(500)	ND	(5000)	ND	(250)
Bromodichloromethane	100	PMCL	(10)	ND	(100)	ND	(5)
Bromoform	100	PMCL	(50)	ND	(500)	ND	(25)
Bromoethane	NE	ND	(120)	ND	(1200)	ND	(59)
Carbon Tetrachloride	0.5	MCL	(12)	ND	(120)	ND	(6)
Chlorobenzene	30	AL	(25)	ND	(250)	ND	(12)
Chloroethane	NE	ND	(52)	ND	(520)	ND	(26)
Chloroform	100	PMCL	(10)	ND	(100)	ND	(5)
Chloromethane	NE	ND	(30)	ND	(300)	ND	(15)
Dibromochloromethane	100	PMCL	(20)	ND	(200)	ND	(10)
Dibromoethane	NE	ND	(500)	ND	(5000)	ND	(250)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-27 (Continued)

	EW-73			EW-83			EW-83		
	Middle			Middle			Middle		
Ground Water Zone	02-Feb-90			02-Feb-90			02-Feb-90		
Date Sampled	RAD			RAD			RAD		
Sampled By									
Date Analyzed	14-Feb-90			05-Mar-90			05-Mar-90		
Lab	RAS			RAS			RAS		
Field Analysis	NS			NS			NS		
Lab Analysis	NS			NS			NS		
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit		
	Result			Result			Result		
Methylene Chloride	NE	140. C	(40)	2000 PI	(400)	ND	50. CI	(20)	
Tetrachloroethene	5 MCL	ND	(10)	ND	(100)	28. C	ND	(5)	
Total 1,2-Dichloroethene	16 AL	390. C	(20)	910 PI	(200)	ND	ND	(10)	
Total Chloroethene	NE	ND	(2500)	ND	(25000)	ND	ND	(1200)	
Trans-1,3-Dichloropropene	NE	ND	(34)	ND	(340)	ND	ND	(17)	
Trichloroethene	5 MCL	1200. C	(20)	1200 PI	(200)	140 C	79 CI	(10)	
Trichlorofluoromethane	150 AL	ND	(20)	ND	(200)	ND	ND	(10)	
Vinyl Chloride	0.5 MCL	930 C	(20)	1700 PI	(200)	ND	ND	(10)	
bis(2-Chloroisopropyl)Ether	NE	ND	(1000)	ND	(10000)	ND	ND	(500)	
cis-1,3-Dichloropropene	NE	ND	(20)	ND	(200)	ND	ND	(10)	

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 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a),(b),(c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

WELL NUMBER											
EW-84				EW-85				EW-85			
Ground Water Zone				Middle				Middle			
Date Sampled				02-Feb-90				02-Feb-90			
Sampled By				RAD				RAD			
Date Analyzed				08-Feb-90				08-Feb-90			
Lab				RAS				RAS			
Field Analysis				NS				NS			
Lab Analysis				NS				NS			
Maximum Contaminant Level Or Action Level											
Analytes				Detection Limit		Result		Detection Limit		Result	
1,1,1,2-Tetrachloroethane				NE	(500)	ND	(500)	ND	(500)	ND	(250)
1,1,1,1-Trichloroethane				200	(20)	130. C	(20)	140	(20)	170 C	(20)
1,1,1,2,2-Tetrachloroethane				1	(15)	ND	(15)	17. CI	(15)	ND	(15)
1,1,1,2-Trichloroethane				32	(20)	ND	(20)	ND	(20)	ND	(20)
1,1-Dichloroethane				NE	(50)	ND	(50)	290	(50)	ND	(50)
1,1-Dichloroethane				6	(20)	950. C	(20)	1300. CI	(20)	450. C	(20)
1,1,2,3-Trichloropropane				NE	(500)	ND	(500)	ND	(500)	ND	(500)
1,1,2-Dichlorobenzene				NE	(50)	ND	(50)	ND	(50)	ND	(25)
1,1,2-Dichloroethane				0.5	(10)	150. C	(10)	120. CI	(10)	ND	(10)
1,1,2-Dichloropropane				5	(10)	ND	(10)	ND	(10)	ND	(10)
1,1,3-Dichlorobenzene				130	(32)	ND	(32)	ND	(32)	ND	(32)
1,1,4-Dichlorobenzene				5	(24)	ND	(24)	ND	(24)	ND	(24)
1-Chlorohexane				NE	(500)	ND	(500)	ND	(500)	ND	(500)
2-Chloroethylvinylether				NE	(50)	ND	(50)	ND	(50)	ND	(25)
Benzyl Chloride				NE	(1000)	ND	(1000)	ND	(1000)	ND	(500)
Bromobenzene				NE	(500)	ND	(500)	ND	(500)	ND	(500)
Bromodichloroethane				100	(10)	ND	(10)	ND	(10)	ND	(5)
Bromoform				100	(50)	ND	(50)	ND	(50)	ND	(25)
Bromomethane				NE	(120)	ND	(120)	ND	(120)	ND	(59)
Carbon Tetrachloride				0.5	(12)	ND	(12)	ND	(12)	ND	(6)
Chlorobenzene				30	(25)	ND	(25)	ND	(25)	ND	(12)
Chloroethane				NE	(52)	ND	(52)	ND	(52)	ND	(26)
Chloroform				100	(10)	ND	(10)	ND	(10)	ND	(5)
Chloromethane				NE	(30)	ND	(30)	ND	(30)	ND	(15)
Dibromochloroethane				100	(20)	ND	(20)	ND	(20)	ND	(10)
Dibromoethane				NE	(500)	ND	(500)	ND	(500)	ND	(250)
Methylene Chloride				NE	(40)	ND	(40)	330	(40)	ND	(40)

ALL UNITS ARE W/L

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 MA = Not analyzed
 NA = Normal sample
 RAD = Radian Corporation, Sacramento
 J = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations.
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-2/ (Continued)

	WELL NUMBER					
	EW-84		EW-85		EW-85	
Ground Water Zone	Middle		Middle		Middle	
Date Sampled	02-Feb-90		02-Feb-90		02-Mar-90	
Sampled By	RAD		RAD		RAD	
Date Analyzed	08-Feb-90		08-Feb-90		05-Mar-90	
Lab	RAS		RAS		RAS	
Field Analysis	NS		NS		NS	
Lab Analysis	NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit	
	Result		Result		Result	
Tetrachloroethene	5 MCL	23. C	(10)	ND	(10)	ND
Total 1,2-Dichloroethene	16 AL	360. C	(20)	170 CI	(20)	ND, I
Total Chlorotoluene	NE	ND	(2500)	ND	(2500)	ND
Trans-1,3-Dichloropropene	NE	ND	(34)	ND	(34)	ND
Trichloroethene	5 MCL	1200. C	(20)	1100. CI	(20)	580 C
Trichlorofluoromethane	150 AL	ND	(20)	ND, I	(20)	ND
Vinyl Chloride	0.5 MCL	ND	(20)	420. CI	(20)	ND
bis(2-Chloroisopropyl) Ether	NE	ND	(1000)	ND	(1000)	ND
cis-1,3-Dichloropropene	NE	ND	(20)	ND	(20)	ND

ALL UNITS ARE ug/L

Al. = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 PD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-2/ (Continued)

WELL NUMBER											
EW-86				EW-87				EW-87			
Middle				Middle				Middle			
02-Feb-90				02-Feb-90				02-Mar-90			
RAD				RAD				RAD			
08-Feb-90				08-Feb-90				05-Mar-90			
RAS				RAS				RAS			
NS				NS				NS			
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TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-86			EW-87			EW-87			MW-10		
	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Result	Detection Limit	Result	Result	Detection Limit	Result
Tetrachloroethene	5 MCL	23. (a)	(1)	ND	(2)	ND, I	ND, I	(1)	ND	ND	(5)	ND
Total 1,2-Dichloroethane	16 AL	ND	(2)	ND	(4)	5 3 CI	5 3 CI	(2)	83. C	83. C	(10)	83. C
Total Chlorotoluene	NE	ND	(250)	ND	(500)	ND	ND	(250)	ND	ND	(1300)	ND
Trans-1,3-Dichloropropene	NE	ND	(3.4)	ND	(6.8)	ND	ND	(3.4)	ND	ND	(17)	ND
Trichloroethene	5 MCL	33. C	(2)	78 C	(4)	63. CI	63. CI	(2)	780 C	780 C	(10)	780 C
Trichlorofluoromethane	150 AL	ND	(2)	ND	(4)	ND	ND	(2)	ND	ND	(10)	ND
Vinyl Chloride	0.5 MCL	ND	(2)	ND	(4)	ND	ND	(2)	ND	ND	(10)	ND
bis(2-Chloroisopropyl) Ether	NE	ND	(100)	ND	(200)	ND	ND	(100)	ND	ND	(500)	ND
cis-1,3-Dichloropropene	NE	ND	(2)	ND	(4)	ND	ND	(2)	ND	ND	(10)	ND

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
MA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error
B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column
C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PHCL = US. EPA primary maximum contaminant level

ALL UNITS ARE ug/L

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analysed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 RAS = Radian Analytical Services, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-11			MW-11			MW-12			MW-14		
	Shallow	22-Feb-90	21-Feb-90	Shallow	22-Feb-90	21-Feb-90	Shallow	20-Feb-90	21-Feb-90	Shallow	21-Feb-90	21-Feb-90
	RAD			RAD			RAD			RAD		
	RAS	25-Feb-90	01-Mar-90	RAS			RAS	23-Feb-90	24-Feb-90	RAS		
	NS			FD			NS			NS		
	NS			NS			NS			NS		
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Tetrachloroethene	5 MCL	ND	ND	(100)	ND	ND	(100)	140. C	ND	ND	(20)	ND
Total 1,2-Dichloroethene	16 AL	ND	ND	(200)	ND	ND	(200)	ND	ND	ND	(40)	ND
Total Chlorotoluene	NE	ND	ND	(25000)	ND	ND	(25000)	ND	ND	ND	(5000)	ND
Trans-1,3-Dichloropropene	NE	ND	ND	(340)	ND	ND	(340)	ND	ND	ND	(68)	ND
Trichloroethene	5 MCL	3900. C	3000. CI	(200)	ND	ND	(200)	1400 C	1900. C	1900. C	(40)	ND
Trichlorofluoromethane	150 AL	ND	ND	(200)	ND	ND	(200)	ND	ND	ND	(40)	ND
Vinyl Chloride	0.5 MCL	ND	ND	(200)	ND	ND	(200)	ND	ND	ND	(40)	ND
bis(2-Chloroisopropyl)Ether	NE	ND	ND	(10000)	ND	ND	(10000)	ND	ND	ND	(2000)	ND
cis-1,3-Dichloropropene	NE	ND	ND	(200)	ND	ND	(200)	ND	ND	ND	(40)	ND

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 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-2/ (Continued)

		WELL NUMBER											
		MW-15				MW-19D				MW-51			
		Shallow				Middle				Deep A			
		15-Feb-90				28-Feb-90				12-Jan-90			
		RAD				RAD				RAD			
		21-Feb-90				01-Mar-90				15-Jan-90			
		RAS				RAS				RAS			
		NS				NS				NS			
		NS				NS				NS			
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TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER					
	MW-15	MW-19D	MW-51	MW-52		
	Shallow 15-Feb-90 RAD 21-Feb-90 RAS NS NS	Middle 28-Feb-90 RAD 01-Mar-90 RAS NS NS	Deep A 12-Jan-90 RAD 15-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 25-Jan-90 RAS NS NS		
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Detection Limit
Tetrachloroethene	5 MCL	ND	(5)	ND	(0 1)	(0 1)
Total 1,2-Dichloroethene	16 AL	ND	(10)	ND	(0 2)	(0 2)
Total Chlorotoluene	ME	ND	(1300)	ND	(25)	(25)
Trans-1,3-Dichloropropene	ME	ND	(17)	ND	(0 34)	(0 34)
Trichloroethene	5 MCL	320. C	(10)	ND	(0 2)	(0 2)
Trichlorofluoromethane	150 AL	ND	(10)	ND	(0 2)	(0 2)
Vinyl Chloride	0.5 MCL	ND	(10)	ND	(0 2)	(0 2)
bis(2-Chloroisopropyl)Ether	ME	ND	(500)	ND	(10)	(10)
cis-1,3-Dichloropropene	ME	ND	(10)	ND	(0 2)	(0 2)

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(a) = Cosolution
(b) = Interference
(c) = Random error

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FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
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RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
ME = Threshold value not established
PHCL = US. EPA primary maximum contaminant level

TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER							
	MW-53		MW-54		MW-55		MW-57	
	Middle		Middle		Middle		Middle	
	18-Jan-90	24-Jan-90	15-Jan-90	25-Jan-90	16-Jan-90	28-Jan-90		
	RAD	RAD	RAD		RAS	RAS		RAS
	RAS	RAS	RAS		NS	NS		NS
	NS	NS	NS		NS	NS		NS
	NS	NS	NS		NS	NS		NS
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	NS							

TABLE 1-2/ (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-53			MW-54			MW-55			MW-57		
	Middle	18-Jan-90	24-Jan-90	Middle	25-Jan-90	16-Jan-90	Middle	15-Jan-90	25-Jan-90	Middle	25-Jan-90	28-Jan-90
	RAD	RAD	RAD	RAD	RAS	RAS	RAD	RAS	RAS	RAD	RAS	RAS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Tetrachloroethane	5 MCL	ND	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)	1.1 C	(0.1)	(0.1)
Total 1,2-Dichloroethane	16 AL	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
Total Chlorotoluene	NE	ND	(25)	ND	(25)	(25)	ND	(25)	(25)	ND	(25)	(25)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(0.34)	(0.34)	ND	(0.34)	(0.34)	ND	(0.34)	(0.34)
Trichloroethane	5 MCL	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	1.8 C	(0.2)	(0.2)
Trichlorofluoromethane	150 AL	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
Vinyl Chloride	0.5 MCL	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
bis(2-Chloroisopropyl)Ether	NE	ND	(10)	ND	(10)	(10)	ND	(10)	(10)	ND	(10)	(10)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)

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MW = Monitoring well
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TABLE 1-27 (Cont Inued.)

Analytes	Maximum Contaminant Level Or Action Level	MW-58			MW-59			MW-70			MW-72		
		Deep A			Deep A			Middle			Middle		
		Result	Detection Limit	Result	Result	Detection Limit	Result	Result	Detection Limit	Result	Result	Detection Limit	Result
Ground Water Ions													
Date Sampled		22-Jan-90		24-Jan-90				25-Jan-90			20-Feb-90		
Sampled By		RAD		RAD				RAD			RAD		
Date Analyzed		23-Jan-90		25-Jan-90				28-Jan-90			24-Feb-90		
Lab		RAS		RAS				RAS			RAS		
Field Analysis		NS		NS				NS			NS		
Lab Analysis		NS		NS				NS			NS		
Analytes	Maximum Contaminant Level Or Action Level	MW-58			MW-59			MW-70			MW-72		
		Result	Detection Limit	Result	Result	Detection Limit	Result	Result	Detection Limit	Result	Result	Detection Limit	Result
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	0.30	(5)	ND	ND	(5)	ND	15.	(250)	ND
1,1,1-Trichloroethane	200	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	C	(10)	ND
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	ND	(0.15)	ND	ND	(0.15)	ND		(7.5)	ND
1,1,2-Trichloroethane	32	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND		(10)	ND
1,1-Dichloroethane	NE	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND		(25)	ND
1,1-Dichlorobenzene	6	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	260.	(10)	ND
1,2,3-Trichloropropane	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND		(250)	ND
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND		(25)	ND
1,2-Dichloroethane	0.5	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND	140.	(5)	ND
1,2-Dichloropropane	5	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND		(5)	ND
1,3-Dichlorobenzene	130	ND	(0.32)	ND	ND	(0.32)	ND	ND	(0.32)	ND		(16)	ND
1,4-Dichlorobenzene	5	ND	(0.24)	ND	ND	(0.24)	ND	ND	(0.24)	ND		(12)	ND
1-Chlorobenzene	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND		(250)	ND
2-Chloroethylvinylether	NE	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND		(25)	ND
Benzyl Chloride	NE	ND	(10)	ND	ND	(10)	ND	ND	(10)	ND		(500)	ND
Bromobenzene	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND		(250)	ND
Bromodichloromethane	100	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND		(5)	ND
Bromoform	100	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND		(25)	ND
Bromomethane	NE	ND	(1.2)	ND	ND	(1.2)	ND	ND	(1.2)	ND		(59)	ND
Carbon Tetrachloride	0.5	ND	(0.12)	ND	ND	(0.12)	ND	ND	(0.12)	ND		(6)	ND
Chlorobenzene	30	ND	(0.25)	ND	ND	(0.25)	ND	ND	(0.25)	ND		(13)	ND
Chloroethane	NE	ND	(0.52)	ND	ND	(0.52)	ND	ND	(0.52)	ND		(26)	ND
Chloroform	100	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND		(5)	ND
Chloromethane	NE	ND	(0.3)	ND	ND	(0.3)	ND	ND	(0.3)	ND		(15)	ND
Dibromochloromethane	100	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND		(10)	ND
Dibromomethane	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND		(250)	ND
Methylene Chloride	NE	ND	(0.4)	ND	ND	(0.4)	ND	ND	(0.4)	ND		(20)	ND

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 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-58			MW-59			MW-70			MW-72		
	Deep A			Deep A			Middle			Middle		
	22-Jan-90	23-Jan-90	NS	24-Jan-90	25-Jan-90	NS	25-Jan-90	28-Jan-90	NS	20-Feb-90	24-Feb-90	NS
Maximum Contaminant Level Or Action Level	5 MCL	16 AL	NE	5 MCL	150 AL	0.5 MCL	5 MCL	16 AL	NE	5 MCL	150 AL	0.5 MCL
Analytes	Tetrachloroethane	Total 1,2-Dichloroethane	Total Chlorotoluene	Trans-1,3-Dichloropropene	Trichloroethane	Trichlorofluoroethane	Vinyl Chloride	bis(2-Chloroisopropyl)Ether	cis-1,3-Dichloropropene			
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(0.1)	(0.2)	(25)	(0.34)	(0.2)	(0.2)	(16)	(0.2)	(0.1)	(0.1)	(0.1)	(5)
	2 3 C	ND	ND	ND	ND	ND	ND	ND	0.25 (a)	ND	15. C	ND
	(0.2)	(25)	(0.34)	(0.2)	(0.2)	(0.2)	(10)	(0.2)	(0.2)	(0.2)	(10)	(1300)
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	700. C	(17)
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(10)
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(10)
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(500)
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(10)

ALL UNITS ARE ug/L

AL = DHS Action Level
 BW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 PD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US EPA primary maximum contaminant level

TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lat Field Analysis Lab Analysis	MW-88			MW-89			MW-90			MW-91		
	Shallow	25-Jan-90	Shallow	29-Jan-90	Shallow	20-Feb-90	Shallow	17-Jan-90	Shallow	17-Jan-90	18-Jan-90	Shallow
	RAD		RAD		RAD		RAD		RAD		RAS	
	RAS	28-Jan-90	RAS	05-Feb-90	RAS	22-Feb-90	RAS		RAS		NS	
	NS		NS		NS		NS		NS		NS	
	NS		NS		NS		NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
1,1,1,2-Tetrachloroethane	NE	(5)	ND	(25)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,1,1-Trichloroethane	200	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	(0.15)	ND	(0.75)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)
1,1,2-Trichloroethane	32	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1-Dichloroethane	NE	(0.5)	ND	(2.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,1-Dichloroethene	6	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,2,3-Trichloropropane	NE	(5)	ND	(25)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,2-Dichlorobenzene	NE	(0.5)	ND	(2.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,2-Dichloroethane	0.5	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,2-Dichloropropane	5	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,3-Dichlorobenzene	130	(0.32)	ND	(1.6)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)
1,4-Dichlorobenzene	5	(0.24)	ND	(1.2)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)
1-Chlorohexane	NE	(5)	ND	(25)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
2-Chloroethylvinylether	NE	(0.5)	ND	(2.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Benzyl Chloride	NE	(10)	ND	(50)	ND	(10)	ND	(10)	ND	(10)	ND	(10)
Bromobenzene	NE	(5)	ND	(25)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Bromodichloromethane	100	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Bromoform	100	(0.5)	ND	(2.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Bromomethane	NE	(1.2)	ND	(5.9)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)
Carbon Tetrachloride	0.5	(0.12)	ND	(0.6)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)
Chlorobenzene	30	(0.25)	ND	(1.3)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)
Chloroethane	NE	(0.52)	ND	(2.6)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)
Chloroform	100	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Chloromethane	NE	(0.3)	ND	(1.5)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)
Dibromochloromethane	100	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Dibromomethane	NE	(5)	ND	(25)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Methylene Chloride	NE	(0.4)	ND	(2)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)

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AL = DHS Action Level
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(a), (b), (c) = Result qualified due to one of the following analytical considerations
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-88			MW-89			MW-90			MW-91		
	Shallow			Shallow			Shallow			Shallow		
	25-Jan-90	29-Jan-90	05-Feb-90	17-Jan-90	20-Feb-90	22-Feb-90	18-Jan-90	20-Feb-90	22-Feb-90	17-Jan-90	20-Feb-90	22-Feb-90
Maximum Contaminant Level Or Action Level	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Analytes	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit
Tetrachloroethene	5 MCL	0.43 (a)	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	ND	(0.1)	(0.1)
Total 1,2-Dichloroethane	16 AL	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	0.48 C	(0.2)	(0.2)
Total Chlorotoluene	NE	ND	(25)	ND	(130)	ND	(25)	ND	(25)	ND	(25)	(25)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(1.7)	ND	(0.34)	ND	(0.34)	ND	(0.34)	(0.34)
Trichloroethane	5 MCL	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	5.4 C	(0.2)	(0.2)
Trichlorofluoroethane	150 AL	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Vinyl Chloride	0.5 MCL	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
bis(2-Chloroisopropyl) Ether	NE	ND	(10)	ND	(50)	ND	(10)	ND	(10)	ND	(10)	(10)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)

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AL = DHS Action level
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 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coalition
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PHCL = US. EPA primary maximum contaminant level

TABLE 1-27 (Continued)

WELL NUMBER											
MW-92				MW-104				MW-105			
Ground Water Zone		Shallow		Shallow		Deep A		Deep A		Deep A	
Date Sampled		17-Jan-90	17-Jan-90	30-Jan-90	12-Jan-90	30-Jan-90	12-Jan-90	30-Jan-90	12-Jan-90	30-Jan-90	12-Jan-90
Sampled By		RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
Date Analyzed		18-Jan-90	18-Jan-90	18-Jan-90	01-Feb-90	01-Feb-90	01-Feb-90	01-Feb-90	01-Feb-90	01-Feb-90	01-Feb-90
Lab		RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS
Field Analysis		NS	PD	NS	NS	NS	NS	NS	NS	NS	NS
Lab Analysis		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Maximum Contaminant											
Level Or Action Level		Detection		Detection		Detection		Detection		Detection	
		Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
1,1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,1,1,1-Trichloroethane	200	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)
1,1,1,2-Trichloroethane	32	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,1-Dichloroethane	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,1,1-Dichloroethane	6	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,2-Dichloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,2,3-Trichloropropane	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,2-Dichlorobenzene	NE	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,2-Dichloroethane	0.5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,2-Dichloropropane	5	PMCL	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)
1,3-Dichlorobenzene	130	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)
1,4-Dichlorobenzene	5	PMCL	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)
1-Chlorobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
2-Chloroethylvinyl ether	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Benzyl Chloride	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)
Bromobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Bromodichloromethane	100	PMCL	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Bromoform	100	PMCL	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Bromomethane	NE	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)
Carbon Tetrachloride	0.5	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)
Chlorobenzene	30	AL	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)
Chloroethane	NE	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)
Chloroform	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Chloromethane	NE	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)
Dibromochloromethane	100	PMCL	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Dibromomethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Methylene Chloride	NE	1.2	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)

TABLE 1-2/ (Continued.)

Ground Water Ions Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-92			MW-92			MW-104			MW-105		
	Shallow	17-Jan-90	Shallow	17-Jan-90	Shallow	17-Jan-90	Deep A	30-Jan-90	Deep A	12-Jan-90	Deep A	15-Jan-90
	17-Jan-90	RAD	17-Jan-90	RAD	17-Jan-90	RAD	30-Jan-90	RAD	30-Jan-90	12-Jan-90	RAD	15-Jan-90
	18-Jan-90	RAS	18-Jan-90	RAS	18-Jan-90	RAS	01-Feb-90	RAS	01-Feb-90	15-Jan-90	RAS	15-Jan-90
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
Tetrachloroethene	5	MCL	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Total 1,2-Dichloroethene	16	AL	0.40	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Total Chlorotoluene	NE	NE	ND	(25)	ND	(25)	ND	(25)	ND	(25)	ND	(25)
Trans-1,3-Dichloropropene	NE	NE	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)
Trichloroethene	5	MCL	3.0	(0.2)	2	(0.2)	3	(0.2)	0.78	(a)	ND	(0.2)
Trichlorofluoromethane	150	AL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Vinyl Chloride	0.5	MCL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)
cis-1,3-Dichloropropene	NE	NE	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations:
(a) = Conclusion
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column
(b) = Interference

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US. EPA primary maximum contaminant level

TABLE 1-28 MASTER LOG OF WELLS SAMPLED FOR METHOD 8020 FOR AREA D AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

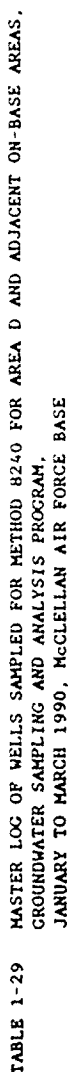
Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-73		EW-73		EW-73	
	Middle 02-Feb-90 RAD 13-Feb-90 RAS MS MS	Middle 02-Mar-90 RAD 05-Mar-90 RAS NS NS	Middle 02-Feb-90 RAD 13-Feb-90 RAS MS MS	Middle 02-Mar-90 RAD 05-Mar-90 RAS NS NS	Middle 02-Mar-90 RAD 05-Mar-90 RAS NS NS	Middle 02-Mar-90 RAD 05-Mar-90 RAS NS NS
Maximum Contaminant Level Or Action Level						
Analytes	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
1,2-Dichlorobenzene	NE	(40)	ND	(40)	ND	(400)
1,3-Dichlorobenzene	130 MCL	(40)	ND	(40)	ND	(400)
1,4-Dichlorobenzene	5 MCL	(30)	ND	(30)	ND	(300)
Benzene	1 MCL	(20)	ND	(20)	ND	(200)
Chlorobenzene	30 AL	(20)	ND	(20)	ND	(200)
Ethylbenzene	680 MCL	(20)	ND	(20)	ND	(200)
Toluene	NE	(20)	130. C	(20)	300. C	(200)
Total Xylenes	1750 MCL	(20)	ND	(20)	ND	(200)

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AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
MS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a),(b),(c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PHCL = US. EPA primary maximum contaminant level



ALL UNITS ARE ug/L

AL	=	DHS Action Level	B	=	Detected in blank, result not corrected	C	=	Confirmed on second column
EW	=	Extraction well	FD	=	Field Duplicate	G	=	Exceeds calibration range
I	=	Result differs from last issue of report	HCL	=	DHS maximum contaminant level	MW	=	Monitoring well
NA	=	Not analyzed	ND	=	Not detected at specified detection limit	NE	=	Threshold value not established
NS	=	Normal sample	P	=	Previously confirmed	PMCL	=	US EPA primary maximum contaminant level
RAD	=	Radian Corporation, Sacramento	RAS	=	Radian Analytical Services, Sacramento			
U	=	Unconfirmed, second column not requested						

AL	- DHS Action Level
EW	- Extraction well
I	- Result differs from
NA	- Not analyzed
NS	- Normal sample
RAD	- Radion Corporation
U	- Unconfirmed, second

last issue of report

Sacramento
column not requested

B = Detected in blank, result not corrected
 F = Field Duplicate
 MCL = Maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
HW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-29 (Continued)

Analytes	Maximum Contaminant Level Or Action Level	EW-73				EW-83				EW-84			
		Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
Ground Water Zone													
Date Sampled													
Sampled By													
Date Analyzed													
Lab													
Field Analysis													
Lab Analysis													
Tetrachloroethene	5 MCL	ND	(210)	ND	(160)	ND	(160)	ND	(16)	ND	(29)	ND	(29)
Toluene	NE	ND	(250)	ND	(200)	ND	(200)	ND	(20)	ND	(35)	ND	(35)
Total Xylenes	1750 MCL	ND	(250)	ND	(200)	ND	(200)	ND	(20)	ND	(35)	ND	(35)
Trans-1,3-Dichloropropene	NE	ND	(250)	ND	(200)	ND	(200)	ND	(20)	ND	(35)	ND	(35)
Trichloroethene	5 MCL	1000.	(130)	1100	(100)	83	(100)	83	(10)	970	(18)	970	(18)
Vinyl Acetate	NE	ND	(350)	ND	(280)	ND	(280)	ND	(28)	ND	(48)	ND	(48)
Vinyl Chloride	0.5 MCL	1100.	(250)	1300.	(200)	ND	(200)	ND	(20)	430.	(35)	ND	(35)
cis-1,3-Dichloropropene	NE	ND	(250)	ND	(200)	ND	(200)	ND	(20)	ND	(35)	ND	(35)
trans-1,2-Dichloroethene	NE	ND	(250)	ND	(200)	ND	(200)	ND	(20)	ND	(35)	ND	(35)

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 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-29 (Continued)

Ground Wat & Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER					
	EW-85		EW-86		EW-87	
	Middle	Middle	Middle	Middle	Middle	Middle
	23-Jan-90	23-Jan-90	23-Jan-90	23-Jan-90	23-Jan-90	23-Jan-90
	RAD	RAD	RAD	RAD	RAD	RAD
	29-Jan-90	29-Jan-90	29-Jan-90	29-Jan-90	29-Jan-90	29-Jan-90
	RAS	RAS	RAS	RAS	RAS	RAS
	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS
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	NS					

ALL UNITS ARE ug/l.

AL = DHS Action Level
EW = Extraction Well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-29 (Continued)

		WELL NUMBER					
		EW-85		EW-86		EW-87	
Ground Water Zone		Middle		Middle		Middle	
Date Sampled		23-Jan-90		23-Jan-90		23-Jan-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		29-Jan-90		28-Jan-90		28-Jan-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		NS		NS	
Lab Analysis		NS		NS		NS	
		EW-85		EW-86		EW-87	
		Middle		Middle		Middle	
		23-Jan-90		23-Jan-90		23-Jan-90	
		RAD		RAD		RAD	
		29-Jan-90		28-Jan-90		28-Jan-90	
		RAS		RAS		RAS	
		NS		NS		NS	
		NS		NS		NS	
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TABLE 1-30 MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR AREA D AND ADJACENT ON BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone	WELL NUMBER					
	EW-85	MW-10	MW-54	MW-70		
Date Sampled	Middle	Shallow	Middle	Middle		
Sampled By	23-Jan-90	21-Feb-90	24-Jan-90	25-Jan-90		
Date Analyzed	RAD	RAD	RAD	RAD		
Lab	29-Jan-90	01-Mar-90	30-Jan-90	31-Jan-90		
Field Analysis	RAS	RAS	RAS	RAS		
Lab Analysis	NS	NS	NS	NS		
	NS	NS	NS	NS		
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit	Result	Detection Limit
1	MCL	(0.045)	4.3	(0.045)	ND	(0.045)
Aluminum	NE	(0.034)	ND	(0.034)	ND	(0.034)
Antimony	0.05 MCL	(0.053)	ND	(0.053)	ND	(0.053)
Arsenic	1	(0.002)	0.22	(0.002)	0.15	(0.002)
Barium	NE	(0.001)	ND	(0.001)	ND	(0.001)
Beryllium	NE	(0.006)	0.27	(0.006)	0.36 B	(0.006)
Boron	0.01 MCL	(0.004)	ND	(0.004)	ND	(0.004)
Cadmium	NE	(0.01)	69.	(0.01)	14	(0.01)
Calcium	NE	(0.007)	ND	(0.007)	ND	(0.007)
Chromium	0.05 MCL	(0.007)	ND	(0.007)	ND	(0.007)
Cobalt	NE	(0.006)	0.023	(0.006)	0.011	(0.006)
Copper	NE	(0.007)	4.3	(0.007)	1.4 B	(0.007)
Iron	NE	(0.042)	ND	(0.042)	ND	(0.042)
Lead	0.05 MCL	(0.03)	51.	(0.03)	11	(0.03)
Magnesium	NE	(0.002)	0.23	(0.002)	1.2	(0.002)
Manganese	NE	(0.008)	ND	(0.008)	ND	(0.008)
Molybdenum	NE	(0.015)	0.073	(0.015)	ND	(0.015)
Nickel	NE	(3)	ND	(3)	ND	(3)
Potassium	0.01 MCL	(0.075)	ND	(0.075)	ND	(0.075)
Selenium	NE	(0.058)	49	(0.058)	38	(0.058)
Silicon	NE	(0.007)	ND	(0.007)	ND	(0.007)
Silver	0.05 MCL	(0.029)	30	(0.029)	18	(0.029)
Sodium	NE	(0.051)	ND	(0.051)	ND	(0.051)
Thallium	NE	(0.008)	0.036	(0.008)	ND	(0.008)
Vanadium	NE	(0.002)	0.032	(0.002)	0.0040	(0.002)
Zinc	NE	0.025 B			0.0050	(0.002)

ALL UNITS ARE mg/L

AJ = DHS Action Level
EW = Extraction Well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level
S = Determined by method of standard addition

TABLE 1-30 (Cont Inued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-89				MW-92				MW-104			
	Shallow		Shallow		Shallow		Shallow		Deep A		Deep A	
	29-Jan-90		17-Jan-90		17-Jan-90		17-Jan-90		30-Jan-90		30-Jan-90	
	RAD		RAD		RAD		RAD		RAD		RAD	
	RAS		RAS		RAS		RAS		RAS		RAS	
	NS		NS		NS		NS		NS		NS	
	NS		NS		NS		NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit		Detection Limit		Detection Limit		Detection Limit	
	Result		Result		Result		Result		Result		Result	
Aluminum	1	MCL	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)
Antimony	NE		ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)
Arsenic	0.05	MCL	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)
Barium	1	MCL	0.029	(0.002)	0.033	(0.002)	0.033	(0.002)	0.048	(0.002)	0.048	(0.002)
Beryllium	NE		ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)
Boron	NE		0.37	(0.006)	0.47	(0.006)	0.36	(0.006)	0.30	(0.006)	0.30	(0.006)
Cadmium	0.01	MCL	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)
Calcium	NE		12 B	(0.01)	13	(0.01)	13	(0.01)	16 B	(0.01)	16 B	(0.01)
Chromium	0.05	MCL	0.013	(0.007)	ND	(0.007)	ND	(0.007)	0.014	(0.007)	0.014	(0.007)
Cobalt	NE		ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)
Copper	NE		0.040	(0.006)	0.014	(0.006)	0.014	(0.006)	0.017	(0.006)	0.017	(0.006)
Iron	NE		0.076 B	(0.007)	0.25	(0.007)	0.24	(0.007)	0.024 B	(0.007)	0.024 B	(0.007)
Lead	0.05	MCL	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)
Magnesium	NE		8.6	(0.03)	9.3	(0.03)	9.3	(0.03)	12	(0.03)	12	(0.03)
Manganese	NE		0.017	(0.002)	0.052	(0.002)	0.052	(0.002)	ND	(0.002)	ND	(0.002)
Molybdenum	NE		ND	(0.008)	0.011 B	(0.008)	ND	(0.008)	0.011	(0.008)	0.011	(0.008)
Nickel	NE		ND	(0.015)	ND	(0.015)	ND	(0.015)	ND	(0.015)	ND	(0.015)
Potassium	NE		ND	(3)	ND	(3)	ND	(3)	ND	(3)	ND	(3)
Selenium	0.01	MCL	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)
Silicon	NE		38. B	(0.058)	34	(0.058)	34	(0.058)	36 B	(0.058)	36 B	(0.058)
Silver	0.05	MCL	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)
Sodium	NE		16	(0.029)	17	(0.029)	17	(0.029)	23	(0.029)	23	(0.029)
Thallium	NE		ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)
Vanadium	NE		0.032	(0.008)	0.023	(0.008)	0.023	(0.008)	0.036	(0.008)	0.036	(0.008)
Zinc	NE		0.040 B	(0.002)	0.0040	(0.002)	0.0020	(0.002)	0.021 B	(0.002)	0.021 B	(0.002)

ALL UNITS ARE mg/L

- AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
- B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
- C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PHCL = US. EPA primary maximum contaminant level
 S = Determined by method of standard addition

TABLE 1-31. MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR AREA D AND ADJACENT ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER			
	EW-85	MW-10	MW-54	MW-70
	Middle 23-Jan-90 RAD 24-Jan-90 RAS NS NS	Shallow 21-Feb-90 RAD 22-Feb-90 RAS NS NS	Middle 24-Jan-90 RAD 25-Jan-90 RAS NS NS	Middle 25-Jan-90 RAD 25-Jan-90 RAS NS NS
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Detection Limit	Detection Limit
Chromium, Hexavalent	50 PMCL	ND (0.02)	ND (0.02)	ND (0.02)

ALL UNITS ARE mg/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
MA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US. EPA primary maximum contaminant level
S = Determined by method of standard addition

TABLE 1-31 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER					
	MW-89		MW-92		MW-104	
	Shallow 29-Jan-90 RAD RAS NS	Detection Limit Result	Shallow 17-Jan-90 RAD RAS NS	Detection Limit Result	Shallow 17-Jan-90 RAD RAS FD NS	Deep A 30-Jan-90 RAD 31-Jan-90 RAS NS
Maximum Contaminant Level Or Action Level	50	PHCL	ND	(0 02)	ND	(0 02)
Chromium, Hexavalent	50	PHCL	ND	(0 02)	ND	(0 02)

ALL UNITS ARE mg/l

- AL = DHS Action Level
 EW = Extraction Well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
- B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
- C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PHCL = US EPA primary maximum contaminant level
 S = Determined by method of standard addition

TABLE 1-32 MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR THE NORTHWEST AREA,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, McCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-74			MW-76			MW-1001			MW-1002		
	Middle			Middle			Deep A			Shallow		
Analytes	Maximum Contaminant Level Or Action Level			Result			Result			Result		
	Detection Limit			Detection Limit			Detection Limit			Detection Limit		
1,1,1,2-Tetrachloroethane	NE			ND	(5)		ND	(5)		ND	(5)	
1,1,1-Trichloroethane	200	MCL		ND	(0.2)		ND	(0.2)		ND	(0.2)	
1,1,1,2,2-Tetrachloroethane	1	MCL		ND	(0.15)		ND	(0.15)		ND	(0.15)	
1,1,2-Trichloroethane	32	MCL		ND	(0.2)		ND	(0.2)		ND	(0.2)	
1,1-Dichloroethane	NR			ND	(0.5)		ND	(0.5)		ND	(0.5)	
1,1-Dichloroethene	6	MCL		ND	(0.2)		ND	(0.2)		ND	(0.2)	
1,2,3-Trichloropropane	NE			ND	(5)		ND	(5)		ND	(5)	
1,2-Dichlorobenzene	NE			ND	(0.5)		ND	(0.5)		ND	(0.5)	
1,2-Dichloroethane	0.5	MCL		ND	(0.1)		ND	(0.1)		ND	(0.1)	
1,2-Dichloropropane	5	PMCL		ND	(0.1)		ND	(0.1)		ND	(0.1)	
1,3-Dichlorobenzene	130	MCL		ND	(0.32)		ND	(0.32)		ND	(0.32)	
1,4-Dichlorobenzene	5	MCL		ND	(0.24)		ND	(0.24)		ND	(0.24)	
1-Chlorobenzene	NE			ND	(5)		ND	(5)		ND	(5)	
2-Chloroethylvinyl ether	NE			ND	(0.5)		ND	(0.5)		ND	(0.5)	
Benzyl Chloride	NE			ND	(10)		ND	(10)		ND	(10)	
Bromobenzene	NE			ND	(5)		ND	(5)		ND	(5)	
Bromodichloromethane	100	PMCL		ND	(0.1)		ND	(0.1)		ND	(0.1)	
Bromomethane	100	PMCL		ND	(0.5)		ND	(0.5)		ND	(0.5)	
Carbon Tetrachloride	NE			ND	(1.2)		ND	(1.2)		ND	(1.2)	
Chlorobenzene	0.5	MCL		ND	(0.12)		ND	(0.12)		ND	(0.12)	
Chloroethane	30	AL		ND	(0.25)		ND	(0.25)		ND	(0.25)	
Chloroform	NE			ND	(0.52)		ND	(0.52)		ND	(0.52)	
Chloromethane	100	PMCL		ND, I	(0.1)		ND	(0.1)		ND	(0.1)	
Dibromochloromethane	NE			ND	(0.3)		ND	(0.3)		ND	(0.3)	
Dibromomethane	100	PMCL		ND	(0.2)		ND	(0.2)		ND	(0.2)	
Dibromomethane	NE			ND	(5)		ND	(5)		ND	(5)	

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NR = Normal sample
RAD = Radon Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error
B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radon Analytical Services, Sacramento
(2) = Result obtained from secondary column
C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-32 (Continued)

		WELL NUMBER					
		MW-74	MW-76	MW-1001	MW-1002		
Ground Water Zone		Middle	Middle	Deep A	Shallow		
Date Sampled		27-Feb-90	28-Feb-90	31-Jan-90	17-Jan-90		
Sampled By		RAD	RAD	RAD	RAD		
Date Analyzed		28-Feb-90	01-Mar-90	04-Feb-90	08-Jan-90		
Lab		RAS	RAS	RAS	RAS		
Field Analysis		NS	NS	NS	NS		
Lab Analysis		NS	NS	NS	NS		
Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit		Detection Limit	
Analytes		Result	Result	Result	Result	Result	Limit
Methylene Chloride	NE	ND	ND	ND	ND	ND	(0.4)
Tetrachloroethane	5	ND	ND	ND	ND	ND	(0.1)
Total 1,2-Dichloroethane	16	0.59 CI	ND	ND	ND	ND	(0.2)
Total Chlorotoluene	NE	ND	ND	ND	ND	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	(0.34)
Trichloroethane	5	ND	ND	ND	ND	ND	(0.2)
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	(0.2)
Vinyl Chloride	0.5	ND	ND	ND	ND	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE	ND	ND	ND	ND	ND	(10)
cis-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 ME = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-32 (Continued)

Analytes	Maximum Contaminant Level Or Action Level	WELL NUMBER					
		MW-1003		MW-1004		MW-1005	
		Ground Water Zone	Sampled By	Date Analyzed	Lab	Field Analysis	Lab Analysis
Tetrachloroethene	5 MCL	Middle	31-Jan-90	Shallow	31-Jan-90	Shallow	01-Feb-90
Total 1,2-Dichloroethene	16 AL	RAD	04-Feb-90	RAD	04-Feb-90	RAD	11-Feb-90
Total Chlorotoluene	NE	RAS	NS	NS	NS	RAS	NS
Trans-1,3-Dichloropropene	5 MCL	NS	NS	NS	NS	NS	NS
Trichloroethene	150 AL	NS	NS	NS	NS	NS	NS
Trichlorofluoroethane	0.5 MCL	NS	NS	NS	NS	NS	NS
Vinyl Chloride	NE	NS	NS	NS	NS	NS	NS
bis(2-Chloroisopropyl)Ether	NE	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	NE	NS	NS	NS	NS	NS	NS

ALL UNITS ARE ug/L

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations.
 (a) = Coelution
 (b) = Interference
 (c) = Random error
 B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column
 C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-32 (Continued)

Ground Water Zone		Maximum Contaminant		Detection	
Analytes	Level Or Action	Result	Limit		
1,1,1,2-Tetrachloroethane	NE	ND	(5)		
1,1,1,1-Trichloroethane	200	ND	(0.2)		
1,1,1,2,2-Tetrachloroethane	1	ND	(0.15)		
1,1,1,2-Trichloroethane	32	ND	(0.2)		
1,1-Dichloroethane	NE	5 0 C	(0.5)		
1,1,1-Dichloroethane	6	ND	(0.2)		
1,1,2,3-Trichloropropane	NE	ND	(5)		
1,2-Dichlorobenzene	NE	ND	(0.5)		
1,2-Dichloroethane	0.5	ND	(0.1)		
1,2-Dichloropropane	5	ND	(0.1)		
1,3-Dichlorobenzene	130	ND	(0.32)		
1,4-Dichlorobenzene	5	ND	(0.24)		
1-Chlorohexane	NE	ND	(5)		
2-Chloroethylvinyl ether	NE	ND	(0.5)		
Benzyl Chloride	NE	ND	(10)		
Bromobenzene	NE	ND	(5)		
Bromodichloromethane	100	PMCL	(0.1)		
Bromoform	100	PMCL	(0.5)		
Bromomethane	NE	ND	(1.2)		
Carbon Tetrachloride	0.5	MCL	(0.12)		
Chlorobenzene	30	AL	(0.25)		
Chloroethane	NE	ND	(0.52)		
Chloroform	100	PMCL	(0.1)		
Chloromethane	NE	ND	(0.3)		
Dibromochloromethane	100	PMCL	(0.2)		
Dibromomethane	NE	ND	(5)		
Methylene Chloride	NE	ND	(0.4)		

ALL UNITS ARE U/L

AL	= DHS Action Level	B	= Detected in blank, result not corrected	C	= Confirmed on second column
EW	= Extraction well	FD	= Field Duplicate	G	= Exceeds calibration range
I	= Result differs from last issue of report	MCL	= DHS maximum contaminant level	HW	= Monitoring well
MA	= Not analysed	NCL	= Not detected at specified detection limit	NE	= Threshold value not established
NS	= Normal sample	P	= Previously confirmed	PHCL	= US EPA primary maximum contaminant level
RAD	= Radian Corporation, Sacramento	RAS	= Radian Analytical Services, Sacramento		
U	= Unconfirmed, second column not requested	(2)	= Result obtained from secondary column		
(a), (b), (c)	= Result qualified due to one of the following analytical considerations				
(a)	= Coelution	(b)	= Interference	(c)	= Random error

TABLE 1-32 (Continued)

MW-1019				WELL NUMBER
Ground Water Zone				Shallow
Date Sampled	01-Feb-90			
Sampled By	RAD			
Date Analyzed	11-Feb-90			
Lab	RAS			
Field Analysis	NS			
Lab Analysis	NS			
Analytes	Maximum Contaminant		Detection	
	Level Or Action	Level	Result	Limit
Tetrachloroethene	5	MCL	1.0 C	(0.1)
Total 1,2-Dichloroethene	16	AL	ND	(0.2)
Total Chlorotoluene	NE		ND	(25)
Trans-1,3-Dichloropropene	NE		ND	(0.34)
Trichloroethene	5	MCL	2.1 C	(0.2)
Trichlorofluoromethane	150	AL	ND	(0.2)
Vinyl Chloride	0.5	MCL	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE		ND	(10)
cis-1,3-Dichloropropene	NE		ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested
 (a), (b), (c) = Result qualified due to one of the following analytical considerations.
 (a) = Coelution
 (b) = Interference
 (c) = Random error

B = Detected in blank, result not corrected
 PD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento
 (2) = Result obtained from secondary column

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 ME = Threshold value not established
 PHCL = US. EPA primary maximum contaminant level

TABLE 1-33 MASTER LOG OF WELLS SAMPLED FOR METHOD 8020 FOR THE NORTHWEST AREA,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-74		MW-76	
	Middle 27-Feb-90 RAD 28-Feb-90 RAS NS NS	Middle 28-Feb-90 RAD 01-Mar-90 RAS NS NS	WELL NUMBER	
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit
1,2-Dichlorobenzene	NE	(0.4)	ND	(0.4)
1,3-Dichlorobenzene	130	(0.4)	ND	(0.4)
1,4-Dichlorobenzene	5	(0.3)	ND	(0.3)
Benzene	1	(0.2)	ND	(0.2)
Chlorobenzene	30	(0.2)	ND	(0.2)
Ethylbenzene	680	(0.2)	ND	(0.2)
Toluene	NE	(0.2)	ND	(0.2)
Total Xylenes	1750	(0.2)	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a),(b),(c) = Result qualified due to one of the following analytical considerations:
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-34 MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR THE NORTHWEST AREA,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

		MW-1001		MW-1003		WELL NUMBER	
Ground Water Zone		Deep A		Middle			
Date Sampled		31-Jan-90		31-Jan-90			
Sampled By		RAD		RAD			
Date Analyzed		02-Feb-90		02-Feb-90			
Lab		RAS		RAS			
Field Analysis		NS		NS			
Lab Analysis		NS		NS			
		Maximum Contaminant		Detection		Detection	
		Level Or Action Level		Limit		Limit	
Analytes		Result		Result		Result	
Aluminum	1	MCL	ND	(0.045)	ND	(0.045)	
Antimony	NE		ND	(0.034)	ND	(0.034)	
Arsenic	0.05	MCL	ND	(0.053)	ND	(0.053)	
Barium	1	MCL	0.044	(0.002)	0.040	(0.002)	
Beryllium	NE		ND	(0.001)	ND	(0.001)	
Boron	NE		0.37	(0.006)	0.36	(0.006)	
Cadmium	0.01	MCL	ND	(0.004)	ND	(0.004)	
Calcium	NE		14 B	(0.01)	14 B	(0.01)	
Chromium	0.05	MCL	0.015	(0.007)	0.014	(0.007)	
Cobalt	NE		ND	(0.007)	ND	(0.007)	
Copper	NE		0.014	(0.006)	0.011	(0.006)	
Iron	NE		0.027 B	(0.007)	0.015 B	(0.007)	
Lead	0.05	MCL	ND	(0.042)	ND	(0.042)	
Magnesium	NE		9.6	(0.03)	9.0	(0.03)	
Manganese	NE		0.016	(0.002)	0.0090	(0.002)	
Molybdenum	NE		0.010	(0.008)	ND	(0.008)	
Nickel	NE		0.016	(0.015)	0.036	(0.015)	
Potassium	NE		ND	(3)	ND	(3)	
Selenium	0.01	MCL	ND	(0.075)	ND	(0.075)	
Silicon	NE		38 B	(0.058)	36 B	(0.058)	
Silver	0.05	MCL	ND	(0.007)	ND	(0.007)	
Sodium	NE		20.	(0.029)	19	(0.029)	
Thallium	NE		ND	(0.051)	ND	(0.051)	
Vanadium	NE		0.039	(0.008)	0.032	(0.008)	
Zinc	NE		0.013 B	(0.002)	0.020 B	(0.002)	

ALL UNITS ARE mg/L

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PHCL = US EPA primary maximum contaminant level
S = Determined by method of standard addition

TABLE 1-35. MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR THE NORTHWEST AREA,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

		MW-1001		MW-1003		WELL NUMBER
Ground Water Zone		Deep A		Middle		
Date Sampled		31-Jan-90		31-Jan-90		
Sampled By		RAD		RAD		
Date Analyzed		01-Feb-90		01-Feb-90		
Lab		RAS		RAS		
Field Analysis		NS		NS		
Lab Analysis		NS		NS		
Maximum Contaminant		Detection		Detection		
Level Or Action Level		Limit		Limit		
Result		Result		Result		
Chromium, Hexavalent		ND		ND		(0.02)

ALL UNITS ARE mg/L

AL = DHS Action Level
 EW = Extraction well
 I = Result differs from last issue of report
 RA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level
 S = Determined by method of standard addition

TABLE 1-36. MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR OTHER ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

				WELL NUMBER	
				MW-24D	
Ground Water Zone				Middle	
Date Sampled				16-Jan-90	
Sampled By				RAD	
Date Analyzed				17-Jan-90	
Lab				RAS	
Field Analysis				NS	
Lab Analysis				MS	
Maximum Contaminant				Detection	
Analytes	Level Or Action	Result	Limit		
1,1,1,2-Tetrachloroethane	NE	ND	(5)		
1,1,1-Trichloroethane	200	ND	(0.2)		
1,1,2,2-Tetrachloroethane	1	ND	(0.15)		
1,1,2-Trichloroethane	32	ND	(0.2)		
1,1-Dichloroethane	NE	ND	(0.5)		
1,1-Dichloroethane	6	ND	(0.2)		
1,2,3-Trichloropropane	NE	ND	(5)		
1,2-Dichlorobenzene	NE	ND	(0.5)		
1,2-Dichloroethane	0.5	ND	(0.1)		
1,2-Dichloropropane	5	ND	(0.1)		
1,3-Dichlorobenzene	130	ND	(0.32)		
1,4-Dichlorobenzene	5	ND	(0.24)		
1-Chlorobenzene	NE	ND	(5)		
2-Chloroethylvinyl ether	NE	ND	(0.5)		
Benzyl Chloride	NE	ND	(10)		
Bromobenzene	NE	ND	(5)		
Bromodichloromethane	100	ND	(0.1)		
Bromoform	100	ND	(0.5)		
Carbon Tetrachloride	NE	ND	(1.2)		
Chlorobenzene	0.5	ND	(0.12)		
Chloroethane	30	ND	(0.25)		
Chloroform	NE	ND	(0.52)		
Chloromethane	100	ND	(0.1)		
Dibromochloromethane	NE	ND	(0.3)		
Dibromomethane	100	ND	(0.2)		
Dibromomethane	NE	ND	(5)		

ALL UNITS ARE ug/L

AL = DBS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested
(a), (b), (c) = Result qualified due to one of the following analytical considerations.
(a) = Coelution
(b) = Interference
(c) = Random error

B = Detected in blank, result not corrected
FD = Field Duplicate
MCL = DBS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento
(2) = Result obtained from secondary column

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level

TABLE 1-36. (Continued)

WELL NUMBER

W-24D

Ground Water Zone

Middle

Date Sampled

16-Jan-90

Sampled By

RAD

Date Analyzed

17-Jan-90

Lab

RAS

Field Analysis

NS

Lab Analysis

NS

Analytes

Maximum Contaminant Level Or Action Level

Result

Detection Limit

Methylene Chloride

NE ND (0.4)

Tetrachloroethane

5 MCL ND (0.1)

Total 1,2-Dichloroethane

16 AL ND (0.2)

Total Chlorotoluene

NE ND (25)

Trans-1,3-Dichloropropene

NE ND (0.34)

Trichloroethane

5 MCL ND (0.2)

Trichlorofluoromethane

150 AL ND (0.2)

Vinyl Chloride

0.5 MCL ND (0.2)

bis(2-Chloroisopropyl)Ether

NE ND (10)

cis-1,3-Dichloropropene

NE ND (0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level

EW = Extraction Well

I = Result differs from last issue of report

NA = Not analyzed

NS = Normal sample

RAD = Radian Corporation, Sacramento

U = Unconfirmed, second column not requested

(a),(b),(c) = Result qualified due to one of the following analytical considerations.

(a) = Coelution

(b) = Interference

(c) = Random error

B = Detected in blank, result not corrected

FD = Field Duplicate

MCL = DHS maximum contaminant level

ND = Not detected at specified detection limit

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento

(2) = Result obtained from secondary column

(b) = Interference

(c) = Random error

C = Confirmed on second column

G = Exceeds calibration range

MW = Monitoring well

NE = Threshold value not established

PMCL = US. EPA primary maximum contaminant level

TABLE 1-37. MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR OTHER ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

		WELL NUMBER	
Ground Water Zone		MW-24D	
Date Sampled	Middle	16-Jan-90	
Sampled By	RAD		
Date Analyzed	19-Jan-90		
Lab	RAS		
Field Analysis	NS		
Lab Analysis	NS		
Maximum Contaminant		Detection	
Analytes	Level Or Action Level	Result	Limit
Aluminum	1 MCL	ND	(0.045)
Antimony	NE	ND	(0.034)
Arsenic	0.05 MCL	ND	(0.053)
Barium	1 MCL	0.047	(0.002)
Beryllium	NE	ND	(0.001)
Boron	NE	0.22	(0.006)
Cadmium	0.01 MCL	ND	(0.004)
Calcium	NE	17.	(0.01)
Chromium	0.05 MCL	0.011	(0.007)
Cobalt	NE	ND	(0.007)
Copper	NE	0.025	(0.006)
Iron	NE	0.048	(0.007)
Lead	0.05 MCL	ND	(0.042)
Magnesium	NE	13.	(0.03)
Manganese	NE	0.0090	(0.002)
Molybdenum	NE	ND	(0.008)
Nickel	NE	0.051	(0.015)
Potassium	NE	ND	(3)
Selenium	0.01 MCL	ND	(0.075)
Silicon	NE	37	(0.058)
Silver	0.05 MCL	ND	(0.007)
Sodium	NE	15.	(0.029)
Thallium	NE	ND	(0.051)
Vanadium	NE	0.022	(0.008)
Zinc	NE	0.0070	(0.002)

ALL UNITS ARE mg/L

AL = DHS Action Level
 EM = Extraction well
 I = Result differs from last issue of report
 NA = Not analyzed
 NS = Normal sample
 RAD = Radian Corporation, Sacramento
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
 FD = Field Duplicate
 MCL = DHS maximum contaminant level
 ND = Not detected at specified detection limit
 P = Previously confirmed
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
 G = Exceeds calibration range
 MW = Monitoring well
 NE = Threshold value not established
 PMCL = US. EPA primary maximum contaminant level
 S = Determined by method of standard addition

TABLE 1-38 MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR OTHER ON-BASE AREAS,
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

MW-24D				WELL NUMBER
Ground Water Zone	Middle			
Date Sampled	16-Jan-90			
Sampled By	RAD			
Date Analyzed	17-Jan-90			
Lab	RAS			
Field Analysis	NS			
Lab Analysis	NS			
Maximum Contaminant Level Or Action Level				Detection Limit
Analytes	Level Or Action Level	Result		
Chromium, Hexavalent	50	PMCL	ND	(0.02)

ALL UNITS ARE mg/l.

AL = DHS Action Level
EW = Extraction well
I = Result differs from last issue of report
NA = Not analyzed
NS = Normal sample
RAD = Radian Corporation, Sacramento
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected
PD = Field Duplicate
MCL = DHS maximum contaminant level
ND = Not detected at specified detection limit
P = Previously confirmed
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column
G = Exceeds calibration range
MW = Monitoring well
NE = Threshold value not established
PMCL = US EPA primary maximum contaminant level
S = Determined by method of standard addition

2.0 EVALUATION OF GROUNDWATER EXTRACTION EXPEDITED RESPONSE ACTIONS

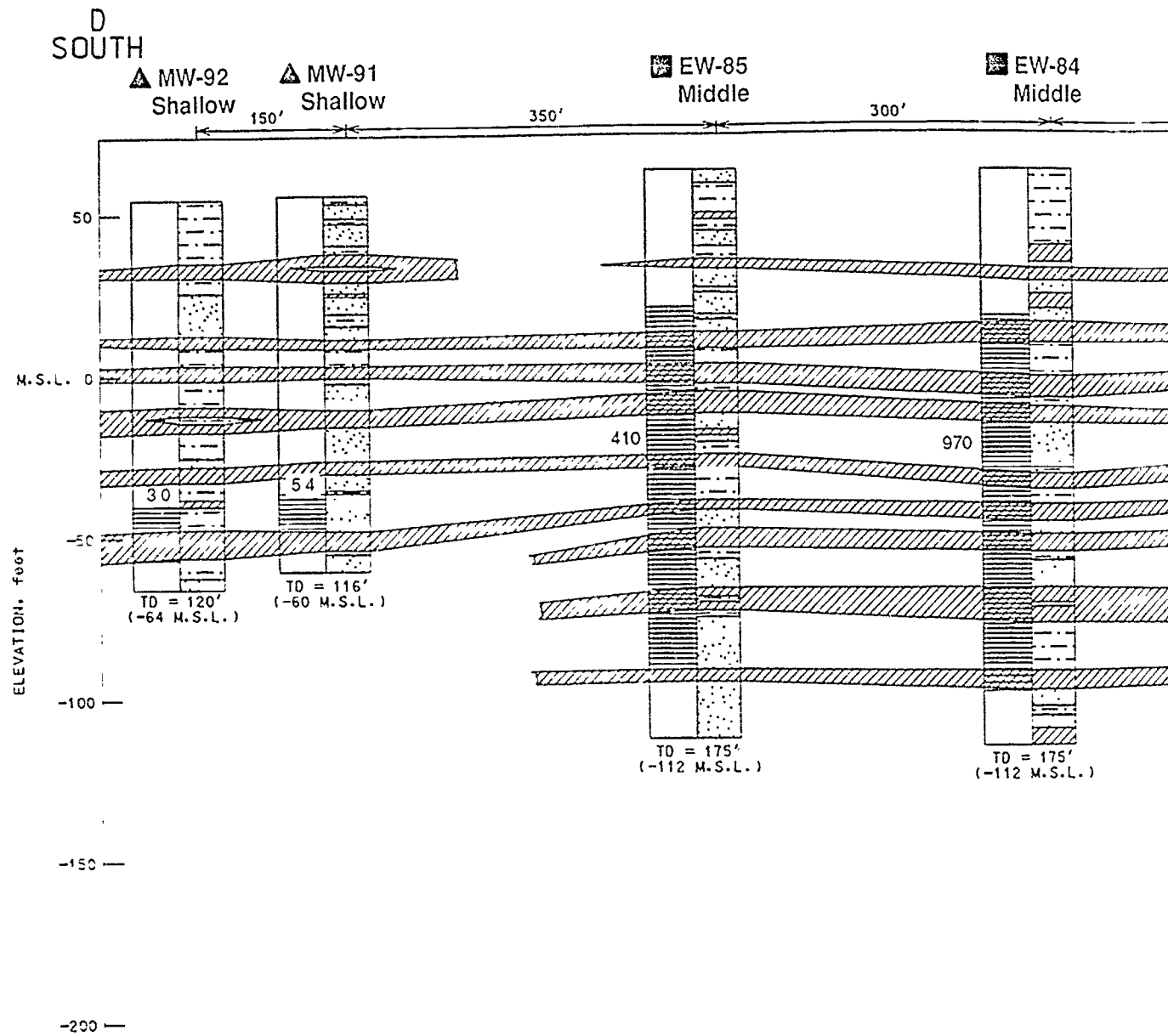
Two Expedited Response Actions (ERA) related to groundwater extraction have been implemented by McClellan Air Force Base (AFB) as a result of the findings of the Groundwater Sampling and Analysis Program and other Remedial Investigation/Feasibility Studies (RI/FS) activities. These include the installation of a synthetic liner/cover, clay cap, and an extraction system in Area D, and installation of a groundwater extraction system in Area C. Pumping of the Area D extraction system began on 15 March 1987 and pumping of the Area C extraction system began on 29 August 1988. The Area C and D extraction systems are discussed below.

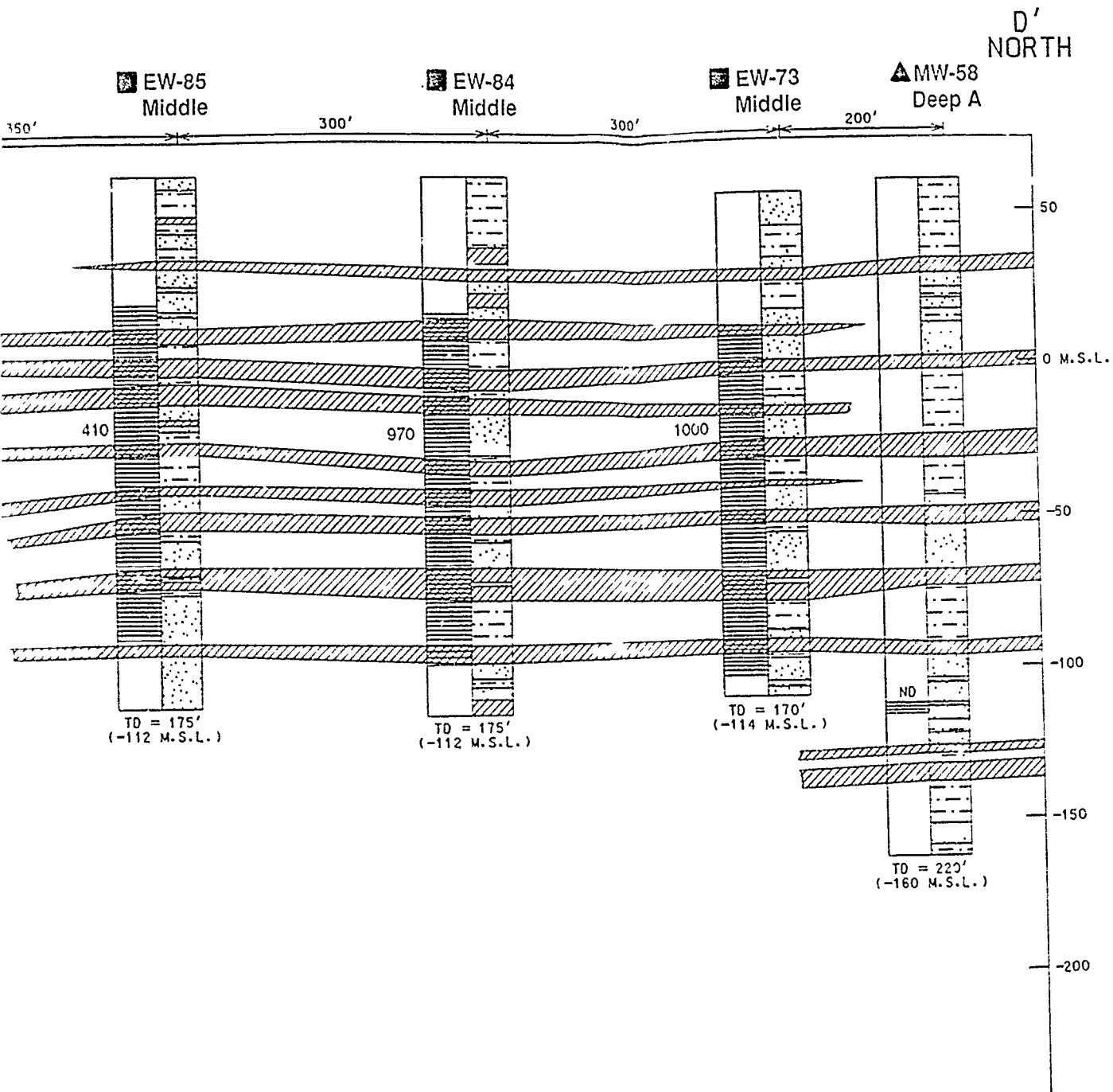
2.1 Area D Extraction System

The Area D extraction system consists of six extraction wells located in the area of former sludge/waste pits. The wells are continuously pumped and collectively produce approximately 75 gallons per minute (gpm). The extracted water is then pumped via an aboveground pipeline to the Groundwater Treatment Plant where the water is treated to remove contaminants.

The six extraction wells are all screened from 40 to 160 feet below ground surface (bgs) in the shallow and middle monitoring zones. As shown on the geologic cross section in Figure 2-1, there are alternating sands, silts, and clayey silts at the screen depth of the Area D extraction wells. The cross section traverses Area D from north to south and includes three of the six extraction wells; the surface trace of the cross section is shown in Figure 2-2.

The purpose of the extraction system is to isolate and contain contaminants within Area D (McLaren Environmental Engineering, 1987, p. 33). To accomplish this goal, McLaren recommended pumping the six wells to achieve a combined minimum flow rate of 78 gpm, which would result in a 3-foot drawdown in each of the monitoring wells after one year of pumping. The 78 gpm flow rate was specified to minimize the decline of groundwater levels, thereby prolonging the usefulness of the extraction system. McLaren also recommended that the evaluation of the extraction system's effectiveness be based on gradient controls between specific pairs of wells. The specified gradients were based on minimum head differences of 0.2 feet between the well pairs.





NOTE TCE in ug/L
ND = Not Detect



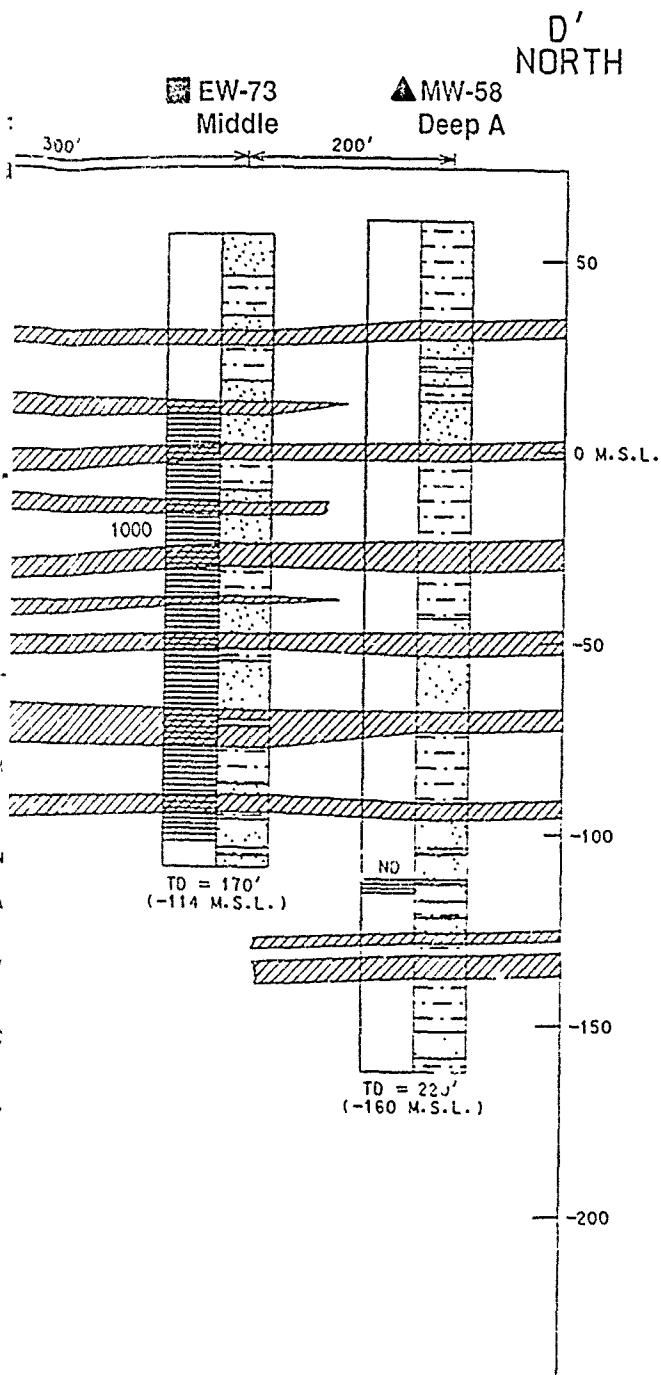


Figure 2-1.
Subsurface Profile - Area D
(D - D')

LEGEND

- ▲ MONITORING WELL (MW)
- EXTRACTION WELL (EW)
- ☼ BASE PRODUCTION WELL (BW)
- M.S.L. MEAN SEA LEVEL
- TD TOTAL DEPTH

- GRAVELLY SAND
- SAND
- SILT
- CLAYEY SILT
- NO DATA
- SCREEN INTERVAL

SCALE

HS: 1" = 390'
VS: 1" = 54'
VE = 7.2

NOTE TCE concentrations are reported next to screen intervals
in ug/L for January through March 1990 sampling period

ND = Not Detected

RADIAN
CORPORATION

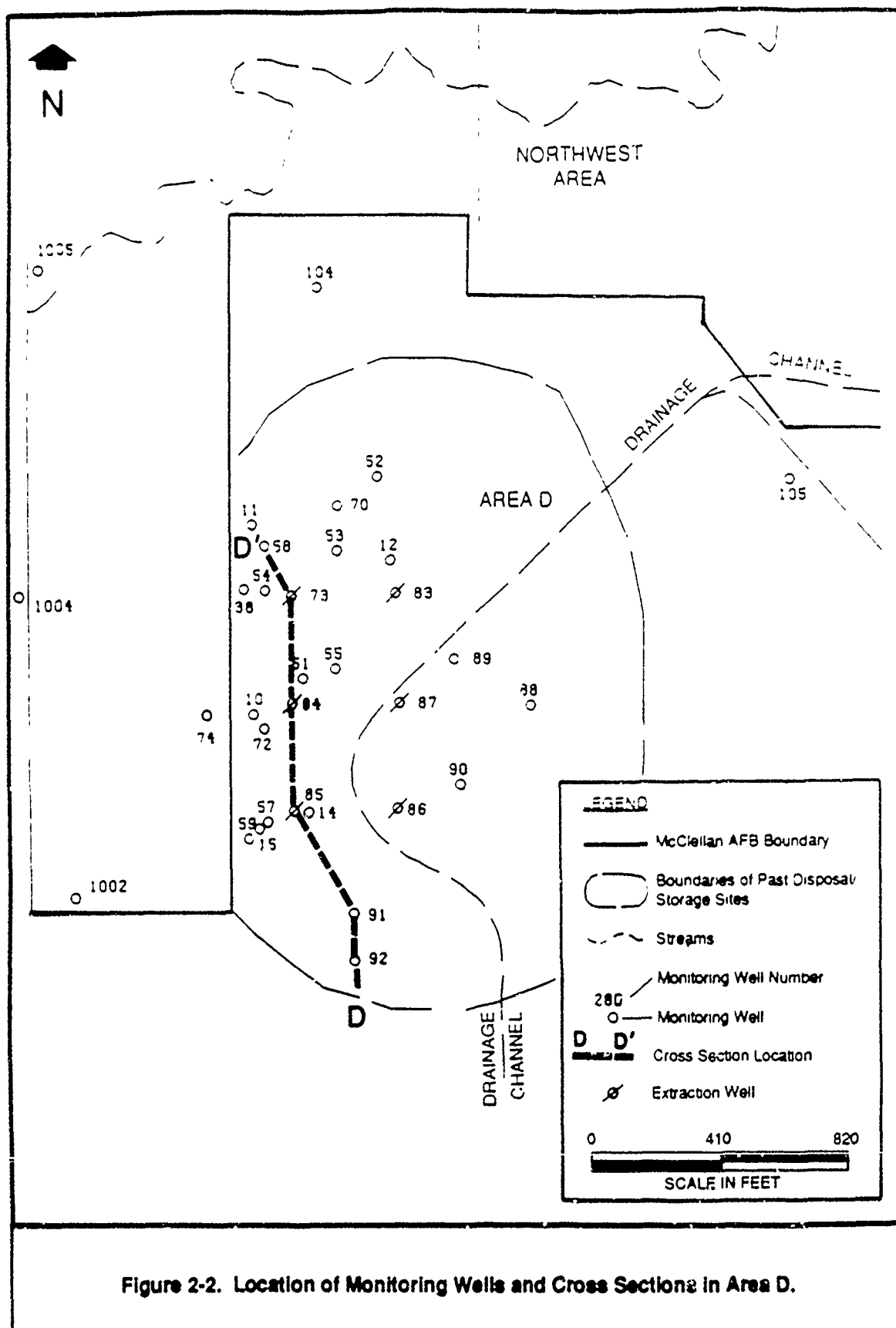


Figure 2-2. Location of Monitoring Wells and Cross Sections in Area D.

The effectiveness of the Area D extraction system is evaluated below based on McLaren's gradient criteria. In addition, changes in contaminant concentrations in several Area D monitoring wells over the period of April 1985 to March 1990 are also reviewed to evaluate the effect of the extraction system on water quality.

Groundwater-Level Data

Groundwater-level data for the McLaren-specified well pairs were measured in early January 1990 prior to groundwater sampling. These data were used to calculate head differences and gradients. Table 2-1 presents the well pairs, calculated head differences and gradients, and McLaren's recommended minimum gradients. As shown in the table, the minimum gradient criteria recommended by McLaren were maintained at the current pumping rate with one exception. The calculated gradient for MW-90 and MW-88 was -0.0002 which is below the recommended gradient of -0.0007. However, the potentiometric surface maps of Area D (Plates 3 and 5) illustrate the containing effects on the groundwater flow directions from pumping of the Area D extraction system. The maps show contours of equal water-level elevations in the shallow, middle and deep monitoring zones beneath Area D; groundwater flow is perpendicular to these contours in the direction of decreasing water-level elevation. In both the shallow and middle monitoring zones, flow is toward the extraction wells (Plates 3 and 4). In the deep "A" zone, groundwater flows from off-base areas in the northwest towards on-base areas in the southeast (Plate 5).

Analytical Data

Analytical results were reviewed for samples collected from shallow, middle, and deep "A" zone monitoring wells located both on base in Area D and off base in the Northwest Area. Time series plots for TCE concentration in 13 of the monitoring wells are shown in Figures 2-3, 2-4, 2-5, and 2-6. The time series plots focus on TCE concentrations, because TCE is the most widely detected compound in the McClellan AFB groundwater monitoring wells, including Area D.

For the purpose of qualitatively evaluating the effectiveness of the extraction system, the historical changes in TCE concentrations from April 1985 through March 1990 were evaluated for selected monitoring wells. Decreasing concentrations are

TABLE 2-1. HEAD DIFFERENCE AND GRADIENTS BETWEEN SELECTED WELL PAIRS
IN AREA D, JANUARY THROUGH MARCH 1990

Well Pair	Monitoring Zone	Head Difference (feet)	Gradient (feet/foot)	Recommended Minimum Gradient ^a (feet/foot)
MW-53 & MW-70	Middle	-0.77	-0.0061	-0.0016
MW-54 & MW-76	Middle	-0.31	-0.0021	-0.0014
MW-72 & MW-74	Middle	-0.56	-0.0046	-0.0014
MW-89 & MW-88	Shallow	-0.56	-0.0022	-0.0007
MW-90 & MW-88	Shallow	-0.61	-0.0002	-0.0007
MW-91 & MW-92	Shallow	-0.18	-0.0014	-0.0013

NOTE: The first well of the well pair is located closest to the extraction well. A negative head difference indicates a gradient toward the extraction well.

^a McLaren Environmental Engineering, 1987.

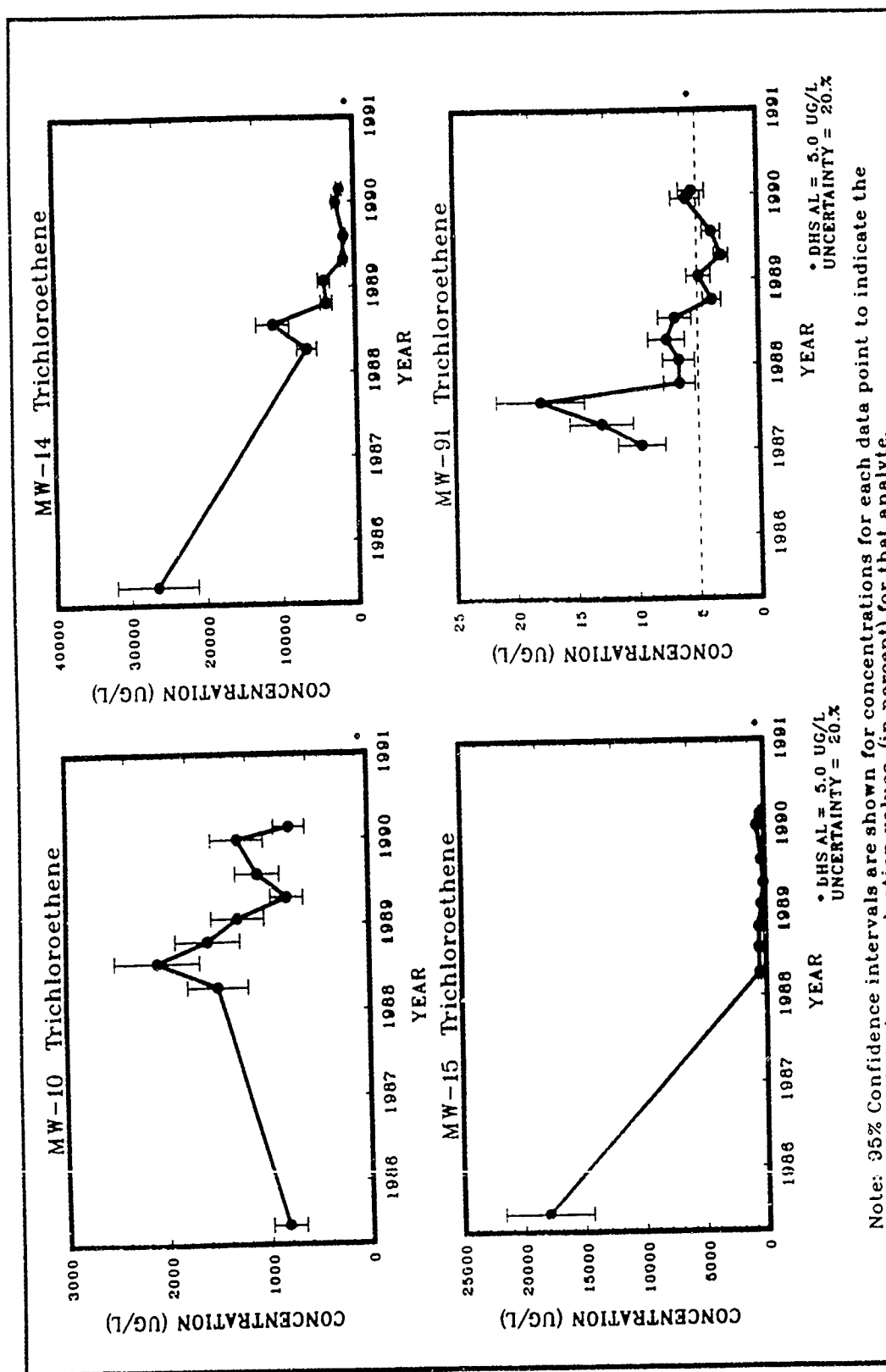


Figure 2-3. Time Series Plots for Selected Shallow Zone Monitoring Wells in Area D.

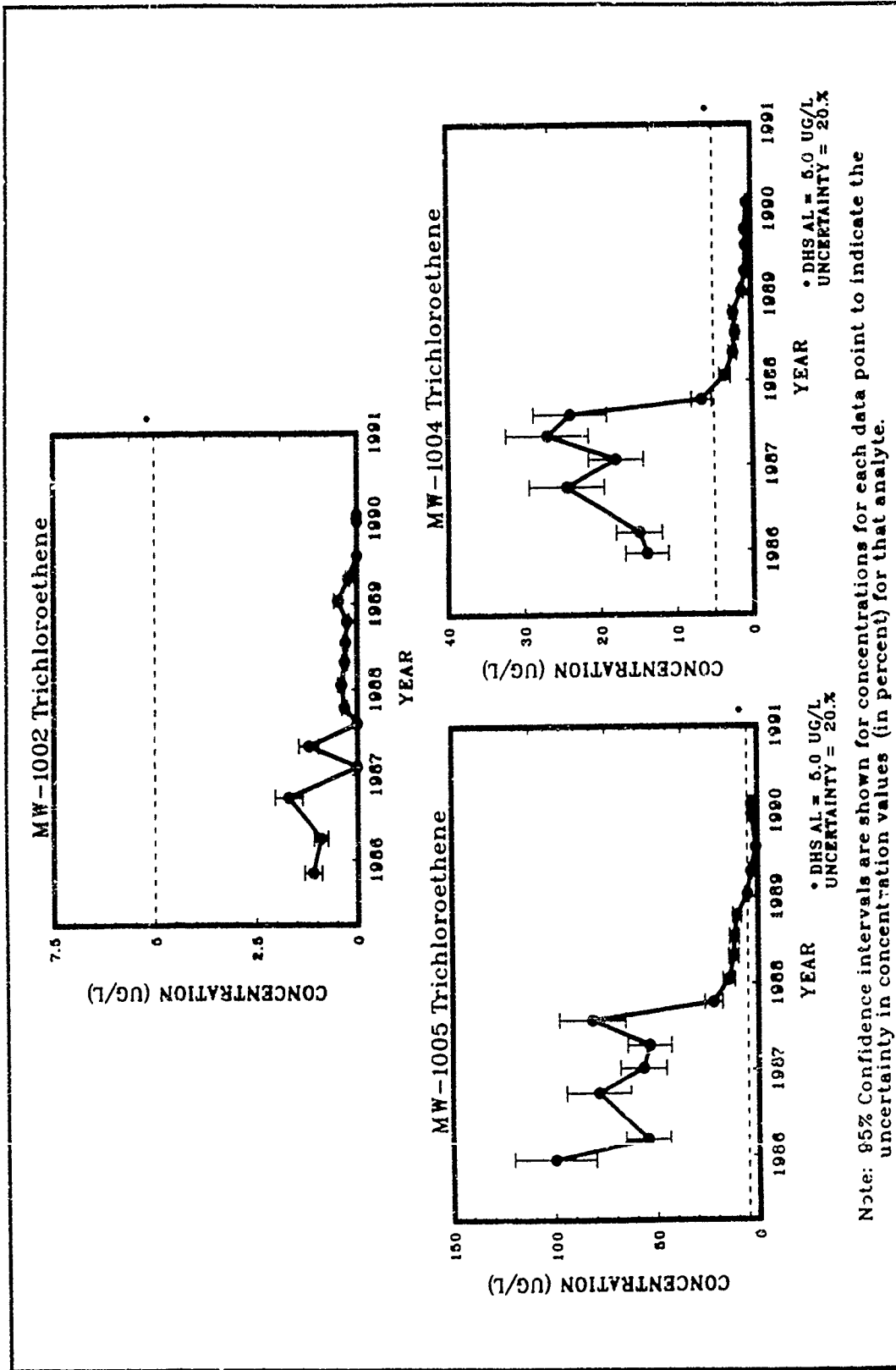


Figure 2-4. Time Series Plots for Selected Shallow Zone Monitoring Wells in the Northwest Area.

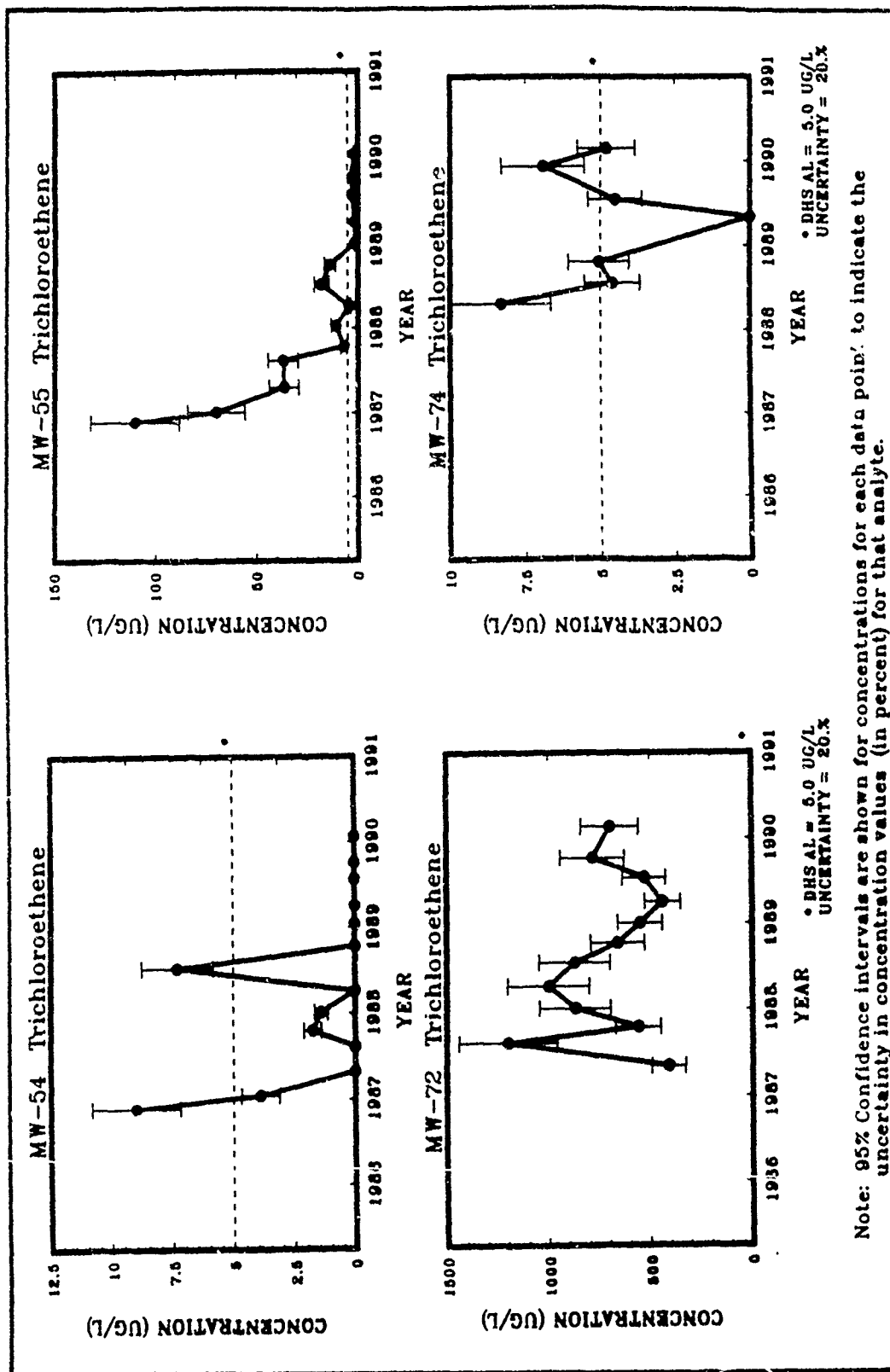
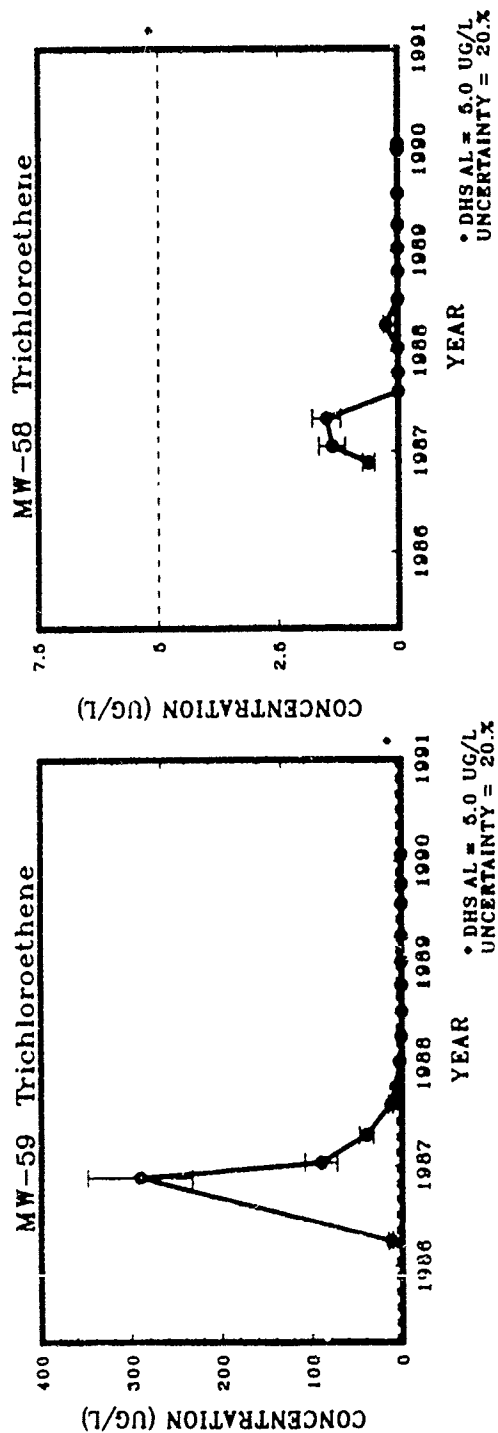


Figure 2-5. Time Series Plots for Selected Middle Zone Monitoring Wells in Area D.

AREA D DEEP ZONE WELLS



Note: 95% Confidence intervals are shown for concentrations for each data point to indicate the uncertainty in concentration values (in percent) for that analyte.

Figure 2-6. Time Series Plots for Selected Deep Zone Monitoring Wells in Area D.

expected in monitoring wells that are located at the greatest radial distance from the extraction wells, but still within the influence of the wells. Monitoring wells located close to the extraction wells are near both the contaminant sources and the extraction wells that are drawing contaminated groundwater toward the monitoring wells. Therefore, the wells are expected to show greater TCE concentrations over a period of time. The time series plots for the 13 monitoring wells are evaluated below.

Included on each time series plot are "error bars" of ± 20 percent of the concentration for each data point. The bars represent the sampling uncertainty associated with each reported concentration and are based on statistical analysis of the available data presented in the Annual Technical Report (Radian, 1989). The sampling variability is attributed to both laboratory and field procedures. Thus from one sampling event to another, there must be an increase or decrease of at least 20 percent in order for there to be evidence of a change in TCE concentration in a monitoring well.

Representative time series plots were developed for four shallow zone monitoring wells located in Area D and three shallow zone monitoring wells located approximately 500 feet west of Area D. The on-base monitoring wells are MW-10, MW-14, MW-15, and MW-91 and the off-base wells are MW-1002, MW-1004, and MW-1005. The locations of these wells are shown in Figure 2-2.

The time series plots for MW-10, MW-14, and MW-15 (Figure 2-3) are based on nine sampling events, including one in 1990, four in 1989, three in 1988, and one in 1985. The time series plots for these three wells show that TCE concentrations have decreased, but the concentrations remain above the DHS maximum contaminant level (MCL) of $5.0 \mu\text{g/L}$ for TCE in drinking water. TCE concentrations in MW-14 and MW-15 have been fairly stable during the past four sampling events. In MW-10, TCE concentrations have fluctuated over the past four sampling events.

In MW-91, TCE concentrations have fluctuated above and below the MCL of $5.0 \mu\text{g/L}$ for the past six sampling events (Figure 2-3). Concentrations of TCE were below the MCL for four sampling events, but have increased to above the MCL for the past two sampling events. However, the most recently measured concentrations remain below TCE concentrations originally detected in 1987.

As shown in Figure 2-4, the time series plots for the three off-base monitoring wells (MW-1002, MW-1004, and MW-1005) continue to show decreases in TCE concentrations since the wells were initially sampled in 1986. In MW-1002, TCE

has not been detected for the past three sampling events. In MW-1004, TCE concentrations have remained at levels less than 1.0 $\mu\text{g/L}$ for the past four sampling events. The concentration of TCE increased in MW-1005, but TCE concentrations have remained below the MCL for the fourth consecutive quarter. However, the concentration of 1,1-dichloroethene was detected above the MCL of 6 $\mu\text{g/L}$ during the First Quarter 1990.

Overall, the time series plots for the shallow zone monitoring wells located outside the well field generally show decreasing concentrations of TCE. TCE concentrations for monitoring wells located within the well field have shown recent fluctuations over the past five sampling events. Fluctuating concentrations of TCE may be expected in these wells for some time because they are located near extraction wells that are drawing contaminated water toward them.

Figure 2-5 shows four middle zone monitoring wells in or adjacent to Area D for which time series plots were developed. These wells, located near the extraction wells, are MW-54, MW-55, MW-72, and MW-74. Monitoring wells MW-54 and MW-55 are located near EW-73, the extraction well containing the highest contaminant concentrations. Trichloroethene has not been detected in MW-54 for the past six sampling events. Trichloroethene levels in MW-55 have decreased since early 1987 and are now below the MCL. The time series plot for MW-72, located near EW-84, shows that the TCE concentration has decreased since the Fourth Quarter 1989, but still remains above 500 $\mu\text{g/L}$. The concentration of TCE in MW-74, located just west of the base boundary, remains above the MCL.

Trichloroethene concentrations over time were plotted for two deep "A" zone monitoring wells in Area D. These wells, MW-58 and MW-59, are located northwest of EW-73 and southwest of EW-85, respectively (Figure 2-2). The wells monitor a zone that is deeper than the screened interval of the extraction wells of the area. The time series plots for these two wells are shown in Figure 2-6. Trichloroethene has not been detected in either MW-58 or MW-59 during the past five sampling periods. The TCE concentration patterns for both wells suggest contaminant concentrations in the deep "A" zone are affected by the extraction of groundwater from the shallow and middle monitoring zones. This may be due to the dilution of contaminant concentrations by uncontaminated water in the deep "A" zone flowing toward the extraction system. In addition, the TCE patterns indicate that pumping in the shallow and middle monitoring zones is preventing downward migration of contaminants to the deep "A" zone.

In summary, TCE concentrations in Area D monitoring wells have not increased or decreased uniformly in all locations nor in all zones monitored in Area D. This is evident from the diversity of slopes on time series plots in Figures 2-3, 2-4, 2-5, and 2-6. Concentrations of TCE in monitoring wells located off base, outside the extraction well field continue to be below the MCL. In the shallow zone monitoring wells located near the extraction wells, TCE levels have fluctuated over the last five sampling periods. Concentrations of TCE remain above the MCL, as is expected due to the proximity of the wells to extraction wells. In two of the four middle-zone monitoring wells, MW-54 and MW-55, TCE levels remain below the MCL. Trichloroethene concentrations in MW-72 and MW-74 remain above the MCL. In the two deep "A" zone monitoring wells, TCE concentrations have decreased to below detection levels. The overall concentration patterns indicate that the Area D extraction system is effectively removing contaminants and preventing contaminants from moving off base.

Conclusions

The Area D extraction system was evaluated on the basis of groundwater-level data and changes over time in contaminant concentrations detected in shallow, middle, and deep "A" zone monitoring wells. The Area D extraction system is apparently effective in containing contaminants as indicated by the potentiometric surface maps which show flow towards the extraction wells. In addition, water-quality data from shallow-zone monitoring wells located outside of the well field indicate that TCE concentrations have decreased to below the MCL or have stabilized since the extraction system began operating in July 1987.

2.2 Area C Extraction System

There are four extraction wells in Area C, located along a north-south line shown in Figure 2-7. The average combined flow rate from the extraction wells in Area C is approximately 160 gpm. The extracted groundwater is pumped via an aboveground pipeline to the Groundwater Treatment Plant where the water is treated to remove organic contaminants.

The four extraction wells in Area C are screened within different monitoring zones. Extraction well EW-137 is screened from 162 to 172 feet bgs (deep "A"

monitoring zone). Extraction Well EW-140 is screened from 180 to 190 feet bgs (deep "A" monitoring zone). Extraction Well EW-141 is screened from 230 to 240 feet bgs (deep "B" monitoring zone). Extraction Well EW-144 is screened from 120 to 130 feet bgs and from 165 to 185 feet bgs (middle and deep "A" zones). The geologic units mapped beneath Area C are illustrated on two cross sections shown in Figure 2-8 and 2-9. As shown in the south to north cross section (Figure 2-8), and the east to west cross section (Figure 2-9), most of the coarse-grained sediments do not appear to be continuous across the area. There does appear to be a fine-grained zone that is continuous at a depth of approximately -50 to -100 ft mean sea level (msl). The four Area C extraction wells are screened below this zone. The locations of both profiles are shown in Figure 2-7.

To evaluate the effectiveness of an extraction system, pumping induced horizontal and vertical gradients can be used. To determine horizontal gradients, several pairs of monitoring wells are needed which are screened in the same monitoring zone, located radially outward from the extraction wells. To evaluate the effect of the extraction system on vertical gradients, several pairs of wells are needed which are directly adjacent to each other, but screened in different monitoring zones.

The number and locations of monitoring wells in Area C do not currently allow an evaluation of the extraction system effectiveness. The evaluation of the Area C extraction system can only focus on the changes in hydraulic head in the area and long-term changes in water quality of nearby monitoring wells. The cone of depression created by the four wells, as currently operated, cannot be defined because there are only two pairs of wells from which horizontal gradients can be calculated and none of the wells are screened in the same zone as the extraction wells. Additional wells located radially outward from each extraction well are needed to define the induced gradients in each of the monitoring zones. Vertical gradients presently can only be determined at two well clusters. Thus, the effect of pumping from one monitoring zone on another monitoring zone cannot be determined, except at these two well clusters. A number of piezometers have been identified for installation as part of the Preliminary Groundwater Operable Unit Remedial Investigation (PGOURI) (Radian, September 1989). These will aid in determining the Area C extraction system zone of capture and in calculating vertical and horizontal gradients.

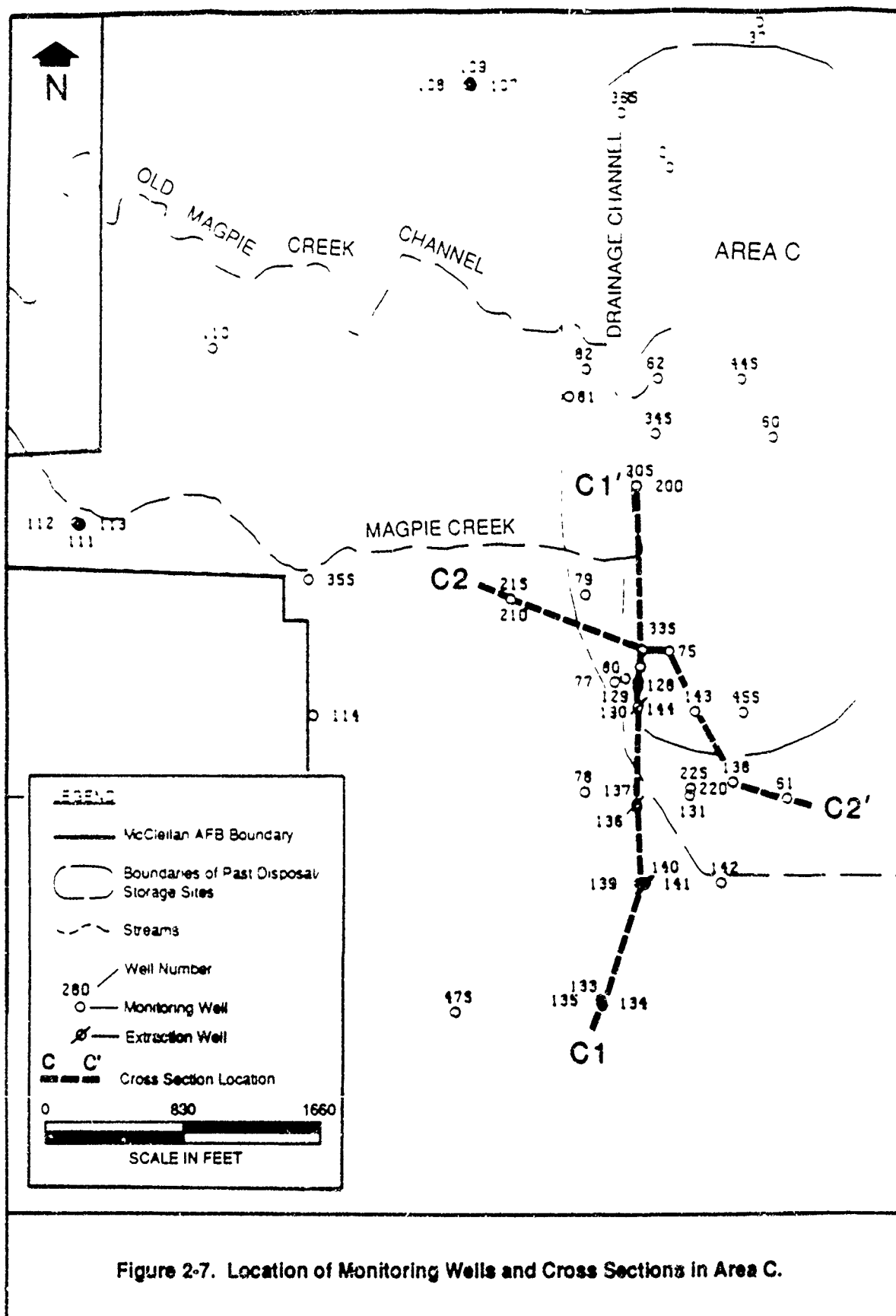
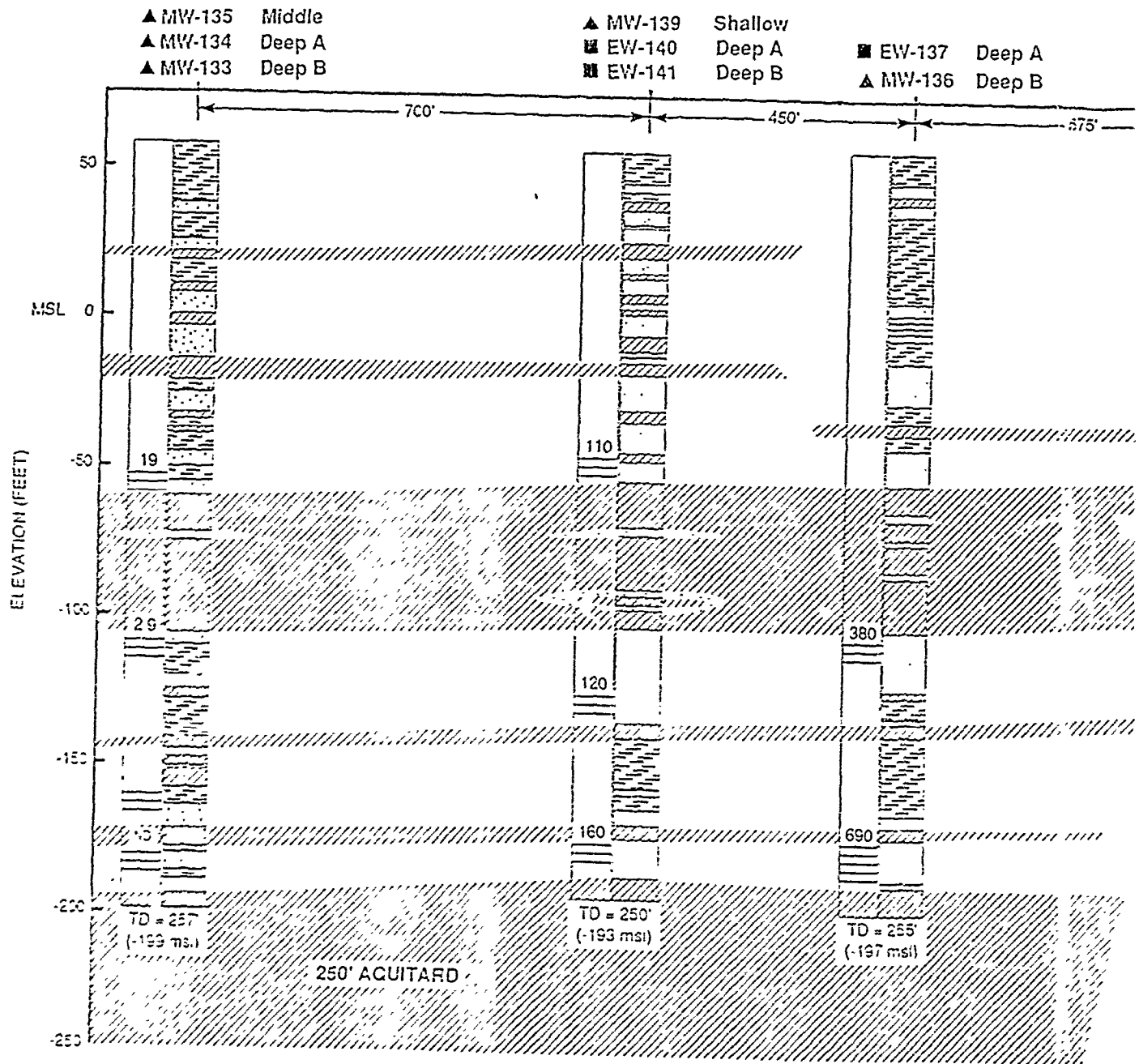


Figure 2-7. Location of Monitoring Wells and Cross Sections in Area C.

**SOUTH
C1**



NORTH
C1'

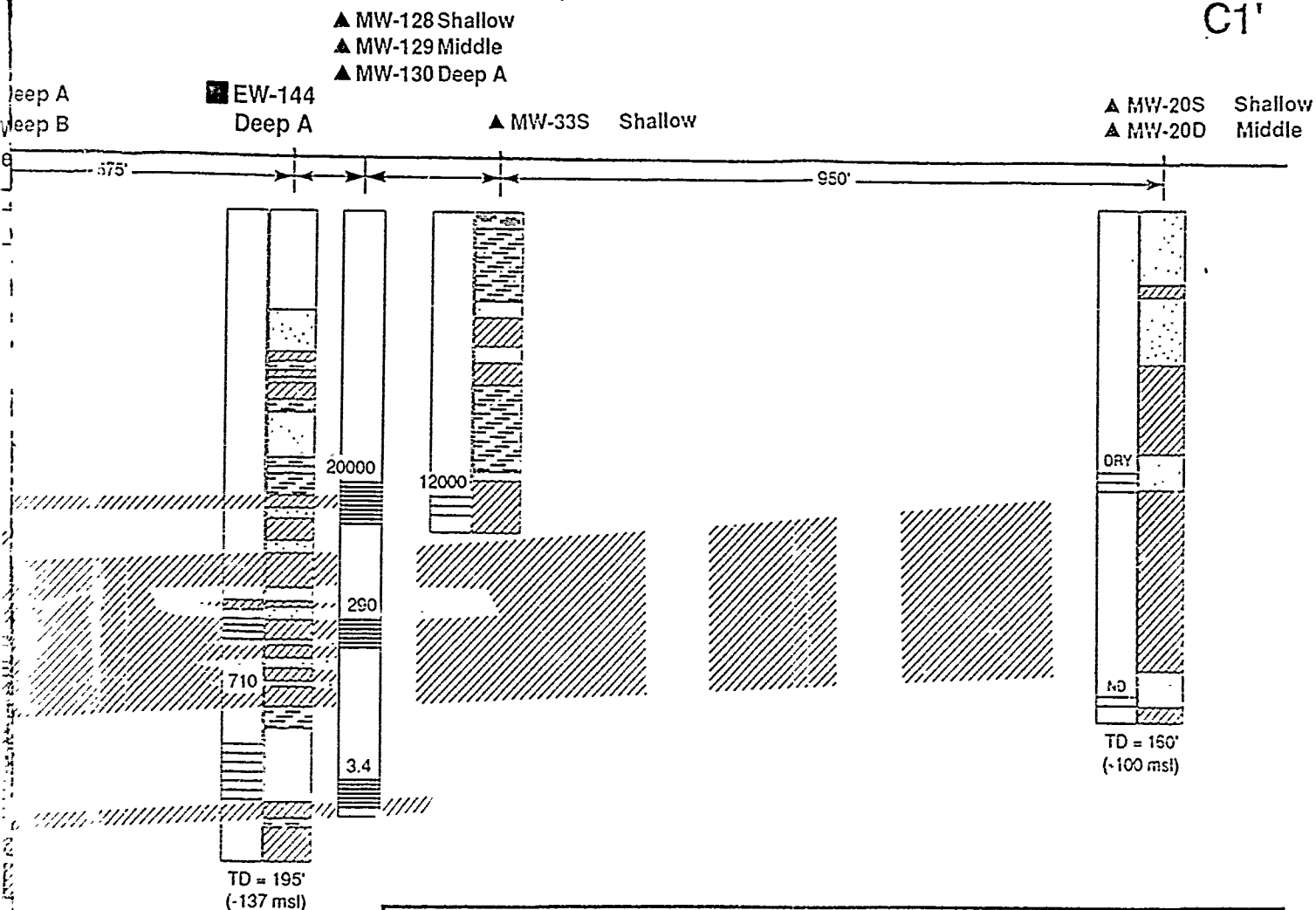
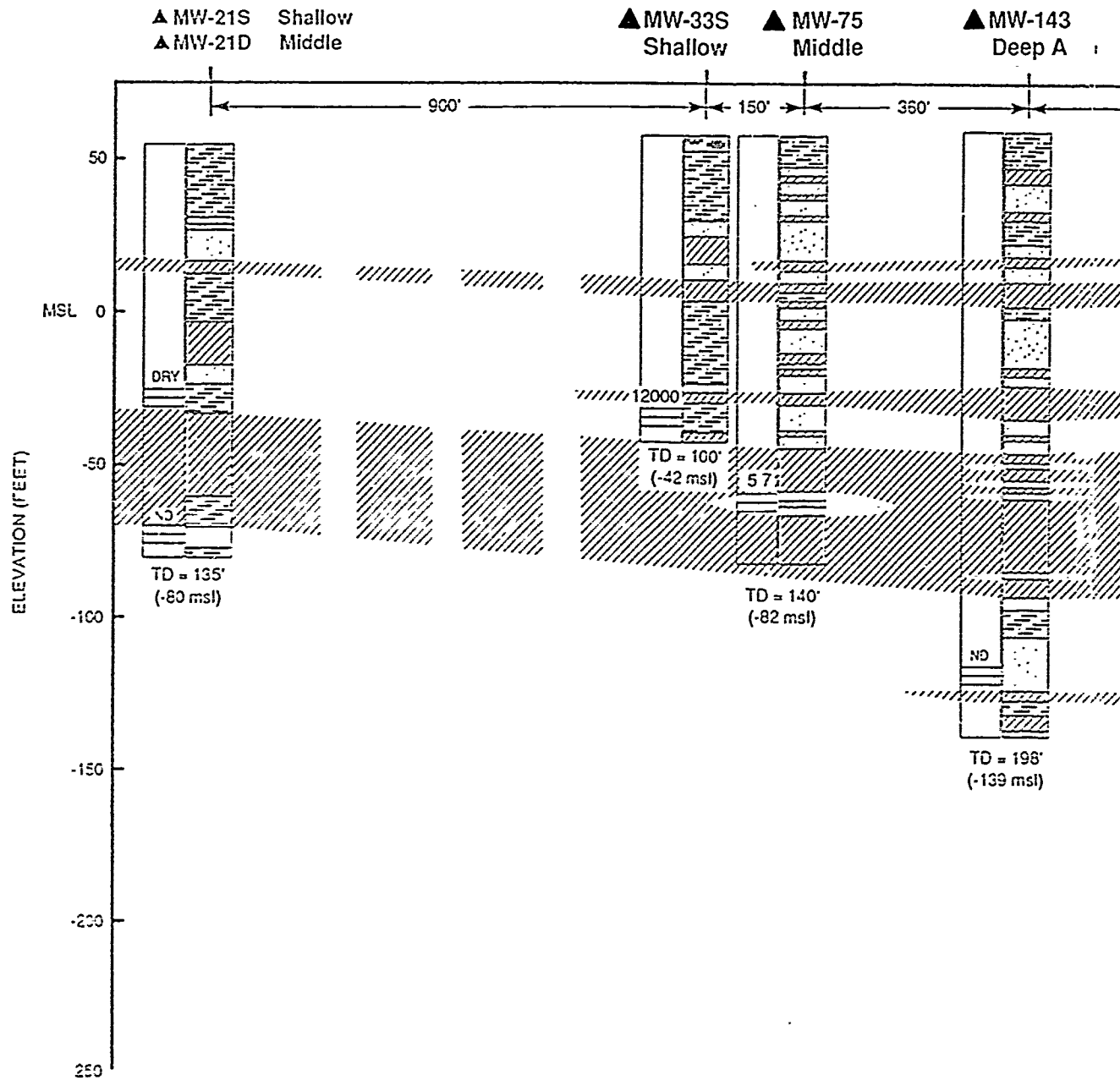


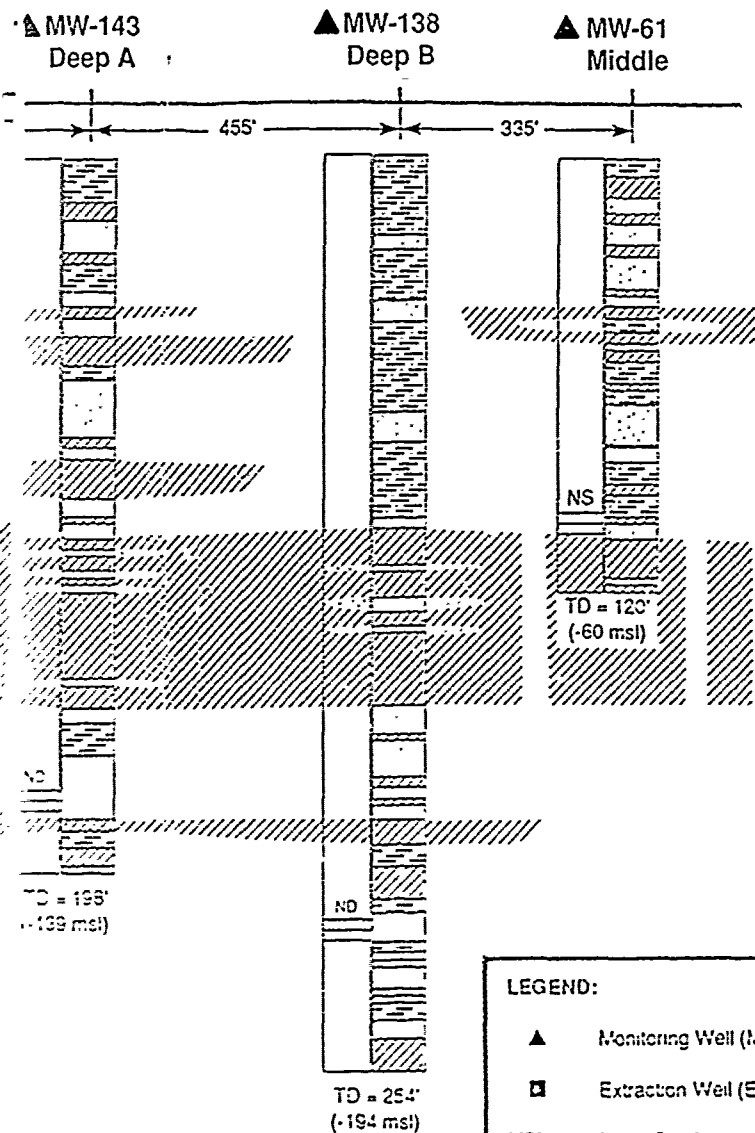
Figure 2-8.
Subsurface Profile Area C:
Depositional Dip Section (C1 - C1').

NW

C2



SE
C2'



LEGEND:

- ▲ Monitoring Well (MW)
- Extraction Well (EW)
- MSL Mean Sea Level
- TD Total Depth
- Screen Interval

- Gravelly Sand
- Sand
- Silt
- Clayey Silt
- No Data

SCALE:

- Horizontal Scale 1" = 277'
- Vertical Scale 1" = 54'
- Vertical Exaggeration ~ 5.1

NOTE: TCE concentrations are reported next to screen intervals in ug/L for January through March 1990 sampling period.

ND = Not Detected
NS = Not Sampled

Figure 2-9.
Subsurface Profile Area C:
Depositional Strike Section (C2 - C2').

Groundwater-Level Data

Groundwater-level data in Area C wells measured in October 1989 were used to generate potentiometric maps. The potentiometric maps for the shallow, middle, and deep "A" monitoring zones in Area C (Plates 2, 4, and 5) show a slight effect from the extraction system. There is a limited number of monitoring wells placed near enough to the extraction wells to delineate the cone of depression created by the extraction wells.

Horizontal gradients were calculated from groundwater-level data from two pairs of monitoring wells screened in the same monitoring zone (Table 2-2). MW-136 and MW-138 are located 16 feet and 580 feet east of EW-137, respectively. The two monitoring wells are screened in the deep "B" monitoring zone, and EW-137 is screened in the deep "A" monitoring zone. MW-128 and MW-33S are located 122 feet and 318 feet north of EW-144, respectively. The two monitoring wells are screened in the shallow monitoring zone, and EW-144 is screened in both the middle and deep "A" monitoring zones. The horizontal gradients between the two well pairs indicate a slight flow potential towards EW-137 and EW-144.

Vertical gradients were calculated at two monitoring well clusters, MW-128/MW-129/MW-130 and MW-134/MW-135 (Table 2-2). MW-128 is screened in the shallow monitoring zone; MW-129 and MW-135 are screened in the middle monitoring zone; and MW-130 and MW-134 are screened in the deep monitoring zone. The calculated vertical gradients for the two well pairs near EW-144 indicate a downward flow potential from the shallow to middle monitoring zone and from the middle to the deep zone. The vertical gradient at well cluster MW-135/MW-134 indicates an upward flow potential from the middle monitoring zone to the deep "A" monitoring zone. No well clusters are located near the other three extraction wells; therefore, the same type of flow potential assessment cannot be conducted for EW-137, EW-140, and EW-141.

The limited information from the calculated horizontal and vertical gradients does not provide enough data to determine the effect of the extraction system on the local groundwater flow patterns. The horizontal gradients calculated for the shallow and deep "B" monitoring zones indicate that there is a slight flow potential toward EW-144.

TABLE 2-2. HEAD DIFFERENCES AND GRADIENTS OF SELECTED WELL PAIRS IN
AREA C, JANUARY THROUGH MARCH 1990

Well Pair	Monitoring Zone	Head Difference (feet)	Gradient (feet/foot)
<u>Horizontal*</u>			
MW-128 & MW-33S	Shallow	-0.35	-0.002
MW-136 & MW-138	Deep "B"	-1.07	-0.002
<u>Vertical</u>			
MW-128/MW-129	Shallow/Middle	-0.41	-0.011
MW-129/MW-130	Middle/Deep "A"	-1.48	-0.029
MW-135/MW-134	Middle/Deep "A"	1.01	0.018

* The first well of the well pair is located closest to the extraction well.

NOTE: Negative head difference indicates flow potential toward extraction well or downward flow potential.

There is also a slight flow potential toward EW-137. Without additional wells in the three other monitoring zones, the influence of the four extraction wells on the groundwater flow pattern in these monitoring zones cannot be determined.

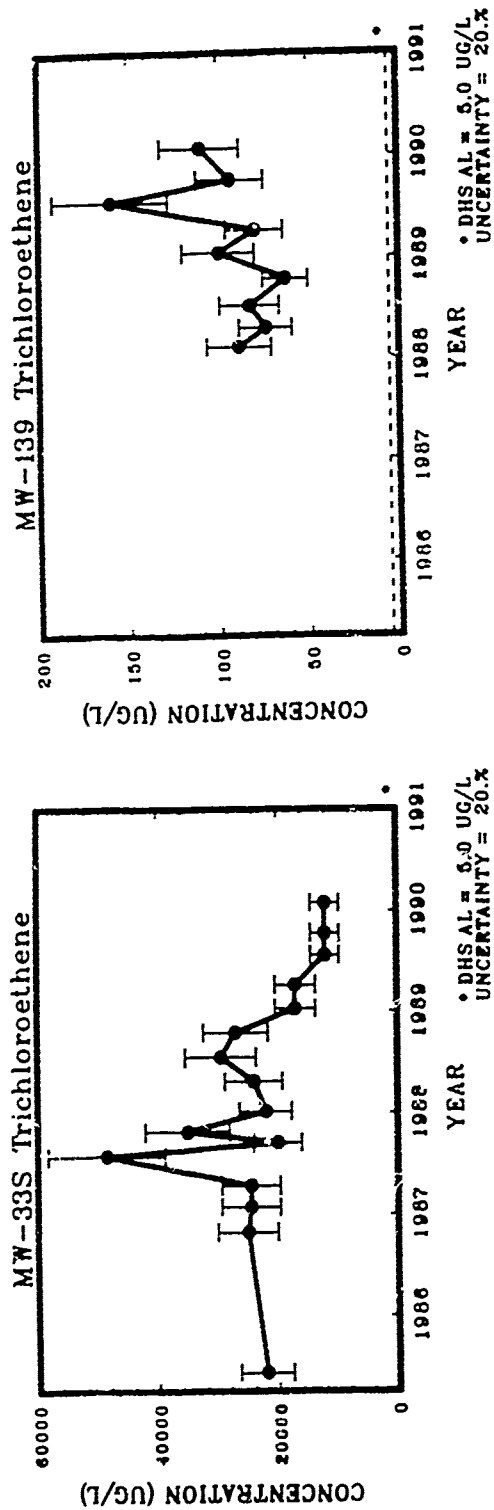
Analytical Data

Analytical data for seven monitoring wells located near the Area C extraction system are presented on time series plots. The extraction system has been in operation for 19 months (August 1988 to March 1990); therefore, there are limited analytical data to evaluate long-term effects on contaminant concentrations. As additional analytical data are added to the plots, they will be evaluated to determine if there is an effect on water quality by the extraction system. Trichloroethene concentrations were plotted from two shallow-zone monitoring wells, two middle-zone monitoring wells, and three deep-zone monitoring wells. Trichloroethene was chosen as an indicator compound because it is the most widely detected compound in the McClellan AFB groundwater monitoring wells.

Time series plots for six Area C wells are depicted in Figures 2-10, 2-11, and 2-12. Figure 2-10 presents time series plots for two shallow zone monitoring wells, MW-139 and MW-33S. These two monitoring wells are located north and south of the extraction wells and contain TCE at concentrations exceeding MCLs. Time series plots for middle zone monitoring wells MW-129 and MW-135, are shown in Figure 2-11. MW-129 is located north of the extraction wells, and MW-135 is located south of the extraction wells. Both contain TCE concentrations above the MCL. Time series plots for two deep "A" zone monitoring wells, MW-130 and MW-134, are shown in Figure 2-12. MW-130 is located north of the extraction wells and MW-134 is located south of the extraction wells; detected TCE concentrations remain below MCLs in both wells.

The time series plots for the six wells all show fluctuating patterns. The TCE concentration patterns on the time series plots will continue to be reviewed to qualitatively assess whether the extraction wells are preventing the migration of contaminants away from Area C. Time series plots from additional wells in Area C may be added if specific patterns become apparent. The TCE concentrations in monitoring wells south of the extraction system should become stable or decrease over time if the extraction wells are preventing migration of contaminants away from Area C. The TCE

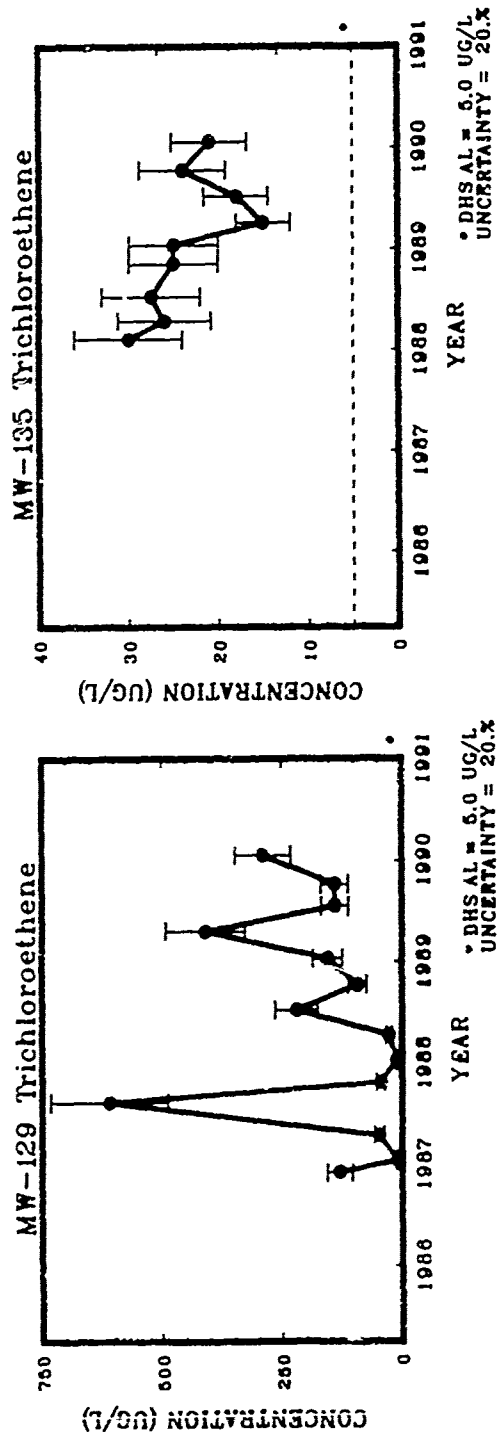
AREA C SHALLOW ZONE WELLS



Note: 95% Confidence intervals are shown for concentrations for each data point to indicate the uncertainty in concentration values (in percent) for that analyte.

Figure 2-10. Time Series Plots for Selected Shallow Zone Monitoring Wells in Area C.

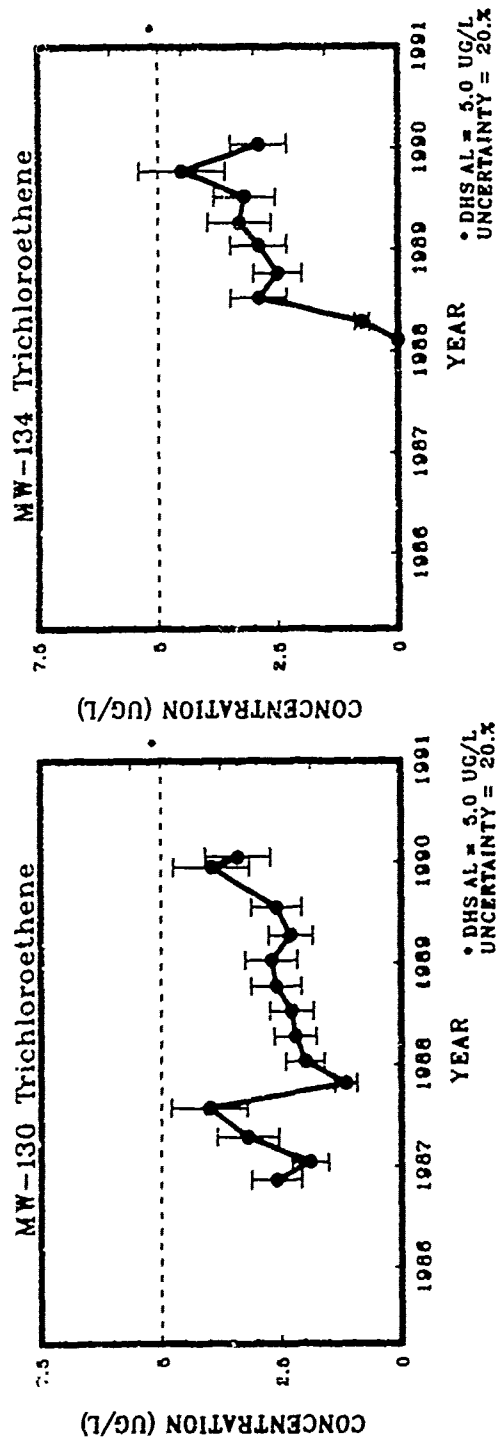
AREA C MIDDLE ZONE WELLS



Note: 95% Confidence intervals are shown for concentrations for each data point to indicate the uncertainty in concentration values (in percent) for that analyte.

Figure 2-11. Time Series Plots for Selected Middle Zone Monitoring Wells in Area C.

AREA C DEEP ZONE WELLS



Note: 95% Confidence intervals are shown for concentrations for each data point to indicate the uncertainty in concentration values (in percent) for that analyte.

Figure 2-12. Time Series Plots for Selected Deep Zone Monitoring Wells in Area C.

levels near extraction wells should remain detectable and show some fluctuation with time, as the extraction wells draw contaminated groundwater past the monitoring wells.

Conclusions

The Area C extraction system was designed as an ERA to remove contaminated groundwater near a contaminant source. Additional work planned in the McClellan AFB RI/FS includes installing piezometers and additional monitoring wells and evaluating the need to construct additional extraction wells in Area C to control and remove contaminated groundwater. However, at the present time, the influence of the Area C extraction system cannot be evaluated using the existing array of monitoring wells. More well pairs are needed to determine the effect of the extraction wells on the hydraulic gradients and on local groundwater flow patterns. The extraction system has been operating for 19 months which does not appear to be a sufficient length of time for the extraction of groundwater to bring about notable changes in contaminant concentrations in existing wells. Trichloroethene concentration trends at monitoring wells located upgradient and downgradient of the extraction wells will continue to be evaluated to determine if contaminants migrating toward the extraction wells are being captured.

3.0 RECOMMENDATIONS

Based on field results and analytical data collected during the First Quarter 1990, the following recommendations are presented in Section 3.1. Section 3.2 presents the status of the recommendations made in the previous (October through December 1989) Data Summary.

3.1 Current Recommendations

A complete evaluation of the Groundwater Sampling and Analysis Program (GSAP) was performed in December 1989 and reported in the "Letter of Recommendations for the Continuance of the Groundwater Sampling and Analysis Program" (Radian, 1990). The report provides the rationale for proposed revisions to the program, including changes in sampling frequencies, analytical methods, and sampling schedules. Current recommendations for the GSAP are contained in the Letter of Recommendations. The recommendations will become effective in the Second Quarter (April - June 1990) sampling effort.

MW-1054, MW-1055, and MW-1057 could not be sampled during the First Quarter sampling period due to muddy conditions at the site. Two attempts were made to sample these wells. These three wells are scheduled for sampling during Second Quarter 1990. Radian recommends that alternatives be explored to allow access to these wells during the wet season.

3.2 Status of Previous Recommendations

The following is a brief status report of the recommendations made in previous reports.

- (1) Recommendation: Replace MW-122 with MW-119 for future sampling activities. This well has a bent casing and a malfunctioning dedicated pump system.

Status: The feasibility of using MW-119 is currently under investigation. Shortly, tests will be performed to determine if MW-119 will accept monitoring equipment. If so, the redevelopment of MW-119 will be recommended.

- (2) Recommendation: Replace MW-120 with MW-117 for future sampling activities. This well has a bent casing, and was dry during Fourth Quarter 1989.

Status: The feasibility of using MW-117 is currently under investigation. Tests will be performed and redevelopment of MW-117 will be recommended if monitoring equipment can be installed.

- (3) Recommendation: Sampling of MW-114, MW-1013, and MW-1014 should be attempted during the October through December 1989 sampling effort. These wells were very muddy and almost dry during Third Quarter 1989, and a representative sample could not be taken.

Status: Sampling of the wells was attempted during Fourth Quarter 1989 and First Quarter 1990 and they were still dry. Sampling will be attempted one more time before the wells are considered permanently dry and well abandonment recommended.

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Radian Corporation, November 1989. "Annual Technical Report (January - December 1988)," Installation Restoration Program, Stage 3, McClellan AFB, CA.

Radian Corporation, March 1990. "Letter of Recommendations for the Continuance of the Groundwater Sampling and Analysis Program," Installation Restoration Program, Stage 3, McClellan AFB, CA.

U.S. Environmental Protection Agency, November, 1986. "Test Methods for Evaluating Solid Waste, Third Edition." Office of Solid Waste and Emergency Response. Washington, D.C. 20460.

APPENDIX A1

APPENDIX A-1. MONITORING WELLS SAMPLED ANNUALLY

Well Number	Area	Rationale
<u>ON-BASE MONITORING WELLS:</u>		
MW-17D	Other	a,b,c
MW-18D	Other	a,c
MW-27D	A	a,b
MW-29D	Other	a,b,c
MW-36S	C	a,b
MW-67	A	a,b,c
MW-68	A	a,b,c
MW-69	A	a,b,c
MW-100	Other	a,c
MW-101	Other	a,c
MW-102	Other	a,b,c
MW-103	Other	a,b,c
MW-106	Other	a,b,c
MW-107	C	a,b,c
MW-108	C	a,b,c
MW-109	C	a,b,c
MW-110	C	a,b,c
MW-111	C	a,b
MW-112	C	a,b,c
MW-113	C	a,b,c
MW-116	Other	a,b
<u>OFF-BASE MONITORING WELLS:</u>		
MW-1009	Northwest	a,b,c,d
MW-1010	Northwest	a,b,c,d
MW-1011	Southwest	a,b,c,d
MW-1012	Northeast	a,c
MW-1017	West	a,b,c,d
MW-1018	West	a,b,d
MW-1026	Northwest	a,b,c,d
MW-1027	Northwest	a,b,c,d
MW-1028	Northwest	a,b,c,d
MW-1029	Northwest	a,b,d
MW-1030	Northwest	a,b,c,d
MW-1031	Northwest	a,b,c,d
MW-1032	West	a,b,c,d
MW-1033	West	a, ,c,d
MW-1034	West	a,b,c,d

(Continued)

APPENDIX A-1. (Continued)

Well Number	Area	Rationale
<u>OFF-BASE MONITORING WELLS:</u>		
MW-1035	West	a,b,c,d
MW-1036	West	a,b,d
MW-1040	Northeast	a,b,c,d
MW-1041	Northwest	a,b,c,d
MW-1042	Northwest	a,b,c,d
MW-1043	Northwest	a,b,c,d

- ^a Well is not currently used to evaluate the effectiveness of the Area C or Area D extraction system.
- ^b Well is not located within 1,000 feet of an active water supply well.
- ^c Well has consistently not contained detectable concentrations of contaminants or has never contained detectable concentrations of contaminants.
- ^d Well is located upgradient within the interim remedial measure area.

APPENDIX A2

APPENDIX A-2 ANALYTICAL RESULTS FOR NETWORK MONITORING WELLS IN WHICH CONCENTRATIONS OF ANALYTES HAVE EXCEEDED STATE AND FEDERAL DRINKING WATER STANDARDS FROM 1985 TO MARCH 1990, GROUNDWATER SAMPLING AND ANALYSIS PROGRAM, MOBILE/AN AIR FORCE BASE

Analyte Name	Maximum Contaminant Level	Round 1	Round 2	Round 3	4th Qtr. 1986	1st Qtr. 1987	2nd Qtr. 1987	3rd Qtr. 1987	4th Qtr. 1987	1st Qtr. 1988	2nd Qtr. 1988	3rd Qtr. 1988	4th Qtr. 1988	1st Qtr. 1989	2nd Qtr. 1989	3rd Qtr. 1989	4th Qtr. 1989	1st Qtr. 1990
Well Number	Or Action Level	6/85	11-12/85	2-4/86	9-12/86	1-3/87	4-6/87	7-9/87	9-12/87	1-3/88	4-6/88	7-9/88	10-12/88	1-3/89	4-6/89	7-9/89	10-12/89	1-3/90
Carbon Tetrachloride by 8010																		
M4-26D	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-27D	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane by 8010																		
M4-7	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-10	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-27D	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-33S	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-57	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-63	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-131	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-132	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-135	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-139	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1004	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1046	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane by 8010																		
M4-10	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-44S	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-74	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-76	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-89	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-91	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-139	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1004	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005	6	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total 1,2-Dichloroethane by 8010																		
M4-7	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-10	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued.)

ALL UNITS ARE ug/l
M4 = Monitoring Well
B = Detected in blank, result not corrected
NA = Not analyzed
NC = Result not confirmed in second column analysis
AL = DHS Action Level
S = Determined by Method of Standard Addition
NE = Threshold value not established
DL = Diluted out of the confirmation run

FWL = US EPA Primary Maximum Contaminant Level
C = Confirmed on second column
NS = Not sampled

M4 = DHS Maximum Contaminant Level

ND = Not detected at specified Detection Limit

P = Previously confirmed column

(Continued.)

APPENDIX A-2 (Continued)

Analyte Name	Maximum Concentration Level Or Action Level	Round 1 1985 6/85	Round 2 1985 11-12/85	Round 3 1986 2-4/86	1st Qtr. 1987 1-3/87	2nd Qtr. 1987 4-6/87	3rd Qtr. 1987 7-9/87	4th Qtr. 1987 9-12/87	1st Qtr. 1988 1-3/88	2nd Qtr. 1988 4-6/88	3rd Qtr. 1988 7-9/88	4th Qtr. 1988 10-12/88	1st Qtr. 1989 1-3/89	2nd Qtr. 1989 4-6/89	3rd Qtr. 1989 7-9/89	4th Qtr. 1989 10-12/89	1st Qtr. 1990 1-3/90
M4-14	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	3800. P	4100. C	1500. P	1400. C	2400. C	1900. C
M4-15	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	570. C	340. C	140. C	310. P	630. C	320. C
M4-20D	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.1 C	22. C	22. C	34. P	50. C	50. C
M4-27D	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	67. P	NS	NS	87. C	150. C	NS
M4-33S	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	27000. P	17000. P	12000. P	12000. P	12000. P	12000. C
M4-41S	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	2900. P	3400. C	2700. C	2500. C	3500. C	1800. C
M4-44S	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.2 C	1.1 P	0.73 P	1.3 C	2.2 C	22. (b)
M4-55	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	14. P	1.4 P	1.5 P	3.2 C	2.9 C	1.8 C
M4-61	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	14. C	14. C	7.6 C	9.8 P	13. P	NS
M4-63	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	58. P	59. C	76. P	35. C	110. C	110. C
M4-65	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	58. C	95. C	110. P	95. CI
M4-72	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	660. C	550. P	580. P	530. C	790. C	700. C
M4-74	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.4 P	NS	NS	5.5 C	7.1 C	4.8 CI
M4-75	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	20. C	12. C	17. C	23. C	38. C	5.7 C
M4-91	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.8 C	4.9 C	3.0 C	3.8 P	5.9 C	5.4 C
M4-120	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.2 C	5.1 C	4.5 C	ND	NS	NS
M4-128	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	22000. C	17000. C	12000. P	26000. P	18000. P	21000. C
M4-129	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	93. C	170. C	410. P	140. P	290. P	290. C
M4-131	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	72. P	90. P	97. P	27. C	NS	49. C
M4-132	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	95. P	90. C	75. P	ND	90. C	130. C
M4-135	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	25. P	25. C	15. P	19. P	24. P	23. C
M4-136	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	360. P	220. C	390. C	130. P	170. C	690. C
M4-139	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	63. P	100. C	80. P	160. C	95. C	110. C
M4-148	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.0 C	6.8 C	7.2 C
M4-153	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10. C	52. C
M4-156	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	100. IC
M4-157	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5400. C
M4-158	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1500. C
M4-100S	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	11. P	5.2 C	3.6 C	0.80 P	3.0 C	3.1 C
M4-1021	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	11. C	15. C	9.3 C	14. P	15. C	13. P
M4-1022	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	10. C	10. C	5.2 P	8.8 P	5.7 P	5.9 C
M4-1045	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.3 C	5.8 C
M4-1046	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	18. C	20. C
M4-1049	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.5 C	8.5 P
Carbon Tetrachloride by 8240																	
M4-27D	0.5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.1	NS
Trichloroethylene by 8240																	
M4-7	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-27D	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-8	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued.)

ALL UNITS ARE ug/l
 M4 = Monitoring Well
 B = Detected in blank, result not corrected
 NA = Not analyzed
 NC = Result not confirmed in second column analysis
 AL = DES Action Level
 S = Determined by Method of Standard Addition
 NE = Threshold value not established
 DL = Diluted out of the confirmation run
 PMCL = US EPA Primary Maximum Contaminant Level
 C = Confirmed on second column
 NS = Not sampled
 MCL = IHS Maximum Contaminant Level
 ND = Not detected at specified Detection Limit
 P = Previously confirmed column

APPENDIX A-2 (Continued)

Analyte Name	Maximum Concentration Level, Or Action Level	Board 1 1985 6/85	Board 2 1985 11-12/85	Board 3 1986 2-4/86	4th Qtr. 1986 9-12/86	1st Qtr. 1987 1-3/87	2nd Qtr. 1987 4-6/87	3rd Qtr. 1987 7-9/87	4th Qtr. 1987 9-12/87	1st Qtr. 1988 1-3/88	2nd Qtr. 1988 4-6/88	3rd Qtr. 1988 7-9/88	4th Qtr. 1988 10-12/88	1st Qtr. 1989 1-3/89	2nd Qtr. 1989 4-6/89	3rd Qtr. 1989 7-9/89	4th Qtr. 1989 10-12/89	1st Qtr. 1990 1-3/90
M4-1046	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1049	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Aluminum by 6010																		
M4-10	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4300.
Cadmium by 6010																		
M4-139	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium by 6010																		
M4-44S	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Selenium by 6010																		
M4-220	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-120	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-129	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Silver by E200.7																		
M4-1005	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium by E200.7																		
M4-36S	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium by E200.7																		
M4-33S	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-36S	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Quantum by E200.7																		
M4-12	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-31S	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-44S	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-101	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1018	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1019	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead by E200.7																		
M4-12	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1001	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1012	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Mercury by E245.1																		
M4-44S	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride by E601																		
M4-270	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-33S	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-41S	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane by E601																		
M4-10	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued)

ALL UNITS ARE $\mu\text{g/l}$
 M4 = Monitoring Well
 B = Detected in blank, result not corrected
 NS = Not analyzed
 NC = Result not confirmed in second column analysis
 EL = Diluted out of the confirmation run
 A. = DTS Action Level
 S = Determined by Method of Standard Addition
 NS = Threshold value not established
 PMCL = US. EPA Primary Maximum Contaminant Level
 C = Confirmed on second column
 NS = Not sampled
 MCL = DTS Maximum Contaminant Level
 ND = Not detected at specified Detection Limit
 P = Previously confirmed column

APPENDIX A-2 (Continued.)

Analyte Name	Maximum Concentration Level	Round 1 1985	Round 2 1985	Round 3 1986	4th Qtr. 1986	1st Qtr. 1987	2nd Qtr. 1987	3rd Qtr. 1987	4th Qtr. 1987	1st Qtr. 1988	2nd Qtr. 1988	3rd Qtr. 1988	4th Qtr. 1988	1st Qtr. 1989	2nd Qtr. 1989	3rd Qtr. 1989	4th Qtr. 1989	1st Qtr. 1990
Well Number	Or Action Level	6/85	11-12/85	2-4/86	9-12/86	1-3/87	4-6/87	7-9/87	9-12/87	1-3/88	4-6/88	7-9/88	10-12/88	1-3/89	4-6/89	7-9/89	10-12/89	1-3/90
M4-14	0.5 (ACL)	2790.	NS	NS	NS	NS	NS	NS	NS	NS	36 C	ND	NS	NS	NS	NS	NS	NS
M4-15	0.5 (ACL)	ND	NS	NS	NS	NS	NS	NS	NS	NS	6.8 C	5.6 C	NS	NS	NS	NS	NS	NS
M4-27D	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.98 FC	2.7 C	NS	NS	NS	NS	NS	NS
M4-33S	0.5 (ACL)	ND	NS	NS	62. C	88 C	NS	NS	NS	NS	400 C	530 C	NS	NS	NS	NS	NS	NS
M4-38D	0.5 (ACL)	300.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-41S	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	0.5 (ACL)	NS	NS	NS	39. DL	14 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	0.5 (ACL)	NS	NS	NS	2.9 DL	2.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-63	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	0.5 (ACL)	NS	NS	NS	0.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-76	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-117	0.5 (ACL)	NS	NS	NS	0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	0.5 (ACL)	NS	NS	NS	41. DL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-131	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-132	0.5 (ACL)	NS	NS	NS	0.70 DL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-135	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-139	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1004	0.5 (ACL)	NS	NS	NS	1.9 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005	0.5 (ACL)	NS	NS	NS	14. C	5.7 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene by E601																		
M4-33S	5	NS	NS	NS	6.2 FC	6.1 DL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	5	NS	NS	NS	57. DL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene by E601																		
M4-10	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-22D	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-28D	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-38D	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-44S	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-53	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-57	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-59	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-74	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued.)

ALL UNITS ARE ug/l
 M4 = Monitoring Well
 S = Detected in blank, result not corrected
 NA = Not analyzed
 NC = Result not confirmed in second column analysis DL = Diluted out of the confirmation run

AL = IIS Action Level
 S = Determined by Method of Standard Addition
 NS = Threshold value not established

PMCL = US. EPA Primary Maximum Contaminant Level
 C = Confirmed on second column
 NS = Not sampled

MCL = IIS Maximum Contaminant Level
 ND = Not detected at specified Detection Limit
 P = Previously confirmed column

APPENDIX A-2. (Continued)

Analyte Name	Maximum Concentration Level	Round 1 1985	Round 2 1985	Round 3 1986	4th Qtr. 1986	1st Qtr. 1987	2nd Qtr. 1987	3rd Qtr. 1987	4th Qtr. 1987	1st Qtr. 1988	2nd Qtr. 1988	3rd Qtr. 1988	4th Qtr. 1988	1st Qtr. 1989	2nd Qtr. 1989	3rd Qtr. 1989	4th Qtr. 1989	1st Qtr. 1990
M4-76	6	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-91	6	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-130	6	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1004	6	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005	6	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total 1,2-Dichloroethane by ES01																		
M4-10	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-27D	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-33S	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-38D	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-41S	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-63	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	15	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-76	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-120	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-131	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-132	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-139	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1000	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane by ES01																		
M4-33S	5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane by ES01																		
M4-36S	150	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl Chloride by ES01																		
M4-10	0.5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	0.5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	0.5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	0.5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-33S	0.5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-36S	0.5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-38D	0.5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	0.5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-58	0.5	(MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued.)

ALL UNITS ARE ug/l
 M4 = Monitoring Well
 B = Detected in blank, result not extracted
 NA = Not analyzed
 NC = Result not confirmed in second column analysis
 AL = IHS Action Level
 S = Determined by Method of Standard Addition
 NS = Threshold value not established
 NS = Result not confirmed in second column analysis
 IL = Diluted out of the confirmation run
 RML = US EPA Primary Maximum Contaminant Level
 C = Confirmed on second column
 NS = Not sampled
 MCL = IHS Maximum Contaminant Level
 ND = Not detected at specified Detection Limit
 P = Previously confirmed column

APPENDIX A-2 (Continued)

Analyte Name	Found 1	Found 2	Found 3	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.
Well Number	1985	1986	1986	1986	1987	1987	1987	1988	1988	1988	1989	1989	1990
M4-72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane by E601													
M4-33S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethane by E601													
M4-10	65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	2490	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	1260	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-22D	14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-33S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-39D	260	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-41S	3.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane by E601													
M4-10	327	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	12100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	12400	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	2800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	4100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-33S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-3D	1870	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane by E601													
M4-3D	213	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethane by E601													
M4-6	86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-7	38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-9	134	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-10	826	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	11900	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	12100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	26600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	18000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-19S	4.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-22D	213	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-2D	8.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued)

ALL UNITS ARE ug/l
 M4 = Monitoring Well
 B = Detected in blank, result not corrected
 NA = Not analyzed
 NS = Result not confirmed in second column analysis
 DL = Diluted out of the confirmation run
 AL = IHS Action Level
 S = Determined by Method of Standard Addition
 NE = Threshold value not established
 NC = Result not confirmed in second column analysis
 IMCL = US EPA Primary Maximum Contaminant Level
 C = Confirmed on second column
 NS = Not sampled
 MCL = IHS Maximum Contaminant Level
 ND = Not detected at specified Detection Limit
 P = Previously confirmed column

APPENDIX A-2 (Continued)

Analyte Name	Well Number	Maximum Contaminant Level Or Action Level	Round 1	Round 2	Round 3	4th Qtr. 1986	1st Qtr. 1987	2nd Qtr. 1987	3rd Qtr. 1987	4th Qtr. 1987	1st Qtr. 1988	2nd Qtr. 1988	3rd Qtr. 1988	4th Qtr. 1988	1st Qtr. 1989	2nd Qtr. 1989	3rd Qtr. 1989	4th Qtr. 1989	1st Qtr. 1990
M4-265		5 (MCL)	21.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-270		5 (MCL)	4.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-275		5 (MCL)	63.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-280		5 (MCL)	8.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-335		5 (MCL)	22600.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-365		5 (MCL)	2.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-380		5 (MCL)	296.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-405		5 (MCL)	190.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-415		5 (MCL)	23.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-57		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-59		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-61		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-63		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-74		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-75		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-91		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-92		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-117		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-120		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-123		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-131		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-132		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-135		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-136		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-139		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-100A		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1021		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1022		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1041		5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform by B501																			
M4-14		100 (MCL)	2320.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene by B502																			
M4-10		1 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11		1 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued)

ALL UNITS ARE ug/l
M4 = Monitoring Well
B = Detected in blank, result not corrected
NA = Not analyzed
NC = Result not confirmed in second column analysis
AL = DHS Action Level
S = Determined by Method of Standard Addition
NE = Threshold value not established
DL = Diluted out of the confirmation run
MCL = DHS Maximum Contaminant Level
ND = Not detected at specified Detection Limit
P = Previously confirmed column

APPENDIX A-2 (Continued.)

Analyte Name	Medium	Round 1	Round 2	Round 3	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.
Well	Contaminant Level	1985	1985	1985	1986	1987	1987	1988	1988	1989	1989	1989	1989	1990
Number	Or Action Level	6/85	11-12/85	2-4/86	9-12/86	1-3/87	4-6/87	7-9/87	10-12/87	1-3/88	4-6/88	7-9/88	10-12/88	1-3/89
M4-54	1	(AL)	NS	NS	9.5 C	NS	1.0 C	NS	NS	NS	NS	NS	NS	NS
M4-112	1	(AL)	NS	NS	2.2 NC	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1021	1	(AL)	NS	NS	NS	NS	1.1 C	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene by E602														
M4-338	5	(AL)	NS	NS	4.2 C	5.8 C	7.2 DL	7.0 DL	NS	NS	NS	NS	NS	NS
Benzene by E624														
M4-54	1	(AL)	NS	NS	NS	NS	2.1 EL	NS	NS	NS	NS	NS	NS	NS
M4-102	1	(AL)	NS	NS	NS	NS	NS	5.2 EL	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride by E624														
M4-270	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	7.1	NS	NS	NS	NS
1,2-Dichloroethene by E624														
M4-10	0.5	(AL)	NS	NS	NS	NS	NS	NS	330	NS	NS	NS	NS	NS
M4-11	0.5	(AL)	NS	NS	NS	NS	NS	NS	79	120	140	NS	NS	NS
M4-12	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-53	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-59	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-74	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-76	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-91	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1004	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total 1,2-Dichloroethene by E624														
M4-10	16	(AL)	NS	NS	NS	NS	NS	NS	780	NS	NS	NS	NS	NS
M4-270	16	(AL)	NS	NS	NS	NS	NS	NS	NS	23	NS	NS	NS	NS
M4-338	16	(AL)	NS	NS	NS	NS	NS	NS	NS	490	NS	NS	NS	NS
M4-415	16	(AL)	NS	NS	NS	NS	NS	NS	NS	20	NS	NS	NS	NS
M4-55	16	(AL)	NS	NS	NS	NS	NS	NS	NS	4.8	NS	NS	NS	NS
M4-63	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	16	(AL)	NS	NS	NS	NS	NS	NS	NS	88	57	NS	NS	NS
M4-76	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	29	NS	NS	NS
M4-128	16	(AL)	NS	NS	NS	NS	NS	NS	NS	420	NS	NS	NS	NS

(Continued.)

ALL UNITS ARE ug/l
M4 = Monitoring Well
B = Detected in blank, result not corrected
NA = Not analyzed
NC = Result not confirmed in second column analysis
DL = Diluted out of the confirmation run
AL = IHS Action Level
S = Determined by Method of Standard Addition
NS = Threshold value not established
NS = Result not confirmed in second column analysis
IHL = US EPA Primary Maximum Contaminant Level
C = Confirmed on second column
NS = Not sampled
MCL = IHS Maximum Contaminant Level
ND = Not Detected at specified Detection Limit
P = Previously confirmed column

APPENDIX A-2 (Continued.)

Analyte Name	Maximum Concentration Level Or Action Level	Round 1 1985 6/85	Round 2 1985 11-12/85	Round 3 1986 2-4/86	4th Qtr. 1986 9-12/86	1st Qtr. 1987 1-3/87	2nd Qtr. 1987 4-6/87	3rd Qtr. 1987 7-9/87	4th Qtr. 1987 9-12/87	1st Qtr. 1988 1-3/88	2nd Qtr. 1988 4-6/88	3rd Qtr. 1988 7-9/88	4th Qtr. 1988 10-12/88	1st Qtr. 1989 1-3/89	2nd Qtr. 1989 4-6/89	3rd Qtr. 1989 7-9/89	4th Qtr. 1989 10-12/89	1st Qtr. 1990 1-3/90
M4-132	16	NS	NS	NS	NS	17.	17	23	NS	25	NS	29	NS	NS	NS	NS	NS	NS
Vinyl Chloride by E624																		
M4-10	0.5	NS	NS	NS	NS	NS	NS	NS	810.	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	0.5	NS	NS	NS	NS	NS	77.	NS	20	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene by E624																		
M4-415	5	NS	NS	NS	NS	NS	NS	NS	NS	5.5	NS	27	NS	NS	NS	NS	NS	NS
M4-55	5	NS	NS	NS	NS	NS	NS	NS	13.	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethene by E624																		
M4-11	200	NS	NS	NS	NS	NS	NS	NS	10000	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	200	NS	NS	NS	NS	NS	NS	NS	3200	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	200	NS	NS	NS	NS	NS	NS	NS	350.	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene by E624																		
M4-10	5	NS	NS	NS	NS	NS	NS	NS	910	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	5	NS	NS	NS	NS	NS	NS	NS	8000.	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	5	NS	NS	NS	NS	NS	NS	NS	4700	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	5	NS	NS	NS	NS	NS	NS	NS	350	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	5	NS	NS	NS	NS	NS	NS	NS	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-270	5	NS	NS	NS	NS	NS	NS	NS	NS	55	NS	77.	NS	NS	NS	NS	NS	NS
M4-335	5	NS	NS	NS	NS	NS	NS	NS	22000.	NS	NS	35000.	NS	NS	NS	NS	NS	NS
M4-415	5	NS	NS	NS	NS	NS	NS	NS	NS	220.	NS	700	NS	NS	NS	NS	NS	NS
M4-53	5	NS	NS	NS	NS	NS	NS	NS	5.3	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	5	NS	NS	NS	NS	NS	NS	NS	9.5	NS	NS	15	NS	NS	NS	NS	NS	NS
M4-59	5	NS	NS	NS	NS	NS	NS	NS	7.4	NS	NS	6.6	NS	NS	NS	NS	NS	NS
M4-61	5	NS	NS	NS	NS	NS	NS	NS	NS	5.4	NS	72	NS	NS	NS	NS	NS	NS
M4-63	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1100	NS	NS	NS	NS	NS	NS
M4-72	5	NS	NS	NS	NS	NS	NS	NS	530.	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-74	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-75	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-76	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-91	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-120	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-129	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-132	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-136	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1022	5	NS	NS	NS	NS	NS	NS	NS	6.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene by E625																		
M4-10	5	NS	NS	NS	NS	NS	NS	NS	18.	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	5	NS	NS	NS	NS	NS	NS	NS	6.3	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued.)

ALL UNITS ARE ug/l
M4 = Monitoring Well
B = Detected in blank, result not corrected
NA = Not analyzed
NC = Result not confirmed in second column analysis
AL = DFS Action Level
S = Determined by Method of Standard Addition
NE = Threshold value not established
DL = Diluted out of the confirmation run
PML = US EPA Primary Maximum Contaminant Level
C = Confirmed on second column
NS = Not sampled
MCL = HHS Maximum Contaminant Level
ND = Not detected at specified Detection Limit
P = Previously confirmed column

APPENDIX A-2 (Continued)

Analyte Name	Maximum Contaminant Level Or Action Level	Round 1	Round 2	Round 3	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.
Well Number		1985	1985	1985	1986	1987	1987	1987	1987	1988	1988	1988	1988	1989
M4-33S	5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ML = Monitoring Well B = Detected in blank, result not corrected NA = Not analyzed NC = Result not confirmed in second column analysis IL = Diluted out of the confirmation run AL = DHS Action Level S = Determined by Method of Standard Addition NE = Threshold value not established ML = DHS Maximum Contaminant Level ND = Not detected at specified Detection Limit P = Previously confirmed column														

PLATE 1.

LOCATIONS OF WELLS

McCLELLAN AFB
GROUNDWATER SAMPLING
& ANALYSIS PROGRAM

JANUARY-MARCH 1990
DATA SUMMARY

LEGEND:

- McCLELLAN AFB BOUNDARY
- (AREA) BOUNDARIES OF PAST DISPOSAL STORAGE SITES
- CULVERTS
- STREAMS/DRAINAGES
- MONITORING WELL IN SAMPLING PROGRAM
- MONITORING WELL, NOT SAMPLED
- ⊕ EXTRACTION WELL
- † DRY WELL
- ⊗ ABANDONED WELL
- ★ ACTIVE WATER SUPPLY WELL
- ☼ INACTIVE WATER SUPPLY WELL



0 2000
SCALE IN FEET

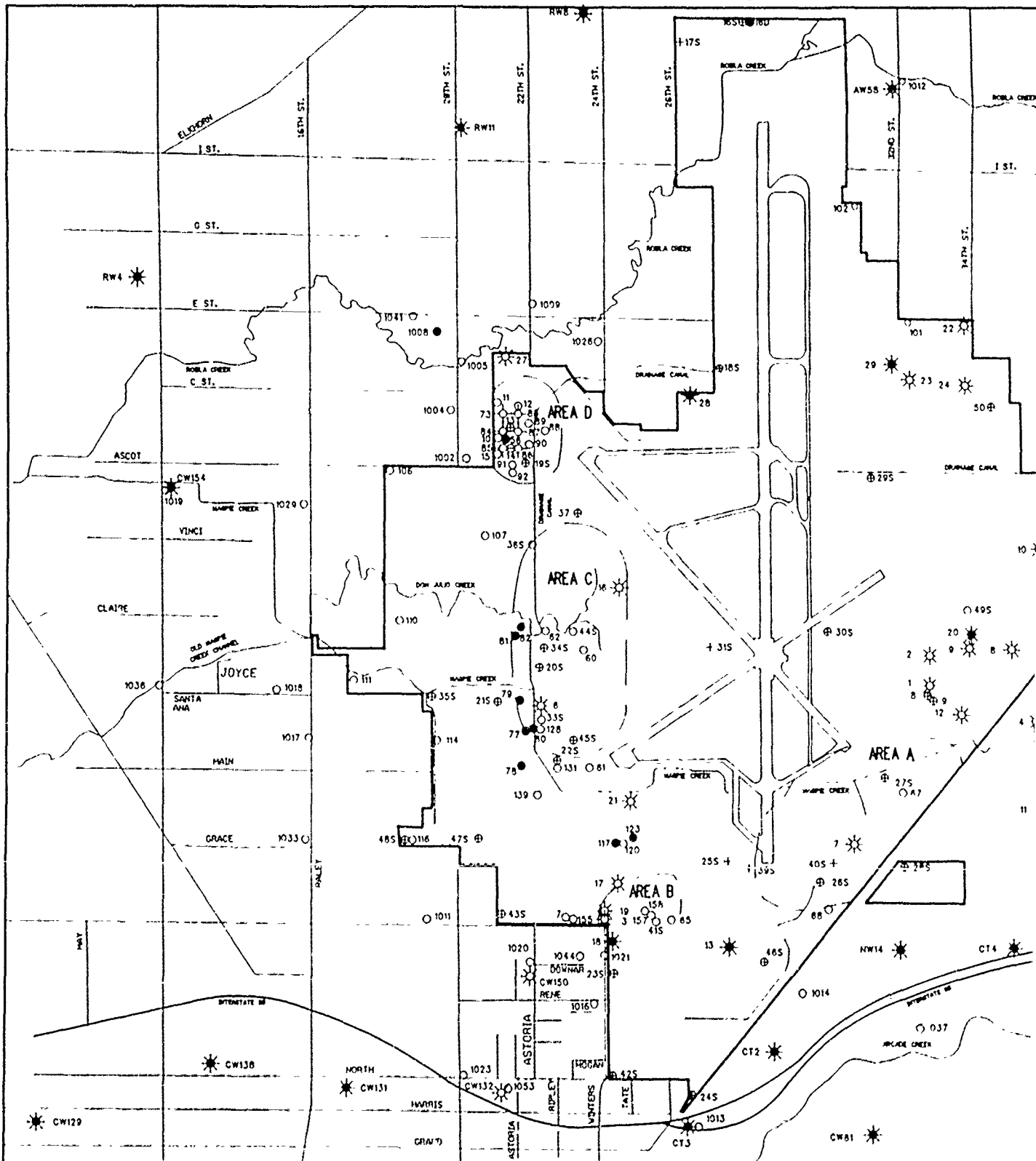
GENERATED BY *Virginia Zewski* DATE:

PEER REVIEW *Deena Stanley* DATE: 8/8/90

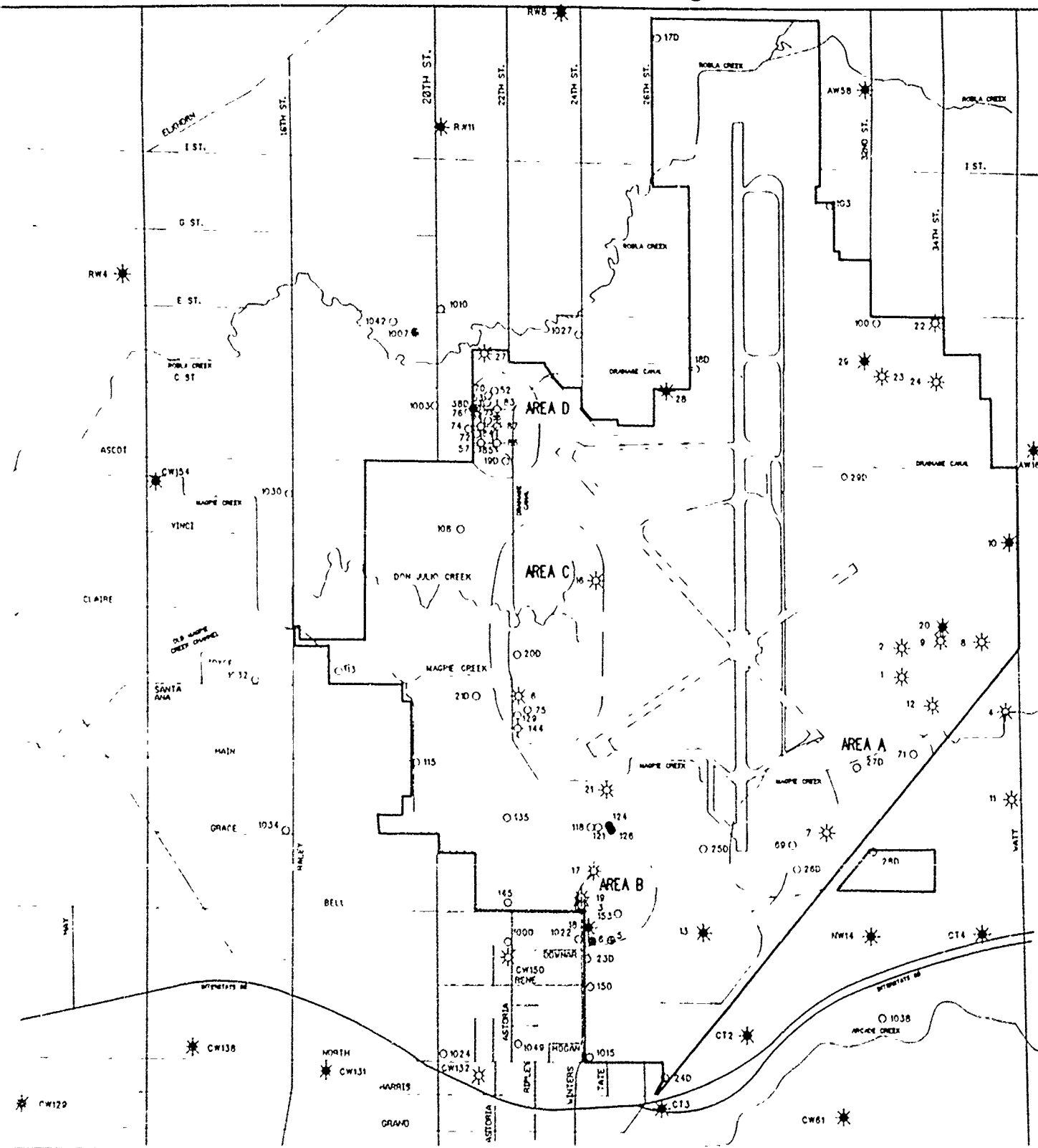
PROJECT REVIEW *J. L. Thompson* DATE: 8/8/90

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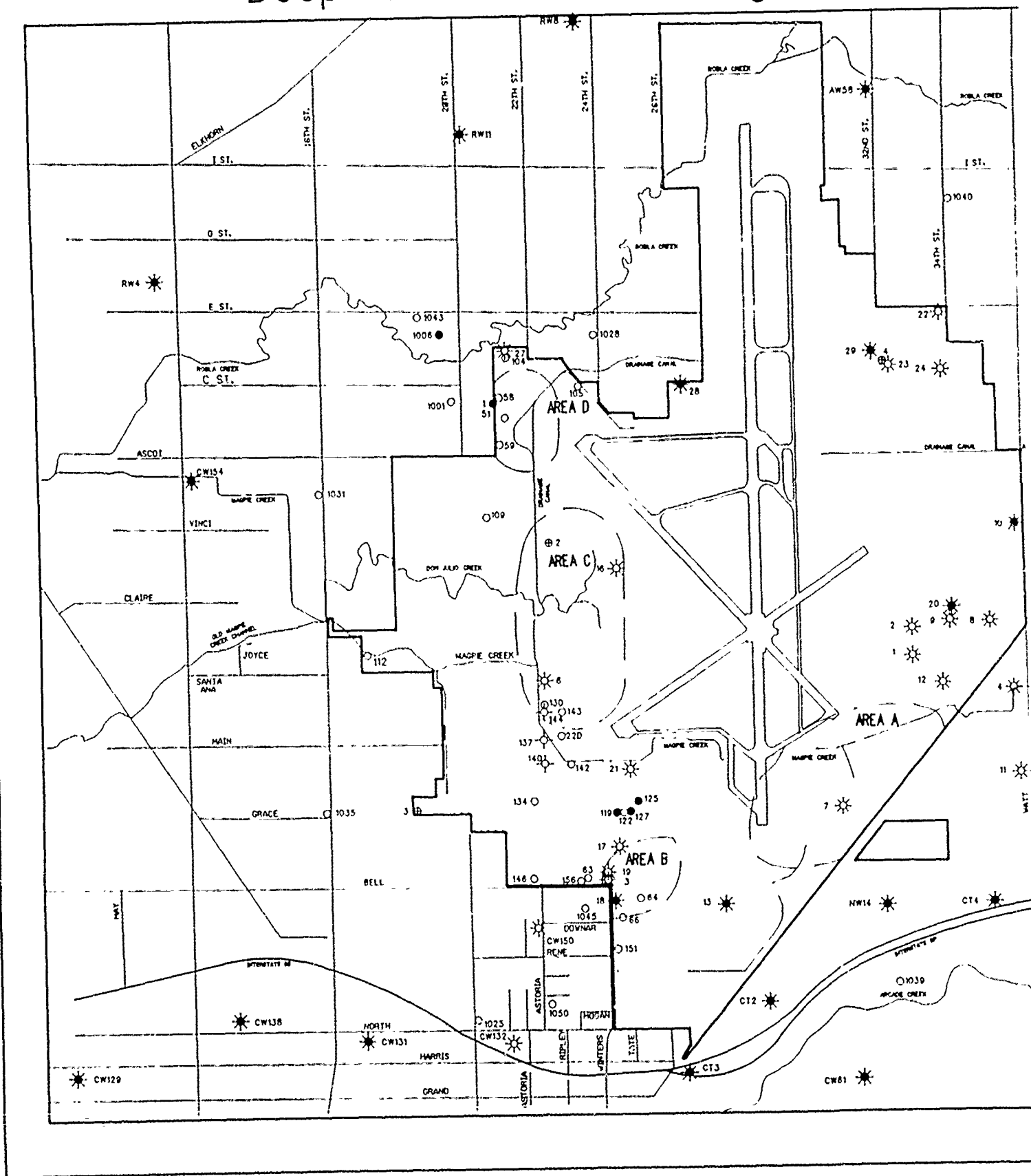
Shallow Zone Monitoring Wells



Middle Zone Monitoring Wells



Deep "A" Zone Monitoring Wells



Deep "B" Zone and Deeper Monitoring Wells

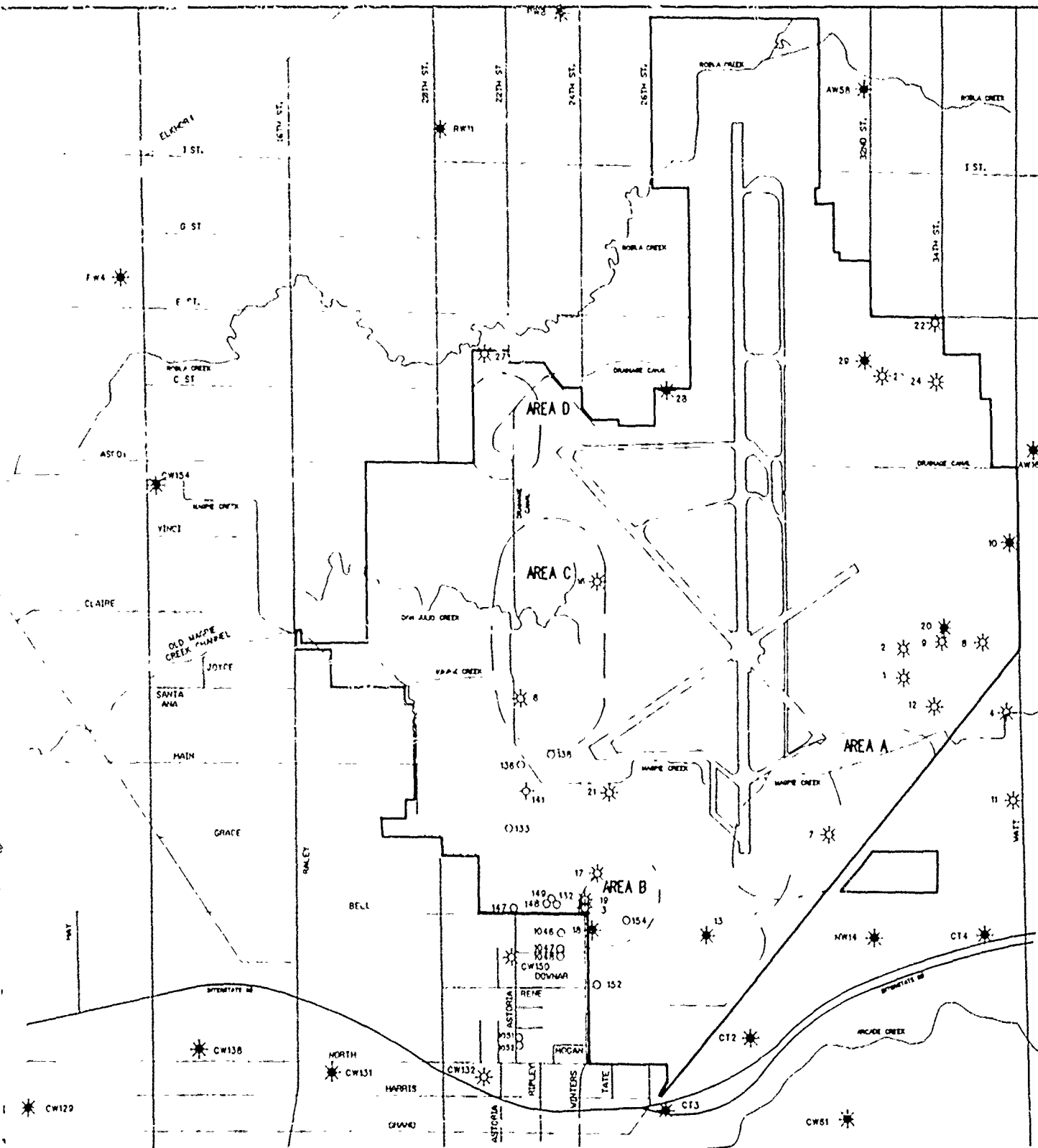


PLATE 2.

SHALLOW MONITORING ZONE
(ABOVE -55 FT. MSL)
POTENTIOMETRIC SURFACE MAP

for Data Collected
January 8, 9, and 10, 1990

McCLELLAN AFB
Groundwater Sampling
& Analysis Program

JANUARY-MARCH 1990

LEGEND:

- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ⋄ EXTRACTION WELLS
- MONITORING WELLS
- * WATER SUPPLY WELLS (INACTIVE)
- * WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.
HACHURES INDICATE DIRECTION OF
GROUNDWATER MOVEMENT. CONTOUR
LINE ELEVATION IN FEET MSL.



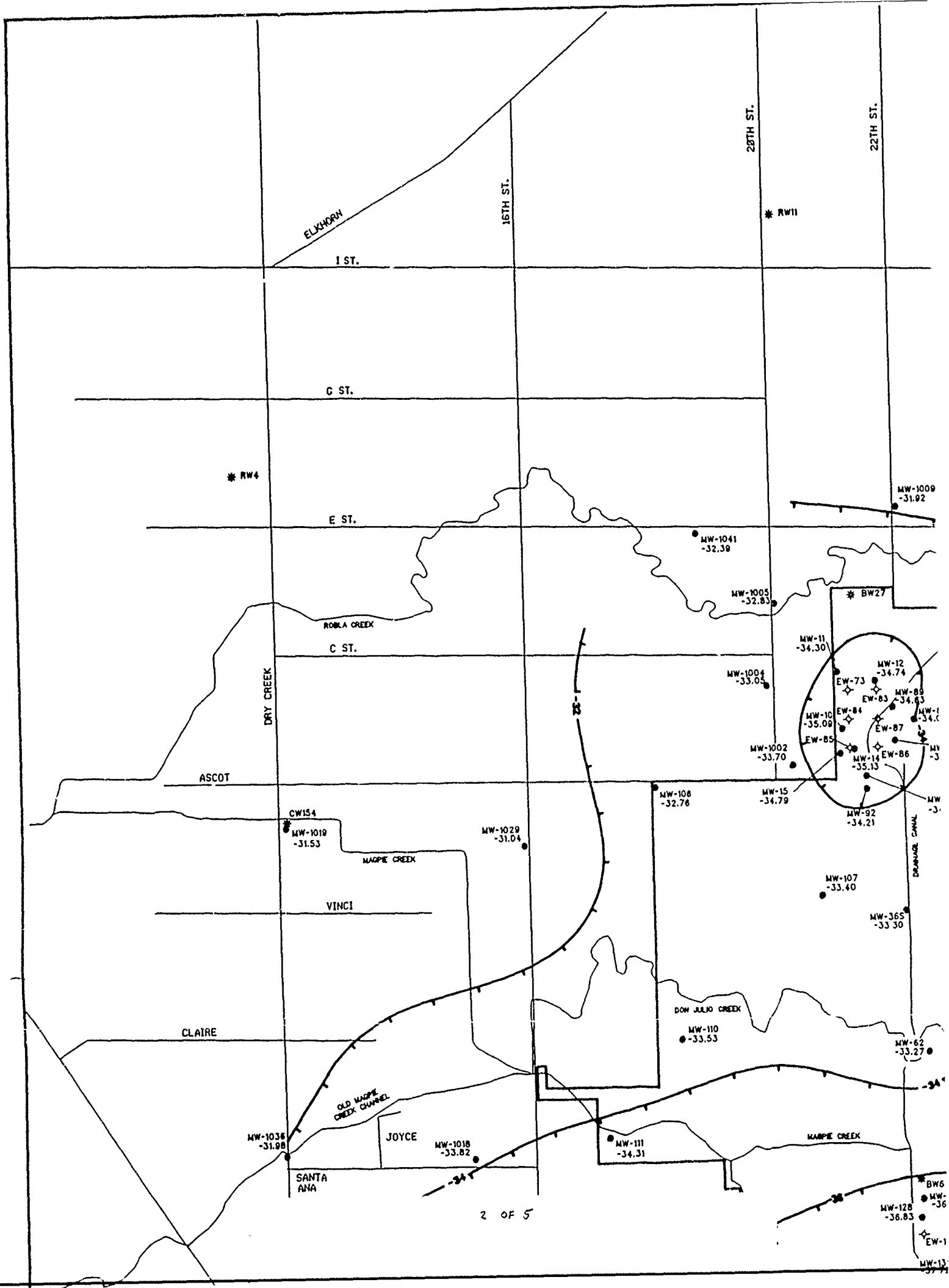
0 1000
SCALE IN FEET

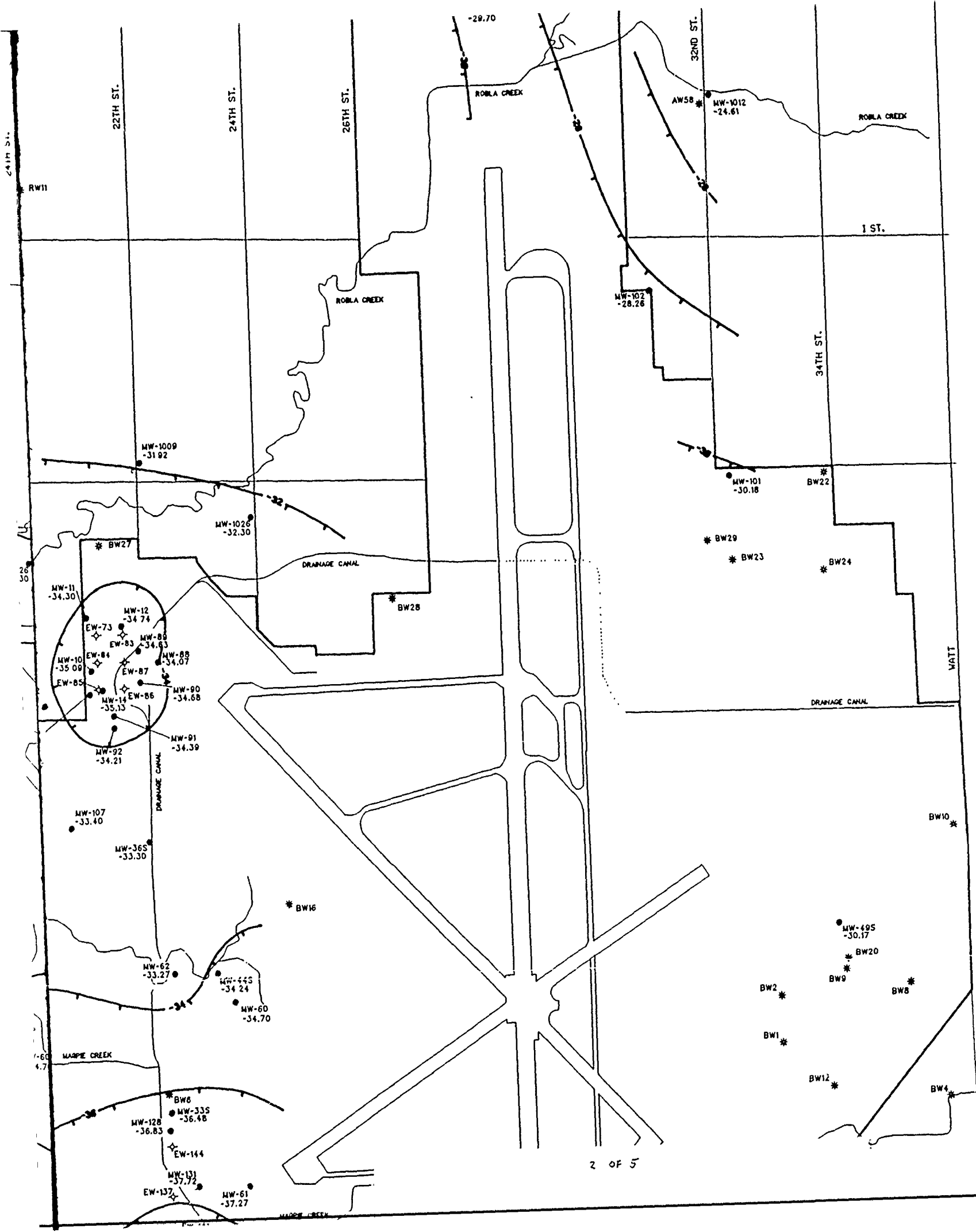
GENERATED BY: *Virginia Jewell* DATE: 8/7/90

PEER REVIEW: *Deanna Stanley* DATE: 8/8/90

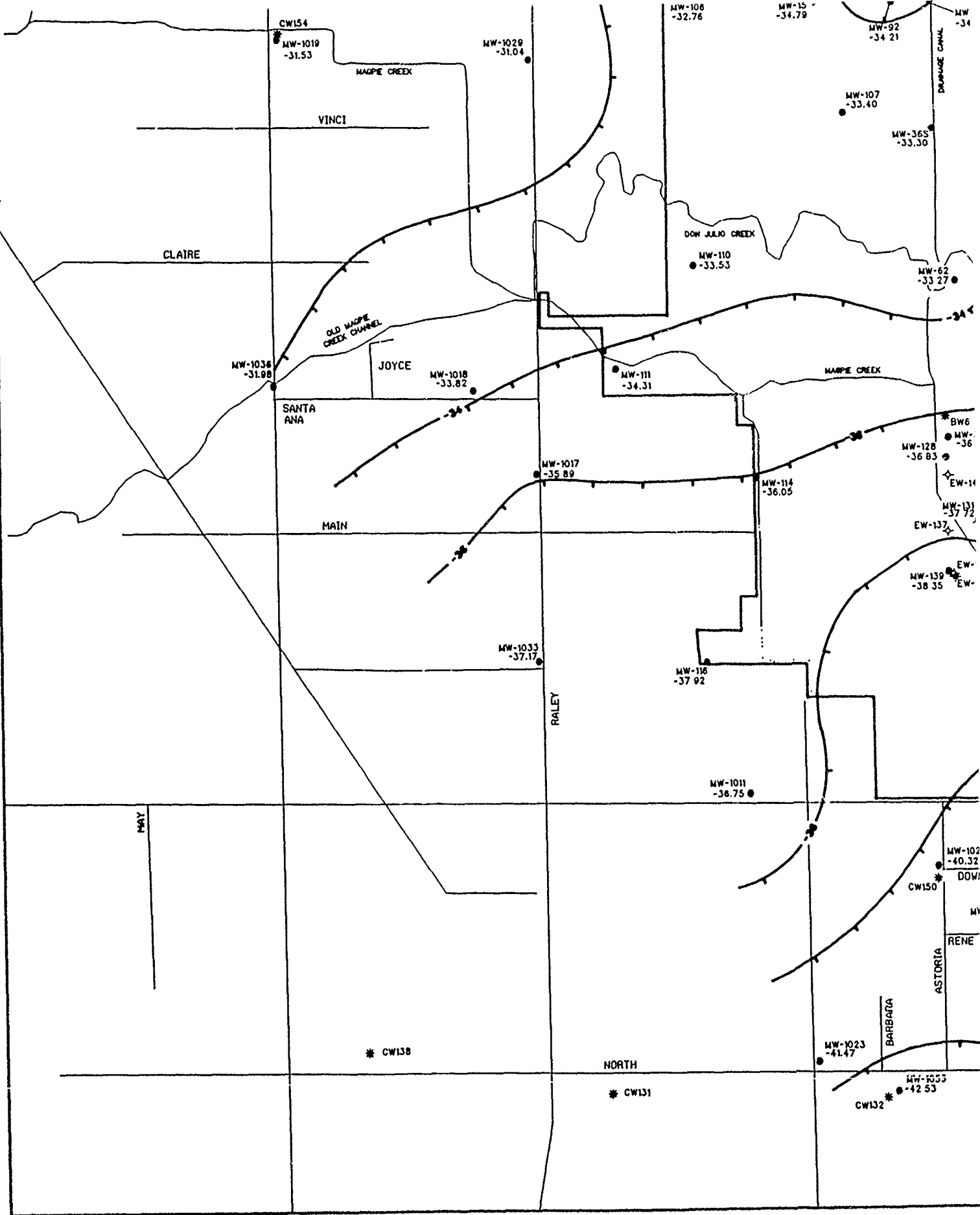
PROJECT REVIEW: *Julia P. Thomas* DATE: 8/8/90

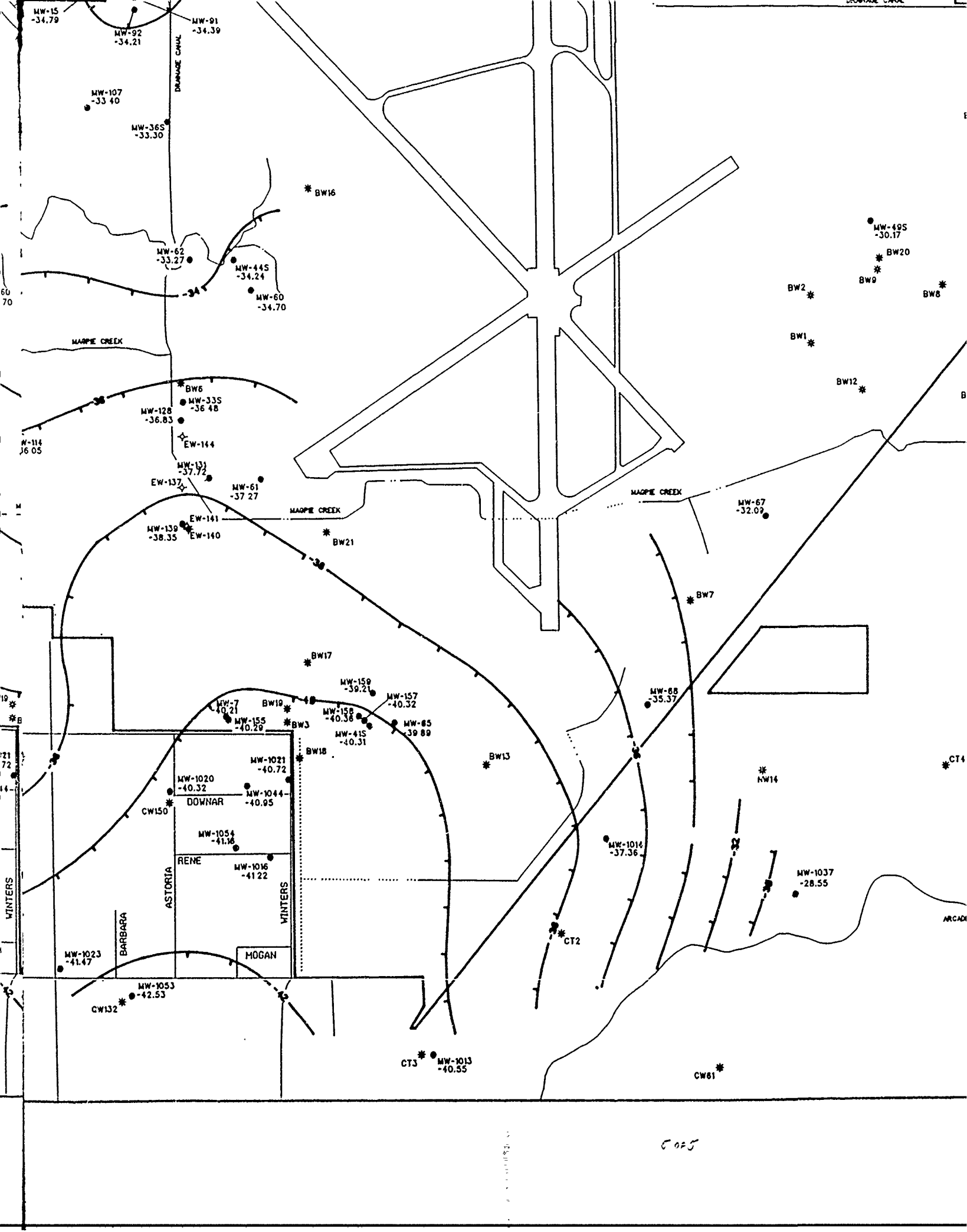
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P





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PLATE 3.

AREA D-SHALLOW MONITORING ZONE
(ABOVE -55 FT. MSL)
POTENTIOMETRIC SURFACE MAP

for Data Collected
January 8,9, and 10, 1990

McCLELLAN AFB
Groundwater Sampling
& Analysis Program
JANUARY-MARCH 1990

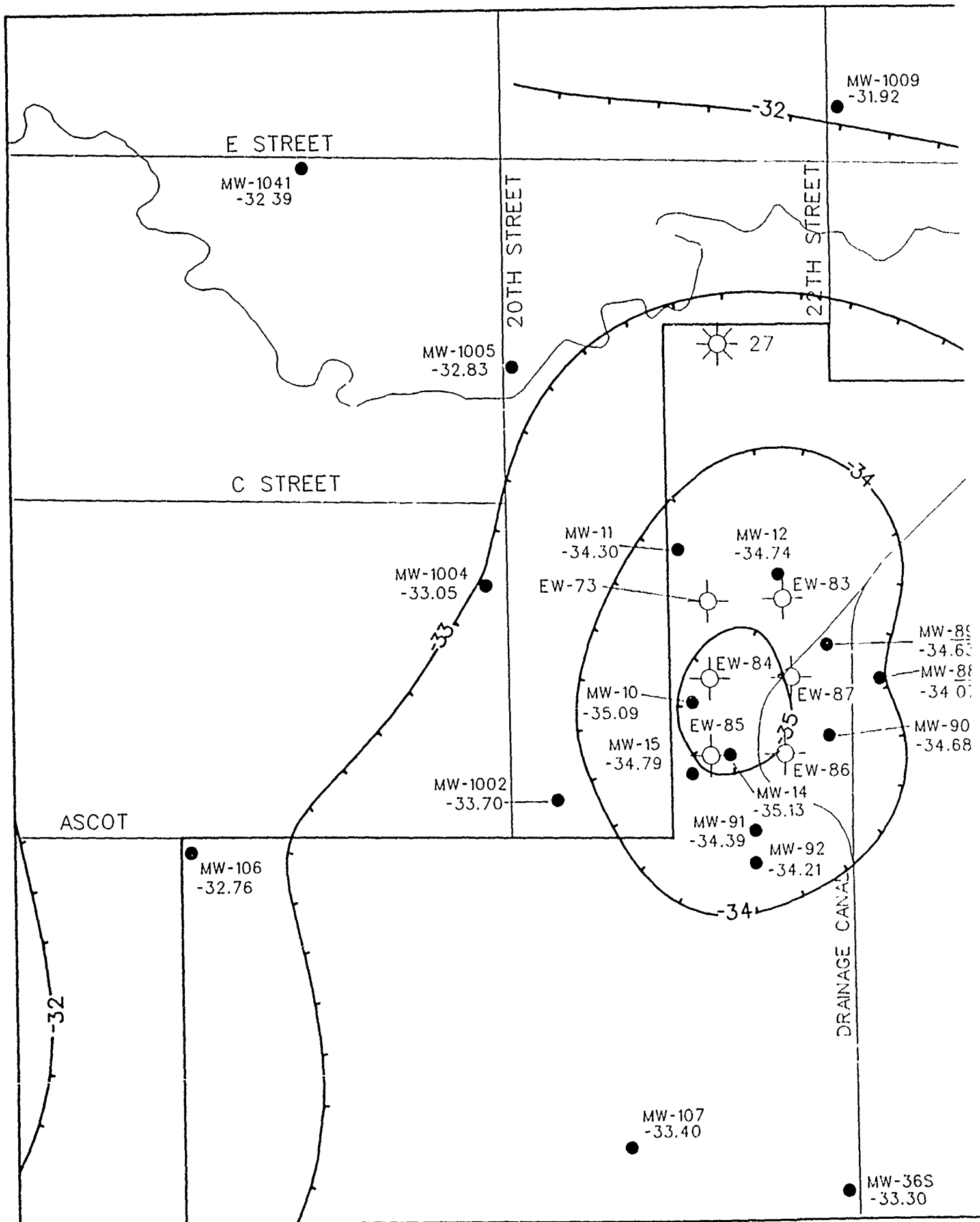
LEGEND:

- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- * WATER SUPPLY WELLS (INACTIVE)
- * WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.
HACHURES INDICATE DIRECTION OF
GROUNDWATER MOVEMENT. CONTOUR
LINE ELEVATION IN FEET MSL.



GENERATED BY: *Virginia Lewick* DATE: 8/7/90
PEER REVIEW: *Deena A. Stanley* DATE: 8/8/90
PROJECT REVIEW: *Gyle P. Thompson* DATE: 8/8/90

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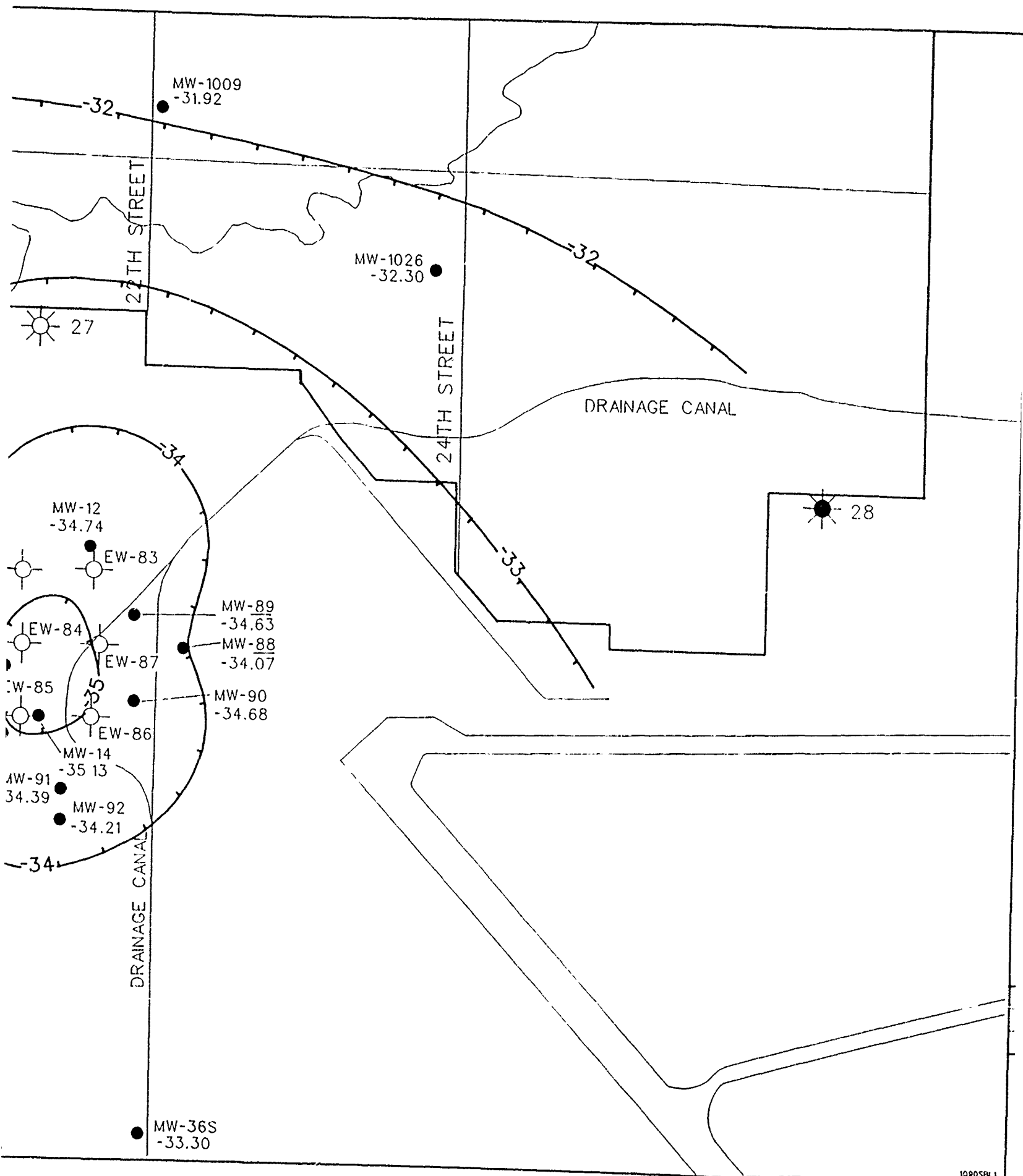


PLATE 4.

MIDDLE MONITORING ZONE
(-55 TO -100 FT. MSL)
POTENTIOMETRIC SURFACE MAP

for Data Collected
January 8,9, and 10, 1990

McCLELLAN AFB
Groundwater Sampling
& Analysis Program

JANUARY-MARCH 1990

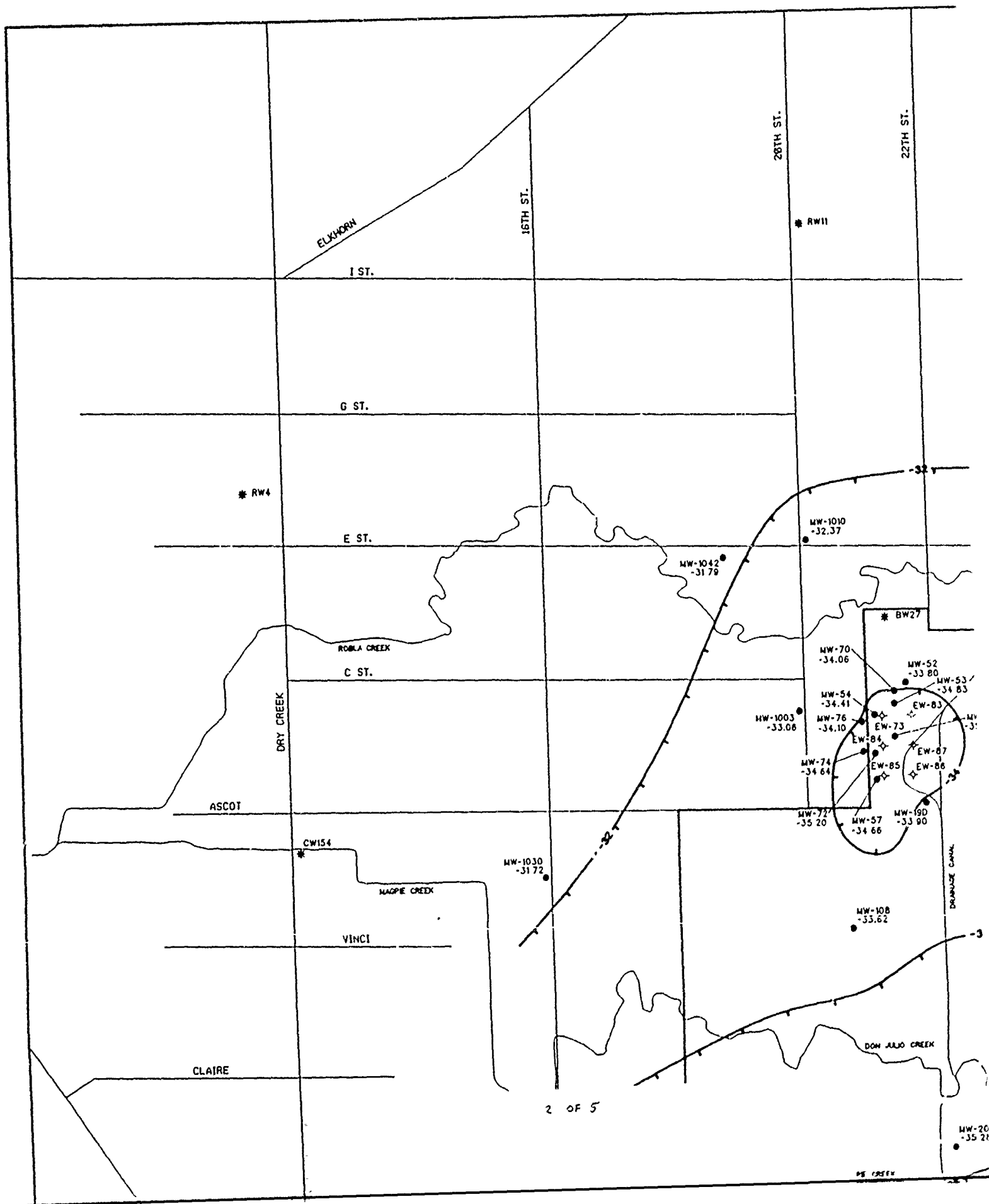
LEGEND:

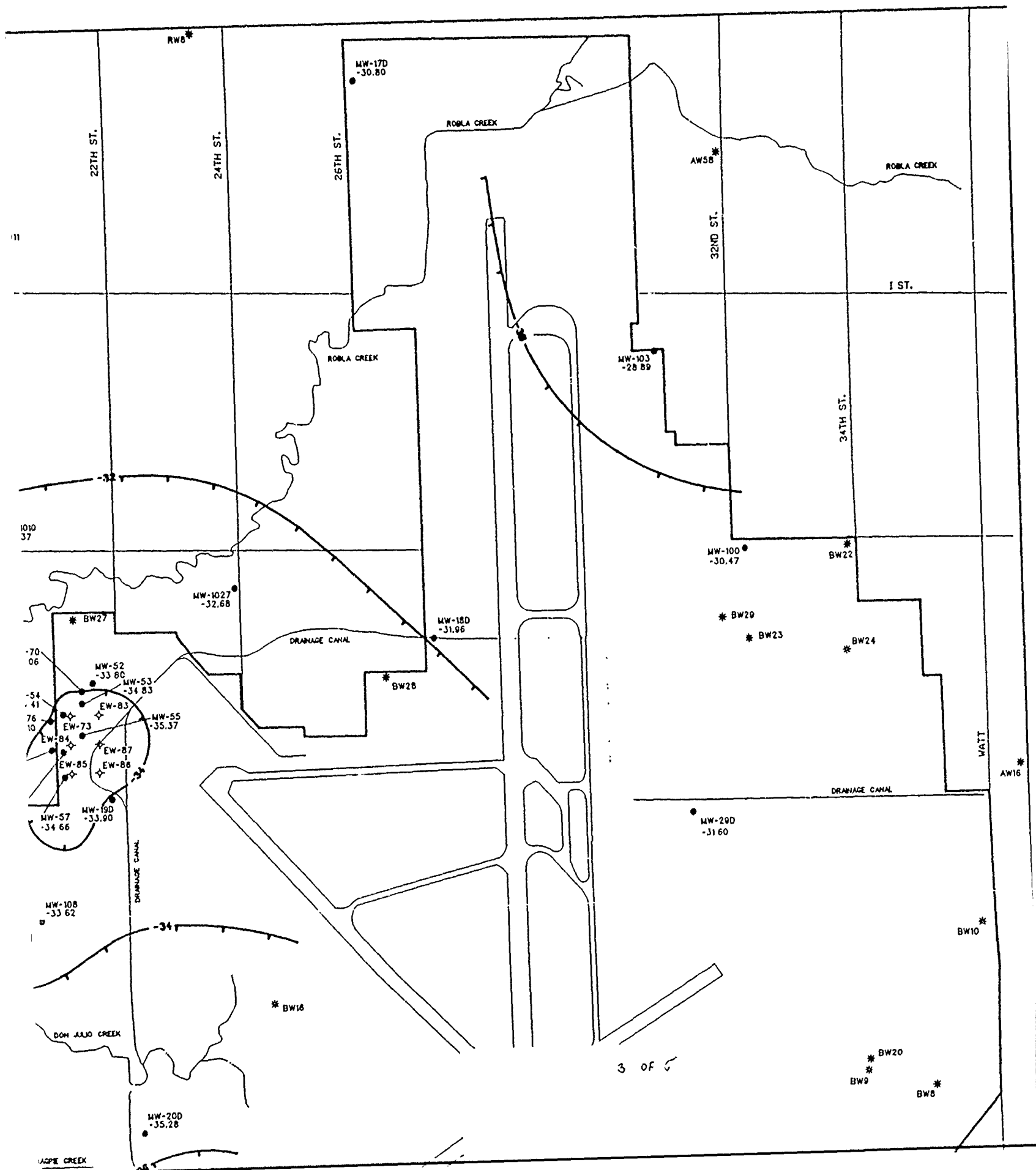
- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- * WATER SUPPLY WELLS (INACTIVE)
- * WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.
HACHURES INDICATE DIRECTION OF
GROUNDWATER MOVEMENT. CONTOUR
LINE ELEVATION IN FEET MSL.

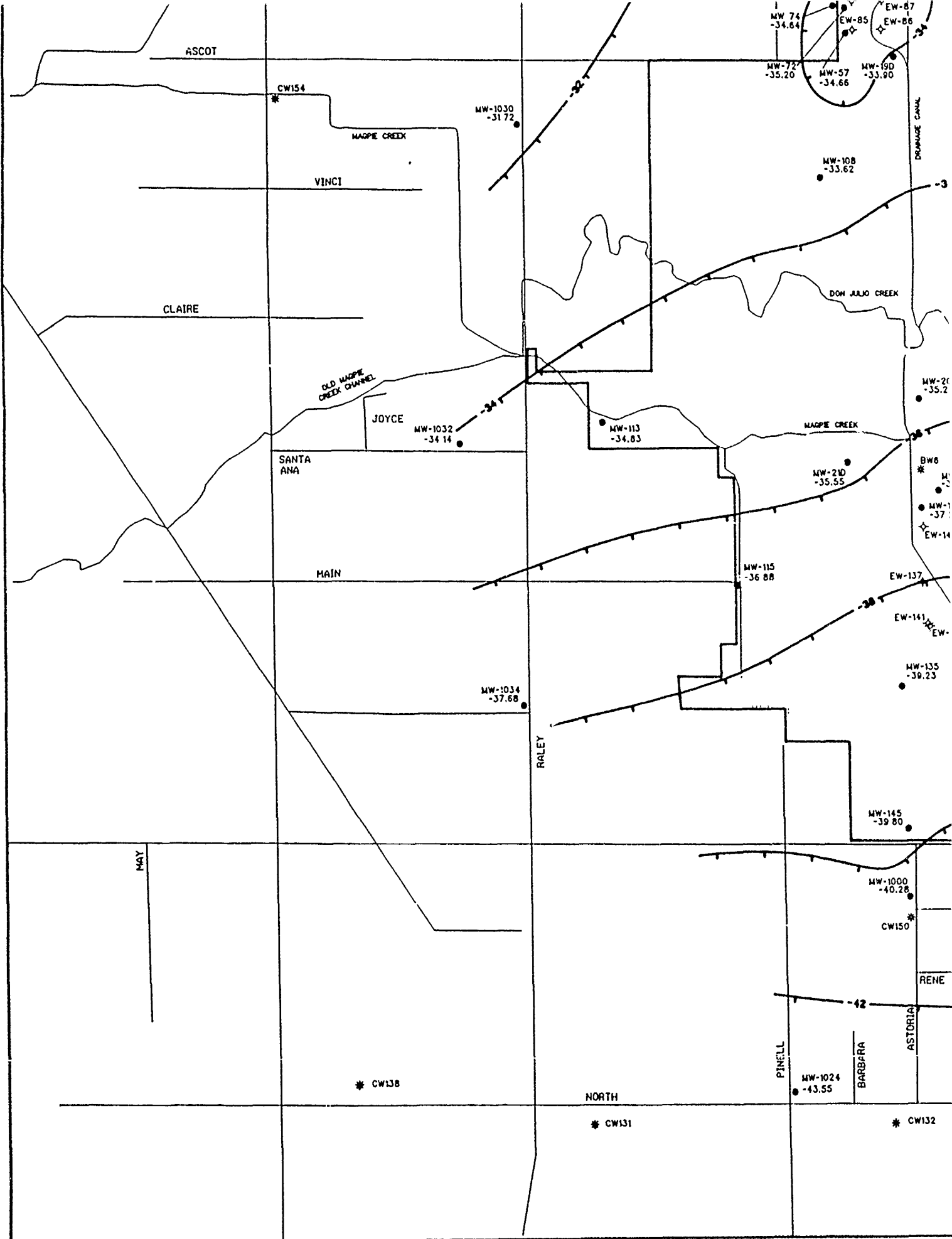


GENERATED BY: *Vigginu Zennith* DATE: 8/7/90
PEER REVIEW: *Deena C. Snyder* DATE: 8/8/90
PROJECT REVIEW: *Lyle P. Thompson* DATE: 8/8/90

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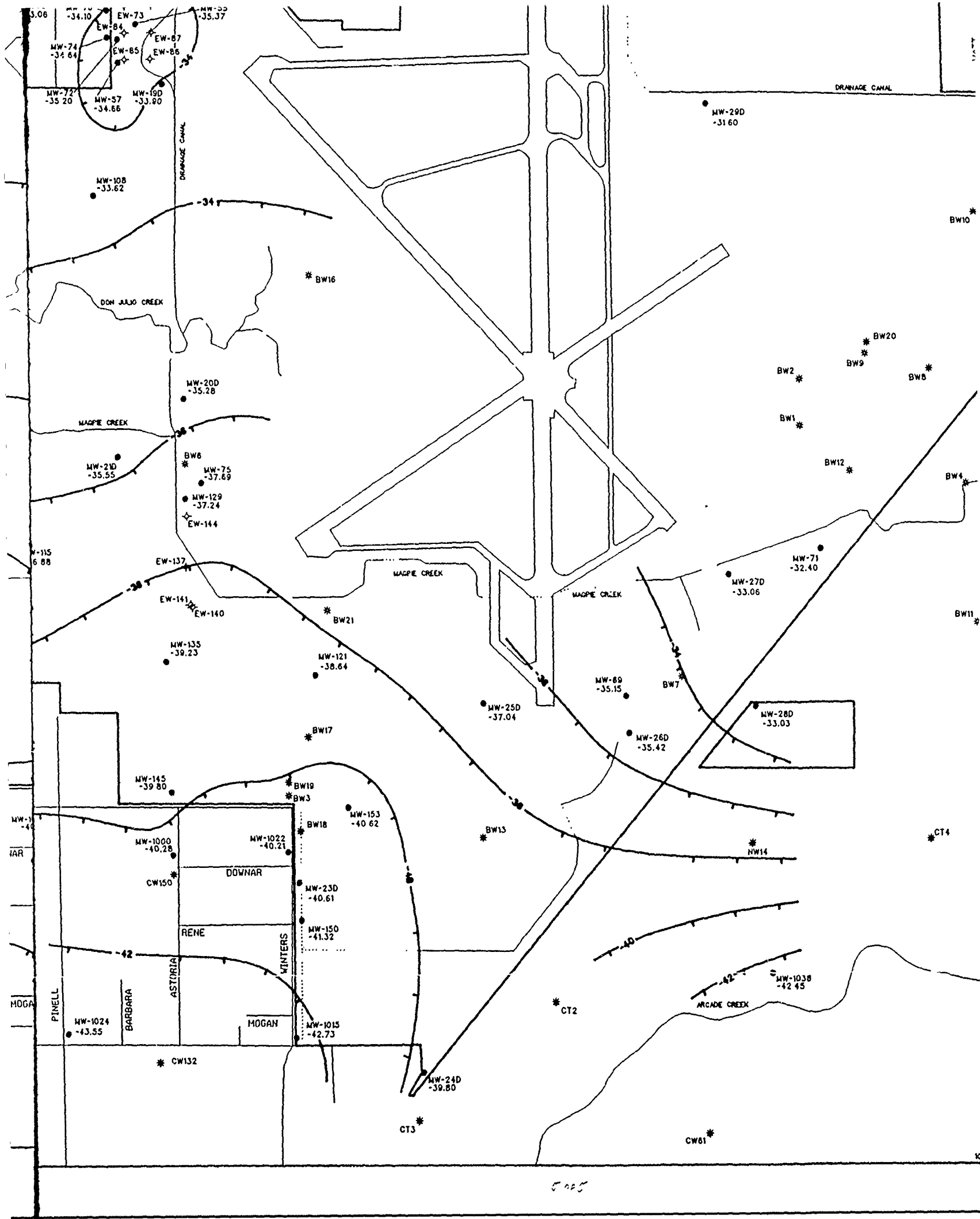


PLATE 5.

AREA D-MIDDLE MONITORING ZONE
(-55 TO -100 FT. MSL)
POTENTIOMETRIC SURFACE MAP

for Data Collected
January 8, 9, and 10, 1990

McCLELLAN AFB
Groundwater Sampling
& Analysis Program
JANUARY-MARCH 1990

LEGEND:

- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- * WATER SUPPLY WELLS (INACTIVE)
- * WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.
HACHURES INDICATE DIRECTION OF
GROUNDWATER MOVEMENT. CONTOUR
LINE ELEVATION IN FEET MSL.

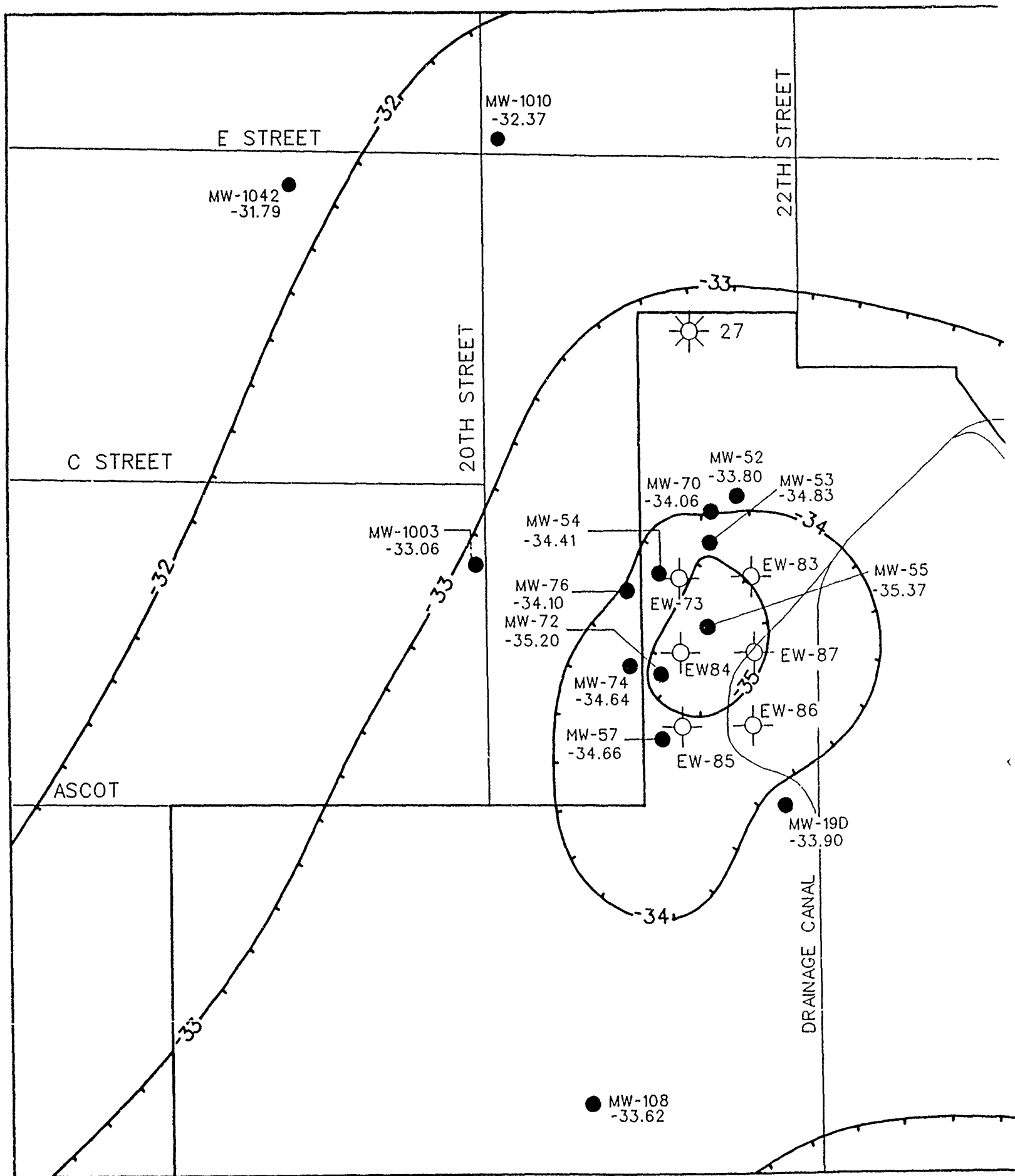


GENERATED BY: *Virginia Lewis* DATE: 8/7/90

PEER REVIEW: *Deanna C. Stanley* DATE: 8/8/90

PROJECT REVIEW: *G. B. H. H. H.* DATE: 8/8/90

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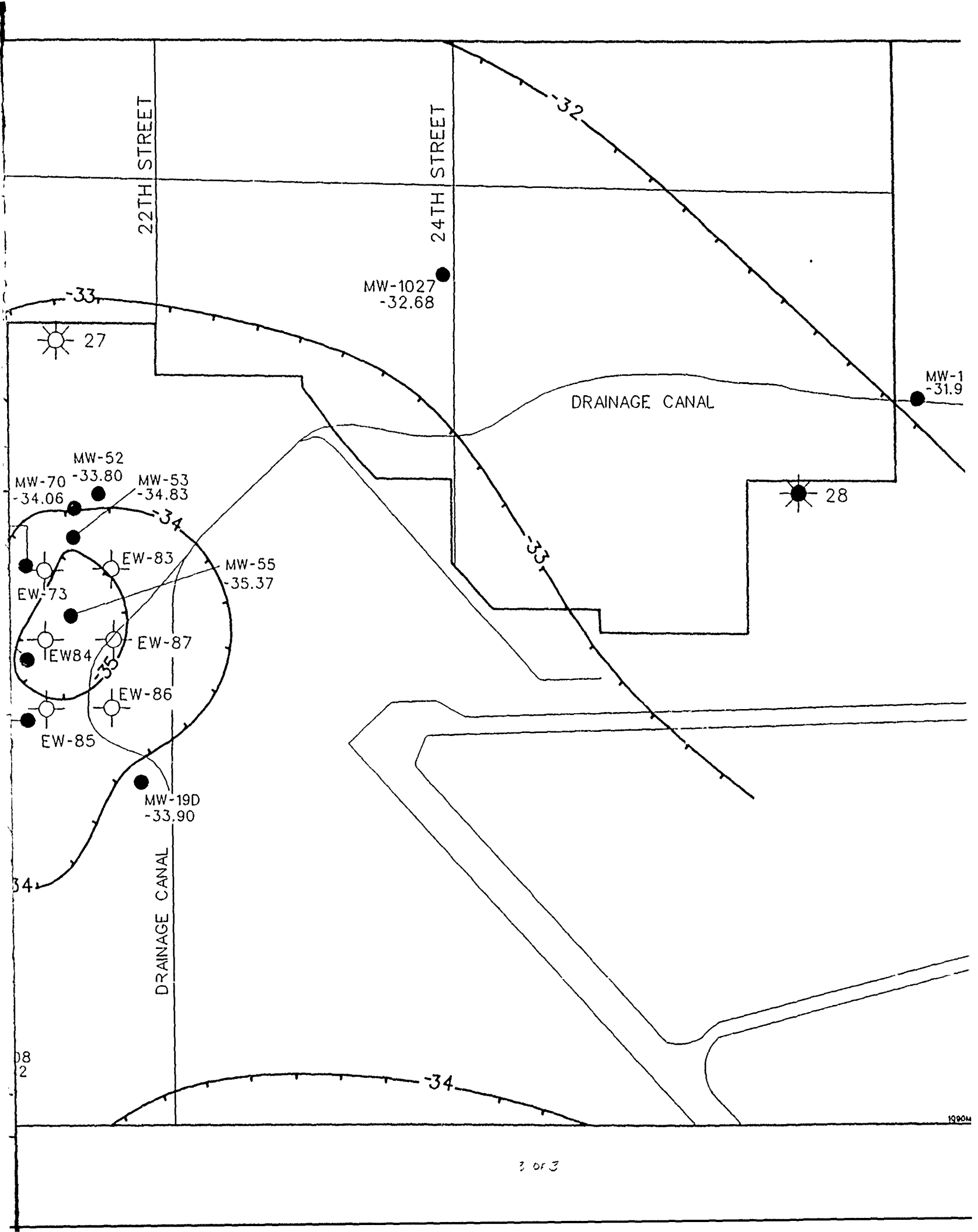


PLATE 6.

DEEP A MONITORING ZONE
(-100 TO -150 FT. MSL)
POTENTIOMETRIC SURFACE MAP

for Data Collected
January 8, 9, and 10, 1990

McCLELLAN AFB
Groundwater Sampling
& Analysis Program

JANUARY-MARCH 1990

LEGEND:

- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- * WATER SUPPLY WELLS (INACTIVE)
- * WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.
HACHURES INDICATE DIRECTION OF
GROUNDWATER MOVEMENT. CONTOUR
LINE ELEVATION IN FEET MSL.



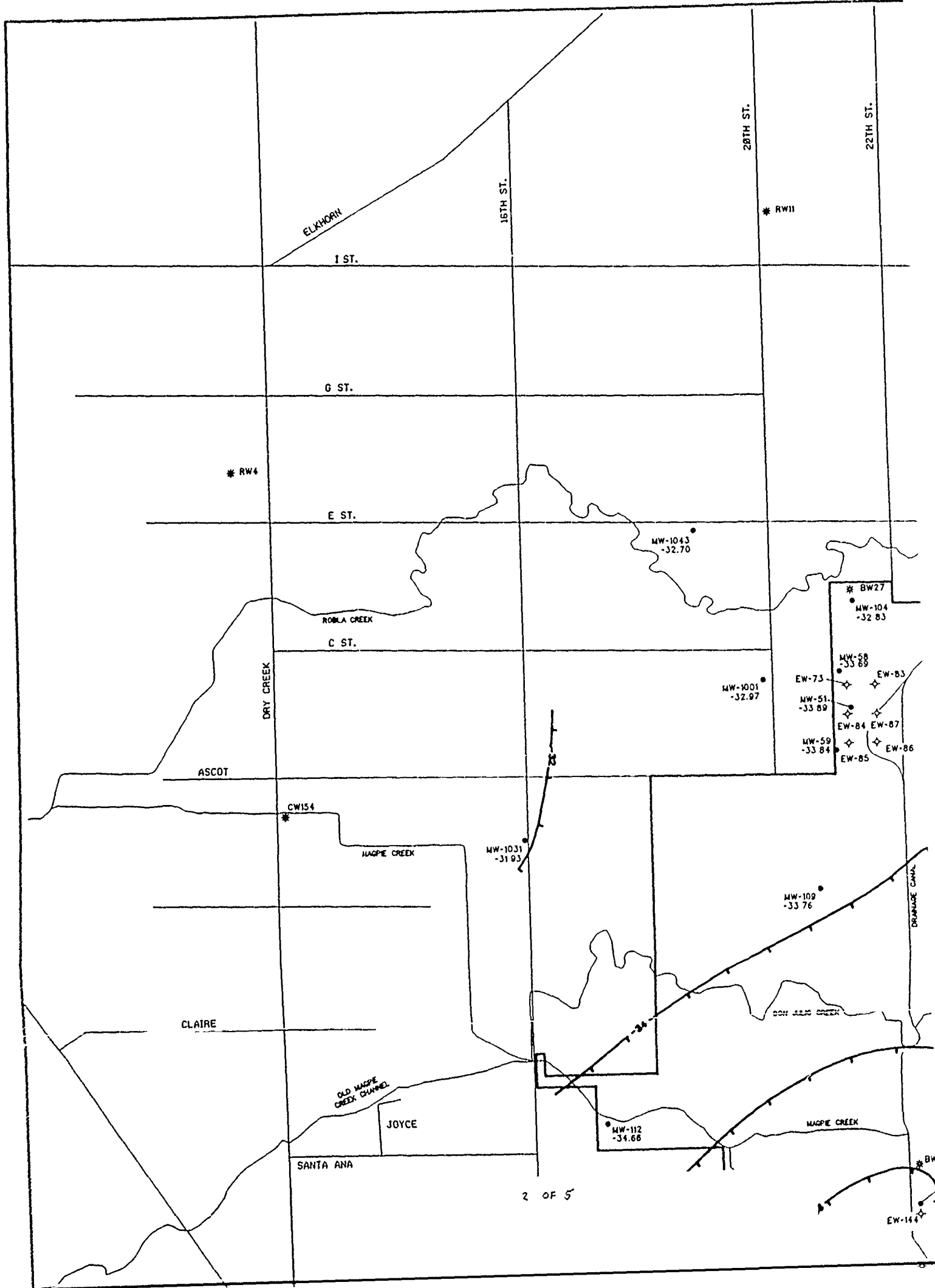
0 1000
SCALE IN FEET

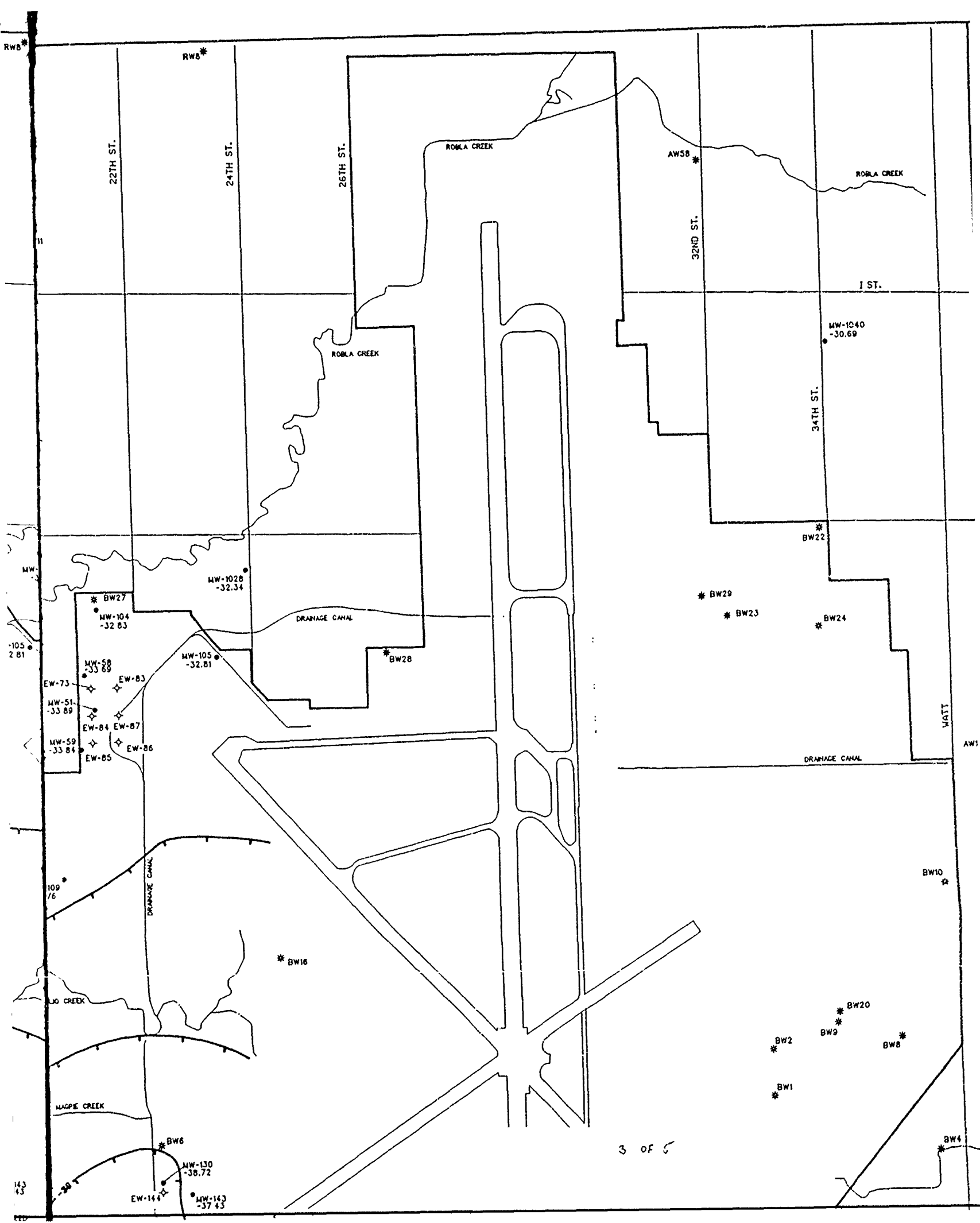
GENERATED BY: *Virginia Lewill* DATE: 8/7/90

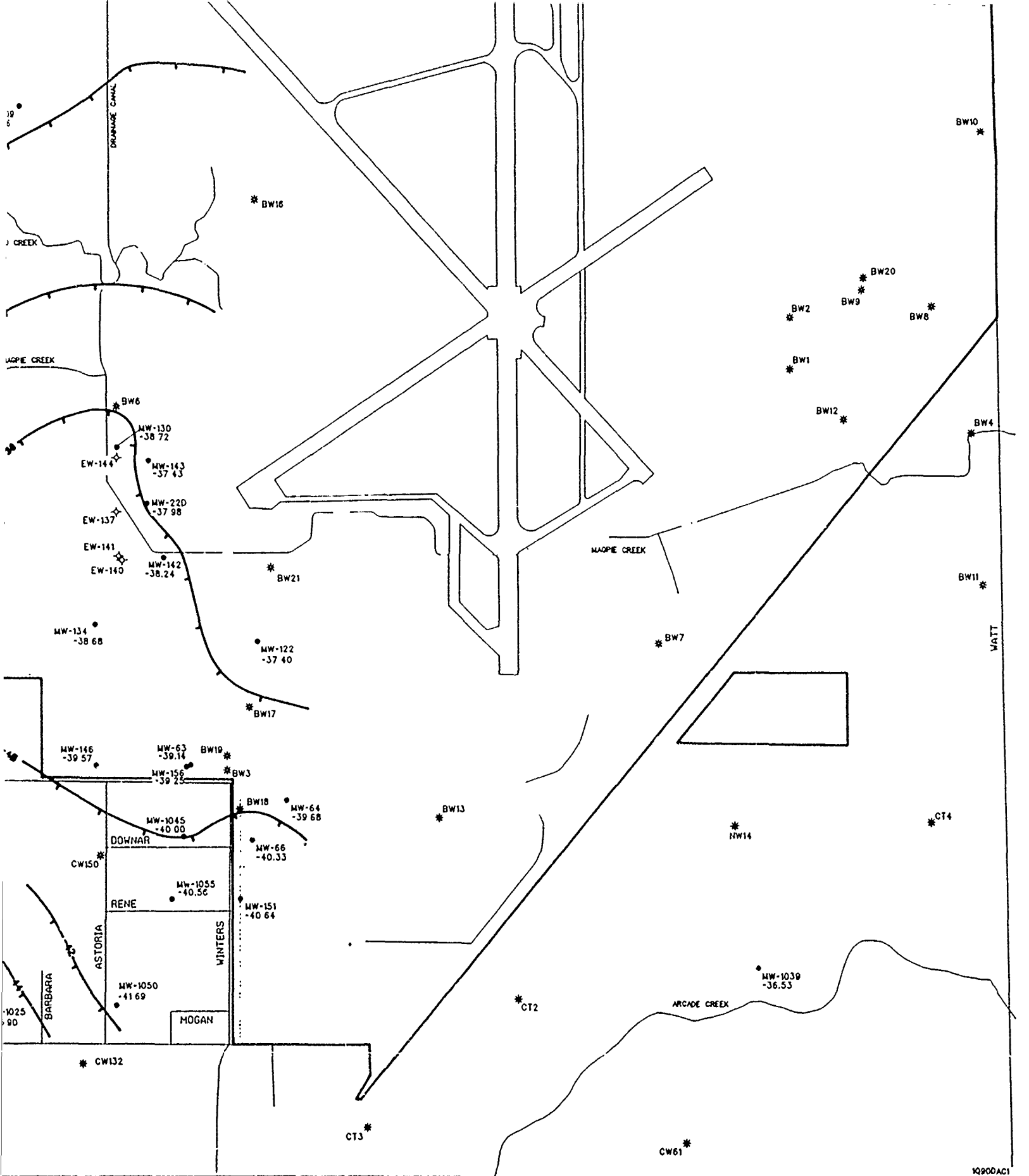
PEER REVIEW: *Deena O'Standley* DATE: 8/8/90

PROJECT REVIEW: *Jyle P. Thompson* DATE: 8/8/90

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DEEP B MONITORING ZONE
(BELOW -150 FT. MSL)
POTENTIOMETRIC SURFACE MAP

for Data Collected
January 8,9, and 10, 1990

McCLELLAN AFB
Groundwater Sampling
& Analysis Program

JANUARY-MARCH 1990

LEGEND:

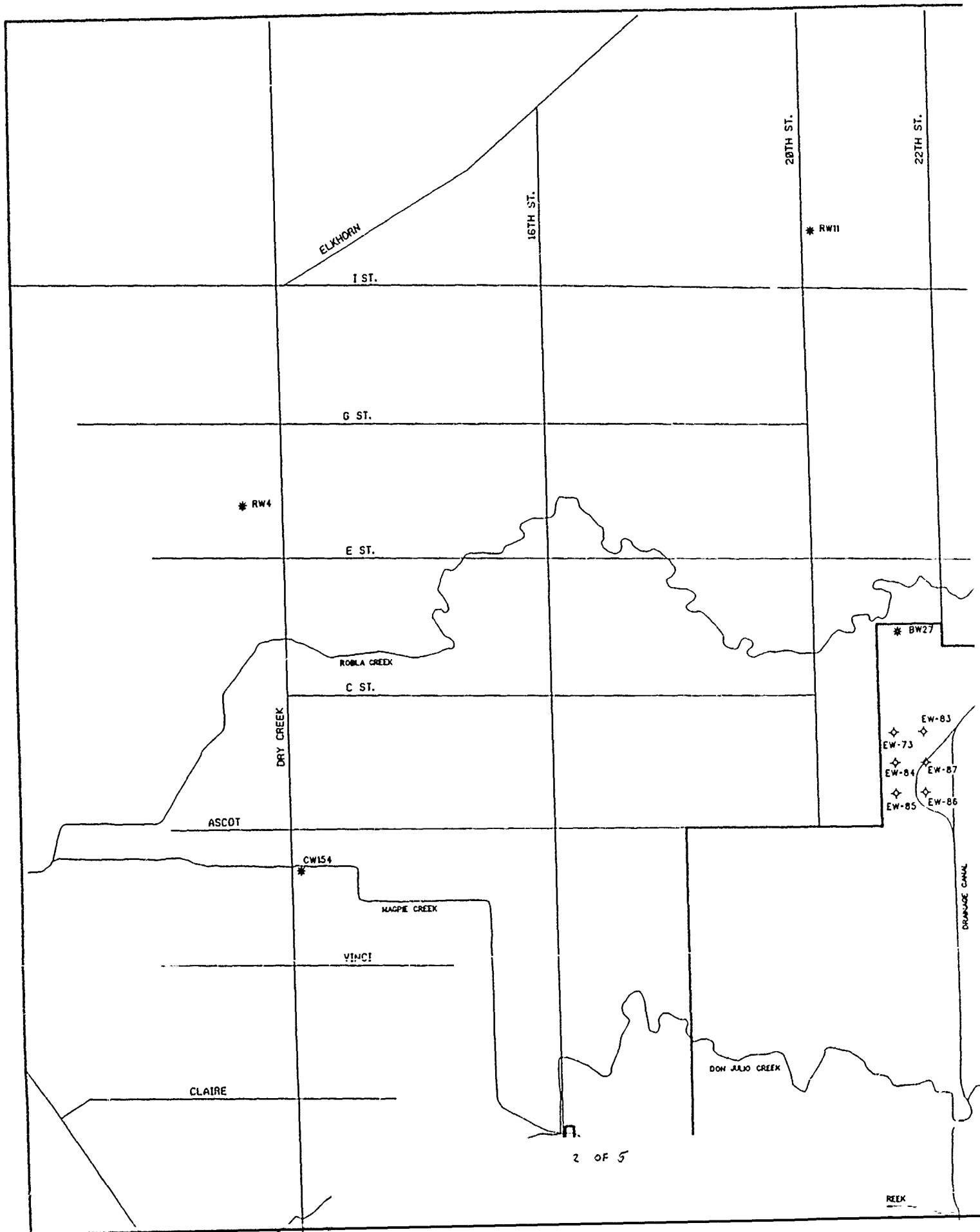
- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- * WATER SUPPLY WELLS (INACTIVE)
- * WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.
HACHURES INDICATE DIRECTION OF
GROUNDWATER MOVEMENT. CONTOUR
LINE ELEVATION IN FEET MSL.

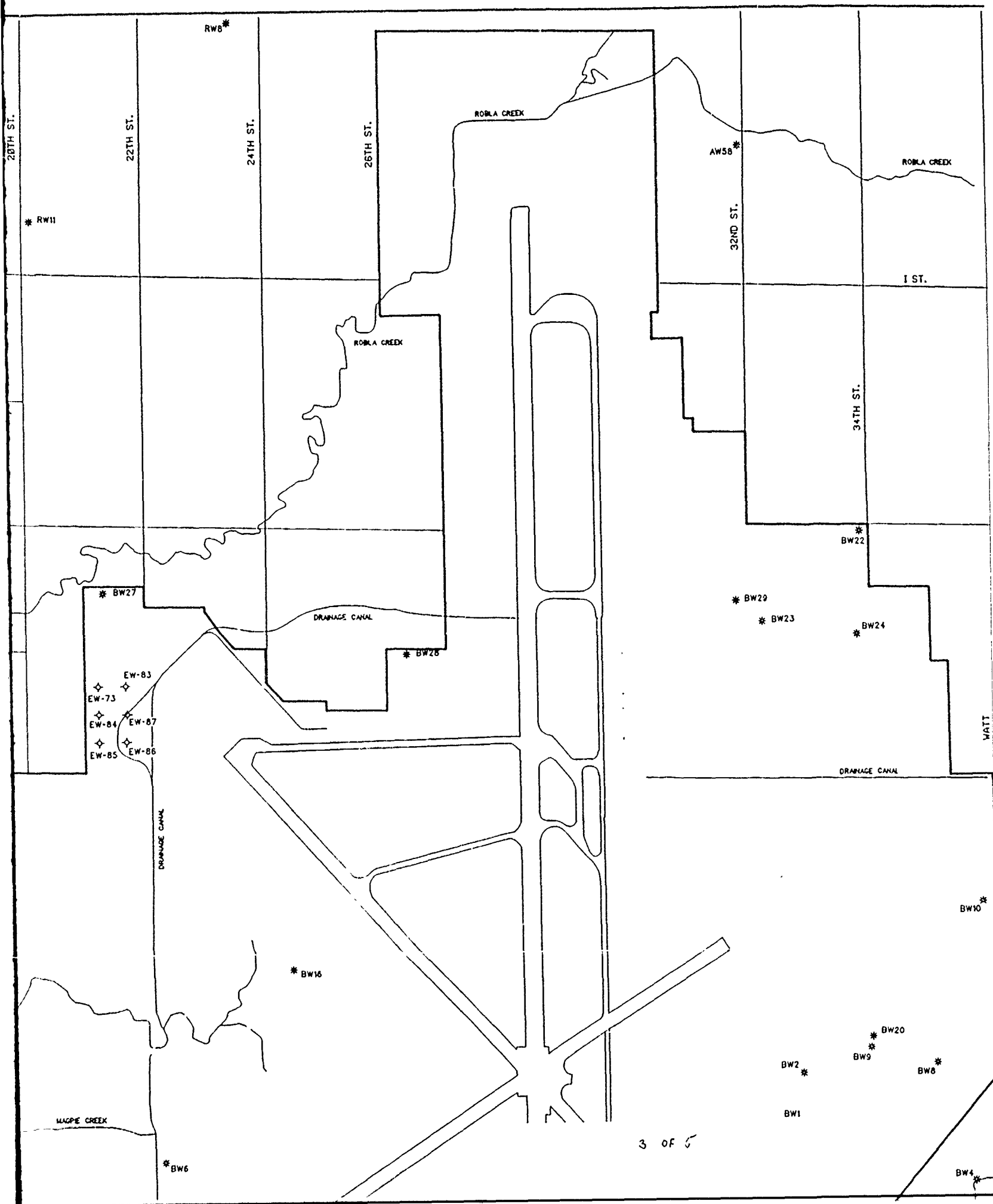


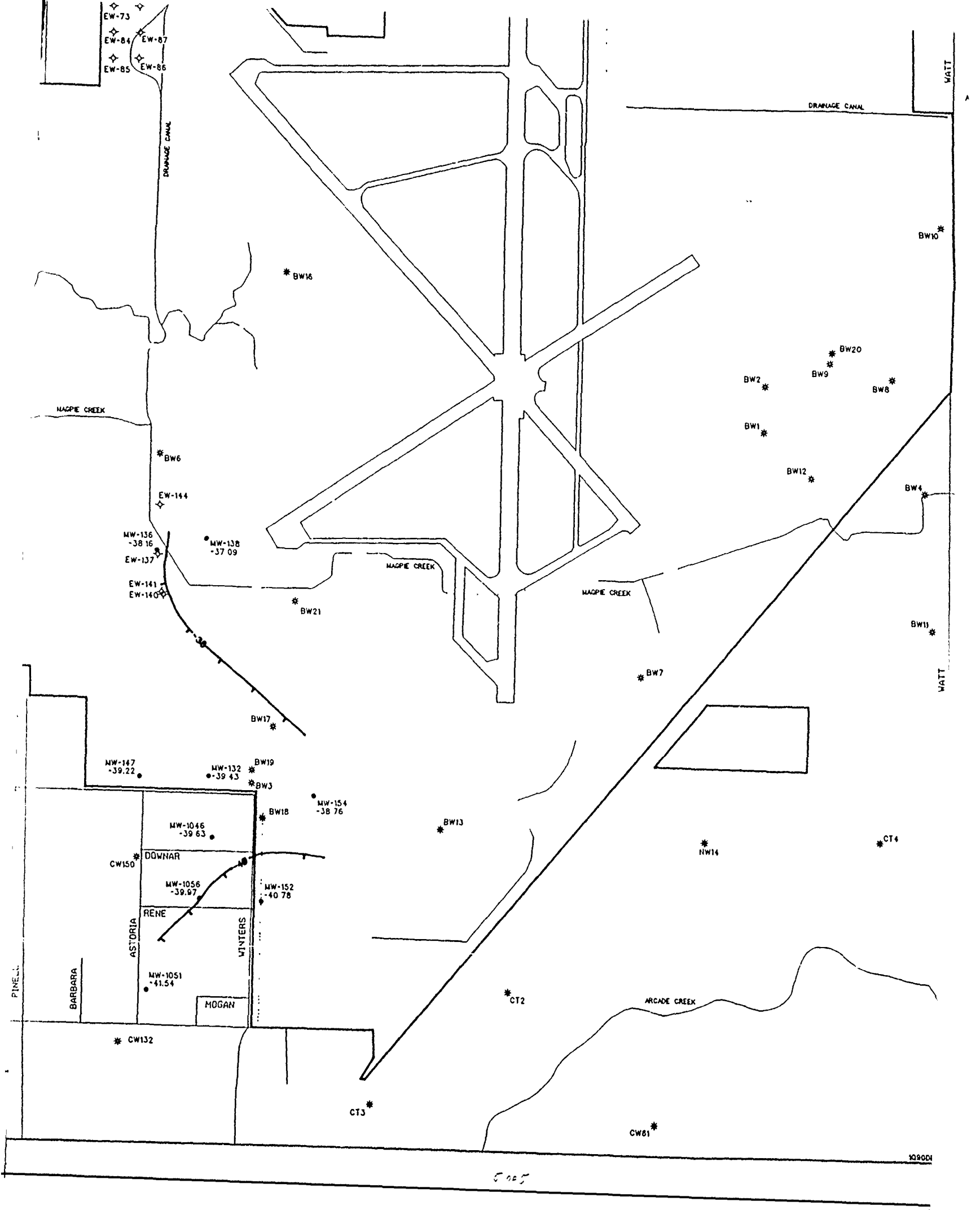
0 1000
SCALE IN FEET

GENERATED BY: *Virginia Jenrich* DATE: *8/7/90*
PEER REVIEW: *Deana A. S. S. S. S.* DATE: *8/8/90*
PROJECT REVIEW: *Dyle P. Thompson* DATE: *8/8/90*

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TCE Concentrations in the
Shallow Monitoring Zone
(-Above -55 Ft. MSL)

McClellan AFB
Groundwater Sampling
& Analysis Program

JANUARY-MARCH 1990
DATA SUMMARY

LEGEND:

- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- 55 TCE CONCENTRATIONS IN ug/l
- ND TCE NOT DETECTED
- () BOUNDARIES OF PAST DISPOSAL/STORAGE AREAS

NOTE: AREA D EXTRACTION WELLS ARE SCREENED
ACROSS THE SHALLOW AND MIDDLE ZONES.

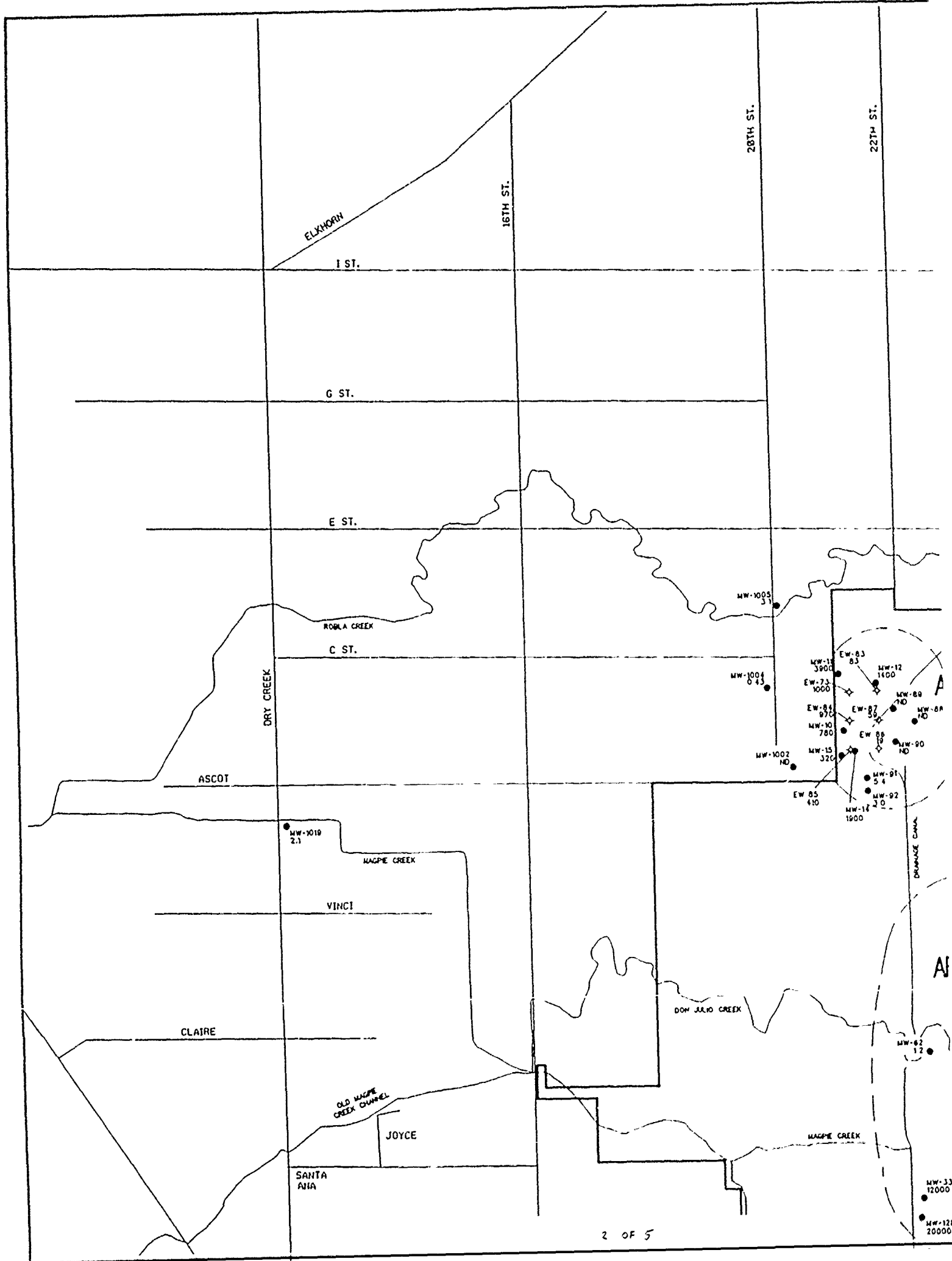


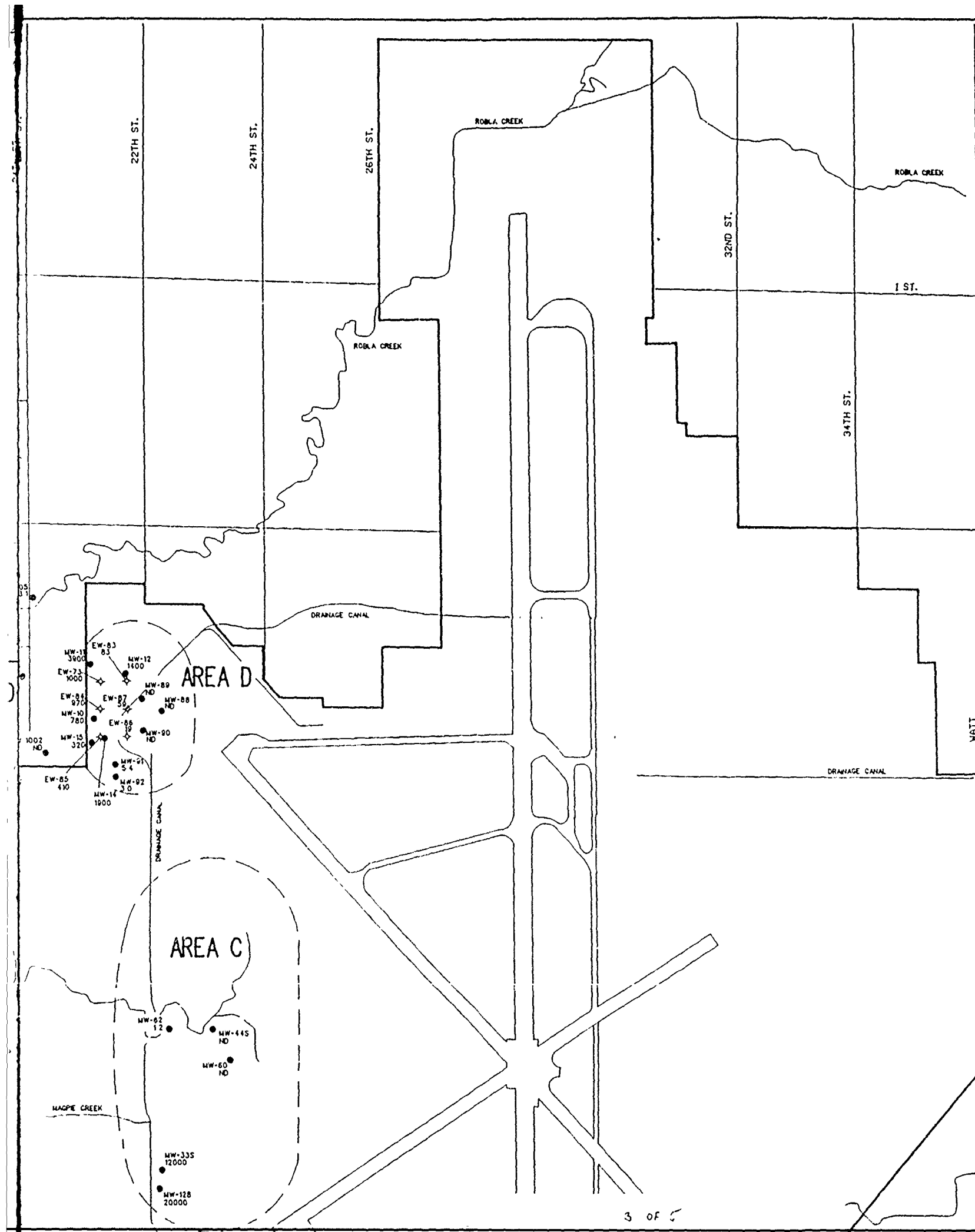
GENERATED BY: *Virginia Jewell* DATE: 8/7/90

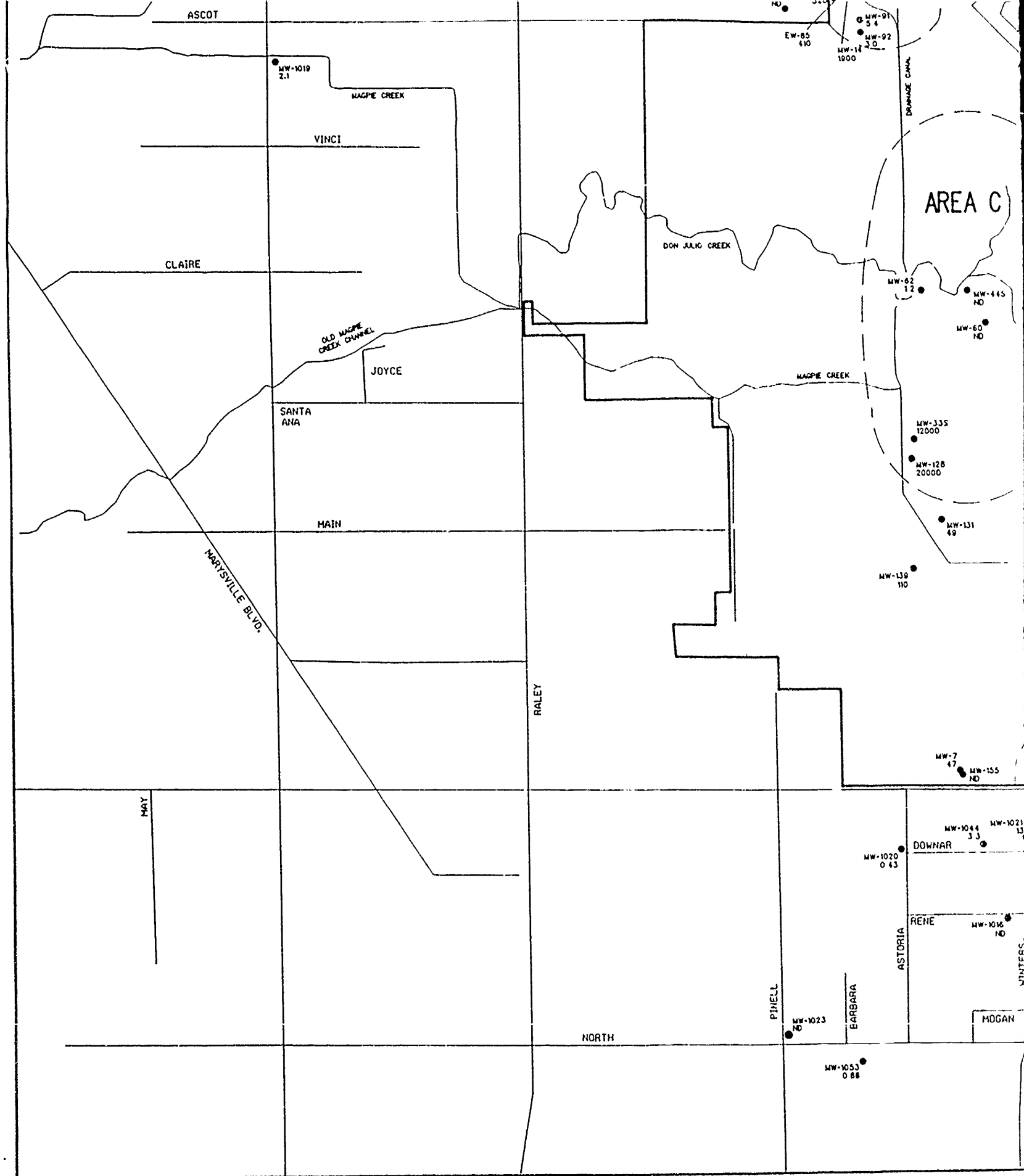
PEER REVIEW: *Deena Stanley* DATE: 8/8/90

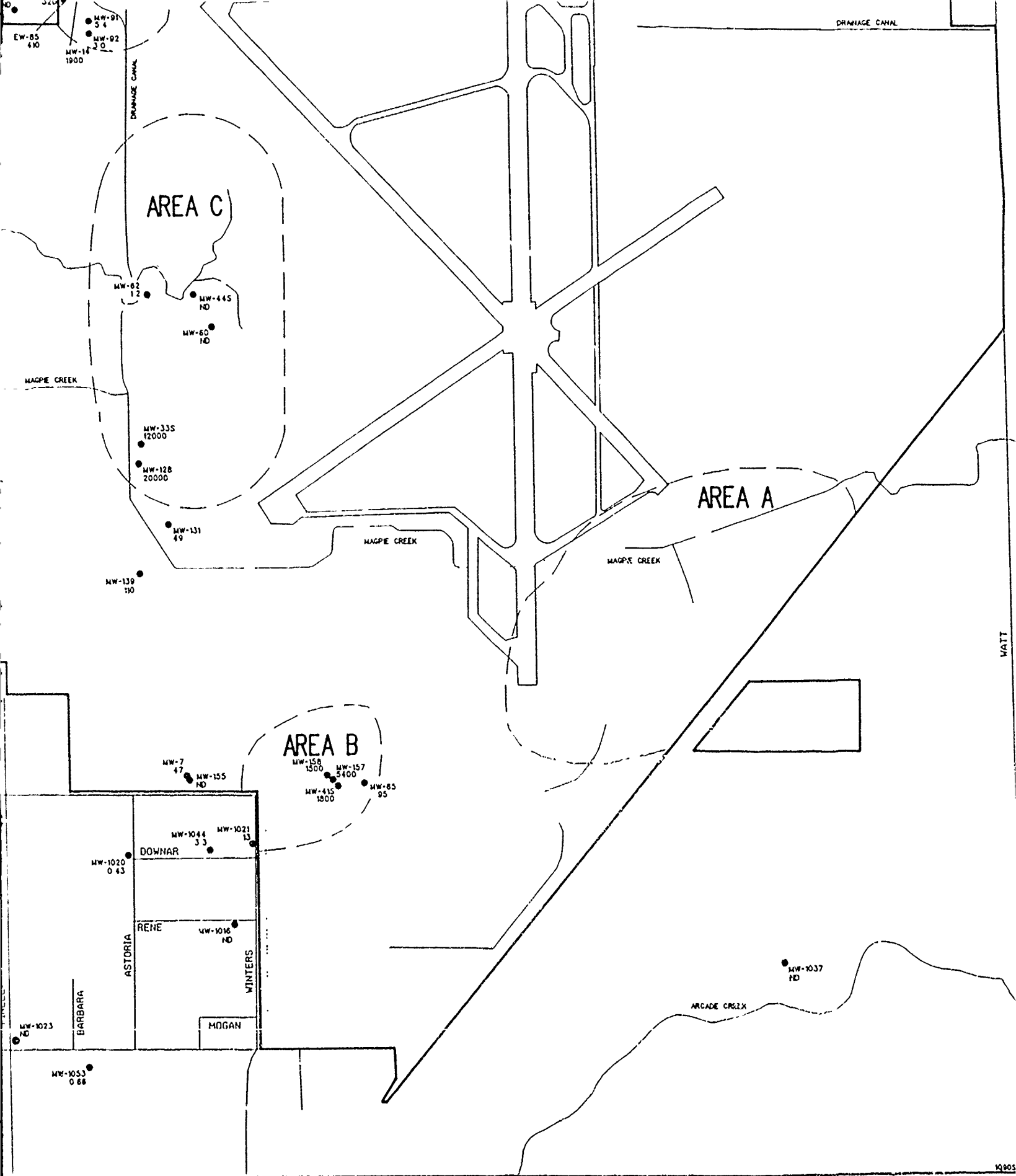
PROJECT REVIEW: *Lyle P. Thompson* DATE: 8/8/90

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PLATE 9.

TCE Concentrations In the
Middle Monitoring Zone
(-55 to -100 Ft. MSL)

McClellan AFB
Groundwater Sampling
& Analysis Program

JANUARY-MARCH 1990
Data Summary

LEGEND:

- McCLELLAN AFB BOUNDARY
- - - - - STREAMS/DRAINAGE (DOTTED
WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- SS TCE CONCENTRATIONS IN ug/l
- ND TCE NOT DETECTED
- BOUNDARIES OF PAST DISPOSAL/
STORAGE AREAS

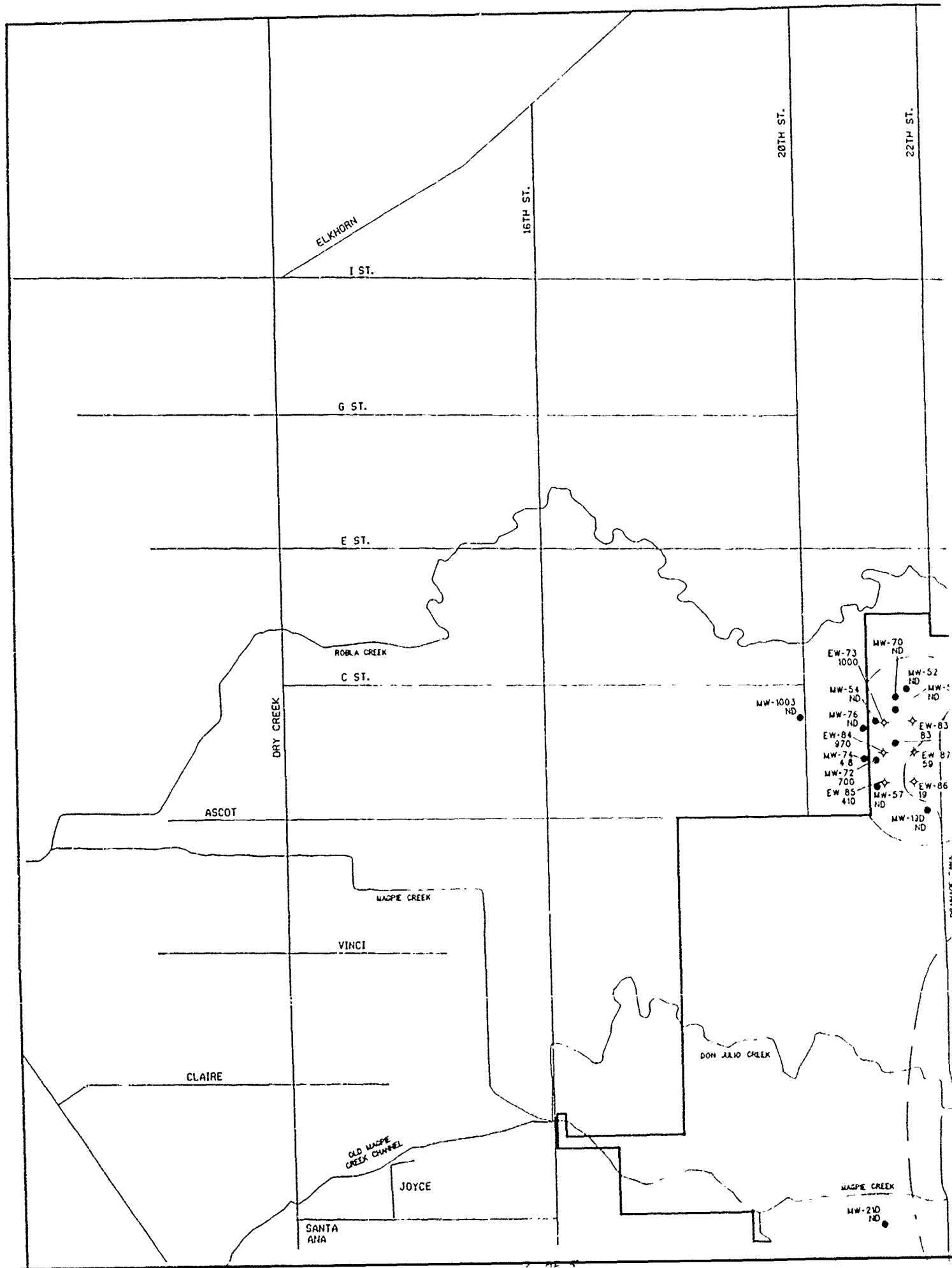
NOTE: AREA D EXTRACTION WELLS ARE SCREENED
ACROSS THE SHALLOW AND MIDDLE ZONES

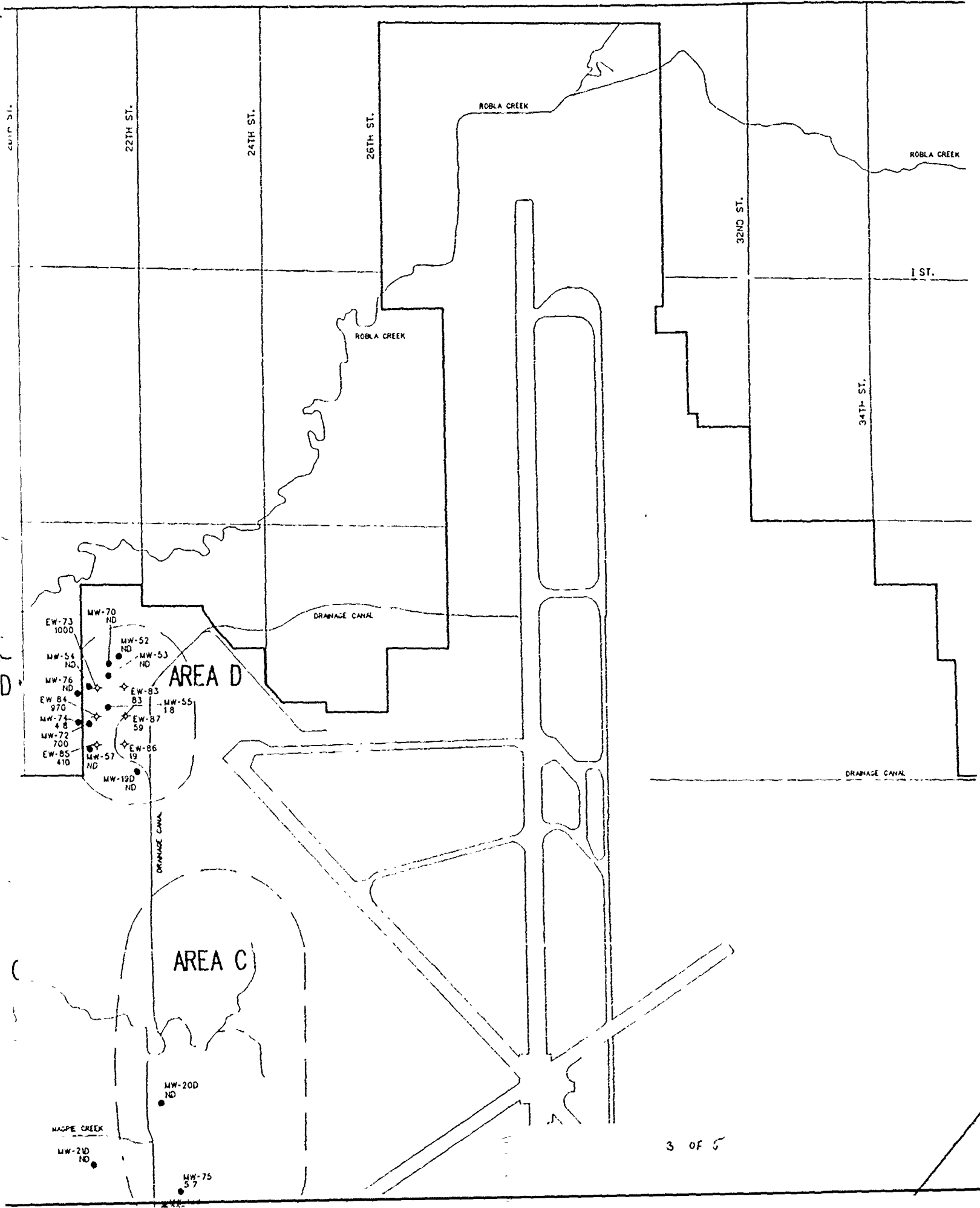
EW-144 IS SCREENED ACROSS THE MIDDLE
AND DEEP "A" ZONE

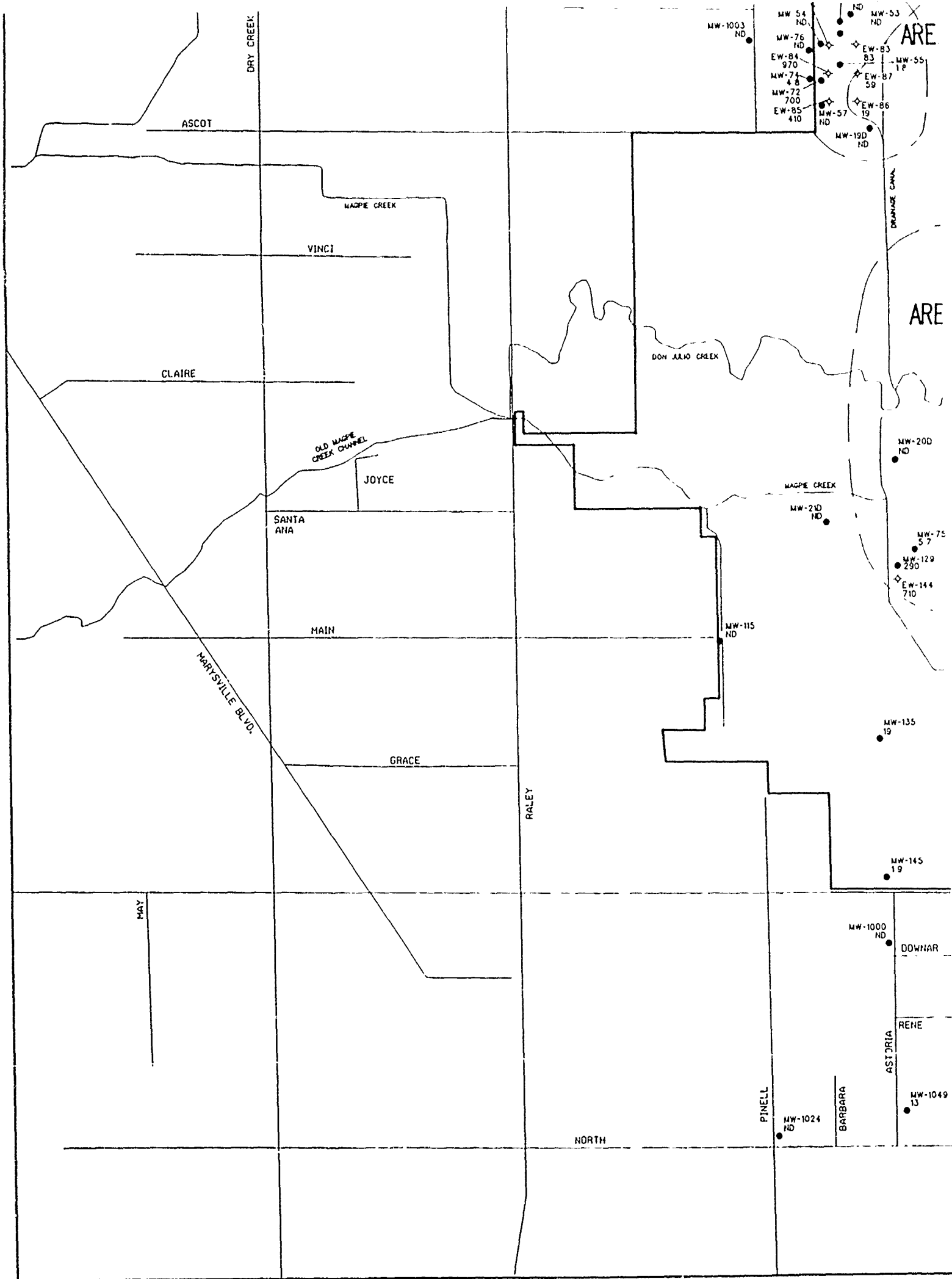


GENERATED BY: <i>Virginia Zewick</i>	DATE: 8/7/90
PEER REVIEW: <i>Debra A. Bentley</i>	DATE: 8/8/90
PROJECT REVIEW: <i>Jyle P. Hume</i>	DATE: 8/8/90

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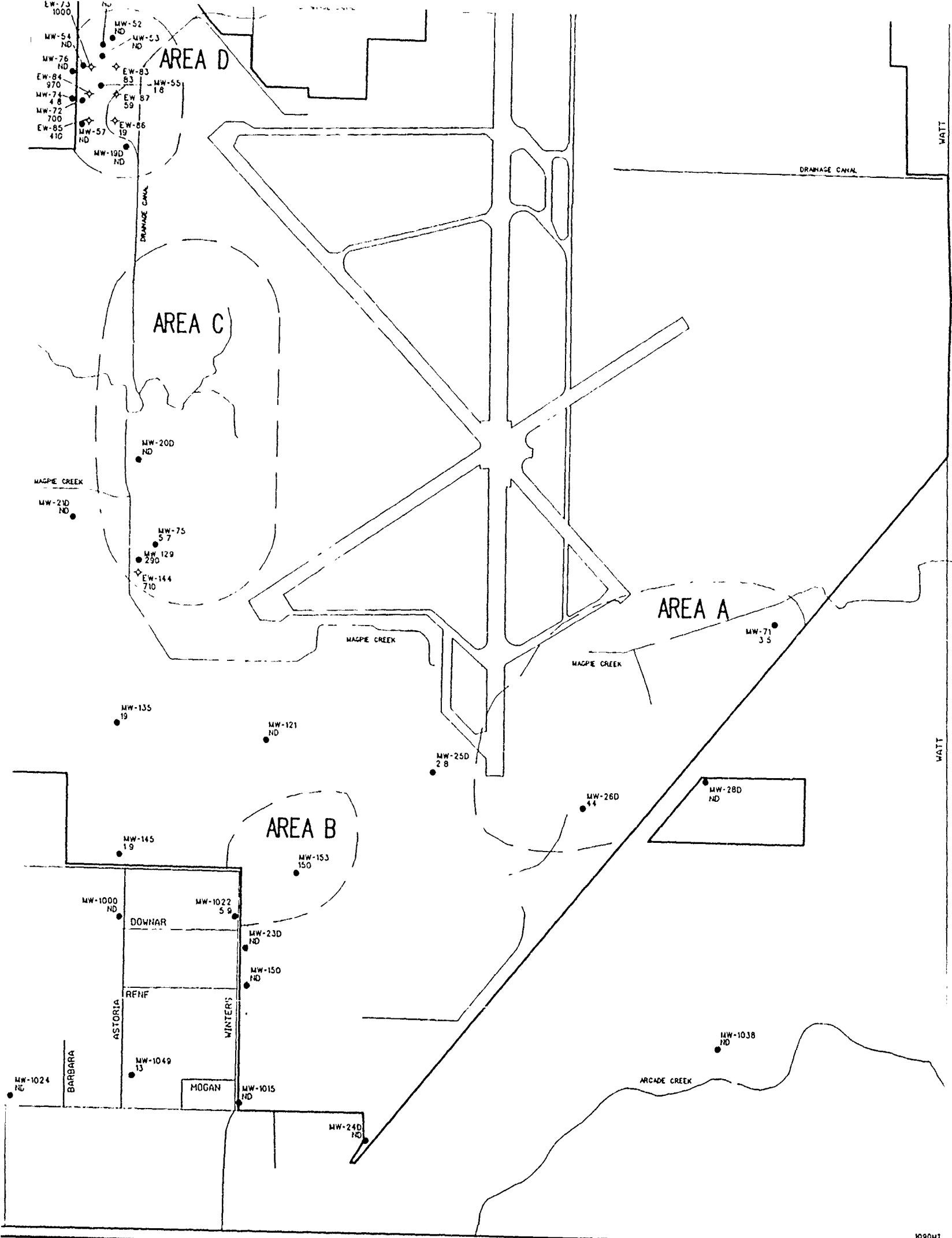


PLATE 10.

TCE Concentrations in the
Deep "A" Monitoring Zone
(-100 to -150 Ft. MSL)

McClellan AFB
Groundwater Sampling
& Analysis Program

JANUARY-MARCH 1990
DATA SUMMARY

LEGEND:

- McCLELLAN AFB BOUNDARY
- - - STREAMS/DRAINAGE (DOTTED
WHERE COVERED)
- ✧ EXTRACTION WELLS
- MONITORING WELLS
- 55 TCE CONCENTRATIONS IN ug/l
- ND TCE NOT DETECTED
- BOUNDARIES OF PAST DISPOSAL/
STORAGE AREAS

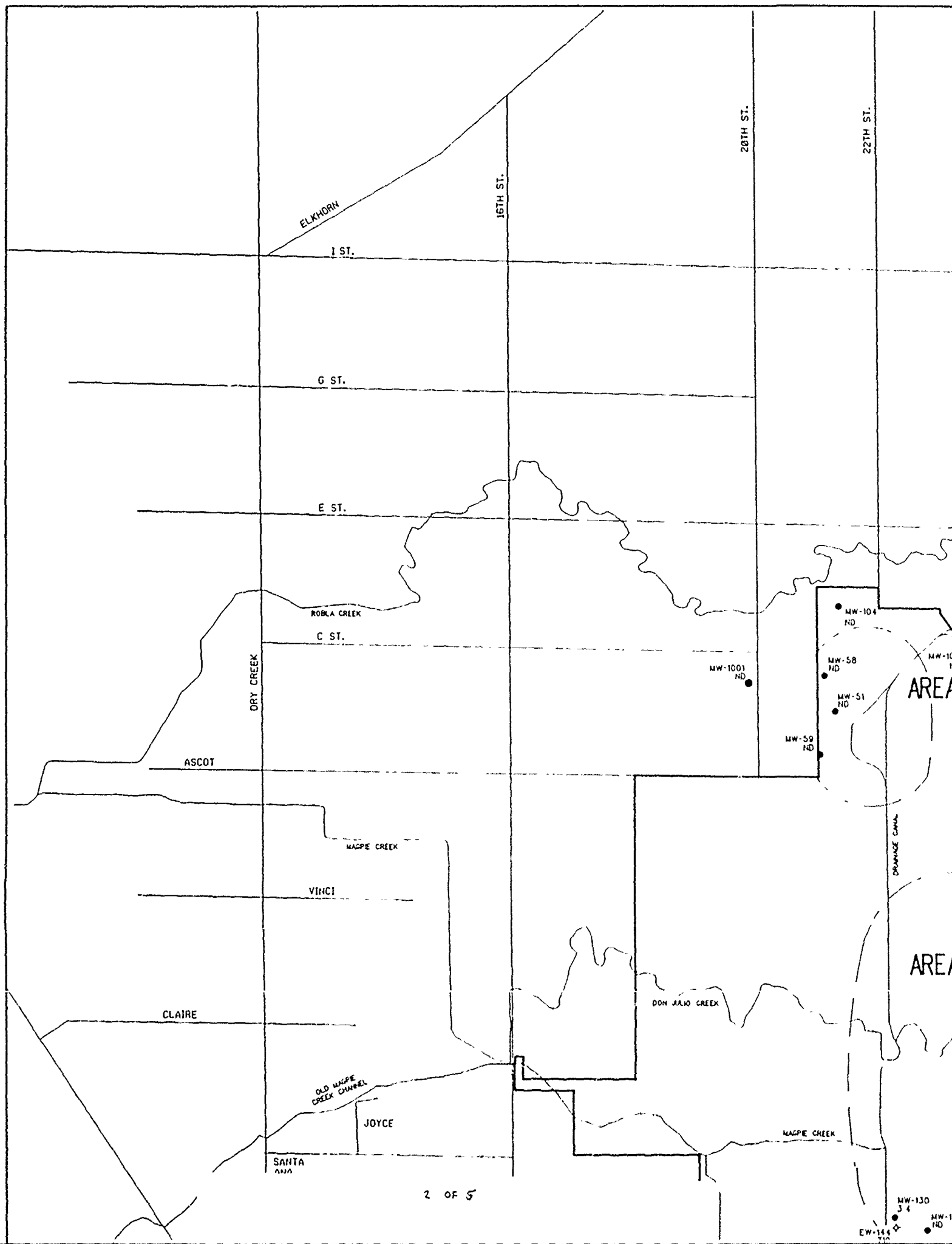
NOTE EW-144 IS SCREENED ACROSS THE MIDDLE
AND DEEP "A" ZONE



0 1000
SCALE IN FEET

GENERATED BY: *Virginia Lewis* DATE: *8/7/90*
PEER REVIEW: *Deena A. Stanley* DATE: *8/8/90*
PROJECT REVIEW: *J. P. Thompson* DATE: *8/8/90*

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22TH ST.

24TH ST.

26TH ST.

ROBLA CREEK

ROBLA CREEK

32ND ST.

1 ST.

34TH ST.

ROBLA CREEK

DRAINAGE CANAL

AREA D

DRAINAGE CANAL

AREA C

MW-59
ND

MW-58
ND

MW-51
ND

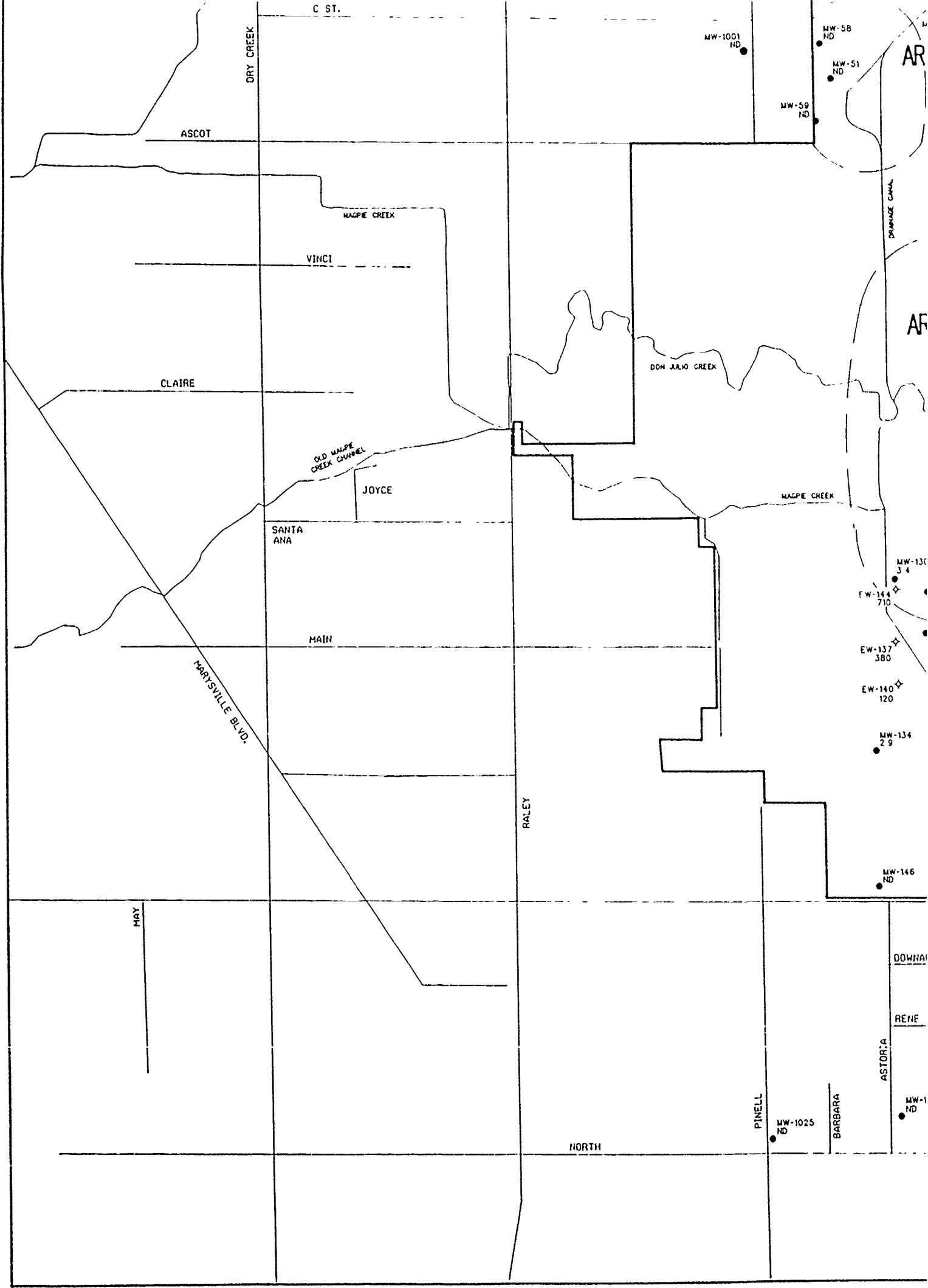
MW-104
ND

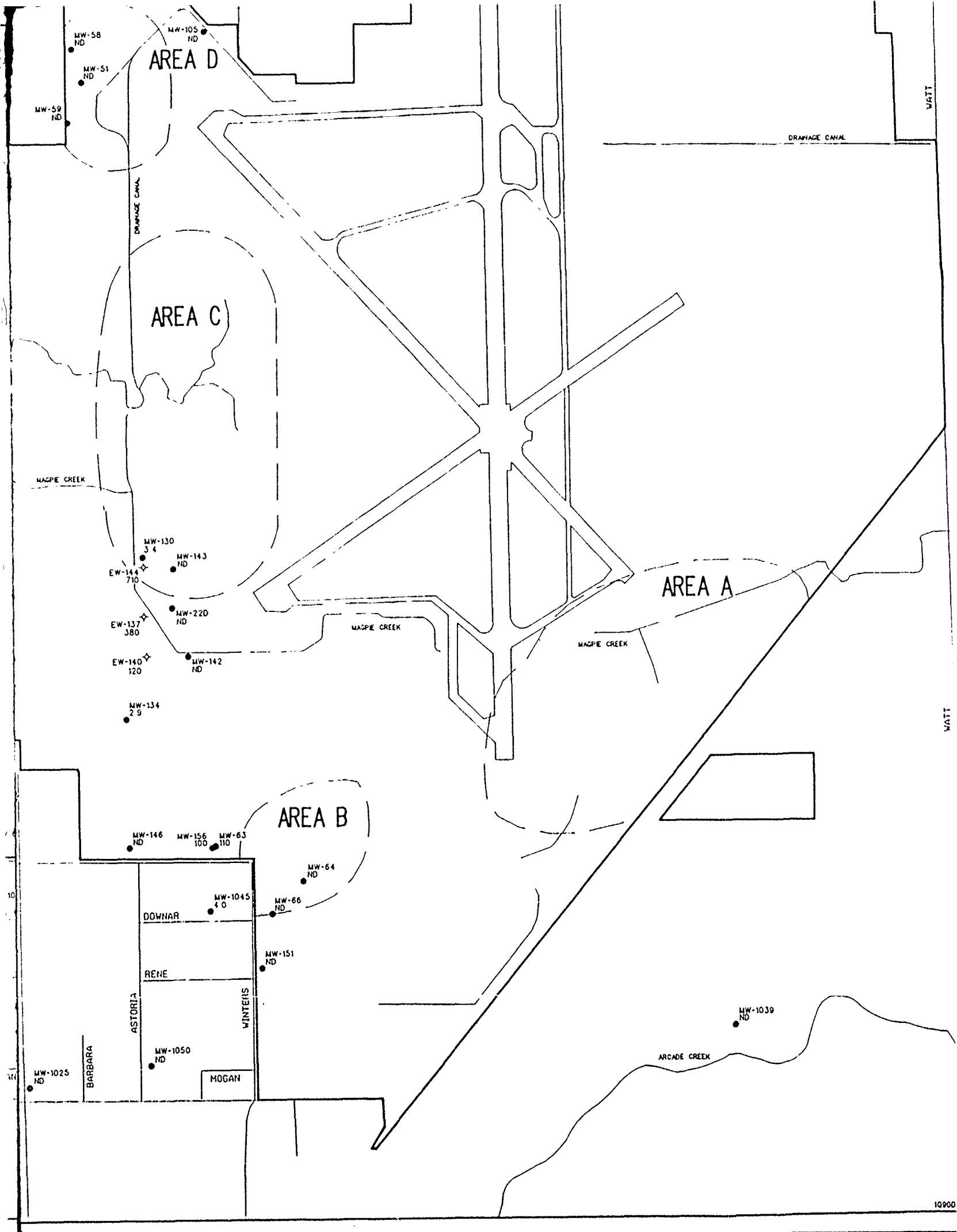
MW-105
ND

WASPE CREEK

MW-130
34
EW-144
710

MW-143
ND





AREA D

AREA C

AREA A

AREA B

DOWNAR

RENE

ASTORIA

WINTERS

HOGAN

BARBARA

DRAINAGE CANAL

MAGPIE CREEK

MAGPIE CREEK

MAGPIE CREEK

ARCADIE CREEK

WATT

WATT

PLATE 11.

TCE Concentrations in the
Deep "B" Monitoring Zone
(Below -150 Ft. MSL)

McClellan AFB
Groundwater Sampling
& Analysis Program

JANUARY-MARCH 1990
DATA SUMMARY

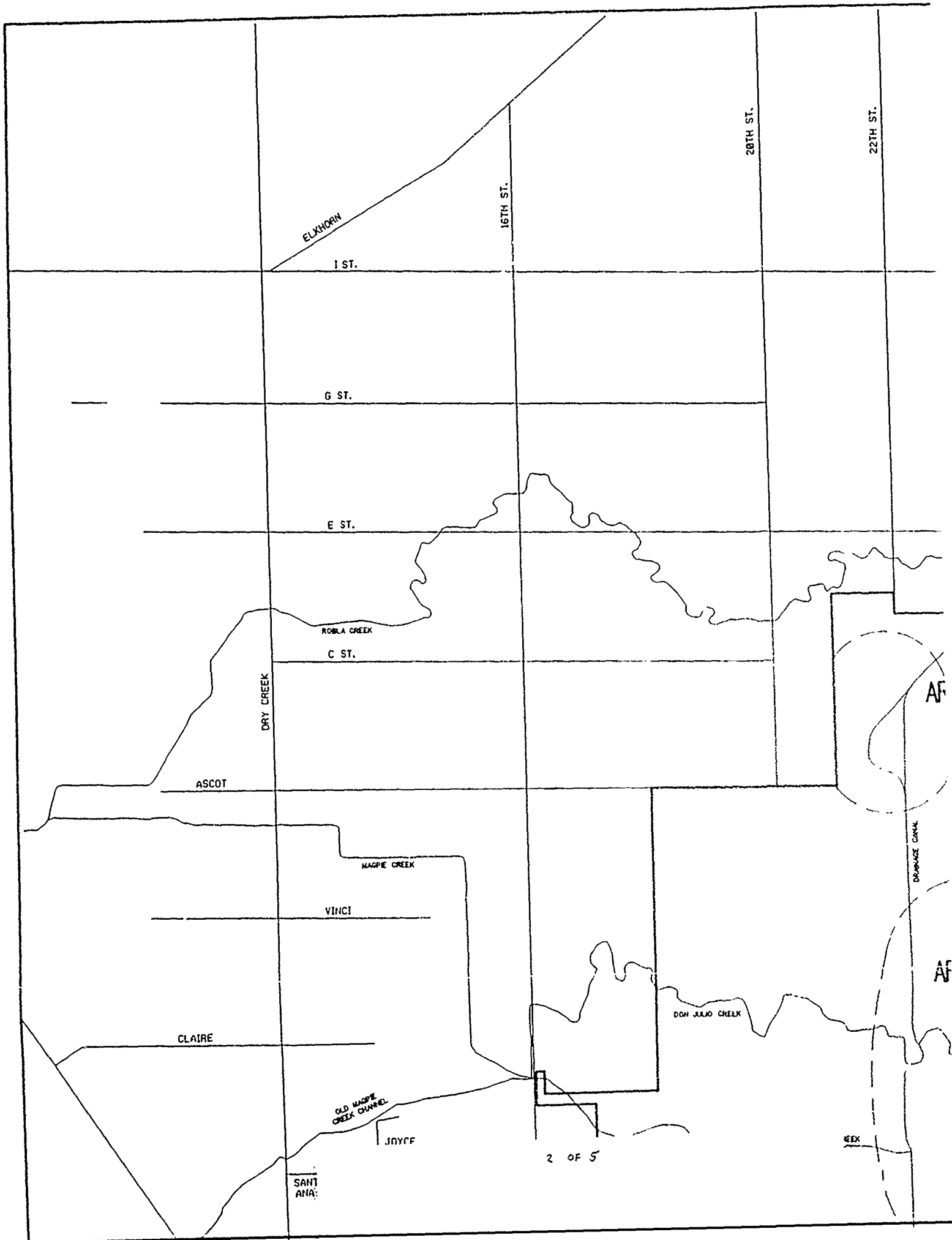
LEGEND:

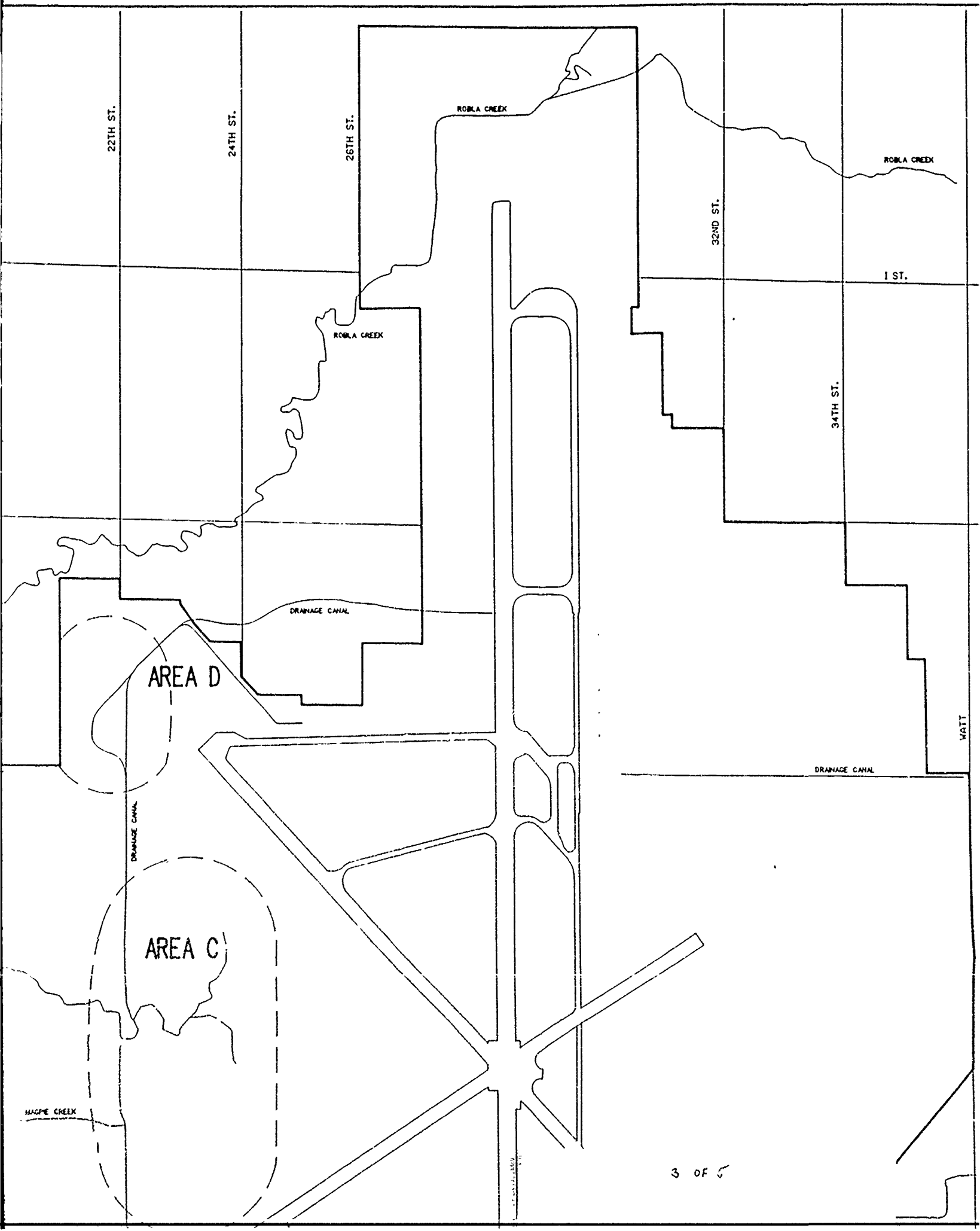
- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- 55 TCE CONCENTRATIONS IN ug/l
- ND TCE NOT DETECTED
- BOUNDARIES OF PAST DISPOSAL/STORAGE AREAS



GENERATED BY: *Virginia K. Lewis* DATE: 8/7/90
PEER REVIEW: *Dana O. Stenberg* DATE: 8/8/90
PROJECT REVIEW: *Judy P. Thompson* DATE: 8/8/90

RADIAN
CORPORATION





22TH ST.

24TH ST.

26TH ST.

ROBLA CREEK

32ND ST.

ROBLA CREEK

1ST.

34TH ST.

ROBLA CREEK

DRAINAGE CANAL

AREA D

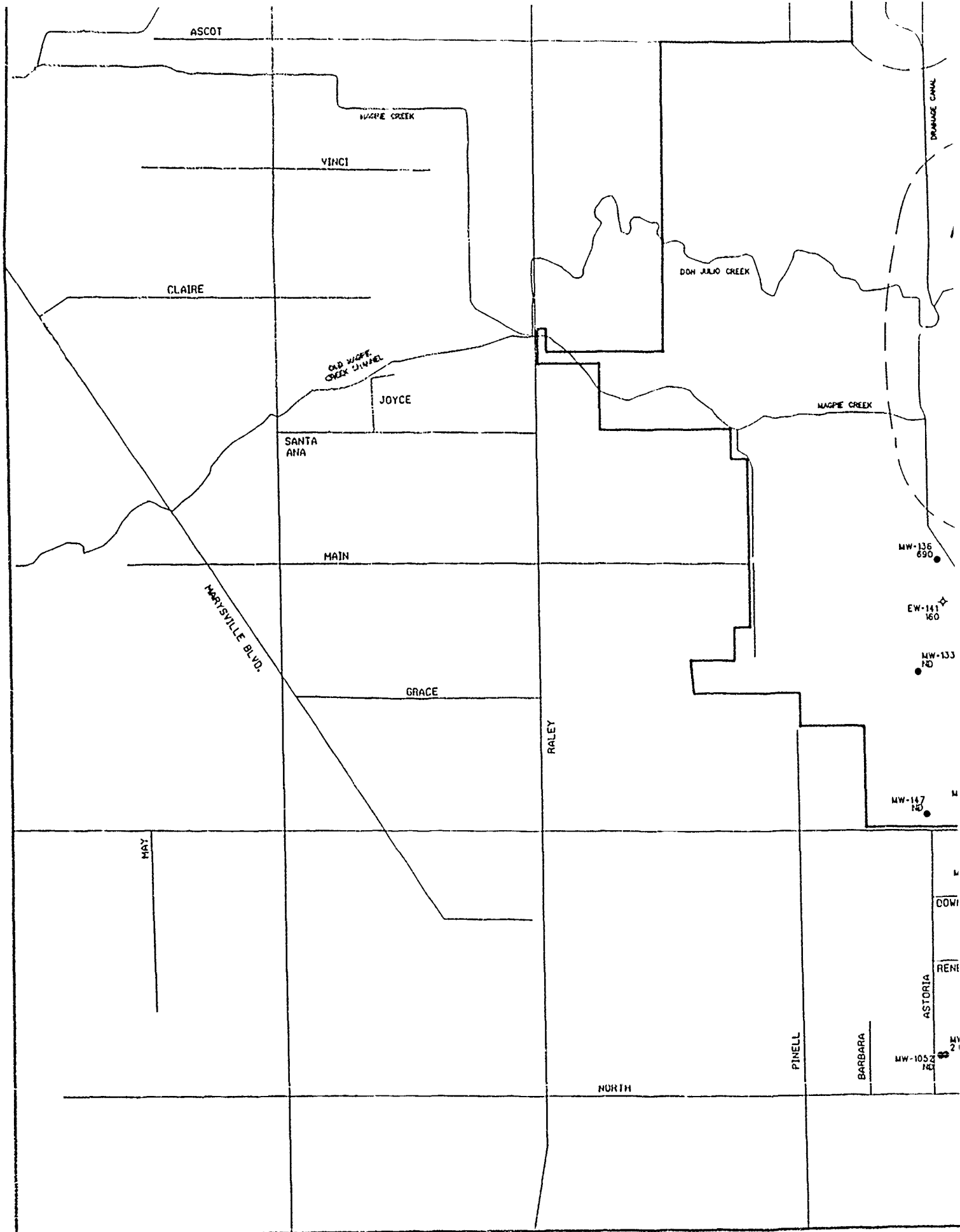
DRAINAGE CANAL

AREA C

HAGUE CREEK

DRAINAGE CANAL

WATT



AREA C

AREA A

AREA B

MW-136
890

MW-138
ND

EW-141
160

MW-133
ND

MW-147
ND

MW-149
0.98

MW-148
7.2

MW-132
120

MW-154
0.83

MW-1047
ND

MW-1046
20

DOWNAR

MW-1048
ND

RENE

MW-152
ND

ASTORIA

WINTERS

MW-1052
15

MW-1051
2.0

MOGAN

PINELL

BARBARA

ARCADE CREEK