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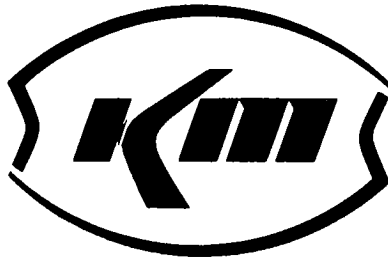
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Environmental  
PROTECTION

***KERR-McGEE CORPORATION***

THIRD QUARTER PERFORMANCE REPORT  
CHROMIUM MITIGATION PROGRAM  
KERR-McGEE CHEMICAL CORPORATION  
HENDERSON, NEVADA

JULY - SEPTEMBER, 1989



Engineering Services

THIRD QUARTER PERFORMANCE REPORT  
CHROMIUM MITIGATION PROGRAM  
KERR-McGEE CHEMICAL CORPORATION  
HENDERSON, NEVADA

JULY - SEPTEMBER, 1989

Submitted in Accordance with:

Chromium Mitigation Program  
Consent Order  
September 9, 1986

Prepared by:

Jeff Lux  
Senior Hydrologist  
Hydrology Department  
Engineering Services Division  
Kerr-McGee Corporation

October 27, 1989

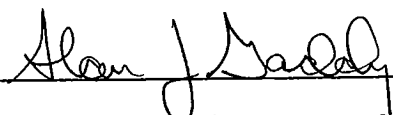
  
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A. J. Gaddy, Environmental Engineer  
Kerr-McGee Chemical Corporation  
Henderson, Nevada

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THIRD QUARTER 1989 PERFORMANCE REPORT  
CHROMIUM MITIGATION PROGRAM  
KERR-McGEE CHEMICAL CORPORATION  
HENDERSON, NEVADA

INTRODUCTION

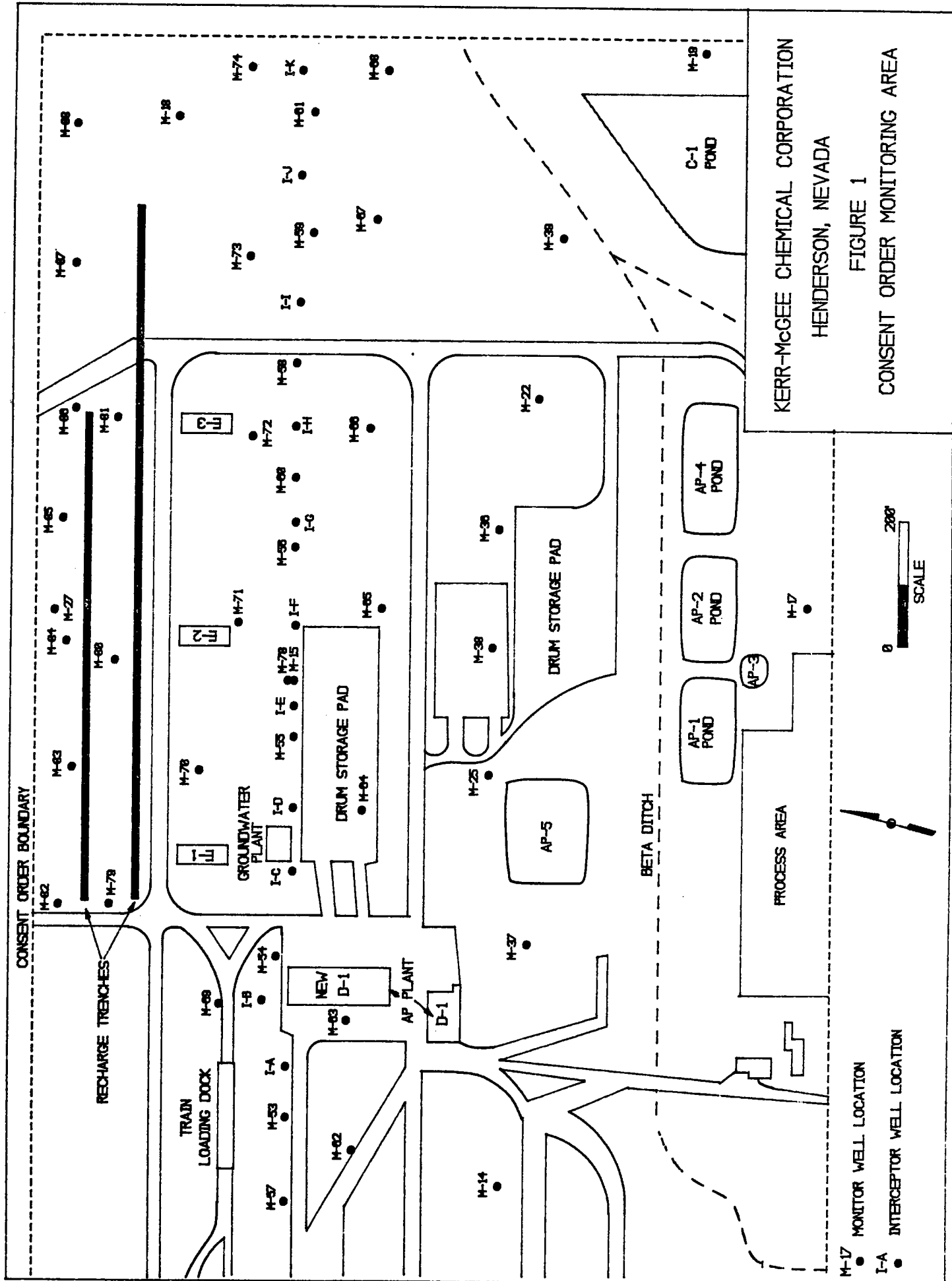
In accordance with the Consent Order for cleanup of chromium contaminated groundwater at the Henderson facility, finalized September 9, 1986, Kerr-McGee Chemical Corporation (KMCC) submits this quarterly performance report to the Nevada Department of Environmental Protection. This report, for the third quarter of 1989, summarizes performance data for the groundwater treatment plant and evaluates the effectiveness of the groundwater interception and treatment system installed to carry out the chromium mitigation program.

## GROUNDWATER SURFACE CONFIGURATION

Figure 1 illustrates the chromium treatment system monitoring area as defined in Appendix D of the Consent Order, and shows the locations of all groundwater interceptor and monitor wells installed by KMCC within this area. Appendix A lists monthly groundwater elevations recorded since January 1988 in wells within the Consent Order area. Appendix B presents the water table configuration during the third quarter of 1989, reflecting each month's water level measurements.

Figure B-1 of Appendix B illustrates the potentiometric surface within the consent order monitoring area on July 3, 1989. Figure B-2 presents a cross-section along the groundwater interceptor line, reflecting the pumping system drawdown on that date. The static water level shown on Figure B-2 represents the Consent Order reference groundwater elevation, established September 14, 1987, just prior to startup of the interception system. Figures B-3 and B-4 present a potentiometric surface map and cross-section for water level data recorded August 16, 1989. Figures B-5 and B-6 present water level data recorded September 12, 1989.

Groundwater elevations, listed in Appendix A, show that water levels throughout the Consent Order monitoring area have stabilized since the discharge of cooling water to the beta ditch was discontinued in November, 1987. Figures B-1 through B-6 show the reconfiguration of the potentiometric surface as groundwater levels have dropped throughout the monitoring area.



## CONTINUOUS WATER LEVEL RECORDERS

Wells M-78 and M-80 (Figure 1) are equipped with continuous water level recorders. Appendix C contains copies of the recorder charts generated during the third quarter of 1989. During the third quarter of 1989, water levels throughout the consent order area showed negligible decline, indicating that the hydrologic environment has stabilized throughout both the interception and recharge areas.

Several erratic and instantaneous changes in water levels shown on the chart for well M-78 are due to a power failure experienced during September. Since well M-78 is located in close proximity to a pumping well, it would naturally reflect the short-term rise in groundwater elevation that would occur within the cone of depression.



## INTERCEPTOR SYSTEM PERFORMANCE

Figures B-1 through B-6, attached as Appendix B, show the potentiometric surface configuration in the interceptor area during the third quarter. Figures B-2, B-4, and B-6 show that drawdown consistently exceeded the one foot below reference water level criterion across the entire interceptor well line.

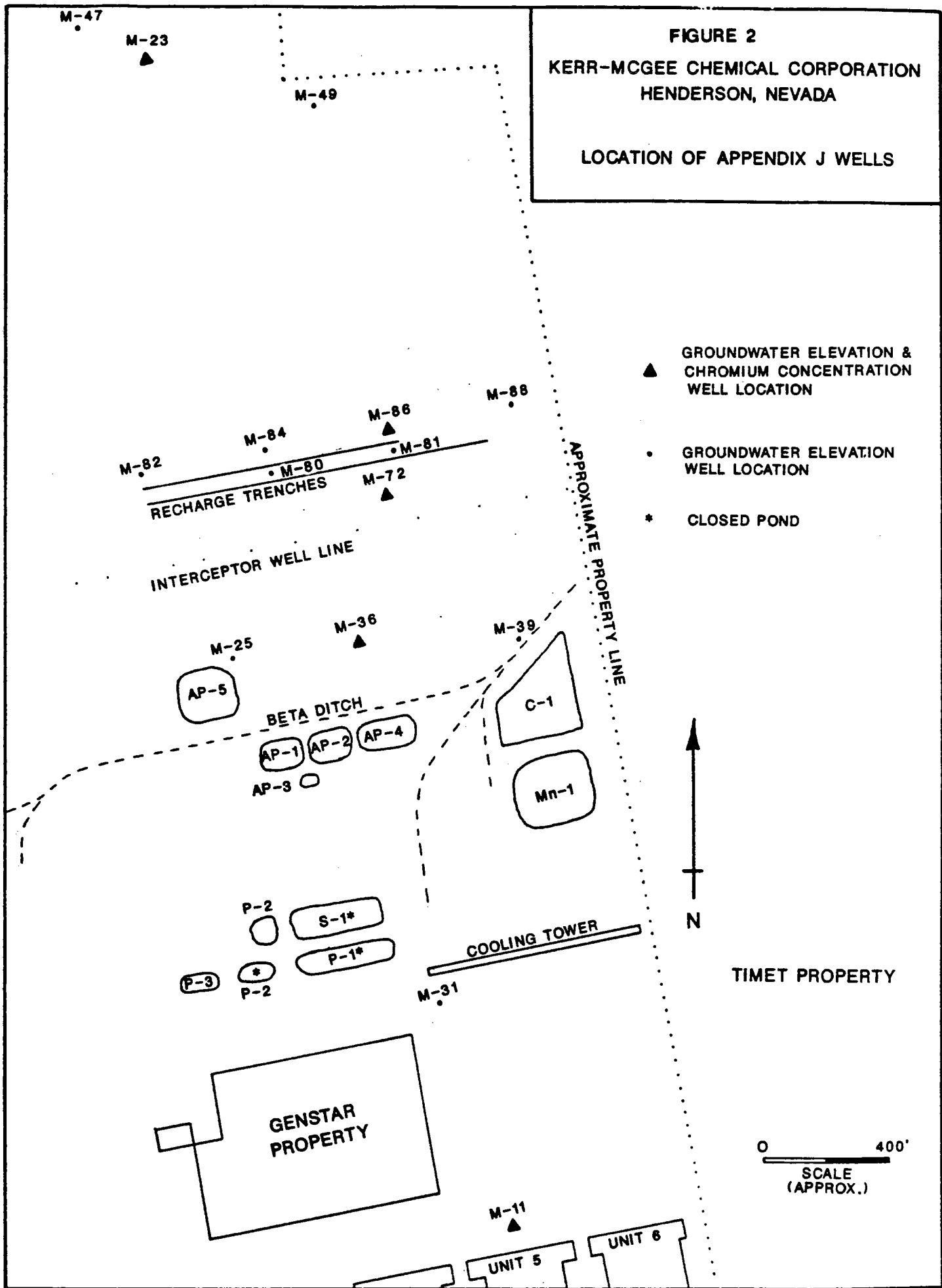
The potentiometric surface maps (Figures B-1, B-3, and B-5) do not show overlapping drawdown cones along the interceptor line that would indicate complete interception of the chromium plume. Some underflow is occurring and is discussed below.

The flow of groundwater toward the cross sectional area represented by the interceptor well line is approximately 95-105 gallons per minute, based on aquifer properties calculated from pump test data. The pumping system is discharging an average of 70.4 gallons per minute to the treatment plant during the third quarter, indicating an approximate 25-35 gpm shortfall in total interception capacity.

The effectiveness of the groundwater interception and treatment system in reducing chromium levels in the groundwater, however, is apparent from the review of chemical analysis of treatment plant effluent and downgradient monitor well samples (wells M-86 and M-23). KMCC is monitoring chromium concentrations in five Consent Order Appendix J wells, located up and downgradient from the plume interceptor line (Figure 2). Hexavalent chromium concentrations

**FIGURE 2**  
**KERR-MCGEE CHEMICAL CORPORATION**  
**HENDERSON, NEVADA**

**LOCATION OF APPENDIX J WELLS**



in the five Appendix J wells sampled and analyzed for chromium are displayed in Table 1. Appendix D portrays this data graphically. Well M-11 was selected for monitoring the upgradient concentration of chromium because it is nearest the identified source. Figure D-1 shows that the chromium concentration in M-11 has not declined significantly. The slow decline that can be seen is due to the slow release of chromium laterally from the low permeability Muddy Creek Clay, the horizon surrounding the basement of the building that was the source of chromium.

Well M-36, located approximately 350 feet upgradient from the interceptor line, shows a gradual increase in chromium concentration with time (Figure D-2).

Well M-72 (Figure D-3), which is located between the interceptor line and the recharge trench, had exhibited a steady decline in chromium concentration until October, 1988. The increase in concentration that began in October has apparently stabilized at approximately 1.3 - 1.4 ppm. KMCC believes the increase and subsequent stabilization of this low concentration is due to the limited flowthrough of the plume through the interception line. Actions have been taken to maximize groundwater withdrawal from wells containing the highest levels of chromium, keeping within the constraints imposed upon the withdrawal system by the treatment system.

interception line that exhibit the highest chromium concentrations. Figure D-6 presents the chromium concentration in each of the interceptor well discharges. On the basis of the potentiometric surface configuration, individual well chromium concentrations, and well production capabilities, new pump rates for each recovery well were established in December, 1988 and March, 1989. Table 2 lists the initial pumping rate of each interceptor well and the changes in pumping rate that have been made to maximize flow to the treatment plant and total chromium interception efficiency.

Figure B-6 shows that most of the interceptor wells are drawn down nearly to the Muddy Creek Clay, so that both groundwater and chromium flow through the interceptor line has been minimized. Monitoring of downgradient wells M-72 and M-86 demonstrates the effectiveness of the interception system.

TABLE 2  
INTERCEPTOR WELL DISCHARGE RATES

| WELL # | DISCHARGE RATE (GPM) |                |                 |                 |
|--------|----------------------|----------------|-----------------|-----------------|
|        | SEP. 14<br>1987      | OCT. 1<br>1988 | DEC. 19<br>1988 | SEP. 29<br>1989 |
| I-A    | 2.0                  | 4.0            | 3.0             | 6.9             |
| I-B    | 2.0                  | 2.5            | 3.0             | 7.3             |
| I-C*   | 2.5                  | 5.0            | 8.8             | 7.0             |
| I-D*   | 20.0                 | 23.0           | 18.0            | 7.9             |
| I-E*   | 5.0                  | 2.2            | 2.4             | 10.6            |
| I-F*   | 30.0                 | 21.0           | 26.0            | 23.0            |
| I-G    | 7.0                  | 4.2            | 5.0             | 5.6             |
| I-H    | 8.0                  | 2.8            | 3.0             | 8.5             |
| I-I    | 15.0                 | 15.0           | 15.0            | 16.8            |
| I-J    | 10.0                 | 5.9            | 8.0             | 5.0             |
| I-K    | 10.0                 | 5.7            | 8.2             | 9.0             |
|        | -----                | -----          | -----           | -----           |
|        | 113.5                | 91.3           | 100.4           | 107.6           |

\* - Wells containing the highest chromium concentrations (see Figure D-6 in Appendix D).

## IMPACT OF DISPOSAL SYSTEM ON DOWNGRAIDENT WATER LEVELS

Appendix J of the Consent Order, the Disposal System Contingency Plan, identifies specific monitor wells that are to be utilized to evaluate any impact from recharge of treated water into the alluvium. In addition, Kerr-McGee Chemical Corporation identified wells in Appendix J of the Consent Order that would be sampled and analyzed for chromium on a quarterly basis. Figure 2 illustrates the location of the Consent Order Appendix J wells.

Appendix A of this report shows that groundwater elevations have stabilized in that portion of the facility that lies downgradient from the recharge system (evidenced by wells M-47, M-23, and M-49), and are lower than in January, 1988. No surface wetting downgradient from the recharge trenches has been observed. KMCC is confident that there exists no undesirable impact to groundwater elevations downgradient from the recharge trench.

## CHROMIUM TREATMENT SYSTEM EFFECTIVENESS

The Consent Order specifies the following effluent concentration limits for the treatment plant discharge water: Total Chromium 1.7 mg/l and Hexavalent Chromium 0.05 mg/l as a monthly average; Total Chromium 3.4 mg/l and Hexavalent Chromium 0.1 mg/l as a maximum single value on a composite sample.

Table 3 lists treatment plant feed and discharge flow/concentration data for July 1, 1989 through September 29, 1989. Table 3 shows that the discharge limits were exceeded only once during the third quarter of 1989. The discharge concentration of hexavalent chromium for the week of July 8 through July 14, 1989 was 0.448 mg/l. This value caused the July average to exceed the 0.05 mg/l limit, with a recorded 0.118 mg/l value.

The reason this one weekly average was high was due to the need for replacement of electrodes in cell number 2. Occasionally, variations in scheduling causes laboratory turnaround time to vary by as much as several days. That week, the chromium concentrations on effluent were not reported until after two successive samples with elevated chromium concentrations were taken. The flow of water was diverted to cell number 1, and the electrodes were changed in cell 2.

TABLE 3  
GROUNDWATER TREATMENT ANALYSIS

| WEEK OF                 | VOLUME<br>TREATED<br>(M gal.) | FEED<br>CHROMIUM<br>(mg/l) | TREATED<br>TOTAL<br>(mg/l) | EFFLUENT<br>HEXAVALENT<br>(mg/l) |
|-------------------------|-------------------------------|----------------------------|----------------------------|----------------------------------|
| Jul. 1 - Jul. 7         | 837                           | 3.1                        | 0.210                      | 0.0047                           |
| Jul. 8 - Jul. 14        | 924                           | 3.2                        | 0.933                      | 0.448                            |
| Jul. 15 - Jul. 21       | 705                           | 3.2                        | 0.030                      | 0.014                            |
| Jul. 22 - Jul. 28       | 779                           | 2.9                        | 0.037                      | 0.004                            |
| July, 1989 Average      |                               | 3.1                        | 0.303                      | 0.118                            |
| Jul. 29 - Aug. 4        | 765                           | 3.0                        | 0.113                      | 0.002                            |
| Aug. 5 - Aug. 11        | 744                           | 2.9                        | 0.075                      | 0.014                            |
| Aug. 12 - Aug. 18       | 633 <sup>1</sup>              | 3.9                        | 0.028                      | 0.0036                           |
| Aug. 19 - Aug. 25       | 717                           | 3.2                        | 0.076                      | 0.0116                           |
| Aug. 26 - Sep. 1        | 750                           | 3.2                        | 0.048                      | 0.0093                           |
| August, 1989 Average    |                               | 3.24                       | 0.068                      | 0.0081                           |
| Sep. 2 - Sep. 8         | 698                           | 3.75                       | 0.113                      | 0.002                            |
| Sep. 9 - Sep. 15        | 646                           | 3.30                       | 0.118                      | 0.004                            |
| Sep. 16 - Sep. 22       | 543                           | 3.25                       | 0.030                      | 0.002                            |
| Sep. 23 - Sep. 29       | 485 <sup>2</sup>              | 2.60                       | 0.032                      | 0.0034                           |
| September, 1989 Average |                               | 3.23                       | 0.073                      | 0.0034                           |

1- Power failure for 5.5 hours.

2- Power failure for 4 hours. Wells I-B and I-K were down for four days.



#### ADDITIONAL WORK PERFORMED

During the third quarter of 1989, installation of an automated water level recording system was begun for monitor wells along the interceptor line. Electronic pressure transducers will be placed in a number of the groundwater monitor wells stationed between recovery wells. A telephone-addressable datalogger will record the pressure head in each of the wells at a regular interval and convert the pressure head to groundwater elevation. KMCC anticipates that this format of groundwater elevation monitoring will provide more accurate data and will eventually replace the monthly manual recording of groundwater elevations throughout the consent order monitoring area, according to the provisions of Section 6 of the Consent Order. A request for a change in monitoring methodology will be submitted when KMCC has determined that the new system is reliable.

Flowmeter readings (total volume) are recorded for each well on a daily basis. In addition, flow rates are recorded for each well every other day. These records indicate when a pump needs to be replaced or a flowrate adjusted. The pump for well I-H went out of service and was replaced on July 31.

When electrodes wear out, groundwater flow is diverted from one electrolytic cell to the other so that electrodes can be replaced. The dates on which electrodes were replaced are July 14, August 4, August 30, and September 21.

## CONCLUSIONS

KMCC is confident that effective groundwater interception and treatment are being attained. The effect of changing the pumping rates of the interceptor wells will continue to be monitored, and appropriate response measures (i.e.- future pump rate adjustments) will be taken to achieve optimal drawdown and plume interception.

Treatment facility discharge chromium concentrations are consistently below established requirements. No adverse impacts to downgradient groundwater elevations have been observed as a result of returning treated groundwater to the near-surface aquifer via the recharge trenches. No other design modifications to the treatment plant facility are contemplated at this time.

**APPENDIX A**  
**GROUNDWATER ELEVATIONS**

APPENDIX A  
 ARB-McGEE CHEMICAL CORPORATION  
 BENDERSON, NEVADA FACILITY  
 GROUNDWATER ELEVATIONS

| TOC-->    | M-11  |         | M-14  |         | M-15  |         | M-17  |         | M-18  |         | M-19  |         | M-22  |         | M-22R |       | M-23  |         | M-25  |         |
|-----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|---------|-------|---------|
|           | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV. | DYW   | ELEV.   | DYW   | ELEV.   |
| 20-Jan-88 | 44.78 | 1768.68 | 28.56 | 1730.27 | 23.29 | 1726.40 | 30.64 | 1738.90 | 11.73 | 1726.55 | 27.60 | 1730.95 | 23.78 | 1734.35 |       |       | 14.58 | 1696.20 | 26.63 | 1731.52 |
| 05-Feb-88 | 44.76 | 1768.68 | 28.70 | 1730.13 | 23.59 | 1726.10 | 31.12 | 1738.42 | 11.87 | 1726.41 | 27.88 | 1730.67 | 24.20 | 1733.93 |       |       | 14.52 | 1696.26 | 27.07 | 1731.08 |
| 01-Mar-88 | 44.76 | 1768.70 | 29.36 | 1729.47 | 24.03 | 1725.66 | 31.72 | 1737.82 | 12.13 | 1726.15 | 28.36 | 1738.19 | 24.65 | 1733.48 |       |       | 14.67 | 1698.11 | 28.33 | 1729.82 |
| 19-Apr-88 | 45.17 | 1768.29 | 30.14 | 1728.69 | 24.62 | 1725.07 | 32.42 | 1737.12 | 12.73 | 1725.55 | 28.92 | 1737.63 | 25.25 | 1732.88 |       |       | 14.94 | 1697.84 | 28.75 | 1729.40 |
| 10-May-88 | 45.13 | 1768.33 | 30.48 | 1728.35 | 25.05 | 1724.64 | 32.90 | 1736.64 | 13.08 | 1725.20 | 29.34 | 1737.21 | 25.61 | 1732.52 |       |       | 15.05 | 1697.73 | 29.00 | 1729.15 |
| 07-Jun-88 | 45.39 | 1768.97 | 30.67 | 1728.16 | 25.24 | 1724.45 | 33.03 | 1736.51 | 13.30 | 1724.98 | 29.64 | 1736.91 | 26.19 | 1731.94 |       |       | 15.29 | 1697.49 | 29.60 | 1728.55 |
| 14-Jul-88 | 46.16 | 1767.30 | 31.06 | 1727.77 | 25.83 | 1723.86 | 33.96 | 1735.59 | 13.73 | 1724.55 | 29.98 | 1736.57 |       |         |       |       | 15.73 | 1697.05 | 29.65 | 1728.50 |
| 06-Aug-88 | 46.20 | 1767.26 | 31.36 | 1727.47 | 25.94 | 1723.75 | 34.18 | 1735.36 | 13.91 | 1724.37 | 29.24 | 1737.31 |       |         |       |       | 15.45 | 1697.33 | 30.10 | 1728.95 |
| 03-Sep-88 | 46.12 | 1767.34 | 31.32 | 1727.51 | 25.95 | 1723.74 | 34.30 | 1735.24 | 13.40 | 1724.86 | 29.75 | 1736.80 |       |         |       |       | 15.50 | 1697.28 | 30.15 | 1728.00 |
| 10-Oct-88 | 45.40 | 1768.06 | 31.50 | 1727.33 | 26.00 | 1723.69 | 34.40 | 1735.14 | 14.30 | 1723.98 | 29.70 | 1736.85 |       |         |       |       | 15.55 | 1697.23 | 30.70 | 1727.45 |
| 26-Nov-88 | 41.65 | 1771.81 | 31.65 | 1727.18 | 27.10 | 1722.59 | 34.30 | 1735.24 | 14.40 | 1723.86 | 29.90 | 1736.55 |       |         |       |       | 16.85 | 1695.93 | 30.70 | 1727.45 |
| 15-Dec-88 | 46.10 | 1767.36 | 37.70 | 1721.13 | 30.18 | 1719.51 | 33.75 | 1735.79 | 14.00 | 1724.28 | 30.40 | 1736.15 |       |         |       |       | 16.10 | 1697.68 | 30.95 | 1727.20 |
| 19-Jan-89 | 46.15 | 1767.31 | 31.80 | 1727.03 | 25.85 | 1724.64 | 34.75 | 1734.79 | 14.80 | 1723.48 | 30.60 | 1735.95 |       |         |       |       | 16.45 | 1696.33 | 32.10 | 1726.95 |
| 23-Feb-89 | 45.27 | 1768.19 | 32.15 | 1726.88 | 26.35 | 1721.34 | 35.00 | 1734.54 | 15.35 | 1722.93 | 30.80 | 1735.75 |       |         |       |       | 16.50 | 1696.28 | 32.10 | 1726.95 |
| 23-Mar-89 | 45.90 | 1767.56 | 32.20 | 1726.83 | 28.40 | 1721.29 | 35.10 | 1734.44 | 15.70 | 1722.58 | 31.00 | 1735.55 |       |         |       |       | 16.60 | 1696.18 | 32.20 | 1726.95 |
| 23-Apr-89 | 46.10 | 1767.36 | 32.30 | 1726.53 | 28.40 | 1721.29 | 35.00 | 1734.44 | 15.85 | 1722.43 | 31.00 | 1735.55 |       |         |       |       | 16.60 | 1696.18 | 32.20 | 1726.95 |
| 09-May-89 | 44.95 | 1768.51 | 32.40 | 1726.43 | 27.80 | 1721.89 | 35.00 | 1734.44 | 16.00 | 1722.28 | 31.00 | 1735.55 |       |         |       |       | 16.60 | 1696.18 | 32.20 | 1726.95 |
| 01-Jun-89 | 45.50 | 1767.96 | 32.50 | 1726.33 | 28.50 | 1721.19 | 35.25 | 1734.29 | 16.25 | 1722.03 | 31.30 | 1735.25 |       |         |       |       | 16.20 | 1696.58 | 32.10 | 1726.95 |
| 03-Jul-89 | 45.00 | 1768.46 | 32.60 | 1726.23 | 27.60 | 1722.09 | 35.35 | 1734.19 | 16.55 | 1721.73 | 31.45 | 1735.10 |       |         |       |       | 16.20 | 1696.58 | 32.10 | 1726.95 |
| 16-Aug-89 | 46.00 | 1767.46 | 32.70 | 1726.13 | 28.30 | 1721.39 | 35.50 | 1734.04 | 16.85 | 1721.43 | 34.55 | 1732.00 |       |         |       |       | 21.70 | 1691.08 | 36.80 | 1722.15 |
| 12-Sep-89 | 45.30 | 1768.16 | 32.55 | 1726.28 | 28.55 | 1721.14 | 35.55 | 1733.99 | 16.80 | 1721.48 | 36.80 | 1729.75 |       |         |       |       | 21.90 | 1690.88 | 32.65 | 1725.50 |

| TOC-->    | M-27  |         | M-31  |         | M-36  |         | M-37  |         | M-38  |         | M-39  |         | M-47  |         | M-49  |         | M-53  |         | M-54  |         |
|-----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
|           | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   | DYW   | ELEV.   |
| 20-Jan-88 | 15.36 | 1725.11 | 39.34 | 1749.05 | 25.62 | 1732.32 | 26.98 | 1732.30 | 26.04 | 1731.84 | 23.80 | 1735.51 | 13.08 | 1703.43 | 12.53 | 1706.25 | 25.60 | 1725.96 | 22.14 | 1726.79 |
| 05-Feb-88 | 15.70 | 1724.77 | 39.53 | 1748.86 | 25.95 | 1731.99 | 27.28 | 1732.00 | 26.37 | 1731.51 | 24.32 | 1734.99 | 13.04 | 1703.47 | 12.49 | 1706.29 | 25.73 | 1725.83 | 22.31 | 1726.82 |
| 01-Mar-88 | 15.86 | 1724.59 | 39.68 | 1748.71 | 26.50 | 1731.44 | 27.87 | 1731.41 | 26.99 | 1730.89 | 24.81 | 1734.50 | 13.00 | 1703.51 | 12.47 | 1706.31 | 26.21 | 1725.35 | 22.88 | 1726.05 |
| 19-Apr-88 | 16.45 | 1724.02 | 40.08 | 1748.31 | 27.14 | 1730.80 | 28.62 | 1730.66 | 27.60 | 1730.28 | 25.42 | 1733.89 | 13.10 | 1703.41 | 12.60 | 1706.18 | 26.75 | 1724.81 | 23.50 | 1725.43 |
| 10-May-88 | 16.95 | 1723.52 | 40.36 | 1748.03 | 27.50 | 1730.44 | 28.90 | 1730.38 | 28.00 | 1729.88 | 25.83 | 1733.48 | 13.29 | 1703.22 | 12.94 | 1705.94 | 27.09 | 1724.47 | 23.60 | 1725.33 |
| 07-Jun-88 | 17.21 | 1723.26 | 40.50 | 1747.89 | 27.73 | 1730.21 | 29.16 | 1730.12 | 28.27 | 1729.61 | 26.07 | 1733.24 | 13.47 | 1703.04 | 13.09 | 1705.69 | 27.25 | 1724.31 | 23.93 | 1725.10 |
| 14-Jul-88 | 17.52 | 1722.95 | 40.70 | 1747.69 | 28.60 | 1729.34 | 29.60 | 1729.68 | 28.75 | 1729.13 | 26.50 | 1732.81 | 13.72 | 1702.79 | 13.35 | 1705.43 | 27.60 | 1723.96 | 24.50 | 1724.43 |
| 06-Aug-88 | 17.67 | 1722.80 | 40.53 | 1747.65 | 28.45 | 1729.49 | 29.86 | 1729.42 | 28.94 | 1728.94 | 26.77 | 1732.54 | 14.07 | 1702.44 | 13.81 | 1704.97 | 27.94 | 1723.62 | 24.52 | 1724.41 |
| 03-Sep-88 | 16.66 | 1723.81 | 40.52 | 1747.87 | 29.50 | 1728.44 | 29.80 | 1729.48 | 29.20 | 1728.68 | 26.71 | 1732.60 | 13.72 | 1702.79 | 13.35 | 1705.43 | 28.12 | 1723.44 | 24.40 | 1724.45 |
| 10-Oct-88 | 18.30 | 1722.17 | 40.15 | 1748.24 | 28.80 | 1729.14 | 30.10 | 1729.18 | 29.50 | 1728.38 | 26.80 | 1732.51 | 13.65 | 1702.86 | 13.60 | 1705.18 | 28.30 | 1723.28 | 24.90 | 1724.03 |
| 26-Nov-88 | 18.60 | 1721.87 | 40.30 | 1748.09 | 29.00 | 1728.94 | 29.90 | 1729.38 | 29.30 | 1728.58 | 26.90 | 1732.41 | 13.80 | 1702.71 | 13.10 | 1705.68 | 28.10 | 1723.46 | 25.16 | 1723.83 |
| 15-Dec-88 | 19.30 | 1721.17 | 39.83 | 1748.56 | 29.40 | 1728.58 | 31.90 | 1727.38 | 29.70 | 1728.18 | 28.75 | 1732.56 | 13.75 | 1702.76 | 13.75 | 1705.03 | 28.60 | 1722.96 | 28.60 | 1723.33 |
| 19-Jan-89 | 18.75 | 1721.72 | 40.15 | 1748.24 | 26.60 | 1731.34 | 30.40 | 1728.88 | 29.90 | 1727.98 | 26.85 | 1732.46 | 14.10 | 1702.41 | 14.10 | 1704.68 | 28.85 | 1722.71 | 24.45 | 1724.88 |
| 23-Feb-89 | 19.75 | 1720.72 | 40.47 | 1747.92 | 29.80 | 1728.14 | 30.65 | 1728.63 | 32.70 | 1725.18 | 27.65 | 1731.66 | 14.45 | 1702.06 | 14.23 | 1704.55 | 28.90 | 1722.66 | 25.90 | 1723.03 |
| 23-Mar-89 | 19.65 | 1720.82 | 40.80 | 1747.59 | 30.50 | 1727.44 | 30.70 | 1728.58 | 30.30 | 1727.58 | 27.85 | 1731.46 | 14.65 | 1701.86 | 14.30 | 1704.48 | 28.40 | 1721.16 | 26.30 | 1722.63 |
| 09-May-89 | 19.80 | 1720.67 | 40.80 | 1747.59 | 30.30 | 1727.64 | 31.75 | 1727.53 | 30.40 | 1727.48 | 27.30 | 1731.41 | 14.70 | 1701.81 | 14.40 | 1704.38 | 29.40 | 1722.16 | 26.40 | 1722.53 |
| 09-May-89 | 19.80 | 1720.67 | 39.90 | 1748.49 | 30.20 | 1727.74 | 30.70 | 1728.58 | 30.40 | 1727.48 | 28.05 | 1731.26 | 14.80 | 1701.71 | 14.50 | 1704.28 | 29.75 | 1721.81 | 26.60 | 1722.53 |
| 01-Jun-89 | 19.70 | 1720.77 | 40.35 | 1748.04 | 30.35 | 1727.59 | 14.60 | 1744.68 | 30.45 | 1727.43 | 28.20 | 1731.11 | 14.60 | 1701.91 | 14.65 | 1704.13 | 29.75 | 1721.81 | 26.60 | 1722.53 |
| 03-Jul-89 | 19.85 | 1720.62 | 40.30 | 1748.09 | 31.70 | 1726.24 | 30.80 | 1728.48 | 30.40 | 1727.48 | 28.30 | 1731.01 | 15.00 | 1701.51 | 14.60 | 1704.16 | 30.00 | 1721.56 | 26.55 | 1722.38 |
| 16-Aug-89 | 20.25 | 1720.22 | 41.00 | 1747.39 | 30.50 | 1727.44 | 30.90 | 1728.38 | 30.65 | 1727.23 | 28.30 | 1731.01 | 20.50 | 1696.01 | 20.25 | 1698.53 | 30.10 | 1721.46 | 26.75 | 1722.18 |
| 12-Sep-89 | 20.50 | 1719.97 | 40.55 | 1747.84 | 30.70 | 1727.24 | 30.90 | 1728.38 | 30.65 | 1727.23 | 28.50 | 1730.81 | 19.50 | 1697.01 | 20.30 | 1698.48 | 30.10 | 1721.46 | 26.75 | 1722.18 |



APPENDIX A  
 KERR-MCCOY CHEMICAL CORPORATION  
 HENDERSON, NEVADA FACILITY  
 GROUNDWATER ELEVATIONS

| YOC-->    | H-76  |         | H-79  |         | H-80  |         | H-81  |         | H-82  |         | H-83  |         |
|-----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
|           | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   |
| 20-Jan-88 | 24.94 | 1726.07 | 17.54 | 1725.39 | 20.80 | 1724.93 | 15.19 | 1720.60 | 15.74 | 1723.64 | 16.52 | 1724.31 |
| 05-Feb-88 | 25.74 | 1725.77 | 17.06 | 1725.05 | 21.23 | 1724.50 | 15.16 | 1720.55 | 15.98 | 1723.40 | 16.64 | 1724.19 |
| 01-Mar-88 | 25.60 | 1725.33 | 18.37 | 1724.56 | 19.72 | 1726.01 | 15.46 | 1720.27 | 16.37 | 1723.01 | 17.05 | 1723.70 |
| 19-Apr-88 | 24.75 | 1726.26 | 18.07 | 1724.06 | 20.41 | 1725.32 | 16.00 | 1727.65 | 16.05 | 1722.53 | 17.54 | 1723.29 |
| 18-May-88 | 26.23 | 1724.78 | 19.47 | 1723.46 | 21.05 | 1724.68 | 16.80 | 1726.93 | 17.28 | 1722.10 | 18.00 | 1722.83 |
| 07-Jun-88 | 26.23 | 1724.78 | 19.70 | 1723.23 | 21.20 | 1724.53 | 17.11 | 1726.62 | 17.47 | 1721.91 | 18.24 | 1722.59 |
| 14-Jul-88 | 26.80 | 1724.21 | 20.00 | 1722.93 | 21.50 | 1724.23 | 17.55 | 1726.16 | 17.67 | 1721.71 | 18.45 | 1722.30 |
| 06-Aug-88 | 26.97 | 1724.04 | 20.42 | 1722.51 | 21.53 | 1724.20 | 17.79 | 1725.94 | 18.07 | 1721.31 | 19.00 | 1721.83 |
| 03-Sep-88 | 27.18 | 1723.91 | 20.10 | 1722.83 | 21.02 | 1724.71 | 17.40 | 1726.33 | 17.50 | 1721.88 | 17.87 | 1722.96 |
| 18-Oct-88 | 27.62 | 1723.39 | 20.50 | 1722.43 | 22.50 | 1723.23 | 18.15 | 1725.50 | 18.30 | 1721.08 | 19.20 | 1721.63 |
| 26-Nov-88 | 23.20 | 1727.81 | 20.75 | 1722.18 | 28.10 | 1717.63 | 17.75 | 1725.98 | 18.50 | 1720.88 | 19.30 | 1721.53 |
| 15-Dec-88 | 28.65 | 1722.36 | 22.45 | 1720.48 | 23.60 | 1722.13 | 18.25 | 1725.48 | 23.40 | 1715.98 | 24.10 | 1716.73 |
| 19-Jan-89 | 29.05 | 1721.96 | 20.15 | 1722.78 | 23.50 | 1722.23 | 18.80 | 1724.93 | 17.90 | 1721.48 | 19.85 | 1720.96 |
| 23-Feb-89 | 29.40 | 1721.61 | 20.20 | 1722.73 | 23.83 | 1721.90 | 19.90 | 1723.83 | 18.70 | 1720.68 | 20.25 | 1720.58 |
| 23-Mar-89 | 29.40 | 1721.61 | 21.20 | 1721.73 | 23.65 | 1721.88 | 20.00 | 1723.73 | 18.85 | 1720.53 | 20.30 | 1720.53 |
| 23-Apr-89 | 29.50 | 1721.51 | 21.25 | 1721.68 | 23.90 | 1721.83 | 19.80 | 1723.93 | 18.70 | 1720.68 | 20.20 | 1720.63 |
| 09-May-89 | 29.40 | 1721.61 | 21.85 | 1721.08 | 24.00 | 1721.73 | 20.35 | 1723.30 | 19.30 | 1720.08 | 20.45 | 1720.36 |
| 01-Jun-89 | 29.40 | 1721.61 | 22.00 | 1720.93 | 23.85 | 1721.88 | 20.50 | 1723.23 | 19.40 | 1719.98 | 20.40 | 1720.43 |
| 03-Jul-89 | 29.50 | 1721.51 | 22.25 | 1720.68 | 24.10 | 1721.63 | 20.55 | 1723.18 | 19.60 | 1719.78 | 20.35 | 1720.48 |
| 16-Aug-89 | 30.05 | 1720.96 | 22.50 | 1720.43 | 24.50 | 1721.23 | 21.00 | 1722.73 | 19.85 | 1719.53 | 20.75 | 1720.08 |
| 12-Sep-89 | 30.10 | 1720.91 | 22.85 | 1720.08 | 24.70 | 1721.03 | 21.40 | 1722.33 | 20.15 | 1719.23 | 21.00 | 1719.83 |

| YOC-->    | H-84  |         | H-85  |         | H-86  |         | H-87  |         | H-88  |         |
|-----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
|           | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   |
| 20-Jan-88 | 14.42 | 1725.21 | 15.14 | 1726.85 | 15.71 | 1727.02 | 16.10 | 1726.17 | 13.02 | 1724.97 |
| 05-Feb-88 | 14.02 | 1724.81 | 15.36 | 1725.83 | 15.96 | 1726.77 | 16.15 | 1726.12 | 13.19 | 1724.80 |
| 01-Mar-88 | 15.00 | 1724.63 | 15.63 | 1725.56 | 16.00 | 1726.73 | 16.32 | 1725.95 | 13.41 | 1724.58 |
| 19-Apr-88 | 15.56 | 1724.07 | 16.23 | 1724.96 | 16.62 | 1726.11 | 16.87 | 1725.40 | 13.93 | 1724.06 |
| 18-May-88 | 16.00 | 1723.63 | 16.80 | 1724.39 | 16.23 | 1726.50 | 17.31 | 1724.96 | 14.41 | 1723.58 |
| 07-Jun-88 | 16.32 | 1723.31 | 17.11 | 1724.08 | 17.50 | 1725.23 | 17.63 | 1724.64 | 14.57 | 1723.42 |
| 14-Jul-88 | 16.62 | 1723.01 | 17.42 | 1723.77 | 17.93 | 1724.80 | 18.15 | 1724.12 | 14.97 | 1723.02 |
| 06-Aug-88 | 17.03 | 1722.60 | 17.80 | 1723.39 | 18.21 | 1724.52 | 18.20 | 1724.07 | 15.08 | 1722.91 |
| 03-Sep-88 | 15.80 | 1723.83 | 16.90 | 1724.29 | 17.74 | 1724.99 | 17.80 | 1724.47 | 14.56 | 1723.43 |
| 10-Oct-88 | 17.30 | 1722.33 | 18.30 | 1722.89 | 18.90 | 1723.83 | 18.60 | 1723.67 | 15.60 | 1722.39 |
| 26-Nov-88 | 17.95 | 1721.68 | 18.35 | 1722.84 | 18.10 | 1724.63 | 18.25 | 1724.02 | 15.75 | 1722.24 |
| 15-Dec-88 | 23.60 | 1715.63 | 19.05 | 1722.14 | 18.55 | 1724.18 | 18.85 | 1723.42 | 15.60 | 1722.39 |
| 19-Jan-89 | 18.30 | 1721.33 | 19.10 | 1722.88 | 16.30 | 1726.43 | 19.35 | 1722.92 | 15.30 | 1722.69 |
| 23-Feb-89 | 18.77 | 1720.86 | 19.60 | 1721.59 | 20.15 | 1722.58 | 24.35 | 1717.92 | 16.70 | 1721.29 |
| 23-Mar-89 | 18.75 | 1720.88 | 19.55 | 1721.64 | 21.50 | 1721.23 | 20.60 | 1721.67 | 17.00 | 1720.99 |
| 23-Apr-89 | 18.75 | 1720.88 | 19.45 | 1721.74 | 20.15 | 1722.58 | 20.75 | 1721.52 | 17.10 | 1720.89 |
| 09-May-89 | 18.90 | 1720.73 | 19.75 | 1721.44 | 20.60 | 1722.13 | 20.70 | 1721.57 | 17.25 | 1720.74 |
| 01-Jun-89 | 18.75 | 1720.88 | 19.65 | 1721.54 | 20.50 | 1722.23 | 21.20 | 1721.07 | 17.55 | 1720.44 |
| 03-Jul-89 | 18.90 | 1720.73 | 19.60 | 1721.59 | 20.75 | 1721.98 | 21.55 | 1720.72 | 17.85 | 1720.14 |
| 16-Aug-89 | 19.30 | 1720.33 | 20.15 | 1721.04 | 21.00 | 1721.73 | 21.70 | 1720.57 | 18.10 | 1719.89 |
| 12-Sep-89 | 19.55 | 1720.08 | 20.50 | 1720.69 | 21.50 | 1721.23 | 21.95 | 1720.32 | 18.20 | 1719.79 |

APPENDIX A  
 KERR-MCGEE CHEMICAL CORPORATION  
 HENDERSON, NEVADA FACILITY  
 GROUNDWATER ELEVATIONS

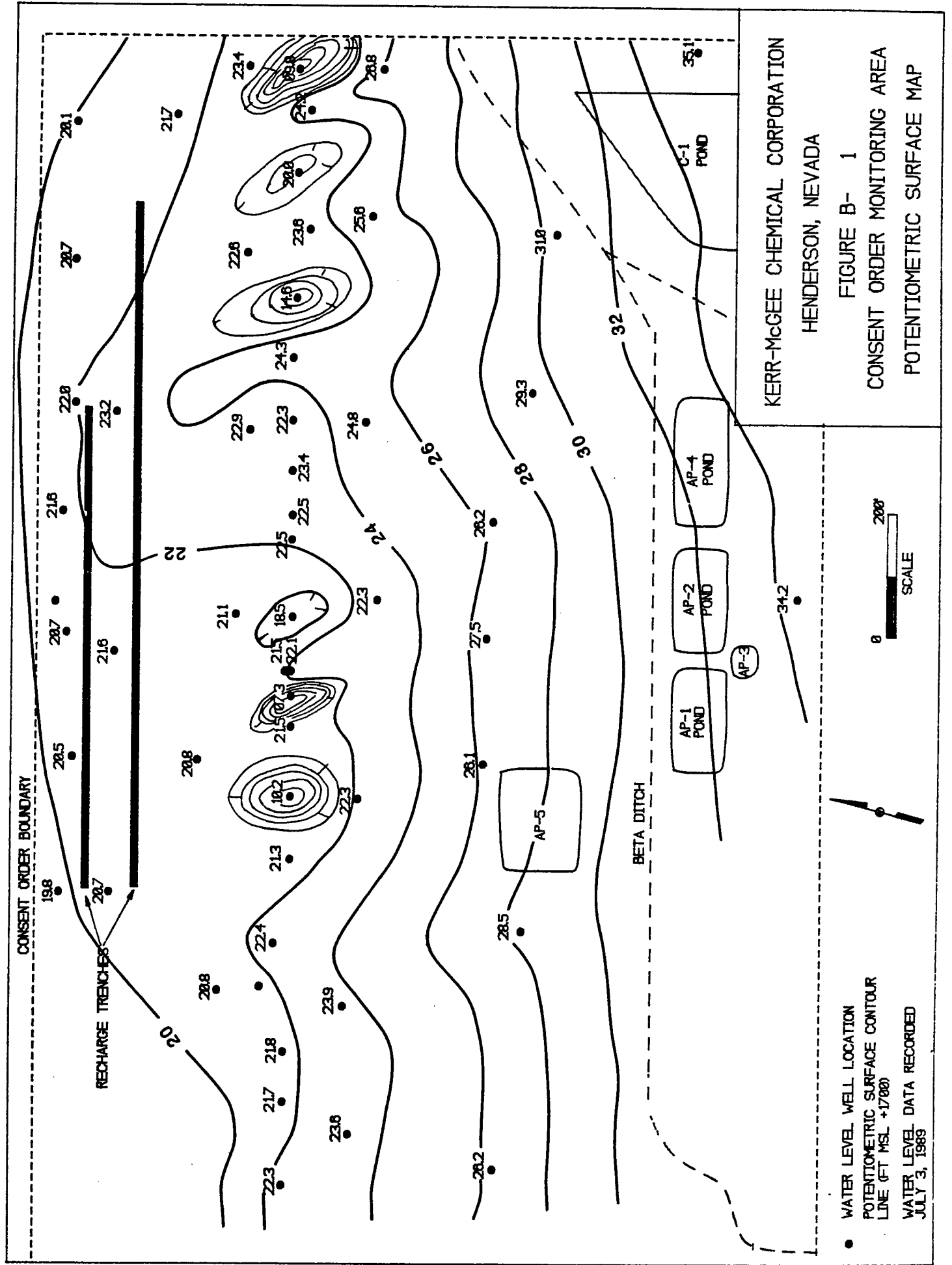
| TOC-->    | I-A   |         | I-B   |         | I-C   |         | I-D   |         | I-E   |         | I-F   |         |
|-----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
|           | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   |
| 20-Jan-88 | 26.63 | 1724.43 | 26.66 | 1724.03 | 26.66 | 1724.38 | 26.29 | 1722.25 | 45.76 | 1704.46 | 23.81 | 1723.77 |
| 05-Feb-88 | 25.42 | 1725.84 | 25.40 | 1725.29 | 26.46 | 1723.36 | 28.72 | 1721.82 | 46.20 | 1704.92 | 23.99 | 1723.59 |
| 01-Mar-88 | 27.70 | 1723.36 | 27.30 | 1723.31 | 26.39 | 1723.45 | 29.16 | 1721.38 | 45.68 | 1704.54 | 24.55 | 1723.03 |
| 18-Apr-88 | 28.42 | 1722.84 | 27.89 | 1722.80 | 27.75 | 1722.69 | 29.79 | 1720.75 | 29.69 | 1720.53 | 25.21 | 1722.37 |
| 16-May-88 | 28.63 | 1722.23 | 28.07 | 1722.62 | 26.83 | 1724.41 | 30.06 | 1720.48 | 32.22 | 1710.00 | 25.74 | 1721.84 |
| 07-Jun-88 | 29.12 | 1721.94 | 28.38 | 1722.39 | 26.25 | 1724.19 | 30.43 | 1720.11 | 32.76 | 1717.46 | 25.87 | 1721.71 |
| 14-Jul-88 | 29.69 | 1721.37 | 27.02 | 1723.67 | 26.37 | 1724.07 | 33.12 | 1717.42 | 34.60 | 1715.62 | 26.50 | 1721.00 |
| 06-Aug-88 | 29.00 | 1721.26 | 28.94 | 1721.75 | 26.49 | 1723.95 | 32.06 | 1718.48 | 33.10 | 1717.12 | 26.60 | 1720.90 |
| 03-Sep-88 | 31.10 | 1719.96 | 28.30 | 1721.79 | 26.60 | 1723.04 | 35.10 | 1715.44 | 32.70 | 1717.52 | 26.75 | 1720.83 |
| 10-Oct-88 | 26.75 | 1724.31 | 27.60 | 1723.09 | 26.00 | 1723.64 | 27.35 | 1723.19 | 29.00 | 1721.22 | 26.80 | 1720.70 |
| 26-Nov-88 | 25.60 | 1725.46 | 29.40 | 1721.29 | 36.20 | 1714.24 | 32.20 | 1718.34 | 38.10 | 1712.12 | 27.80 | 1719.70 |
| 15-Dec-88 | 30.00 | 1721.66 | 29.65 | 1721.04 | 37.75 | 1712.69 | 45.40 | 1705.14 | 41.50 | 1708.72 | 33.65 | 1713.93 |
| 19-Jan-89 | 28.10 | 1722.96 | 27.70 | 1722.99 | 42.90 | 1707.54 | 39.55 | 1710.99 | 40.65 | 1709.57 | 28.20 | 1719.30 |
| 23-Feb-89 | 28.20 | 1722.06 | 28.00 | 1722.69 | 44.10 | 1706.34 | 44.55 | 1705.99 | 45.70 | 1704.52 | 31.00 | 1716.58 |
| 23-Mar-89 | 31.00 | 1720.06 | 30.60 | 1720.09 | 41.00 | 1706.44 | 32.20 | 1718.34 | 38.00 | 1719.42 | 29.90 | 1717.68 |
| 23-Apr-89 | 30.70 | 1720.36 | 29.00 | 1721.69 | 28.90 | 1721.54 | 40.00 | 1710.54 | 35.70 | 1714.52 | 29.00 | 1717.68 |
| 09-May-89 | 30.70 | 1712.36 |       |         | 28.60 | 1721.84 | 37.20 | 1713.34 | 39.10 | 1711.12 | 29.00 | 1718.58 |
| 01-Jun-89 | 29.25 | 1721.61 |       |         | 29.00 | 1721.44 | 39.40 | 1711.14 | 40.35 | 1709.87 | 29.00 | 1718.58 |
| 03-Jul-89 | 29.30 | 1721.76 |       |         | 28.10 | 1721.34 | 40.30 | 1710.24 | 42.90 | 1707.32 | 29.10 | 1718.48 |
| 16-Aug-89 | 30.30 | 1720.76 |       |         | 28.60 | 1721.84 | 44.10 | 1706.44 | 33.55 | 1716.67 | 30.60 | 1716.90 |
| 12-Sep-89 | 30.70 | 1720.36 |       |         | 29.00 | 1721.44 | 44.20 | 1706.34 | 34.00 | 1716.22 | 30.85 | 1716.73 |

| TOC-->    | I-G   |         | I-H   |         | I-I   |         | I-J   |         | I-K   |         |
|-----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
|           | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   | DTH   | ELEV.   |
| 20-Jan-88 | 25.62 | 1724.00 | 30.07 | 1721.00 | 18.65 | 1724.71 | 22.62 | 1725.33 | 21.48 | 1722.49 |
| 05-Feb-88 | 26.06 | 1724.36 | 33.08 | 1717.99 | 18.87 | 1724.49 | 22.90 | 1725.05 | 22.75 | 1721.22 |
| 01-Mar-88 | 26.59 | 1723.83 | 33.20 | 1717.87 | 19.30 | 1724.06 | 23.39 | 1724.56 | 24.02 | 1719.95 |
| 19-Apr-88 | 27.83 | 1722.59 | 28.54 | 1722.59 | 20.02 | 1723.34 | 23.50 | 1724.45 | 22.17 | 1721.60 |
| 18-May-88 | 29.13 | 1721.29 | 30.12 | 1720.95 | 20.30 | 1723.06 | 23.62 | 1724.33 | 22.79 | 1721.18 |
| 07-Jun-88 | 37.40 | 1713.02 | 30.85 | 1720.22 | 19.80 | 1723.56 | 23.87 | 1724.08 | 25.20 | 1718.77 |
| 14-Jul-88 | 37.50 | 1712.92 | 32.97 | 1718.10 | 21.40 | 1721.96 |       |         | 25.00 | 1718.97 |
| 06-Aug-88 | 38.61 | 1712.41 | 31.45 | 1719.62 | 21.48 | 1721.80 | 24.65 | 1723.30 | 27.40 | 1716.57 |
| 03-Sep-88 | 40.50 | 1709.92 | 30.80 | 1712.27 | 21.12 | 1722.24 | 23.54 | 1724.41 | 23.75 | 1720.22 |
| 10-Oct-88 | 30.30 | 1720.12 | 27.90 | 1723.17 | 20.25 | 1723.11 | 24.00 | 1723.95 | 24.25 | 1719.72 |
| 26-Nov-88 | 27.50 | 1722.92 | 26.70 | 1724.37 | 21.60 | 1721.76 | 25.60 | 1722.35 | 26.00 | 1715.97 |
| 15-Dec-88 | 40.65 | 1709.77 | 34.90 | 1716.17 | 21.60 | 1721.76 | 26.70 | 1721.25 | 22.35 | 1721.62 |
| 19-Jan-89 | 37.00 | 1713.42 | 29.65 | 1712.42 | 25.40 | 1717.96 | 26.00 | 1721.95 | 22.95 | 1721.02 |
| 23-Feb-89 | 28.00 | 1722.42 | 31.00 | 1720.07 | 28.00 | 1715.36 | 26.57 | 1721.38 | 25.35 | 1718.62 |
| 23-Mar-89 | 29.00 | 1721.42 | 30.60 | 1720.47 | 24.80 | 1718.56 | 25.20 | 1722.75 | 27.00 | 1716.97 |
| 23-Apr-89 | 28.00 | 1722.42 | 22.00 | 1729.07 | 29.80 | 1713.56 | 24.00 | 1723.95 | 29.50 | 1714.47 |
| 09-May-89 | 27.60 | 1722.82 | 42.00 | 1709.07 | 28.40 | 1713.96 | 22.00 | 1725.95 | 30.50 | 1713.47 |
| 01-Jun-89 | 27.90 | 1722.52 | 28.30 | 1722.17 | 27.80 | 1715.56 | 26.80 | 1721.15 | 30.50 | 1713.47 |
| 03-Jul-89 | 27.95 | 1722.47 | 28.80 | 1722.27 | 28.80 | 1714.56 | 28.00 | 1719.95 | 34.20 | 1709.77 |
| 16-Aug-89 | 29.70 | 1720.72 | 29.20 | 1721.87 | 31.00 | 1712.36 | 29.35 | 1710.60 | 34.00 | 1709.97 |
| 12-Sep-89 | 30.45 | 1719.97 | 29.00 | 1722.07 | 30.00 | 1713.36 | 27.35 | 1720.60 | 18.55 | 1725.42 |

**APPENDIX B**  
**POTENTIOMETRIC SURFACE MAPS**  
**INTERCEPTOR AREA CROSS-SECTIONS**





CONSENT ORDER BOUNDARY

RECHARGE TRENCHES

BETA DITCH

AP-1 POND

AP-2 POND

AP-4 POND

AP-5 POND

C-1 POND

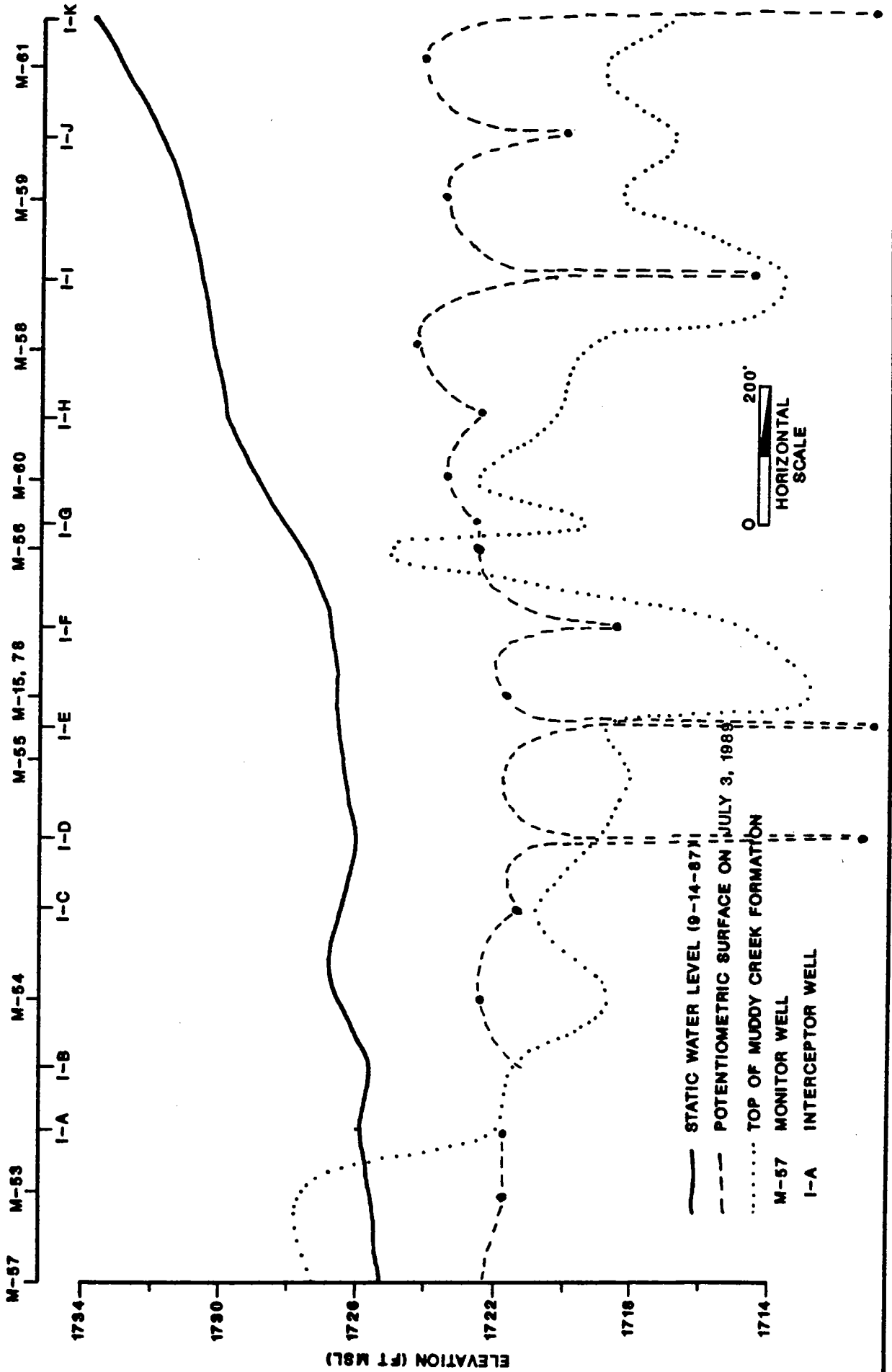


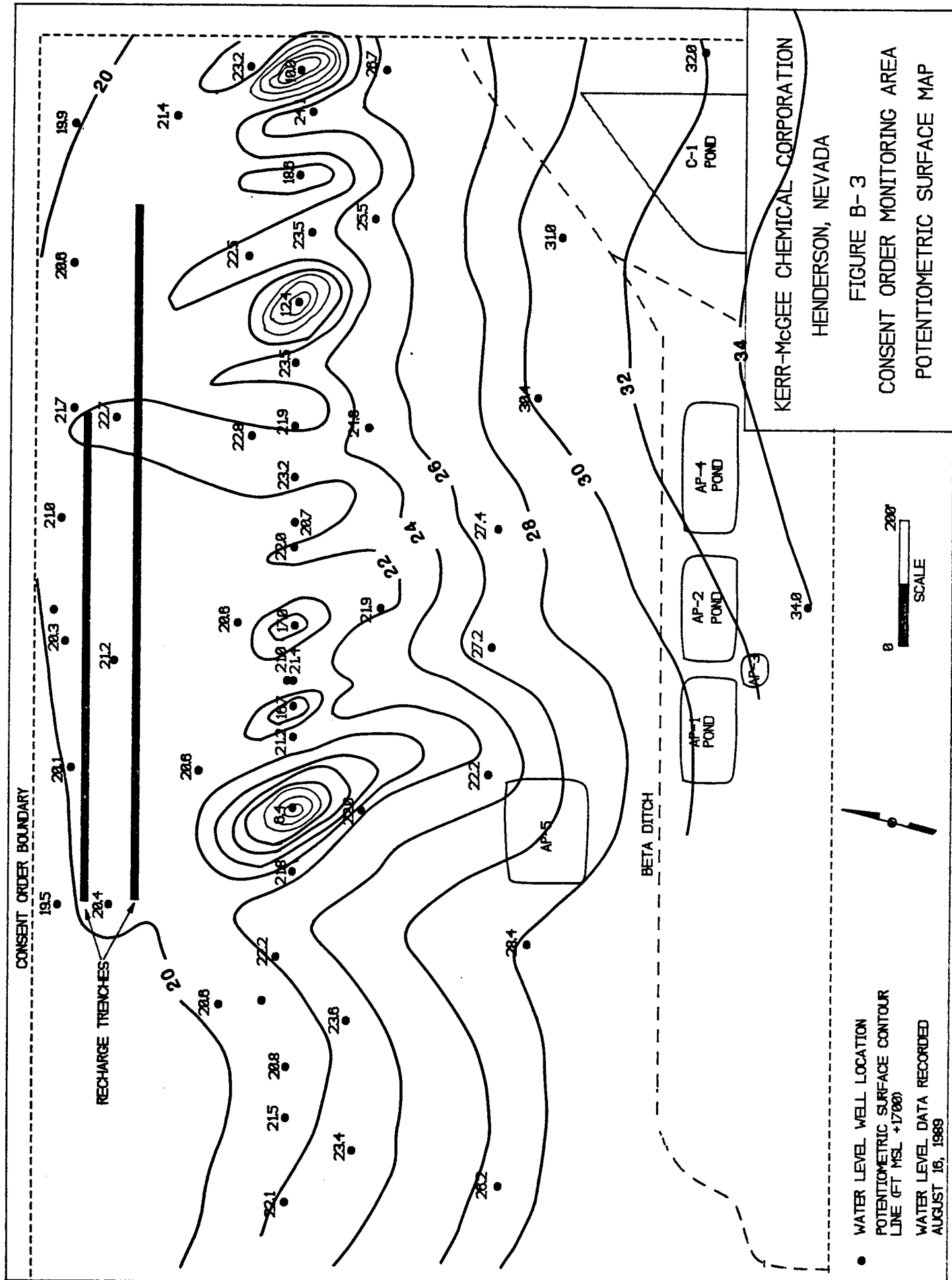
KERR-McGEE CHEMICAL CORPORATION  
HENDERSON, NEVADA

FIGURE B- 1  
CONSENT ORDER MONITORING AREA  
POTENTIOMETRIC SURFACE MAP

• WATER LEVEL WELL LOCATION  
 POTENTIOMETRIC SURFACE CONTOUR  
 LINE (FT MSL +1780)  
 WATER LEVEL DATA RECORDED  
 JULY 3, 1989

KERR-MCGEE CHEMICAL CORPORATION  
 HENDERSON, NEVADA  
 GROUNDWATER INTERCEPTOR LINE CROSS-SECTION  
 FIGURE B-2



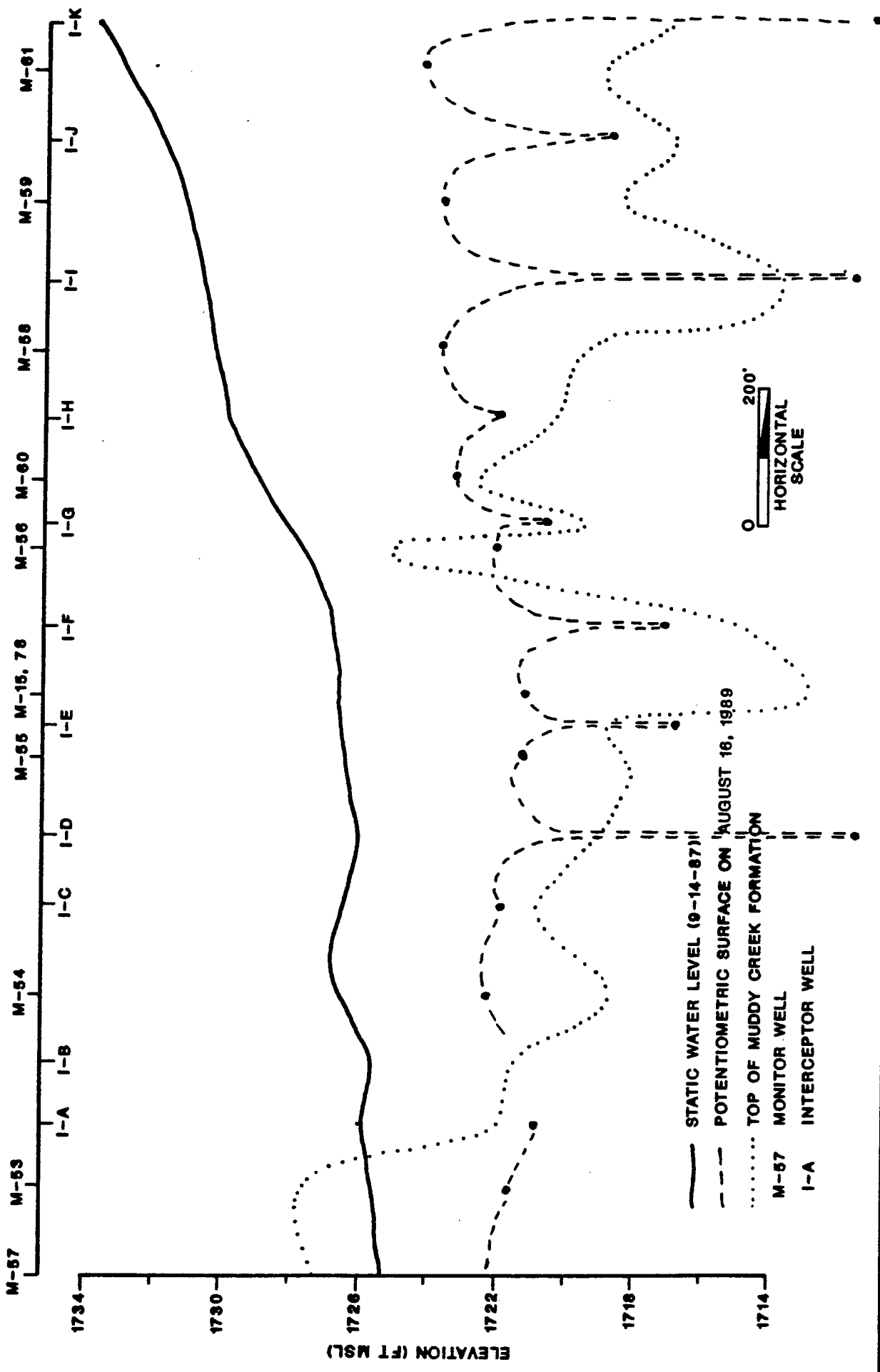


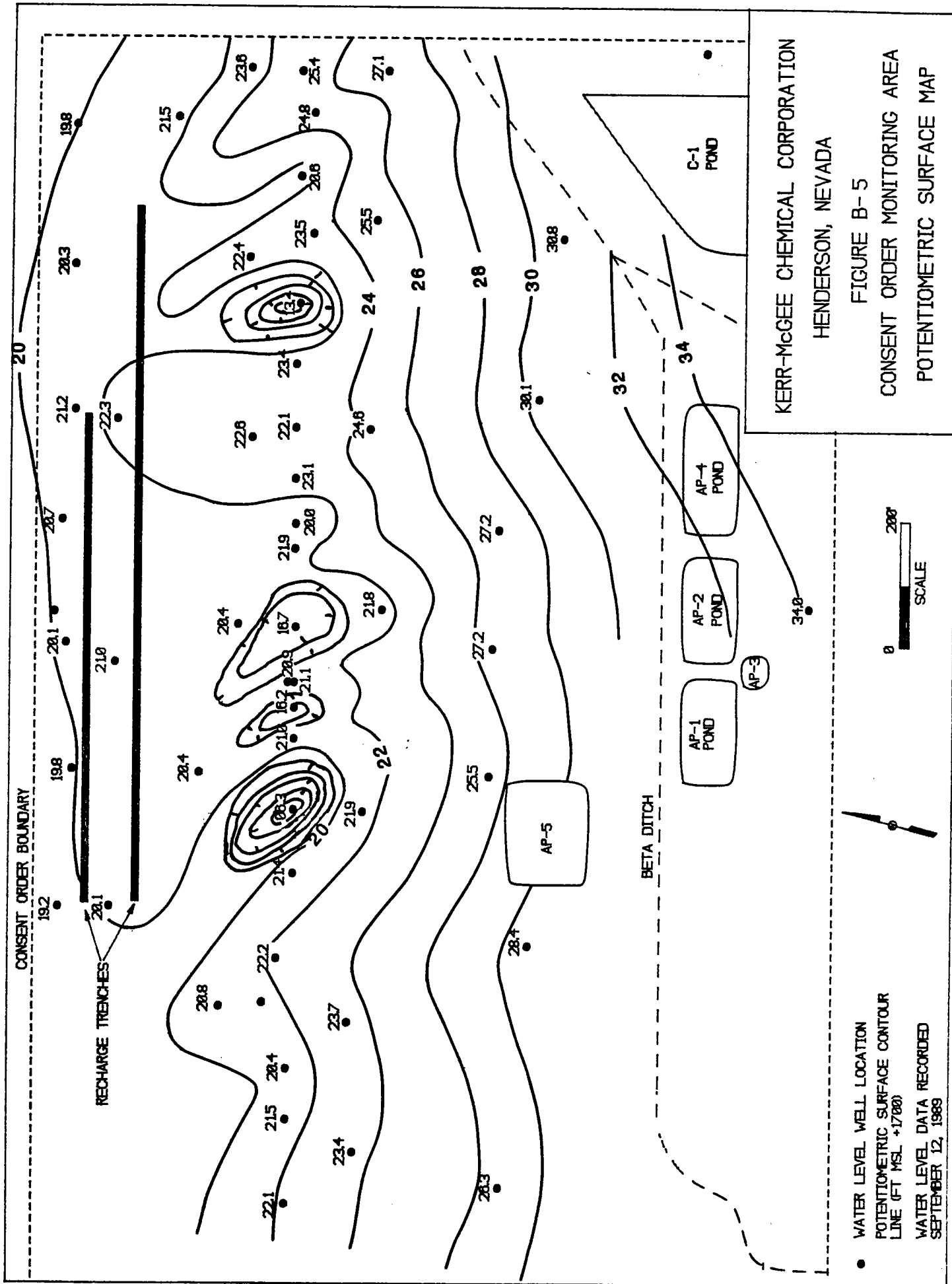
KERR-McGEE CHEMICAL CORPORATION  
 HENDERSON, NEVADA  
 FIGURE B-3  
 CONSENT ORDER MONITORING AREA  
 POTENTIOMETRIC SURFACE MAP



- WATER LEVEL WELL LOCATION
- POTENTIOMETRIC SURFACE CONTOUR LINE (FT MSL +1700)
- WATER LEVEL DATA RECORDED AUGUST 16, 1988

**KERR-MCGEE CHEMICAL CORPORATION  
HENDERSON, NEVADA  
GROUNDWATER INTERCEPTOR LINE CROSS-SECTION  
FIGURE B-4**

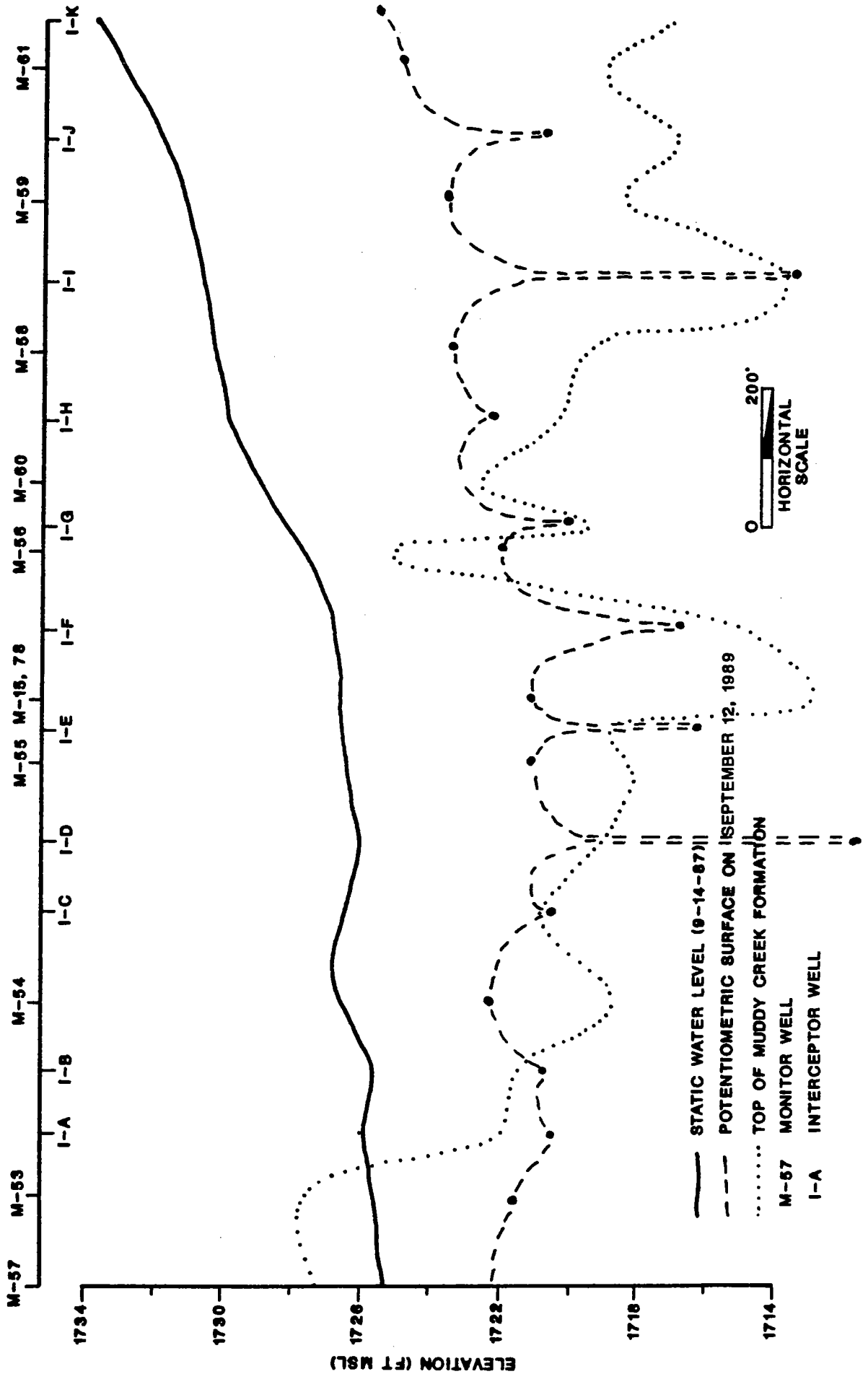




KERR-McGEE CHEMICAL CORPORATION  
 HENDERSON, NEVADA  
 FIGURE B-5  
 CONSENT ORDER MONITORING AREA  
 POTENTIOMETRIC SURFACE MAP

● WATER LEVEL WELL LOCATION  
 POTENTIOMETRIC SURFACE CONTOUR  
 LINE (FT MSL +1700)  
 WATER LEVEL DATA RECORDED  
 SEPTEMBER 12, 1989

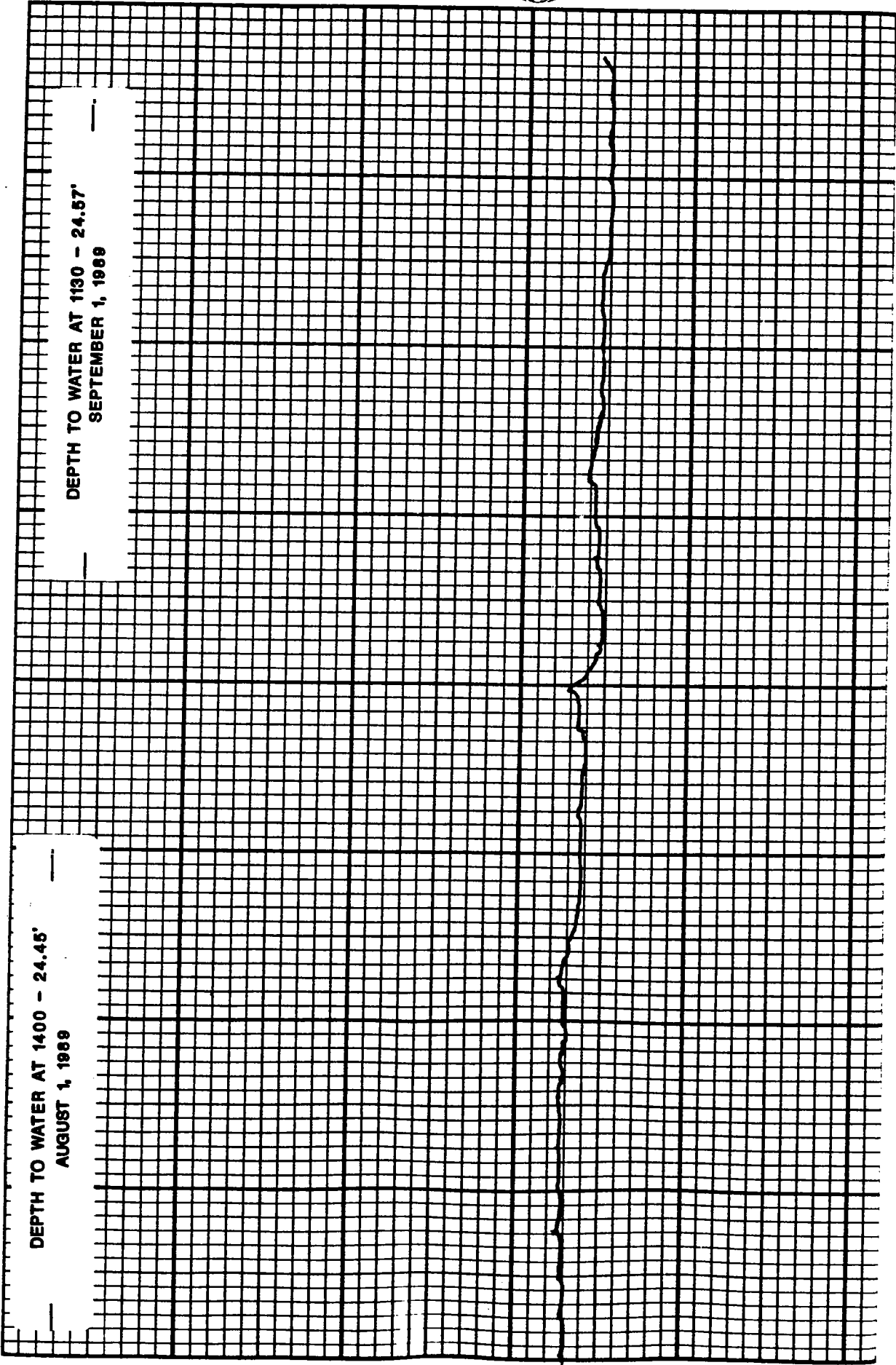
**KERR-MCGEE CHEMICAL CORPORATION  
HENDERSON, NEVADA  
GROUNDWATER INTERCEPTOR LINE CROSS-SECTION  
FIGURE B-6**



**APPENDIX C**  
**CONTINUOUS WATER LEVEL RECORDER CHARTS**

DEPTH TO WATER AT 1400 - 24.45'  
AUGUST 1, 1989

DEPTH TO WATER AT 1130 - 24.57'  
SEPTEMBER 1, 1989



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Inc., Beaverton, Ore.



Chart F-1

-Type F

### CONTINUOUS WATER LEVEL RECORDER CHART

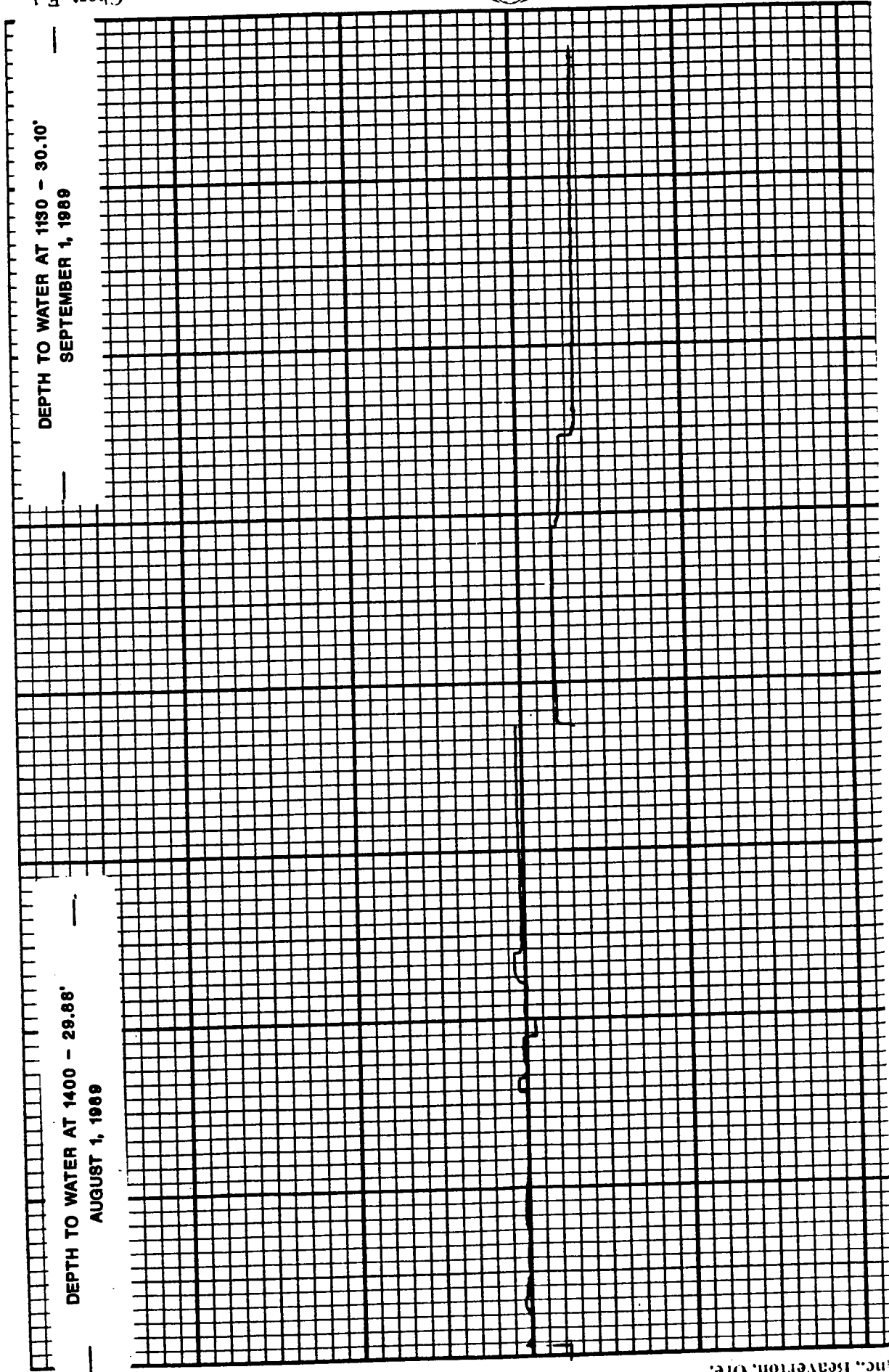
WELL M-80

8-1-89 TO 9-1-89



DEPTH TO WATER AT 1130 - 30.10'  
SEPTEMBER 1, 1989

DEPTH TO WATER AT 1400 - 29.88'  
AUGUST 1, 1989



Printed in U.S.A.

Inc., Beaverton, Ore.

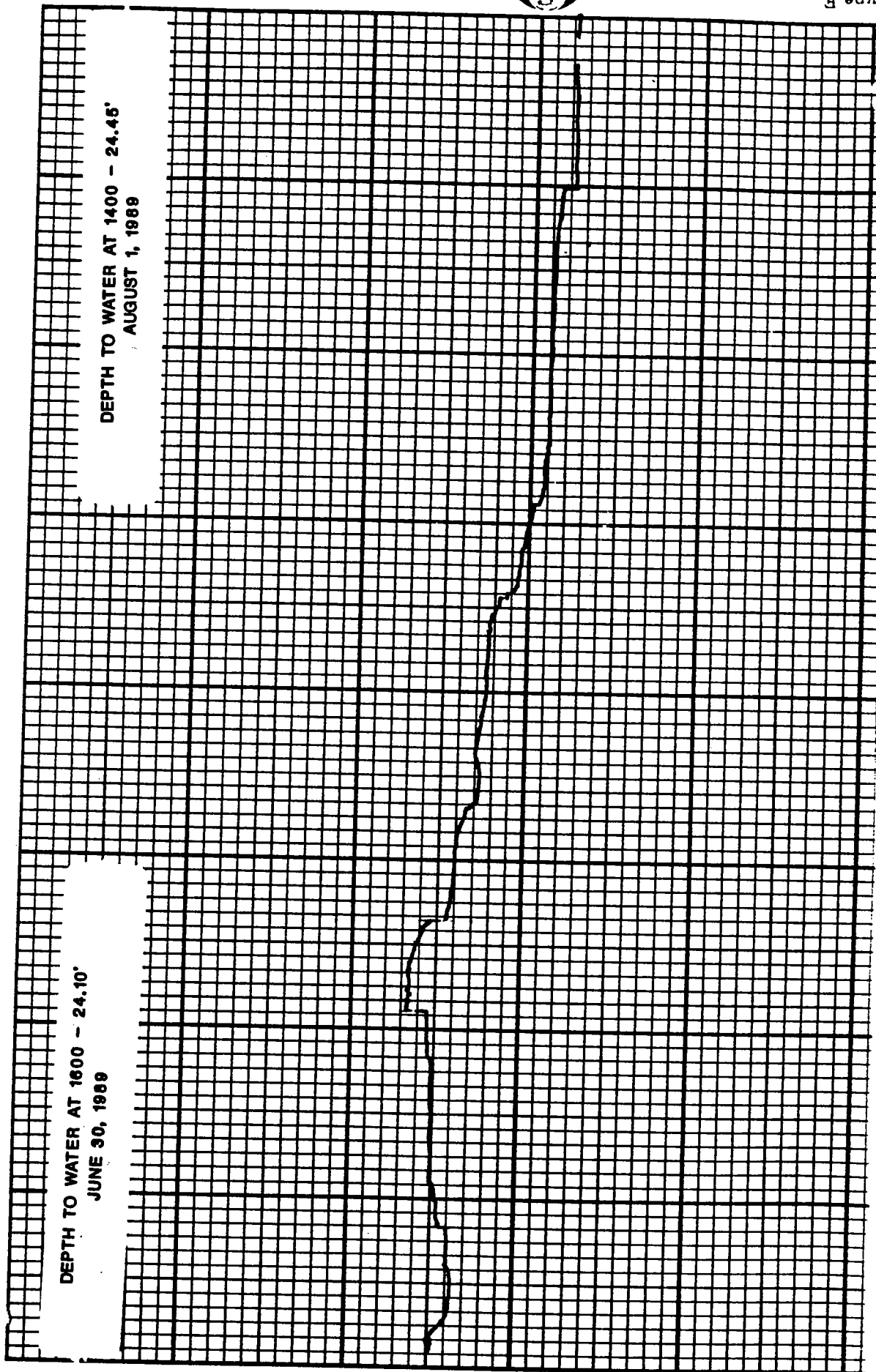
CONTINUOUS WATER LEVEL RECORDER CHART  
WELL M-78  
8-1-89 TO 9-1-89



# CONTINUOUS WATER LEVEL RECORDER CHART

WELL M-80

6-30-89 TO 8-1-89



CONTINUOUS WATER LEVEL RECORDER CHART

WELL M-78

6-30-89 TO 8-1-89

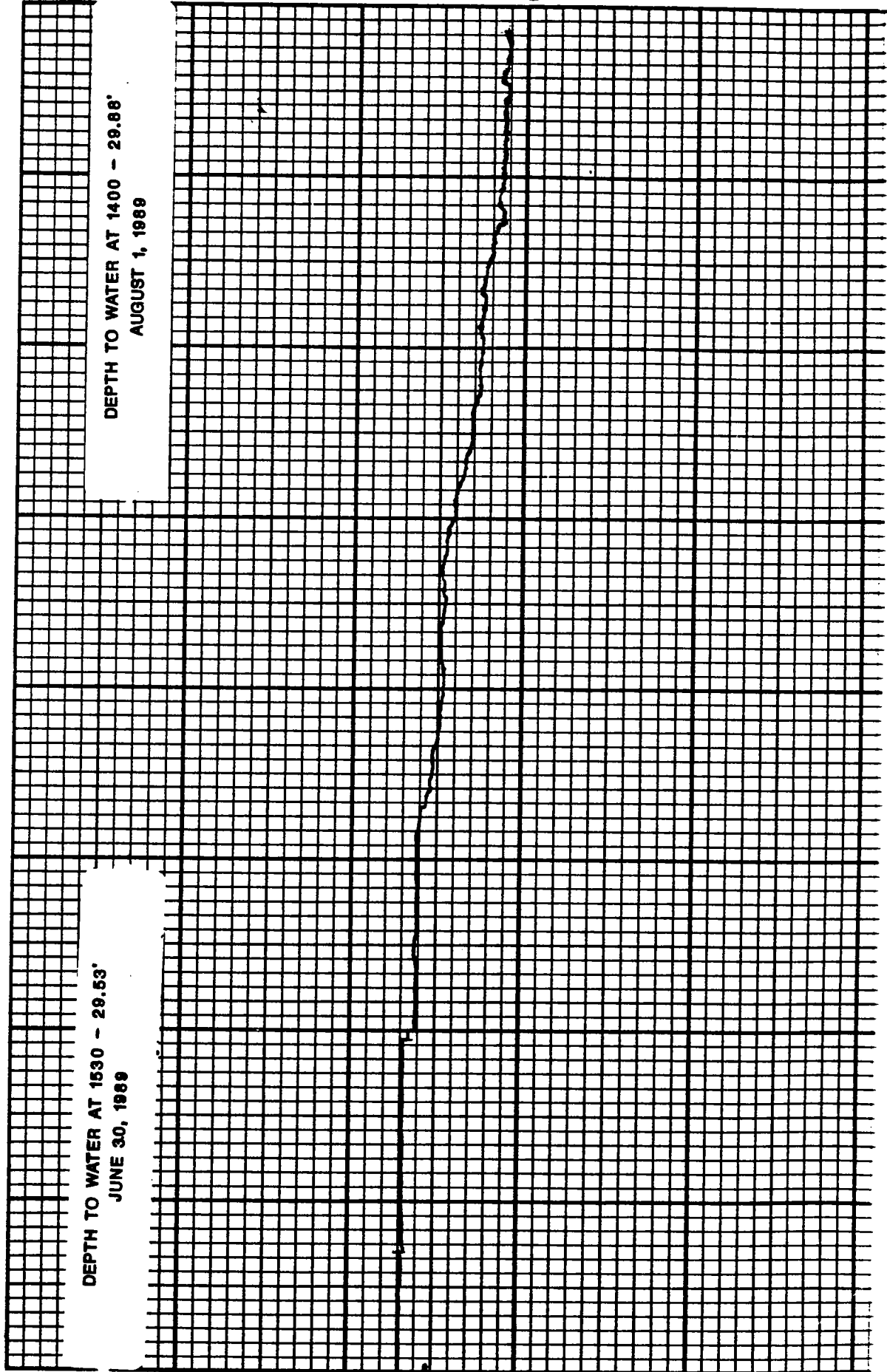


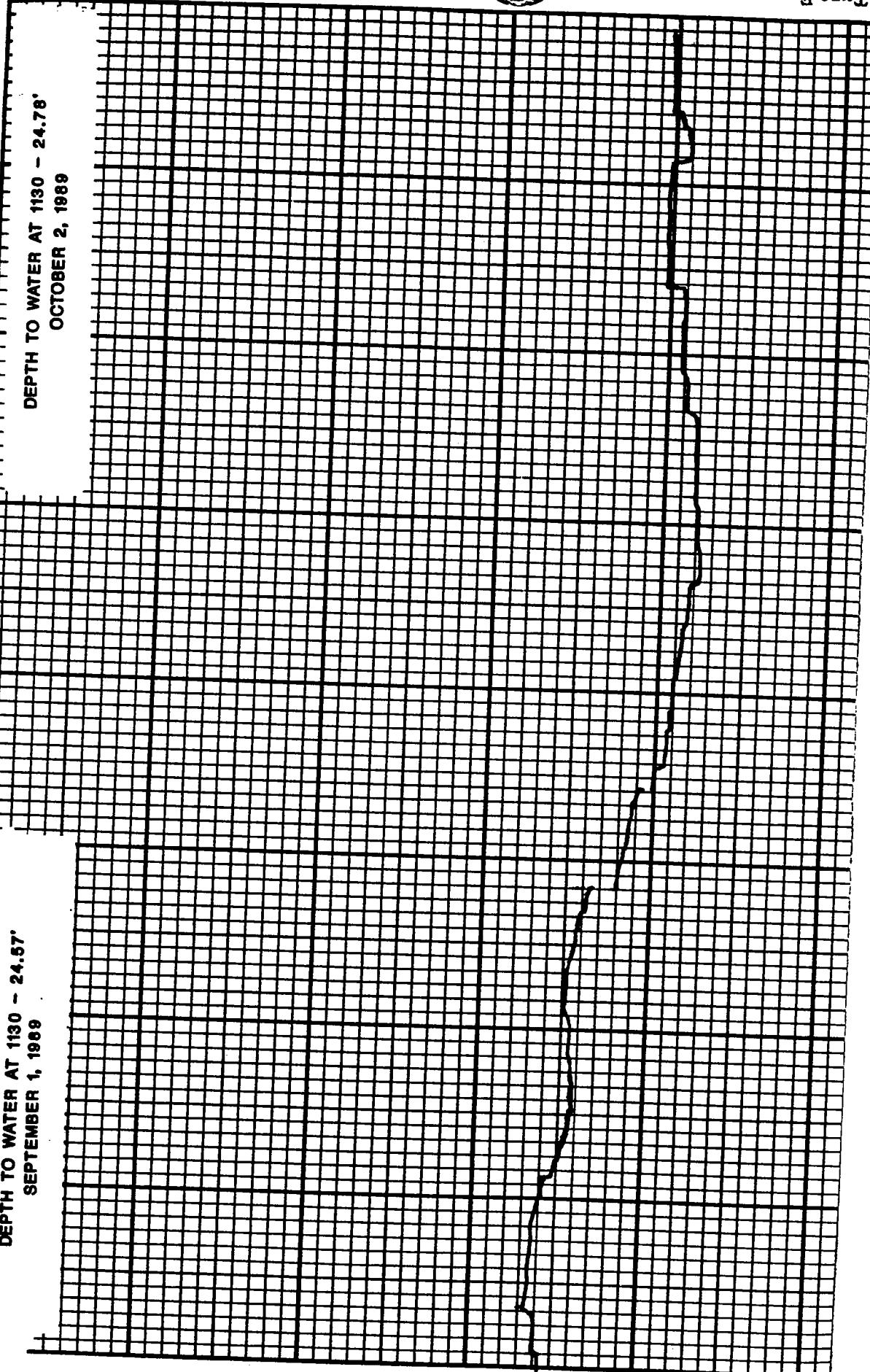
Chart F-1

Type F



DEPTH TO WATER AT 1130 - 24.57'  
SEPTEMBER 1, 1989

DEPTH TO WATER AT 1130 - 24.78'  
OCTOBER 2, 1989

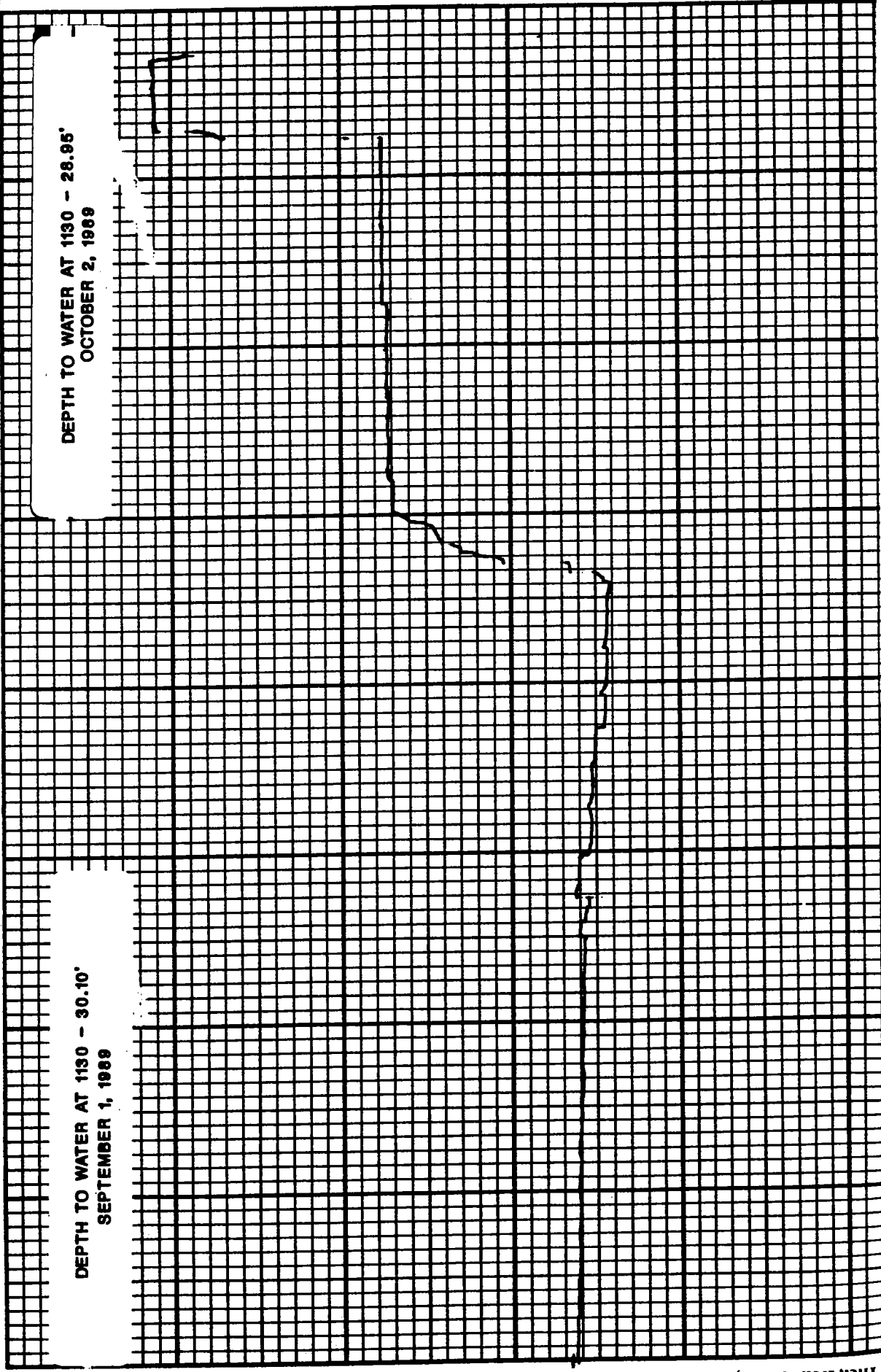


CONTINUOUS WATER LEVEL RECORDER CHART  
WELL M-80  
9-1-89 TO 10-2-89



DEPTH TO WATER AT 1130 - 28.95'  
OCTOBER 2, 1989

DEPTH TO WATER AT 1130 - 30.10'  
SEPTEMBER 1, 1989



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Inc., Beaverton, Ore.

CONTINUOUS WATER LEVEL RECORDER CHART

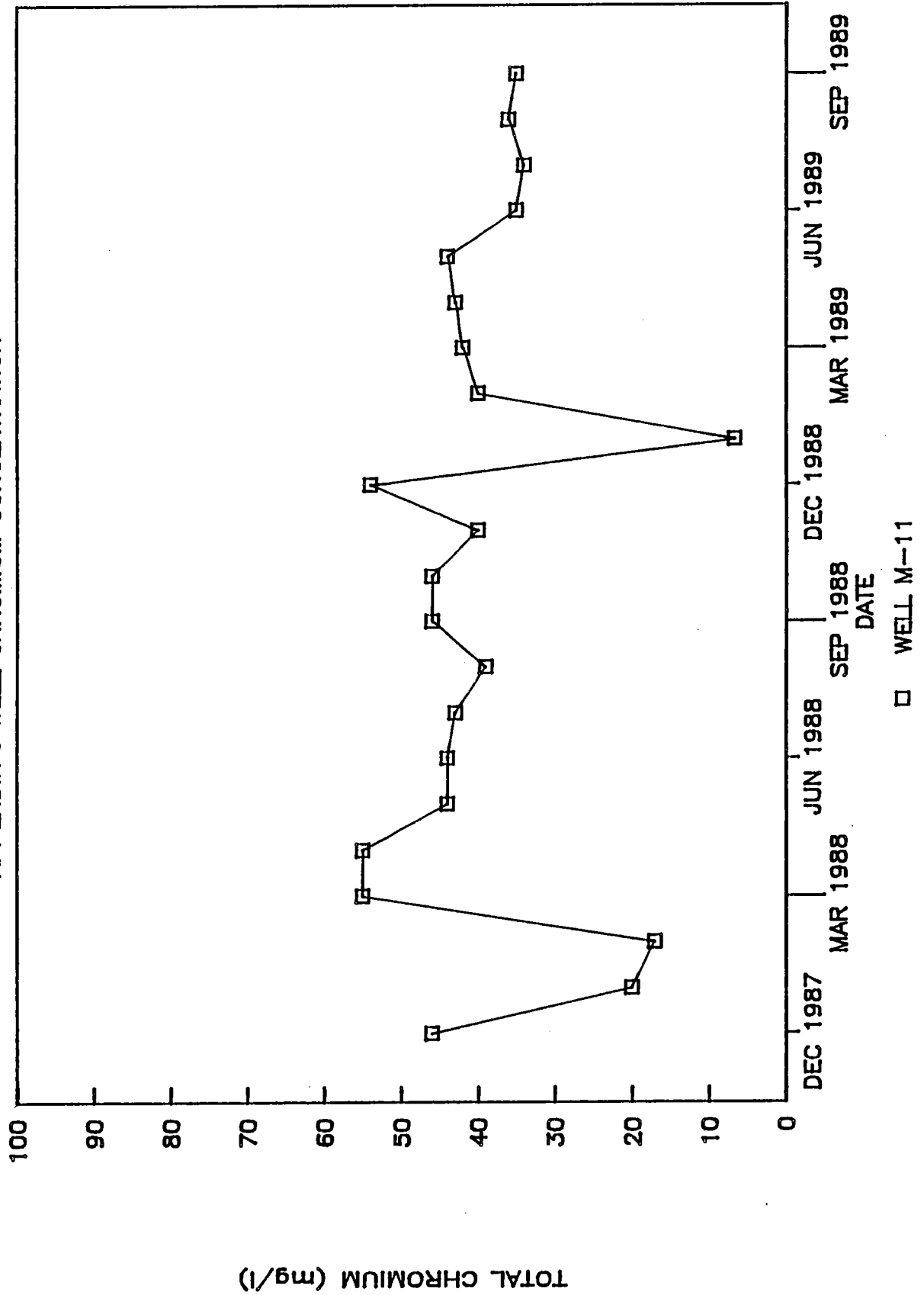
WELL M-78

9-1-89 TO 10-2-89

APPENDIX D  
CHROMIUM CONCENTRATIONS IN  
APPENDIX J AND INTERCEPTOR WELLS

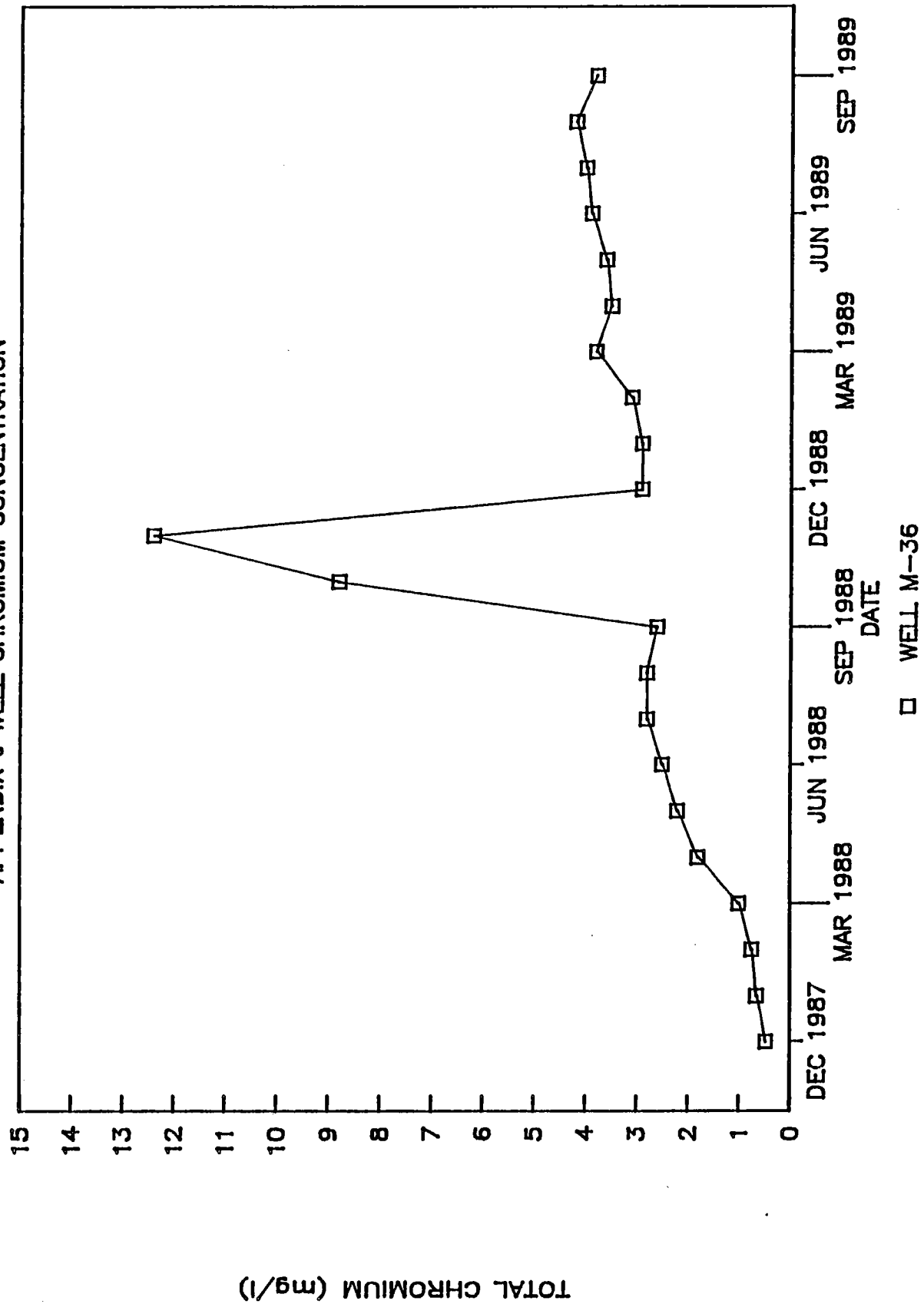
# FIGURE D-1

## APPENDIX J WELL CHROMIUM CONCENTRATION



# FIGURE D-2

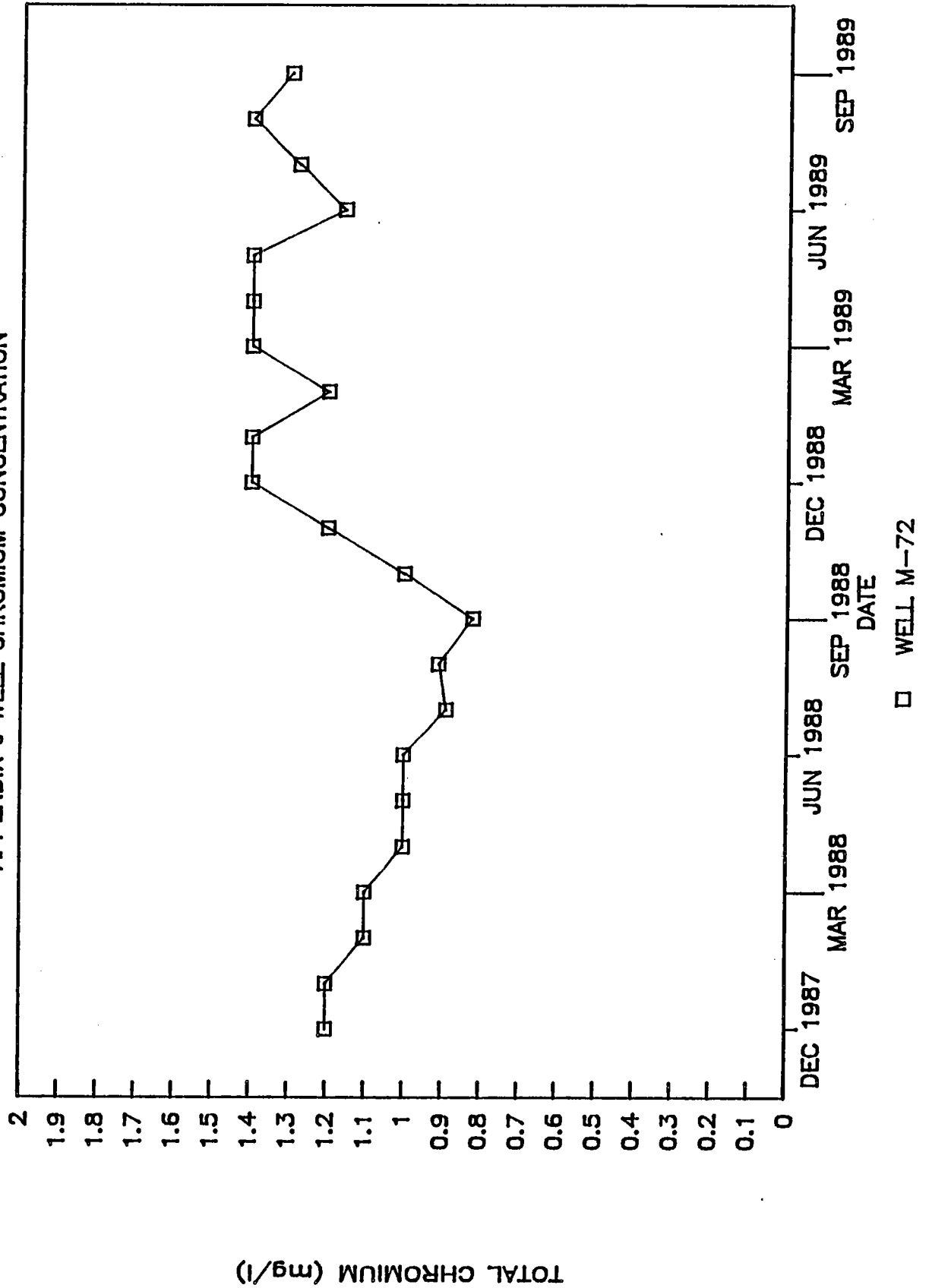
APPENDIX J WELL CHROMIUM CONCENTRATION





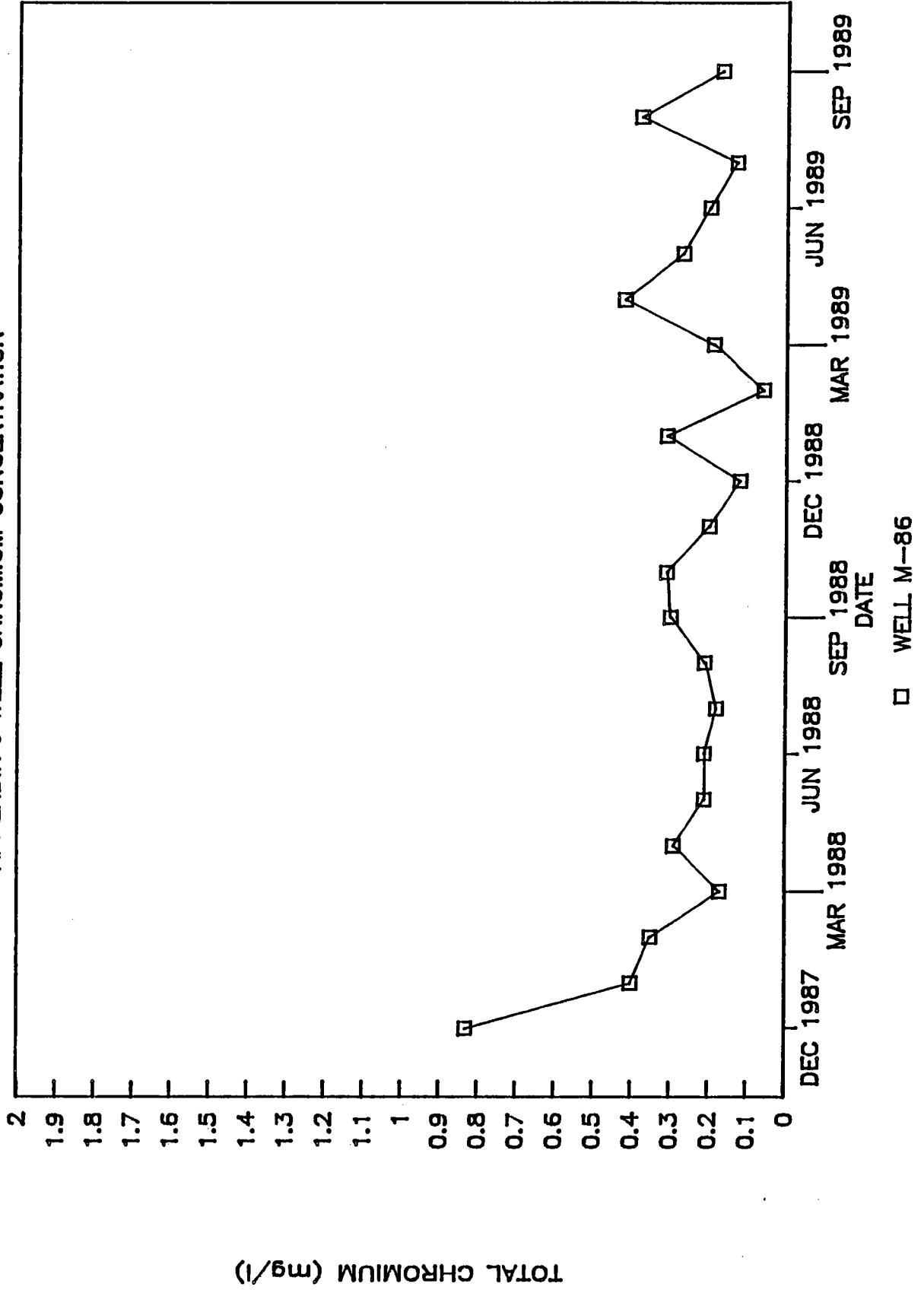
# FIGURE D-3

APPENDIX J WELL CHROMIUM CONCENTRATION



# FIGURE D-4

## APPENDIX J WELL CHROMIUM CONCENTRATION



# FIGURE D-5

APPENDIX J WELL CHROMIUM CONCENTRATION

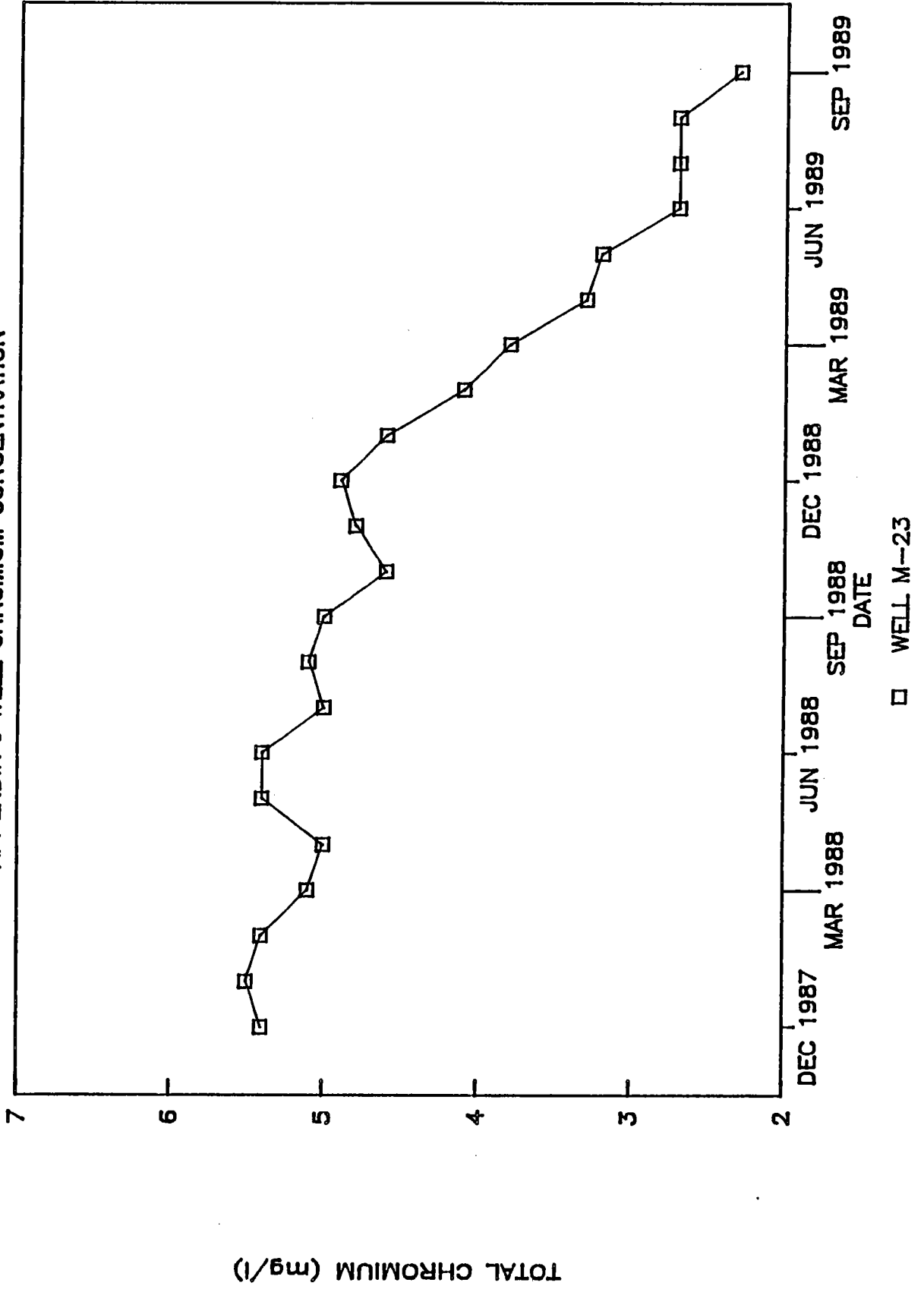
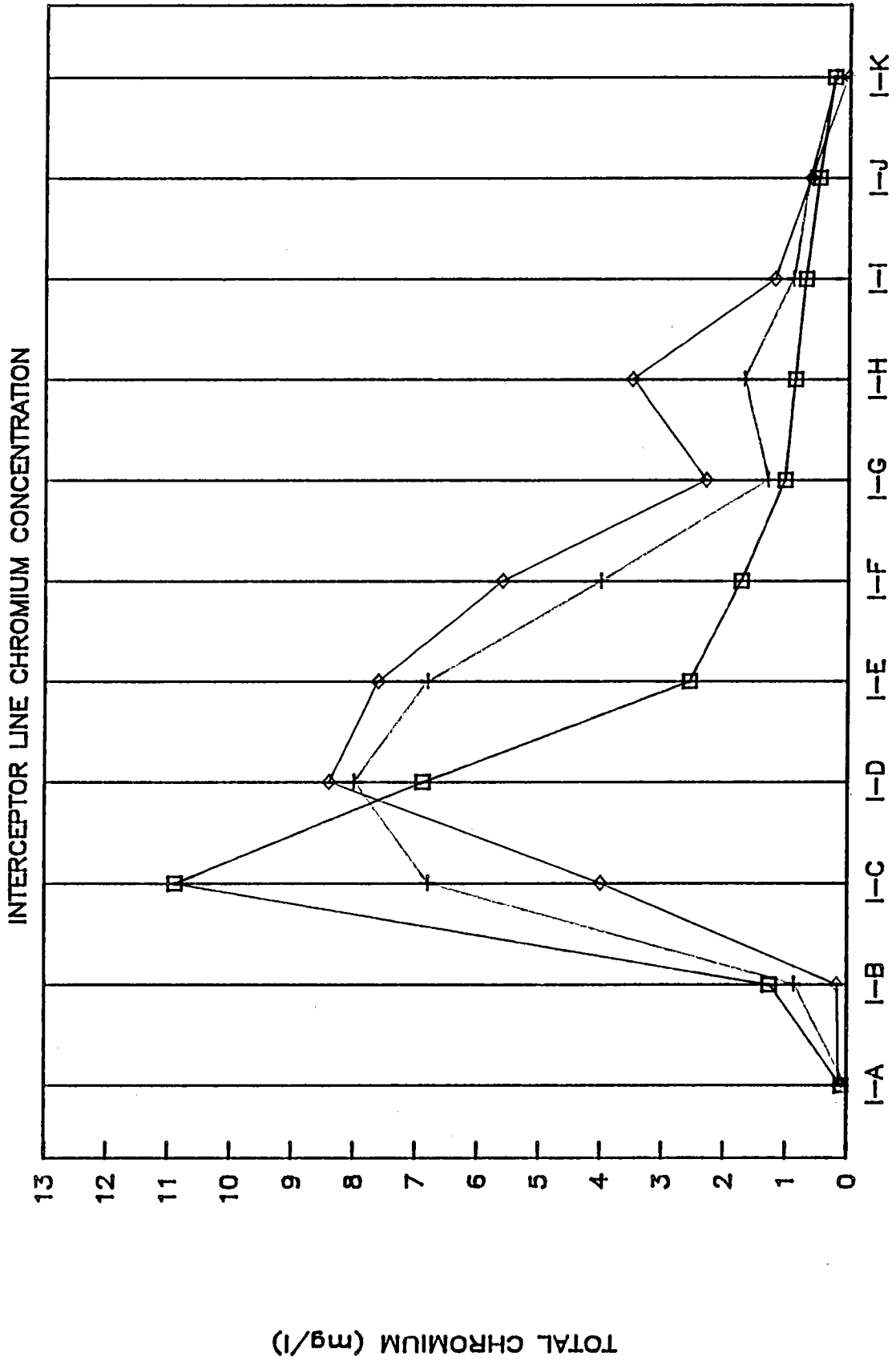


FIGURE D-6



INTERCEPTOR WELL NUMBER  
□ JAN 1988 + NOV 1988 ◇ SEPT 1989