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United States Air Force Aeronautical Systems Center

Air Force Plant 4
Fort Worth, Texas

INSTALLATION RESTORATION PROGRAM (IRP)
COMPREHENSIVE SAMPLING LETTER REPORT

FINAL

MAY 1996

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By:

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1.0 BACKGROUND

In March 1991, the Environmental Systems Division of Jacobs Engineering Group Inc. (Jacobs) was contracted to perform quarterly groundwater monitoring activities at U.S. Air Force (Air Force) Plant 4 (AFP4), Fort Worth, Texas. These activities are being conducted to aid in the implementation of a final remedial action plan under the Air Force Installation Restoration Program. The objectives of quarterly sampling at AFP4 are to monitor changes in water quality in the Terrace Alluvium and Paluxy aquifers and in surface waters adjacent to AFP4, and to monitor contaminant plumes and the effect of interim remedial actions on plume concentrations.

In July 1991, under Delivery Order 3 (Contract Number F33615-90-D-4009) a draft sampling and analysis plan (SAP), detailing the quarterly sampling methodology, was submitted to the Air Force. An updated version of the SAP, incorporating additions and comments by Mitre Corporation, was submitted in April 1992 (Jacobs 1992), and amended in April 1995 (Jacobs 1995).

This work was a continuation of previous quarterly sampling efforts and was conducted under Delivery Order 12 (Contract Number F41624-94-D-8046). Jacobs submits all acquired data to the Air Force Center for Environmental Excellence for entry into the Installation Restoration Program Information Management System (IRPIMS) database. All data from the first 15 sampling rounds have been submitted.

2.0 SUMMARY OF SAMPLING ACTIVITIES

This letter report discusses sampling activities and analytical results from the fifteenth sampling round, a comprehensive sampling round conducted by Jacobs personnel between 4 October and 17 November 1995. During this period, 242 groundwater monitoring wells, seven city water production wells, and seven surface-water sites were sampled on AFP4 property, Naval Air Station Fort Worth (NASFW), and in the community of White Settlement (Plate 1). Nine monitoring wells were found to be dry and were not sampled.

2.1 SAMPLING PROCEDURES

Groundwater and surface-water sampling procedures that were employed are described in detail in the April 1992 SAP and the April 1995 SAP addendum (Jacobs 1992, 1995). In general, the groundwater sampling procedure was carried out as follows: (1) three well casing volumes were purged and evaluated by measuring the pH, conductivity, and temperature; (2) when these parameters stabilized, samples were collected using a 1.88-inch Teflon bailer with a controlled-flow, bottom-emptying device and stored at 4 degrees Centigrade until they were shipped to the offsite laboratory for analysis. At each of the seven White Settlement municipal water supply wells, groundwater for the environmental sample and parameters measurement was collected directly from a faucet on the delivery pipe at each well while the production pumps were operating. Sampling equipment was usually decontaminated at the end of each day, but on several occasions, equipment from two consecutive days was decontaminated together.

Surface-water samples were collected on 16 October 1995 using a polypropylene pond sampler or a 600-milliliter polypropylene beaker. No unusual stream flow volumes were observed. SW-3A, which is immediately south of Silver Creek Road, was not sampled because the location was dry.

Groundwater and surface-water samples were analyzed by the following methods:

- SW8240 — Volatile Organic Compounds (VOCs)
- SW8270 — Semivolatile Organic Compounds (SVOCs)
- SW8015 (Modified) — Diesel-range Organic Compounds (DRO)
- SW6010 — Metals Screen by Inductively Coupled Plasma (ICP)
- SW7421 — Lead by Graphite Furnace Atomic Absorption

Middle Paluxy and Lower Paluxy wells were analyzed for VOCs by Method E524.2 instead of Method SW8240 to achieve a lower detection limit. Also, some Terrace Alluvium wells on the west side of the plant were purged dry, and did not recover sufficiently to provide enough volume to perform all analyses. In this situation, the VOC sample was taken, and the remaining volume was assigned to whatever analysis was most important for that area (e.g.,

DRO in a fuel-saturation area). Appendices A, B, and C summarize all detected organic and metals results from the comprehensive sampling round.

Purge water from monitoring wells was collected in a portable 325-gallon tank and transferred to the groundwater treatment system in the east parking lot. Purge water was added to the treatment system through a prefiltering system, with the assistance and under the direction of IT Corporation. All purge water generated during the comprehensive round was treated before the field team left the site at the end of the round.

2.2 SAMPLING PROCEDURES AT WELLS WITH FREE PRODUCT

Measurable light nonaqueous phase liquid (LNAPL) was encountered in four wells. Odors noted at these wells were tentatively identified as diesel or jet fuel. Purging and sampling procedures were the same as for other groundwater monitoring wells with the following modifications.

In wells with measurable floating product, a 2-inch flush-threaded polyvinyl chloride (PVC) pipe was lowered to within approximately 2 feet of the bottom of the well. The well was then purged through the 2-inch pipe with a disposable bailer, during which time the water level was monitored with an interface probe to ensure that the product-water interface was not drawn below the bottom of the 2-inch pipe.

In one Terrace Alluvium well in AFP4 Landfill 3 (W-130), both LNAPL and dense nonaqueous phase liquid (DNAPL) were encountered. The 2-inch-diameter well was purged with a disposable bailer to disturb the DNAPL as little as possible. The water level was drawn down before one full casing volume was removed, and subsequently recovered very slowly. The well only recovered enough water to collect a VOC sample.

Purge water that was contaminated with fuel or other nonaqueous phase liquid (NAPL) was collected and transported separately, and added to the oil-water separator at the west treatment system.

2.3 WELL MAINTENANCE

Well locks were found to be corroded and inoperable at numerous locations, and a number of well plugs had deteriorated and required replacement. Twenty-seven padlocks and 19 well plugs were replaced on wells at AFP4 and NASFW.

The stickup PVC pipe of well FSA-3-01 was found to be broken off at the ground surface and was rebuilt with a flush-mount completion. The Triloc pump was removed from 2-inch-diameter Terrace Alluvium well HM-103, and the existing broken casing was repaired and cemented in place. Approximate measuring point changes due to well repairs are as follows:

- FSA-3-01 - 2 feet
- HM-103 + 0.1 foot

Existing Triloc pumps were repaired at approximately 15 locations. Conditions usually required that the pump heads and O-rings be replaced, along with pump pistons and O-rings at several locations. Triloc pumps were installed in wells HM-24, HM-88, HM-111, HM-113, and HM-120 to facilitate future sampling. The Triloc pump in well W-149 (2-inch-diameter) was installed temporarily for the intrinsic bioremediation study in 1995. It was removed to allow Jacobs personnel to use sampling methods consistent with previous quarterly monitoring. A broken Triloc pump was removed from well HM-73, and the well was subsequently purged with a nondedicated submersible pump.

3.0 OBSERVATIONS AND PROBLEMS

Dry wells. Nine wells contained no water (Appendix D), and a number of wells did not recover sufficiently after purging to collect a full suite of samples. Samples were not collected at the following wells because they were dry:

- P-14U
- P-26U
- P-31U
- P-5US
- P-11US
- P-13US
- GMI-01M
- W-133U
- W-164

These wells have been observed to be dry on all previous occasions, and could be considered for abandonment.

Farmers Branch Surface Locations. Concentrations from samples from the aqueduct outlet (EGL-2) and one downstream location (LF05-S5) have returned to a range of concentrations that is comparable to those recorded before April 1995 (after recording anomalously high concentrations at these locations during the past two quarters). However, the Farmers Branch sample from LF05-S6 remains anomalously high, and the sample from LF05-S7 registered an increase during the October 1995 sampling round. The reason for these fluctuations is not known, but it is possible that it is a seasonal effect. Similar increases in concentration, although somewhat smaller in magnitude, were observed at some of the same locations in May 1993 and January 1994 (Appendix E).

Groundwater Elevations. A groundwater elevation map of the AFP4 vicinity (Plate 2) was created to assist in interpreting the extent of trichloroethylene (TCE) contamination. The data used were acquired by IT Corporation (IT Corp) during their final monthly groundwater measurements in June 1995 (IT Corp 1995). Trinity River elevations from Rust Geotech's hydrogeologic reconnaisance report (Rust Geotech 1995a) were used to control the eastern boundary of NASFW, and the Lake Worth spillway elevation was used as an approximate lake surface elevation, forming the north boundary.

Laboratory Quality Control. The laboratory, BC Analytical Laboratory (BCA), experienced problems with blank contamination, surrogate spikes, detection limits, and analytical batch control. These problems are discussed in more detail in the Data Validation Letter Report (Jacobs 1996) for this round of sampling.

4.0 SUMMARY OF ANALYTICAL RESULTS

All analyses during the fifteenth round were performed by BCA's laboratory in Glendale, California. Plate 3 shows TCE concentrations in the Terrace Alluvium wells sampled during the October/November 1995 sampling round.

Appendices A, B, and C summarize the analytical results, maximum contaminant levels (MCLs), and practical quantitation limits (PQLs) for all locations sampled during the October/November 1995 round. Appendix D contains results of field parameter measurements. Appendix E contains a comparison of results from this round to previous rounds. Because of the volume of analytical results and quality information generated during this sampling effort, those raw data have not been included in this report. Appendix F contains photographs of sampling activities.

VOC analyses were performed on samples from all locations. Method E524.2 was used for Middle Paluxy monitoring wells, City of White Settlement production wells, and two U.S. Geological Survey (USGS) monitoring wells from the Lower Paluxy. Method SW8240 was used for all other samples. Analyses for SVOCs (SW8270), DRO (SW8015 Modified), metals (SW6010), and lead (SW7421) were performed on samples from all wells and surface locations, as long as enough water could be generated to fulfill sample volume requirements.

4.1 VOLATILE ORGANIC COMPOUNDS

TCE and its degradation products (cis-1,2-dichloroethylene [DCE], trans-1,2-DCE, and vinyl chloride) are the organic compounds of primary concern at AFP4. The charts in Appendix E depict general trends of concentrations of these compounds since Jacobs began sampling at AFP4 in October 1991. An additional, earlier data point, extracted from reports by Hargis & Associates (1989a,b,c), Rust Geotech (1995a), or Radian (1991), is included in each chart for reference.

Middle Paluxy Wells. TCE was not reported above the PQLs at any Middle Paluxy wells, but cis-1,2-DCE was reported at the PQL (2.0 micrograms per liter [µg/L]) at well P-7M, and at 8.5 µg/L at well P-6M. These results are generally consistent with previous sampling rounds (Appendix E). Well P-6M also contained 4.6 µg/L vinyl chloride, which has been seen intermittently at this location. Toluene was detected in the samples from wells P-7M and P-8M at 5.1 µg/L and 4.1 µg/L, respectively.

TCE and TCE-derived compounds were reported at or near their detection limits (below their PQLs) in the following Middle Paluxy wells, and are considered to be estimated ("J"): P-5M, P-9M, P-11M, P-12M, P-24M, P-26M, P-29M, and P-30M. Previous results at some of these locations suggest that TCE-derived compounds are present at very low concentrations. Only wells P-24M and P-26M have not had previously reported TCE compounds.

Upper Paluxy Wells. Concentrations of TCE and related compounds in Upper Paluxy wells were within an expected range of values (Appendix E, pages E-3, E-4).

Paluxy Upper Sand Wells. Concentrations of TCE and related compounds in Paluxy Upper Sand wells were within an expected range of values, except for P-15US, which returned to levels of concentration observed in January 1992, after increasing somewhat in May 1993 (Appendix E, page E-5). Concentrations at AFP4 flightline well P-19US continue to be anomalously high, because of its location in relation to the currently defined window area. However, the recent results at nearby Terrace Alluvium well HM-112 (see next paragraph) suggests a source of contaminated shallow groundwater in proximity to P-19US, and possible local thinning of the Walnut Formation in the vicinity of the two wells. Vertical migration via the P-19US wellbore also remains a possibility.

Terrace Alluvium Wells. Results for TCE and related compounds at Terrace Alluvium locations were generally in a range of expected values, with the following exceptions. The TCE concentration in the sample from AFP4 flightline well HM-112 was 14,000 µg/L during the comprehensive sampling round, compared to 8,400 µg/L in June 1993. It will be resampled during a future quarterly round to confirm this concentration. The VOC sample from AFP4 Landfill 3 well F-214 indicates a significant drop in the TCE concentration since July 1995 (Appendix E, page E-9). Well F-214 contains small amounts of both LNAPL and DNAPL, and it is anticipated that the large difference is due to the "nugget effect" of small amounts of DNAPL collected with the groundwater sample during previous sampling rounds. If that is the case, the amount measured during the comprehensive round (15,000 µg/L) would be more indicative of actual groundwater concentrations.

Results for other VOC compounds generally show little change from the May/June 1993 comprehensive sampling round. Tetrachloroethene was again reported in Terace Alluvium wells HM-64, HM-71, and HM-79; extremely high concentrations (Appendix A, Table A-2) of methylene chloride, toluene, and 1,2-dichloroethane were again reported at HM-51 (Fire Training Area #2) and at W-130 (AFP4 Landfill 3); and benzene, toluene, ethylbenzene, and xylene (BTEX) compounds were reported at wells in Fuel Saturation Area 1 (W-139L, W-139U, W-140L, W-140U, W-141L, W-141U).

AFP4 and NAS Fort Worth Surface Locations. Surface sites were sampled along Meandering Road Creek and along Farmers Branch on 16 October 1995. Concentrations at Farmers Branch locations fluctuated according to where the sample was taken. At EGL-2 and LF05-S5, both of which are upstream from the confluence with the unnamed tributary (near the Carswell Golf Course Clubhouse), concentrations declined or remained about the same as they were in July 1995. Concentrations increased at LF05-S7 (unnamed tributary) and LF05-S6 (downstream from confluence), presumably reflecting higher concentrations in the groundwater feeding the unnamed tributary. Results from Meandering Road Creek locations were generally consistent with previous sampling rounds.

4.2 SEMIVOLATILES AND DIESEL-RANGE ORGANICS

Fuel-related SVOCs, primarily 1,2-dichlorobenzene, 1,4-dichlorbenzene, naphthalene, and 2-methylnaphthalene, occurred above the PQLs in Terrace Alluvium wells in the following areas around the AFP4 site: AFP4 Landfills 1 and 3, Fuel Saturation Areas 1 and 3, the die yard chemical pits, and at well HM-47, adjacent to the wastewater collection basins (Appendix A, Table A-3). All of these sites have been previously identified as being contaminated with fuel-related compounds, and none of the recent results were significantly different from those obtained in May/June 1993 (Jacobs 1993).

DRO (SW8015 Modified) were also detected above the PQLs in the same areas referred to in the previous paragraph, with the exception of the wastewater collection basins. DRO compounds were observed more frequently than their semivolatile counterparts at Fuel Saturation Area 3 ("FSA-3-nn" wells), but occurred at relatively low concentrations (Appendix A, Table A-4).

4.3 METALS

Samples collected during Round 15 were analyzed by Method SW6010 (ICP metals screen) and SW7421 (lead by GFAA). Samples were, as in past rounds, unfiltered and preserved with nitric acid. At the laboratory, the SW6010 sample underwent an additional hydrochloric acid digestion during the SW3010 preparation for analysis.

After reviewing the data and comparing the results with the turbidities recorded in Appendix D, it is believed that some of the metals results reported probably include metals leached from sediment or colloidal material collected with the samples in the field. Specifically, aluminum, iron, manganese, and lead may be derived from sediment suspended in the groundwater instead of from the groundwater itself.

It should be noted that lead was not detected by either method in any of the surface location samples and in only one of the samples from the City of White Settlement wells, which are pumped continuously and probably relatively sediment-free. It is suggested that metals results reported at low concentrations be used with caution.

When compared to data from the May/June 1993 comprehensive round, no clear trends could be observed. Intermittent low levels of lead, chromium, cadmium, and other metals continue to be reported in widely distributed areas around the plant, and at NASFW, including areas that are not believed to have been contaminated by operations at either facility.

All SW6010 metals detected above the PQLs are reported in Appendix B, and lead by SW7421 and chromium by SW6010 are summarized in Appendix C. Metals results on diskette are available on request from Jacobs. Several formats are available.

4.4 DATA QUALITY

When the laboratory reported TCE and TCE-derived compounds below the PQLs but above the laboratory detection limits, the data are included in Appendix A and qualified as estimated (J). These data were qualified because the results of previous sampling indicate that these estimated concentrations frequently reflect actual concentrations.

Data validation has been completed by Jacobs' subcontractor, EcoChem, Inc., and will be reported separately.

In addition, common laboratory contaminants were frequently reported in samples, but may not be related to groundwater quality (methylene chloride, acetone, and toluene by Method SW8240 and bis(2-ethylhexyl) phthalate by Method SW8270).

Data for all analytical methods exceeded the completeness requirement of 95 percent.

5.0 RECOMMENDATIONS

Beginning in January 1996, normal quarterly groundwater sampling will resume at AFP4. The January round will focus on Terrace Alluvium locations, followed by a round in April 1996 that will concentrate on Paluxy wells.

Several wells were identified during the comprehensive round that were in need of repairs but where groundwater quality was not immediately threatened. These wells will be repaired during future rounds as time allows. All wells that had deteriorated or had been damaged sufficiently to allow surface-water infiltration were repaired during October/November 1995.

6.0 REFERENCES

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Worth, Texas, and U.S. Air Force Center for Environmental Excellence (AFCEE/ERB), Brooks Air Force Base, Texas, under Contract No. F41624-94-D-8050/0001. Radian Corporation. 1991. Remedial Investigation Report for the Flightline Area, Carswell AFB, October 1991.

APPENDIX A

Positive Organic Detects: October/November 1995

Location	Result (µg/L)	Lab Qual.	JEG Qual.	Compound	MDL	PQL	Dilut. Factor
Middle Paluxy Wells							
P-5M	0.86	J		cis-1,2-DICHLOROETHYLENE	0.08	2.0	1
P-5M	0.31	J		TRICHLOROETHYLENE (TCE)	0.20	2.0	1
P-6M	8.50			cis-1,2-DICHLOROETHYLENE	0.08	2.0	1
P-6M	0.44	J		trans-1,2-DICHLOROETHYLENE	0.20	2.0	1
P-6M	4.60			VINYL CHLORIDE	0.20	2.0	1
P-7M	2.00			cis-1,2-DICHLOROETHYLENE	0.08	2.0	1
P-7M	5.10			TOLUENE	0.07	2.0	1
P-7M	0.64	J		VINYL CHLORIDE	0.20	2.0	1
P-8M	4.10			TOLUENE	0.07	2.0	1
P-9M	0.12	J		cis-1,2-DICHLOROETHYLENE	0.08	2.0	1
P-11M	0.66	J		TRICHLOROETHYLENE (TCE)	0.20	2.0	1
P-11M (dup.)	0.72	J		TRICHLOROETHYLENE (TCE)	0.20	2.0	1
P-12M	0.36	J		TRICHLOROETHYLENE (TCE)	0.20	2.0	1
P-24M	0.25	J		cis-1,2-DICHLOROETHYLENE	0.08	2.0	1
P-26M	0.84	J		TRICHLOROETHYLENE (TCE)	0.20	2.0	1
P-29M	0.43	J		cis-1,2-DICHLOROETHYLENE	0.08	2.0	1
P-30M	0.38	J		TRICHLOROETHYLENE (TCE)	0.20	2.0	1
WS-3	0.37	J		cis-1,2-DICHLOROETHYLENE	0.08	2.0	1
WS-3	0.31	J		TRICHLOROETHYLENE (TCE)	0.20	2.0	1

NOTES: Compounds reported below the PQLs are qualified by the laboratory as estimated ("J"), and are frequently due to laboratory contamination. These estimated ("J") results are included in this table for TCE-derived compounds only, and are presented for informational purposes.

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

J = Estimated (below PQL)
dup. = field duplicate
µg/L = micrograms per liter = parts per billion

Location	Result (µg/L)	Lab Qual.	JEG Qual.	Compound	MDL	PQL	Dilut. Factor
Upper Paluxy Wells							
P-5UN	38.0			VINYL CHLORIDE	0.9	10	1
P-5UN	35.0			cis-1,2-DICHLOROETHYLENE	0.9	5	1
P-8UN	5.4			TRICHLOROETHYLENE (TCE)	1.0	5	1
P-8UN	1.0	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
P-11U	17.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
P-15U	13.0			ACETONE	7.0	10	1
P-21U	10.0		e	ACETONE	7.0	10	1
P-22U	56.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
P-22U	40.0			VINYL CHLORIDE	0.9	10	1
P-22U	150			cis-1,2-DICHLOROETHYLENE	0.9	5	1
P-22U	3.1	J		trans-1,2-DICHLOROETHYLENE	0.9	5	1
P-24U	1.8	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
P-27U	7.6	J		TRICHLOROETHYLENE (TCE)	5.0	30	5
P-27U	27.0	J		VINYL CHLORIDE	5.0	50	5
P-27U	350			cis-1,2-DICHLOROETHYLENE	5.0	30	5
USGS09PU	12.0		B	ACETONE	7.0	10	1
Paluxy Upper Sand Wells							
P-8US	540			ACETONE	200.0	200	20
P-8US	1,600			TRICHLOROETHYLENE (TCE)	20.0	100	20
P-8US	120			cis-1,2-DICHLOROETHYLENE	20.0	100	20
P-9US	120			TRICHLOROETHYLENE (TCE)	1.0	5	1
P-9US	2.5	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
P-9US (dup.)	110			TRICHLOROETHYLENE (TCE)	1.0	5	1
P-9US (dup.)	2.5	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
P-14US	82.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
P-14US	15.0			cis-1,2-DICHLOROETHYLENE	0.9	5	1
P-15US	480			TRICHLOROETHYLENE (TCE)	5.0	30	5
P-15US	150			cis-1,2-DICHLOROETHYLENE	5.0	30	5
P-16US	540			TRICHLOROETHYLENE (TCE)	5.0	30	5
P-16US	230			cis-1,2-DICHLOROETHYLENE	5.0	30	5
P-19US	7,200			TRICHLOROETHYLENE (TCE)	50.0	300	50
P-19US	700			cis-1,2-DICHLOROETHYLENE	50.0	300	50
AFP4 Terrace Alluvium Wells							
DOCK-17	8.6			cis-1,2-DICHLOROETHYLENE	0.9	5	1
F-200	16.0		Ba	ACETONE	7.0	10	1
F-203	17.0			BENZENE	2.0	10	2
F-203	48.0			ETHYLBENZENE	2.0	10	2
F-203	38.0			TOTAL XYLENES	6.0	10	2
F-203	200			TRICHLOROETHYLENE (TCE)	2.0	10	2
F-203	24.0			VINYL CHLORIDE	2.0	20	2
F-203	46.0			cis-1,2-DICHLOROETHYLENE	2.0	10	2
F-203	15.0			trans-1,2-DICHLOROETHYLENE	2.0	10	2
F-203 (dup.)	43.0			ETHYLBENZENE	5.0	30	5
F-203 (dup.)	200			TRICHLOROETHYLENE (TCE)	5.0	30	5
F-203 (dup.)	19.0	J		VINYL CHLORIDE	5.0	50	5
F-203 (dup.)	42.0			cis-1,2-DICHLOROETHYLENE	5.0	30	5

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

J = Estimated (below PQL)
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Location	Result (µg/L)	Lab Qual.	JEG Qual.	Compound	MDL	PQL	Dilut. Factor
F-203 (dup.)	13.0	J		trans-1,2-DICHLOROETHYLENE	5.0	30	5
F-204	0.9	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
F-207	98.0			1,1-DICHLOROETHENE	0.8	5	1
F-207	42.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
F-209	25.0			ACETONE	7.0	10	1
F-211	130			ACETONE	70.0	100	10
F-211	1,300			TRICHLOROETHYLENE (TCE)	10.0	50	10
F-211	26.0	J		cis-1,2-DICHLOROETHYLENE	9.0	50	10
F-214	1,900			METHYLENE CHLORIDE	200.0	1000	200
F-214	6,900			TOLUENE	200.0	1000	200
F-214	15,000			TRICHLOROETHYLENE (TCE)	200.0	1000	200
F-214	1,100	J		VINYL CHLORIDE	200.0	2000	200
F-214	11,000			cis-1,2-DICHLOROETHYLENE	200.0	1000	200
F-215	19.0	J		1,1-DICHLOROETHYLENE	4.0	30	5
F-215	62.0		Ba	ACETONE	40.0	50	5
F-215	720			TRICHLOROETHYLENE (TCE)	5.0	30	5
F-215	12.0	J		cis-1,2-DICHLOROETHYLENE	5.0	30	5
F-216	33.0			1,1-DICHLOROETHYLENE	0.8	5	1
F-216	20.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
F-216	14.0			cis-1,2-DICHLOROETHYLENE	0.9	5	1
F-217	120			TRICHLOROETHYLENE (TCE)	10.0	50	10
F-217	330			VINYL CHLORIDE	9.0	100	10
F-217	810			cis-1,2-DICHLOROETHYLENE	9.0	50	10
F-218	70,000			TRICHLOROETHYLENE (TCE)	500.0	3000	500
F-218	1,600	J		cis-1,2-DICHLOROETHYLENE	500.0	3000	500
F-218 (dup.)	79,000			TRICHLOROETHYLENE (TCE)	500.0	3000	500
F-218 (dup.)	1,600	J		cis-1,2-DICHLOROETHYLENE	500.0	3000	500
F-219	56.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
F-220	160,000			TRICHLOROETHYLENE (TCE)	1.0	5	1
FSA-3-04	11.0		e	ACETONE	7.0	10	1
FSA-3-08	13.0		Be	ACETONE	7.0	10	1
FSA-3-08	9.8			TRICHLOROETHYLENE (TCE)	1.0	5	1
FSA-3-10	21.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
FSA-3-12	17.0		e	TRICHLOROETHYLENE (TCE)	1.0	5	1
FSA-3-14	12.0		e	ACETONE	7.0	10	1
FSA-3-15	2.6	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
FSA-3-15 (dup.)	2.3	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
FSA-3-16	3.2	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
GMI-04M	20.0		e	ACETONE	7.0	10	1
GMI-04M	1.3	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-7	260			ACETONE	70.0	100	10
HM-7	1,200			CHLOROBENZENE	9.0	50	10
HM-7	220			ETHYLBENZENE	9.0	50	10
HM-7	55.0			TOLUENE	9.0	50	10
HM-7	180			TOTAL XYLENES	30.0	50	10
HM-10	51.0			1,1-DICHLOROETHYLENE	0.8	5	1
HM-10	22.0			TRICHLOROETHYLENE (TCE)	1.0	5	1

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HM-10	4.5	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-11	120			TRICHLOROETHYLENE (TCE)	2.0	10	2
HM-11	97.0			cis-1,2-DICHLOROETHYLENE	2.0	10	2
HM-15	16.0		b	ACETONE	7.0	10	1
HM-15	270			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-17	320			ACETONE	200.0	200	20
HM-17	2,400			TRICHLOROETHYLENE (TCE)	20.0	100	20
HM-17	27.0	J		cis-1,2-DICHLOROETHYLENE	20.0	100	20
HM-19	3.6	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-19	9.2			cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-20	35.0			1,1-DICHLOROETHYLENE	4.0	30	5
HM-20	450			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-20	6.2	J		cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-20 (dup.)	34.0			1,1-DICHLOROETHYLENE	4.0	30	5
HM-20 (dup.)	430			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-20 (dup.)	5.3	J		cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-24	30.0		Be	ACETONE	7.0	10	1
HM-24	1.1	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-24 (dup.)	54.0			ACETONE	7.0	10	1
HM-24 (dup.)	1.1	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-26	34.0			1,1-DICHLOROETHYLENE	0.8	5	1
HM-26	19.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-26	9.6			cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-29	670			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-29	13.0	J		cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-30	80.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-31	850			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-31	200			cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-31	12.0	J		trans-1,2-DICHLOROETHYLENE	5.0	30	5
HM-34	11.0		e	ACETONE	7.0	10	1
HM-35	11.0		Be	ACETONE	7.0	10	1
HM-36	11.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-36	5.4			cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-37	29.0			1,1-DICHLOROETHYLENE	0.8	5	1
HM-37	7.8			CHLOROBENZENE	0.9	5	1
HM-37	90.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-37	35.0			VINYL CHLORIDE	0.9	10	1
HM-37	88.0			cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-37	2.6	J		trans-1,2-DICHLOROETHYLENE	0.9	5	1
HM-38	21,000			1,2-DICHLOROETHANE	1.0	10	2
HM-38	140,000			METHYLENE CHLORIDE	2.0	10	2
HM-38	78,000			TOLUENE	2.0	10	2
HM-38	210,000			TRICHLOROETHYLENE (TCE)	2.0	10	2
HM-38	150,000			cis-1,2-DICHLOROETHYLENE	2.0	10	2
HM-38	2,700	J		trans-1,2-DICHLOROETHYLENE	2.0	10	2
HM-41	47.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-41 (dup.)	51.0			TRICHLOROETHYLENE (TCE)	1.0	5	1

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HM-42	14.0		e	ACETONE	7.0	10	1
HM-47	310			CHLOROBENZENE	50.0	300	50
HM-47	5,100			TRICHLOROETHYLENE (TCE)	50.0	300	50
HM-47	680			cis-1,2-DICHLOROETHYLENE	50.0	300	50
HM-49	1.5	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-49	2.2	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-50	56.0			VINYL CHLORIDE	5.0	50	5
HM-50	660			cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-51	60,000			1,2-DICHLOROETHANE	1.0	10	2
HM-51	290,000			METHYLENE CHLORIDE	2.0	10	2
HM-51	58,000			TOLUENE	2.0	10	2
HM-51	200,000			TRICHLOROETHYLENE (TCE)	2.0	10	2
HM-51	17,000	J		VINYL CHLORIDE	2.0	20	2
HM-51	92,000			cis-1,2-DICHLOROETHYLENE	2.0	10	2
HM-52	27.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-53	70.0			ACETONE	7.0	10	1
HM-53	140			BENZENE	0.8	5	1
HM-54	210			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-54 (dup.)	220			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-54 (dup.)	5.2	J		cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-56	30.0			BENZENE	0.8	5	1
HM-58	15.0		ea	ACETONE	7.0	10	1
HM-59	16.0		Be	ACETONE	7.0	10	1
HM-60	100			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-62	2.4	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-63	3.1	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-63	73.0			VINYL CHLORIDE	0.9	10	1
HM-63	110			cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-63	1.8	J		trans-1,2-DICHLOROETHYLENE	0.9	5	1
HM-64	410			TETRACHLOROETHYLENE (PCE)	3.0	30	5
HM-64	23.0	J		TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-64	220			cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-66	38.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-68	3.2	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-68 (dup.)	3.6	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-69	3.8	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-69	1.2	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-71	70.0			TETRACHLOROETHYLENE (PCE)	3.0	30	5
HM-71	310			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-71	16.0	J		cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-71 (dup.)	56.0			TETRACHLOROETHYLENE (PCE)	3.0	30	5
HM-71 (dup.)	280			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-71 (dup.)	14.0	J		cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-76	3.7	J	e	TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-77	1.6	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-79	13.0			TETRACHLOROETHYLENE (PCE)	0.6	5	1
HM-79	9.4			TRICHLOROETHYLENE (TCE)	1.0	5	1

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HM-79	1.6	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-80	18.0		e	ACETONE	7.0	10	1
HM-84	15.0		B	ACETONE	7.0	10	1
HM-87	94.0			ACETONE	40.0	50	5
HM-87	220			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-87	18.0	J		cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-88	37,000			TRICHLOROETHYLENE (TCE)	200.0	1000	200
HM-88 (dup.)	38,000			TRICHLOROETHYLENE (TCE)	200.0	1000	200
HM-88 (dup.)	380	J		cis-1,2-DICHLOROETHYLENE	200.0	1000	200
HM-89	2,500			TRICHLOROETHYLENE (TCE)	50.0	300	50
HM-89	180	J		cis-1,2-DICHLOROETHYLENE	50.0	300	50
HM-92	1.6	J	e	TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-95	2,400			TRICHLOROETHYLENE (TCE)	20.0	100	20
HM-95	170			cis-1,2-DICHLOROETHYLENE	20.0	100	20
HM-96	53.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-96	1.4	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-99	320			TRICHLOROETHYLENE (TCE)	2.0	10	2
HM-99	55.0			cis-1,2-DICHLOROETHYLENE	2.0	10	2
HM-103	580		e	TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-103	300			cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-103	8.4	J		trans-1,2-DICHLOROETHYLENE	5.0	30	5
HM-107	1.5	J	e	TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-110	14.0		B	ACETONE	7.0	10	1
HM-110	69.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-110	8.3			cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-111	19.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-111	3.2	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-111 (dup.)	13.0		Be	ACETONE	7.0	10	1
HM-111 (dup.)	17.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-111 (dup.)	3.1	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-112	14,000			TRICHLOROETHYLENE (TCE)	100.0	500	100
HM-112	150	J		cis-1,2-DICHLOROETHYLENE	90.0	500	100
HM-113	470			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-113	52.0			VINYL CHLORIDE	5.0	50	5
HM-113	55.0			cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-113	210			trans-1,2-DICHLOROETHYLENE	5.0	30	5
HM-113 (dup.)	500			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-113 (dup.)	56.0			VINYL CHLORIDE	5.0	50	5
HM-113 (dup.)	58.0			cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-113 (dup.)	210			trans-1,2-DICHLOROETHYLENE	5.0	30	5
HM-114	2,100			TRICHLOROETHYLENE (TCE)	20.0	100	20
HM-114	280			cis-1,2-DICHLOROETHYLENE	20.0	100	20
HM-115	1,400			TRICHLOROETHYLENE (TCE)	20.0	100	20
HM-115	270			cis-1,2-DICHLOROETHYLENE	20.0	100	20
HM-116	450			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-116	42.0			cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-117	220			TRICHLOROETHYLENE (TCE)	5.0	30	5

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HM-117 (dup.)	300			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-118	160			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-118	3.1	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-119	41.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-119	1.4	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
HM-121	520			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-122	260			TRICHLOROETHYLENE (TCE)	10.0	50	10
HM-122	710			cis-1,2-DICHLOROETHYLENE	9.0	50	10
HM-122	110			trans-1,2-DICHLOROETHYLENE	9.0	50	10
HM-123	1,400			TRICHLOROETHYLENE (TCE)	30.0	200	25
HM-123	370			cis-1,2-DICHLOROETHYLENE	30.0	200	25
HM-124	2.2	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
HM-125	160			TRICHLOROETHYLENE (TCE)	2.0	10	2
HM-125	26.0			cis-1,2-DICHLOROETHYLENE	2.0	10	2
HM-126	3,100			TRICHLOROETHYLENE (TCE)	5.0	30	5
HM-126	96.0			cis-1,2-DICHLOROETHYLENE	5.0	30	5
HM-127	1.3	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
MW-2	330,000		e	TRICHLOROETHYLENE (TCE)	3.0	20	3
MW-3	230,000			TRICHLOROETHYLENE (TCE)	3.0	20	3
MW-5	1,400,000			TRICHLOROETHYLENE (TCE)	10.0	50	10
MW-IT-02T	2,600			TRICHLOROETHYLENE (TCE)	20.0	100	20
MW-IT-02T	420			cis-1,2-DICHLOROETHYLENE	20.0	100	20
W-128L	24.0		e	ACETONE	7.0	10	1
W-128L	10.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
W-128U	7,700			TRICHLOROETHYLENE (TCE)	100.0	500	100
W-128U	220	J		cis-1,2-DICHLOROETHYLENE	90.0	500	100
W-129	10.0			METHYL ETHYL KETONE (2-BUTANONE)	5.0	10	1
W-129	20.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
W-129	83.0			cis-1,2-DICHLOROETHYLENE	0.9	5	1
W-129	31.0			trans-1,2-DICHLOROETHYLENE	0.9	5	1
W-130	68,000			1,2-DICHLOROETHANE	5.0	50	10
W-130	100,000			ACETONE	70.0	100	10
W-130	720,000			METHYLENE CHLORIDE	7.0	50	10
W-130	94,000			TOLUENE	9.0	50	10
W-130	620,000			TRICHLOROETHYLENE (TCE)	10.0	50	10
W-130	30,000	J		cis-1,2-DICHLOROETHYLENE	9.0	50	10
W-131L	9.3			1,2-DICHLOROPROPANE	0.7	5	1
W-131L	3.8	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
W-131L	3.5	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
W-131L	0.9	J		trans-1,2-DICHLOROETHYLENE	0.9	5	1
W-131U	20.0		e	ACETONE	7.0	10	1
W-131U	1.4	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
W-132	6.2			TRICHLOROETHYLENE (TCE)	1.0	5	1
W-132	5.6			cis-1,2-DICHLOROETHYLENE	0.9	5	1
W-132	4.5	J		trans-1,2-DICHLOROETHYLENE	0.9	5	1
W-133L	320			ACETONE	200.0	300	25
W-133L	2,700			CHLOROBENZENE	30.0	200	25

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W-133L (dup.)	3,100			CHLOROBENZENE	30.0	200	25
W-135	14.0		a	METHYL ETHYL KETONE (2-BUTANONE)	5.0	10	1
W-135	35.0			STYRENE	1.0	5	1
W-137	19.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
W-137	14.0			cis-1,2-DICHLOROETHYLENE	0.9	5	1
W-139L	23.0			ACETONE	7.0	10	1
W-139L	44.0			BENZENE	0.8	5	1
W-139L	21.0			ETHYLBENZENE	0.9	5	1
W-139L	100		e	TRICHLOROETHYLENE (TCE)	1.0	5	1
W-139U	71.0			BENZENE	0.8	5	1
W-139U	130			ETHYLBENZENE	0.9	5	1
W-139U	200			TOTAL XYLENES	3.0	5	1
W-140L	5.7			1,1-DICHLOROETHANE	1.0	5	1
W-140L	47.0			BENZENE	0.8	5	1
W-140L (dup.)	5.8			1,1-DICHLOROETHANE	1.0	5	1
W-140L (dup.)	53.0			BENZENE	0.8	5	1
W-141L	49.0			BENZENE	4.0	30	5
W-141L	350			ETHYLBENZENE	5.0	30	5
W-141L	46.0			TOTAL XYLENES	20.0	30	5
W-141U	33.0			BENZENE	2.0	10	2
W-141U	180			ETHYLBENZENE	2.0	10	2
W-141U	130			TOTAL XYLENES	6.0	10	2
W-144	310			1,1-DICHLOROETHYLENE	4.0	30	5
W-144	19.0	J		TRICHLOROETHYLENE (TCE)	5.0	30	5
W-145	12.0			ACETONE	7.0	10	1
W-145	19.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
W-146	6.1			TRICHLOROETHYLENE (TCE)	1.0	5	1
W-148	52.0			BENZENE	0.8	5	1
W-148	130			TOLUENE	0.9	5	1
W-148	1.2	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
W-149	4,800			ACETONE	2000.0	2000	200
W-149	19,000			TRICHLOROETHYLENE (TCE)	200.0	1000	200
W-149	1,200			cis-1,2-DICHLOROETHYLENE	200.0	1000	200
W-149 (dup.)	15,000			TRICHLOROETHYLENE (TCE)	200.0	1000	200
W-149 (dup.)	1,100			cis-1,2-DICHLOROETHYLENE	200.0	1000	200
W-150L	120,000			TRICHLOROETHYLENE (TCE)	1.0	5	1
W-150U	4,800			TRICHLOROETHYLENE (TCE)	50.0	300	50
W-151	900			TRICHLOROETHYLENE (TCE)	5.0	30	5
W-151	40.0			cis-1,2-DICHLOROETHYLENE	5.0	30	5
W-153	1,600			TRICHLOROETHYLENE (TCE)	20.0	100	20
W-153	320			cis-1,2-DICHLOROETHYLENE	20.0	100	20
W-154	920			TRICHLOROETHYLENE (TCE)	20.0	100	20
W-154 (dup.)	890			TRICHLOROETHYLENE (TCE)	20.0	100	20
W-156	7,800			TRICHLOROETHYLENE (TCE)	50.0	300	50
W-156	170	J		cis-1,2-DICHLOROETHYLENE	50.0	300	50
W-156 (dup.)	7,300			TRICHLOROETHYLENE (TCE)	50.0	300	50
W-156 (dup.)	150	J		cis-1,2-DICHLOROETHYLENE	50.0	300	50

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

J = Estimated (below PQL)
dup. = field duplicate
µg/L = micrograms per liter = parts per billion

Location	Result (µg/L)	Lab Qual.	JEG Qual.	Compound	MDL	PQL	Dilut. Factor
W-158	11,000			TRICHLOROETHYLENE (TCE)	100.0	500	100
W-159	28,000			TRICHLOROETHYLENE (TCE)	500.0	3000	500
W-160	610			TRICHLOROETHYLENE (TCE)	10.0	50	10
W-160	400			cis-1,2-DICHLOROETHYLENE	9.0	50	10
W-162	3.7	J		TRICHLOROETHYLENE (TCE)	1.0	5	1
W-163	48.0			ETHYLBENZENE	5.0	30	5
W-163	240			TRICHLOROETHYLENE (TCE)	5.0	30	5
W-163	110			VINYL CHLORIDE	5.0	50	5
W-163	50.0			cis-1,2-DICHLOROETHYLENE	5.0	30	5
W-163 (dup.)	62.0			ETHYLBENZENE	0.9	5	1
W-163 (dup.)	140			VINYL CHLORIDE	0.9	10	1
W-163 (dup.)	53.0			cis-1,2-DICHLOROETHYLENE	0.9	5	1
NASFW Terrace Alluvium Wells							
LF04-02	860			ACETONE	200.0	200	20
LF04-02	2,400			TRICHLOROETHYLENE (TCE)	20.0	100	20
LF04-02	220			cis-1,2-DICHLOROETHYLENE	20.0	100	20
LF04-04	1,300			TRICHLOROETHYLENE (TCE)	10.0	50	10
LF04-04	410			cis-1,2-DICHLOROETHYLENE	9.0	50	10
LF04-04	130			trans-1,2-DICHLOROETHYLENE	9.0	50	10
LF04-4C	13.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
LF04-4C	2.7	J		VINYL CHLORIDE	0.9	10	1
LF04-4C	6.7			cis-1,2-DICHLOROETHYLENE	0.9	5	1
LF04-4C (dup.)	14.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
LF04-4C (dup.)	3.3	J		VINYL CHLORIDE	0.9	10	1
LF04-4C (dup.)	6.7			cis-1,2-DICHLOROETHYLENE	0.9	5	1
LF04-4C (dup.)	1.4	J		trans-1,2-DICHLOROETHYLENE	0.9	5	1
LF04-4G	1,400			TRICHLOROETHYLENE (TCE)	10.0	50	10
LF04-4G	170			cis-1,2-DICHLOROETHYLENE	9.0	50	10
LF04-4G	11.0	J		trans-1,2-DICHLOROETHYLENE	9.0	50	10
LF05-01	2,300			TRICHLOROETHYLENE (TCE)	20.0	100	20
LF05-01	230			cis-1,2-DICHLOROETHYLENE	20.0	100	20
LF05-02	160			TRICHLOROETHYLENE (TCE)	5.0	30	5
LF05-02	18.0	J		VINYL CHLORIDE	5.0	50	5
LF05-02	350			cis-1,2-DICHLOROETHYLENE	5.0	30	5
LF05-02	32.0			trans-1,2-DICHLOROETHYLENE	5.0	30	5
LF05-5A	200			TRICHLOROETHYLENE (TCE)	5.0	30	5
LF05-5A	44.0			cis-1,2-DICHLOROETHYLENE	5.0	30	5
LF05-5B	81.0	J		VINYL CHLORIDE	9.0	100	10
LF05-5B	640			cis-1,2-DICHLOROETHYLENE	9.0	50	10
LF05-5E	56.0			ACETONE	40.0	50	5
LF05-5E	200			TRICHLOROETHYLENE (TCE)	5.0	30	5
LF05-5E	110			cis-1,2-DICHLOROETHYLENE	5.0	30	5
LF05-14	310			ACETONE	70.0	100	10
LF05-14	800			TRICHLOROETHYLENE (TCE)	10.0	50	10
LF05-14	220			cis-1,2-DICHLOROETHYLENE	9.0	50	10
LF05-14	13.0	J		trans-1,2-DICHLOROETHYLENE	9.0	50	10
LF05-18	1,600			TRICHLOROETHYLENE (TCE)	10.0	50	10

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

J = Estimated (below PQL)
dup. = field duplicate
µg/L = micrograms per liter = parts per billion

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Location	Result (µg/L)	Lab Qual.	JEG Qual.	Compound	MDL	PQL	Dilut. Factor
LF05-18	450			cis-1,2-DICHLOROETHYLENE	9.0	50	10
LF05-18	26.0	J		trans-1,2-DICHLOROETHYLENE	9.0	50	10
LF05-19	14.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
LF05-19	8.0			cis-1,2-DICHLOROETHYLENE	0.9	5	1
LF05-19 (dup.)	14.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
LF05-19 (dup.)	8.5			cis-1,2-DICHLOROETHYLENE	0.9	5	1
Surface Water Locations							
EGL-2	19.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
EGL-2	4.0	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
LF05-S5	13.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
LF05-S5	2.8	J		cis-1,2-DICHLOROETHYLENE	0.9	5	1
LF05-S6	86.0			TRICHLOROETHYLENE (TCE)	1.0	5	1
LF05-S6	34.0			cis-1,2-DICHLOROETHYLENE	0.9	5	1
LF05-S7	96.0			ACETONE	40.0	50	5
LF05-S7	507			TRICHLOROETHYLENE (TCE)	5.0	30	5
LF05-S7	180			cis-1,2-DICHLOROETHYLENE	5.0	30	5
LF05-S7	6.2	J		trans-1,2-DICHLOROETHYLENE	5.0	30	5
LF05-S7 (dup.)	110			ACETONE	40.0	50	5
LF05-S7 (dup.)	490			TRICHLOROETHYLENE (TCE)	5.0	30	5
LF05-S7 (dup.)	170			cis-1,2-DICHLOROETHYLENE	5.0	30	5
LF05-S7 (dup.)	6.8	J		trans-1,2-DICHLOROETHYLENE	5.0	30	5
SW-08	7.6			cis-1,2-DICHLOROETHYLENE	0.9	5	1

NOTES: Compounds reported below the PQLs are qualified by the laboratory as estimated ("J"), and are frequently due to laboratory contamination. Estimated ("J") results are included in this table for TCE-derived compounds only, and are presented for comparison to results prior to October 1994, when the detection limits and PQLs increased for TCE-related compounds.

Jacobs qualifiers indicate that the reported amount is less than five times the amount detected in the associated laboratory blank ("B"), field equipment blank ("e"), or ambient blank ("a").

J = Estimated (below PQL)
dup. = field duplicate
µg/L = micrograms per liter = parts per billion

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

Location	Result (µg/L)	JEG Qual.	Compound	MDL	PQL	Dilut. Factor
Middle Paluxy Well						
P-12M	17.0		bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
Upper Paluxy Wells						
P-5UN	12.0		N-NITROSODI-n-PROPYLAMINE	3	10	1
P-6U	20.0		bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
P-13U	20.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
P-15U	11.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
Paluxy Upper Sand Wells						
P-9US (dup.)	12.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
P-15US	14.0		DI-n-OCTYLPHTHALATE	4	10	1
P-15US	30.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
USGS Paluxy Wells						
USGS08PL	13.0		bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
USGS08PM	11.0		bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
USGS09PL	12.0		N-NITROSODI-n-PROPYLAMINE	3	10	1
USGS09PM	11.0		N-NITROSODI-n-PROPYLAMINE	3	10	1
USGS09PM	35.0		bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
AFP4 Terrace Alluvium Wells						
F-203	28.0		2-METHYLNAPHTHALENE	4	10	1
F-203	23.0		NAPHTHALENE	3	10	1
F-203	17.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
F-203 (dup.)	16.0		2-METHYLNAPHTHALENE	4	10	1
F-203 (dup.)	14.0		NAPHTHALENE	3	10	1
F-203 (dup.)	12.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
F-204	11.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
F-209	19.0		2-METHYLNAPHTHALENE	4	10	1
F-214	2400.0		1,2-DICHLOROBENZENE	80	200	20
F-214	360.0		1,4-DICHLOROBENZENE	60	200	20
F-217	11.0		1,2-DICHLOROBENZENE	4	10	1
F-218 (dup.)	10.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
FSA-3-02	120.0		2-METHYLNAPHTHALENE	4	10	1
FSA-3-02	22.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
FSA-3-02 (dup.)	140.0		2-METHYLNAPHTHALENE	20	50	5
FSA-3-10	15.0	e	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
HM-7	110.0		1,2-DICHLOROBENZENE	4	10	1
HM-7	130.0		1,4-DICHLOROBENZENE	3	10	1
HM-7	46.0		NAPHTHALENE	3	10	1
HM-10	28.0		bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
HM-14	15.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
HM-17	10.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
HM-37	25.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
HM-41	13.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
HM-41 (dup.)	13.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
HM-47	110.0		1,2-DICHLOROBENZENE	4	10	1
HM-47	41.0		1,4-DICHLOROBENZENE	3	10	1
HM-51	57.0		BENZOIC ACID	20	50	1
HM-55	16.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

dup. = field duplicate
µg/L = micrograms per liter = parts per billion

Location	Result (µg/L)	JEG Qual.	Compound	MDL	PQL	Dilut. Factor
HM-71	41.0		bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
HM-102	11.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
HM-117 (dup.)	10.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
HM-121	10.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
MW-5	12.0		1,2-DICHLOROBENZENE	4	10	1
MW-5	11.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
W-131L	180.0		1,2-DICHLOROBENZENE	8	20	2
W-131L	26.0		1,4-DICHLOROBENZENE	6	20	2
W-131U	120.0		1,2-DICHLOROBENZENE	4	10	1
W-131U	16.0		1,4-DICHLOROBENZENE	3	10	1
W-133L	1900.0		1,2-DICHLOROBENZENE	80	200	20
W-133L	640.0		1,4-DICHLOROBENZENE	60	200	20
W-133L (dup.)	1700.0		1,2-DICHLOROBENZENE	80	200	20
W-133L (dup.)	560.0		1,4-DICHLOROBENZENE	60	200	20
W-135	15.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
W-136	35.0		2-METHYLNAPHTHALENE	4	10	1
W-136	19.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
W-139L	29.0		2-METHYLNAPHTHALENE	4	10	1
W-139L	24.0		NAPHTHALENE	3	10	1
W-139U	110.0		2-METHYLNAPHTHALENE	4	10	1
W-139U	65.0		NAPHTHALENE	3	10	1
W-140L	15.0		2-METHYLNAPHTHALENE	4	10	1
W-140L	13.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
W-140L (dup.)	12.0		2-METHYLNAPHTHALENE	4	10	1
W-141L	37.0		2-METHYLNAPHTHALENE	4	10	1
W-141L	27.0		NAPHTHALENE	3	10	1
W-141U	46.0		2-METHYLNAPHTHALENE	4	10	1
W-141U	27.0		NAPHTHALENE	3	10	1
W-141U	13.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
W-145	16.0	B	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
W-148	72.0		2-METHYLNAPHTHALENE	4	10	1
W-148	42.0		NAPHTHALENE	3	10	1
W-150L	11.0		2-METHYLNAPHTHALENE	4	10	1
W-150L	81.0		2-NITROPHENOL	3	10	1
W-150L	13.0		NAPHTHALENE	3	10	1
W-152	12.0		N-NITROSODI-n-PROPYLAMINE	3	10	1
W-158	11.0	Be	bis(2-ETHYLHEXYL) PHTHALATE	2	10	1
			NASFW Terrace Alluvium Wells			
LF04-01	12.0		N-NITROSODI-n-PROPYLAMINE	3	10	1
LF04-01	18.0		bis(2-CHLOROISOPROPYL) ETHER	3	10	1
LF04-4C	10.0		N-NITROSODI-n-PROPYLAMINE	3	10	1
LF05-5A	12.0		N-NITROSODI-n-PROPYLAMINE	3	10	1

NOTES: Jacobs qualifiers indicate that the reported amount is less than five times the amount detected in the associated laboratory blank ("B") or field equipment blank ("e").

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

dup. = field duplicate
µg/L = micrograms per liter = parts per billion

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Location	Result (mg/L)	JEG Qual.	Compound	MDL	PQL	Dilut. Factor
AFP4 Terrace Alluvium Wells						
F-203	1.10		Diesel-range Organics	0.02	1.0	1
F-203 (dup.)	1.10		Diesel-range Organics	0.02	1.0	1
F-204	5.20		Diesel-range Organics	0.04	2.0	2
F-218	1.10		Diesel-range Organics	0.02	1.0	1
F-218 (dup.)	1.50		Diesel-range Organics	0.02	1.0	1
F-220	2.80		Diesel-range Organics	0.04	2.0	2
FSA-3-02	15.00		Diesel-range Organics	0.20	10.0	10
FSA-3-04	1.40		Diesel-range Organics	0.02	1.0	1
FSA-3-07	2.50		Diesel-range Organics	0.04	2.0	2
FSA-3-08	1.00		Diesel-range Organics	0.02	1.0	1
FSA-3-10	1.70		Diesel-range Organics	0.02	1.0	1
FSA-3-14	2.30		Diesel-range Organics	0.04	2.0	2
FSA-3-15	1.70		Diesel-range Organics	0.02	1.0	1
FSA-3-15 (dup.)	1.50		Diesel-range Organics	0.02	1.0	1
HM-7	1.70		Diesel-range Organics	0.02	1.0	1
HM-24	1.50		Diesel-range Organics	0.02	1.0	1
HM-24 (dup.)	1.40		Diesel-range Organics	0.02	1.0	1
HM-50	1.70		Diesel-range Organics	0.02	1.0	1
HM-53	1.20		Diesel-range Organics	0.02	1.0	1
HM-56	1.90		Diesel-range Organics	0.02	1.0	1
W-133L	15.00		Diesel-range Organics	0.10	5.0	5
W-133L (dup.)	17.00		Diesel-range Organics	0.20	10.0	10
W-136	6.20		Diesel-range Organics	0.02	1.0	10
W-139U	24.00		Diesel-range Organics	0.20	10.0	10
W-140L	1.60		Diesel-range Organics	0.02	1.0	1
W-140L (dup.)	1.60		Diesel-range Organics	0.02	1.0	1
W-148	16.00		Diesel-range Organics	0.02	1.0	1

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

dup. = field duplicate
mg/L = milligrams per liter = parts per million

APPENDIX B

Positive Metals Detects: October/November 1995

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
		Middle Paluxy Wells			
P-5M	0.100	BARIUM	0.001	0.100	1
P-5M	59.000	CALCIUM	0.020	1.000	1
P-5M	0.092	IRON	0.005	0.050	1
P-5M	22.000	MAGNESIUM	0.040	1.000	1
P-5M	0.028	MANGANESE	0.001	0.020	1
P-5M	23.000	SODIUM	0.050	1.000	1
P-5M	0.700	ZINC	0.003	0.020	1
P-6M	0.140	BARIUM	0.001	0.100	1
P-6M	63.000	CALCIUM	0.020	1.000	1
P-6M	0.210	IRON	0.005	0.050	1
P-6M	24.000	MAGNESIUM	0.040	1.000	1
P-6M	0.025	MANGANESE	0.001	0.020	1
P-6M	5.000	POTASSIUM	0.200	5.000	1
P-6M	24.000	SODIUM	0.050	1.000	1
P-6M	0.640	ZINC	0.003	0.020	1
P-7M	58.000	CALCIUM	0.020	1.000	1
P-7M	0.190	IRON	0.005	0.050	1
P-7M	25.000	MAGNESIUM	0.040	1.000	1
P-7M	0.021	MANGANESE	0.001	0.020	1
P-7M	6.000	POTASSIUM	0.200	5.000	1
P-7M	28.000	SODIUM	0.050	1.000	1
P-7M	1.500	ZINC	0.003	0.020	1
P-8M	40.000	CALCIUM	0.020	1.000	1
P-8M	0.240	IRON	0.005	0.050	1
P-8M	17.000	MAGNESIUM	0.040	1.000	1
P-8M	7.600	POTASSIUM	0.200	5.000	1
P-8M	31.000	SODIUM	0.050	1.000	1
P-8M	1.600	ZINC	0.003	0.020	1
P-9M	45.000	CALCIUM	0.020	1.000	1
P-9M	0.084	IRON	0.005	0.050	1
P-9M	17.000	MAGNESIUM	0.040	1.000	1
P-9M	14.000	POTASSIUM	0.200	5.000	1
P-9M	37.000	SODIUM	0.050	1.000	1
P-9M	1.100	ZINC	0.003	0.020	1
P-10M	18.000	CALCIUM	0.020	1.000	1
P-10M	0.140	IRON	0.005	0.050	1
P-10M	35.000	SODIUM	0.050	1.000	1
P-10M	0.390	ZINC	0.003	0.020	1
P-11M	0.720	ALUMINUM	0.080	0.500	1
P-11M	0.006	CADMIUM	0.002	0.005	1
P-11M	44.000	CALCIUM	0.020	1.000	1
P-11M	0.810	IRON	0.005	0.050	1
P-11M	14.000	MAGNESIUM	0.040	1.000	1
P-11M	0.071	MANGANESE	0.001	0.020	1
P-11M	55.000	SODIUM	0.050	1.000	1
P-11M	3.900	ZINC	0.003	0.020	1
P-11M (dup.)	0.670	ALUMINUM	0.080	0.500	1
P-11M (dup.)	0.010	CADMIUM	0.002	0.005	1
P-11M (dup.)	44.000	CALCIUM	0.020	1.000	1
P-11M (dup.)	0.760	IRON	0.005	0.050	1
P-11M (dup.)	14.000	MAGNESIUM	0.040	1.000	1
P-11M (dup.)	0.066	MANGANESE	0.001	0.020	1
P-11M (dup.)	55.000	SODIUM	0.050	1.000	1
P-11M (dup.)	3.600	ZINC	0.003	0.020	1
P-12M	0.200	BARIUM	0.001	0.100	1
P-12M	57.000	CALCIUM	0.020	1.000	1
P-12M	0.100	COPPER	0.005	0.050	1
P-12M	0.190	IRON	0.005	0.050	1

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Dup. = field duplicate
mg/L = milligrams per liter = parts per million

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
P-12M	2.400	MAGNESIUM	0.040	1.000	1
P-12M	98.000	POTASSIUM	0.200	5.000	1
P-12M	55.000	SODIUM	0.050	1.000	1
P-12M	0.240	ZINC	0.003	0.020	1
P-13M	13.000	CALCIUM	0.020	1.000	1
P-13M	0.260	IRON	0.005	0.050	1
P-13M	11.000	MAGNESIUM	0.040	1.000	1
P-13M	35.000	POTASSIUM	0.200	5.000	1
P-13M	47.000	SODIUM	0.050	1.000	1
P-13M	2.300	ZINC	0.003	0.020	1
P-20M	0.007	CADMIUM	0.002	0.005	1
P-20M	54.000	CALCIUM	0.020	1.000	1
P-20M	0.270	IRON	0.005	0.050	1
P-20M	21.000	MAGNESIUM	0.040	1.000	1
P-20M	0.052	MANGANESE	0.001	0.020	1
P-20M	6.400	POTASSIUM	0.200	5.000	1
P-20M	32.000	SODIUM	0.050	1.000	1
P-20M	0.029	ZINC	0.003	0.020	1
P-24M	0.290	BARIUM	0.001	0.100	1
P-24M	66.000	CALCIUM	0.020	1.000	1
P-24M	1.100	IRON	0.005	0.050	1
P-24M	14.000	MAGNESIUM	0.040	1.000	1
P-24M	0.210	MANGANESE	0.001	0.020	1
P-24M	22.000	SODIUM	0.050	1.000	1
P-24M	3.000	ZINC	0.003	0.020	1
P-25M	34.000	CALCIUM	0.020	1.000	1
P-25M	0.120	IRON	0.005	0.050	1
P-25M	14.000	MAGNESIUM	0.040	1.000	1
P-25M	15.000	POTASSIUM	0.200	5.000	1
P-25M	45.000	SODIUM	0.050	1.000	1
P-25M	0.320	ZINC	0.003	0.020	1
P-26M	16.000	CALCIUM	0.020	1.000	1
P-26M	0.170	IRON	0.005	0.050	1
P-26M	11.000	MAGNESIUM	0.040	1.000	1
P-26M	6.500	POTASSIUM	0.200	5.000	1
P-26M	41.000	SODIUM	0.050	1.000	1
P-26M	0.680	ZINC	0.003	0.020	1
P-29M	70.000	CALCIUM	0.020	1.000	1
P-29M	0.210	IRON	0.005	0.050	1
P-29M	25.000	MAGNESIUM	0.040	1.000	1
P-29M	0.032	MANGANESE	0.001	0.020	1
P-29M	25.000	SODIUM	0.050	1.000	1
P-29M	0.071	ZINC	0.003	0.020	1
P-30M	51.000	CALCIUM	0.020	1.000	1
P-30M	0.190	IRON	0.005	0.050	1
P-30M	20.000	MAGNESIUM	0.040	1.000	1
P-30M	0.021	MANGANESE	0.001	0.020	1
P-30M	5.000	POTASSIUM	0.200	5.000	1
P-30M	41.000	SODIUM	0.050	1.000	1
P-30M	0.079	ZINC	0.003	0.020	1
WS-1	64.000	CALCIUM	0.020	1.000	1
WS-1	0.170	IRON	0.005	0.050	1
WS-1	25.000	MAGNESIUM	0.040	1.000	1
WS-1	0.025	MANGANESE	0.001	0.020	1
WS-1	29.000	SODIUM	0.050	1.000	1
WS-3	50.000	CALCIUM	0.020	1.000	1
WS-3	0.160	IRON	0.005	0.050	1
WS-3	20.000	MAGNESIUM	0.040	1.000	1
WS-3	0.021	MANGANESE	0.001	0.020	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
WS-3	5.000	POTASSIUM	0.200	5.000	1
WS-3	45.000	SODIUM	0.050	1.000	1
WS-3 (dup.)	52.000	CALCIUM	0.020	1.000	1
WS-3 (dup.)	0.170	IRON	0.005	0.050	1
WS-3 (dup.)	21.000	MAGNESIUM	0.040	1.000	1
WS-3 (dup.)	0.023	MANGANESE	0.001	0.020	1
WS-3 (dup.)	5.200	POTASSIUM	0.200	5.000	1
WS-3 (dup.)	46.000	SODIUM	0.050	1.000	1
WS-5A	32.000	CALCIUM	0.020	1.000	1
WS-5A	0.057	IRON	0.005	0.050	1
WS-5A	13.000	MAGNESIUM	0.040	1.000	1
WS-5A	100.000	SODIUM	0.050	1.000	1
WS-6	53.000	CALCIUM	0.020	1.000	1
WS-6	0.087	IRON	0.005	0.050	1
WS-6	18.000	MAGNESIUM	0.040	1.000	1
WS-6	0.024	MANGANESE	0.001	0.020	1
WS-6	55.000	SODIUM	0.050	1.000	1
WS-8	46.000	CALCIUM	0.020	1.000	1
WS-8	0.060	IRON	0.005	0.050	1
WS-8	18.000	MAGNESIUM	0.040	1.000	1
WS-8	48.000	SODIUM	0.050	1.000	1
WS-12	44.000	CALCIUM	0.020	1.000	1
WS-12	0.060	IRON	0.005	0.050	1
WS-12	17.000	MAGNESIUM	0.040	1.000	1
WS-12	0.020	MANGANESE	0.001	0.020	1
WS-12	53.000	SODIUM	0.050	1.000	1
WS-H3	2.500	CALCIUM	0.020	1.000	1
WS-H3	0.079	IRON	0.005	0.050	1
WS-H3	1.100	MAGNESIUM	0.040	1.000	1
WS-H3	320.000	SODIUM	0.050	1.000	1
Upper Paluxy Wells					
P-5UN	140.000	CALCIUM	0.020	1.000	1
P-5UN	3.900	IRON	0.005	0.050	1
P-5UN	15.000	MAGNESIUM	0.040	1.000	1
P-5UN	0.120	MANGANESE	0.001	0.020	1
P-5UN	6.000	MOLYBDENUM	0.003	0.100	1
P-5UN	5.100	POTASSIUM	0.200	5.000	1
P-5UN	45.000	SODIUM	0.050	1.000	1
P-5UN	0.310	ZINC	0.003	0.020	1
P-6U	0.008	CADMIUM	0.002	0.005	1
P-6U	110.000	CALCIUM	0.020	1.000	1
P-6U	8.200	IRON	0.005	0.050	1
P-6U	5.700	MAGNESIUM	0.040	1.000	1
P-6U	0.049	MANGANESE	0.001	0.020	1
P-6U	7.800	POTASSIUM	0.200	5.000	1
P-6U	42.000	SODIUM	0.050	1.000	1
P-6U	3.700	ZINC	0.003	0.020	1
P-7U	110.000	CALCIUM	0.020	1.000	1
P-7U	1.800	IRON	0.005	0.050	1
P-7U	40.000	MAGNESIUM	0.040	1.000	1
P-7U	0.081	MANGANESE	0.001	0.020	1
P-7U	8.500	POTASSIUM	0.200	5.000	1
P-7U	47.000	SODIUM	0.050	1.000	1
P-7U	0.160	ZINC	0.003	0.020	1
P-8UN	0.600	ALUMINUM	0.080	0.500	1
P-8UN	40.000	CALCIUM	0.020	1.000	1
P-8UN	0.300	IRON	0.005	0.050	1
P-8UN	16.000	MAGNESIUM	0.040	1.000	1
P-8UN	5.900	POTASSIUM	0.200	5.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
P-8UN	60.000	SODIUM	0.050	1.000	1
P-8UN	0.022	ZINC	0.003	0.020	1
P-9UN	84.000	CALCIUM	0.020	1.000	1
P-9UN	0.170	IRON	0.005	0.050	1
P-9UN	32.000	MAGNESIUM	0.040	1.000	1
P-9UN	0.030	MANGANESE	0.001	0.020	1
P-9UN	7.100	POTASSIUM	0.200	5.000	1
P-9UN	70.000	SODIUM	0.050	1.000	1
P-9UN	0.930	ZINC	0.003	0.020	1
P-10U	160.000	CALCIUM	0.020	1.000	1
P-10U	5.600	IRON	0.005	0.050	1
P-10U	8.300	MAGNESIUM	0.040	1.000	1
P-10U	3.000	MANGANESE	0.001	0.020	1
P-10U	45.000	SODIUM	0.050	1.000	1
P-10U	0.170	ZINC	0.003	0.020	1
P-11U	1.100	ALUMINUM	0.080	0.500	1
P-11U	42.000	CALCIUM	0.020	1.000	1
P-11U	1.500	IRON	0.005	0.050	1
P-11U	16.000	MAGNESIUM	0.040	1.000	1
P-11U	0.027	MANGANESE	0.001	0.020	1
P-11U	5.400	POTASSIUM	0.200	5.000	1
P-11U	57.000	SODIUM	0.050	1.000	1
P-11U	3.300	ZINC	0.003	0.020	1
P-12UN	8.600	ALUMINUM	0.080	0.500	1
P-12UN	0.120	BARIUM	0.001	0.100	1
P-12UN	49.000	CALCIUM	0.020	1.000	1
P-12UN	4.800	IRON	0.005	0.050	1
P-12UN	20.000	MAGNESIUM	0.040	1.000	1
P-12UN	0.099	MANGANESE	0.001	0.020	1
P-12UN	6.700	POTASSIUM	0.200	5.000	1
P-12UN	56.000	SODIUM	0.050	1.000	1
P-12UN	2.800	ZINC	0.003	0.020	1
P-13U	5.200	ALUMINUM	0.080	0.500	1
P-13U	0.100	BARIUM	0.001	0.100	1
P-13U	64.000	CALCIUM	0.020	1.000	1
P-13U	6.900	IRON	0.005	0.050	1
P-13U	16.000	MAGNESIUM	0.040	1.000	1
P-13U	0.180	MANGANESE	0.001	0.020	1
P-13U	6.000	POTASSIUM	0.200	5.000	1
P-13U	73.000	SODIUM	0.050	1.000	1
P-13U	0.610	ZINC	0.003	0.020	1
P-15U	0.006	CADMIUM	0.002	0.005	1
P-15U	38.000	CALCIUM	0.020	1.000	1
P-15U	0.098	IRON	0.005	0.050	1
P-15U	14.000	MAGNESIUM	0.040	1.000	1
P-15U	6.200	POTASSIUM	0.200	5.000	1
P-15U	51.000	SODIUM	0.050	1.000	1
P-21U	3.300	ALUMINUM	0.080	0.500	1
P-21U	50.000	CALCIUM	0.020	1.000	1
P-21U	7.900	IRON	0.005	0.050	1
P-21U	19.000	MAGNESIUM	0.040	1.000	1
P-21U	0.050	MANGANESE	0.001	0.020	1
P-21U	6.100	POTASSIUM	0.200	5.000	1
P-21U	39.000	SODIUM	0.050	1.000	1
P-21U	1.200	ZINC	0.003	0.020	1
P-22U	160.000	CALCIUM	0.020	1.000	1
P-22U	2.000	IRON	0.005	0.050	1
P-22U	26.000	MAGNESIUM	0.040	1.000	1
P-22U	0.150	MANGANESE	0.001	0.020	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
P-22U	5.400	POTASSIUM	0.200	5.000	1
P-22U	36.000	SODIUM	0.050	1.000	1
P-22U	0.130	ZINC	0.003	0.020	1
P-23U	0.007	CADMIUM	0.002	0.005	1
P-23U	110.000	CALCIUM	0.020	1.000	1
P-23U	18.000	IRON	0.005	0.050	1
P-23U	5.700	MAGNESIUM	0.040	1.000	1
P-23U	0.310	MANGANESE	0.001	0.020	1
P-23U	34.000	POTASSIUM	0.200	5.000	1
P-23U	52.000	SODIUM	0.050	1.000	1
P-23U	0.036	ZINC	0.003	0.020	1
P-24U	0.520	ALUMINUM	0.080	0.500	1
P-24U	0.110	BARIUM	0.001	0.100	1
P-24U	110.000	CALCIUM	0.020	1.000	1
P-24U	7.500	IRON	0.005	0.050	1
P-24U	7.700	MAGNESIUM	0.040	1.000	1
P-24U	0.270	MANGANESE	0.001	0.020	1
P-24U	29.000	SODIUM	0.050	1.000	1
P-24U	0.400	ZINC	0.003	0.020	1
P-25U	7.100	ALUMINUM	0.080	0.500	1
P-25U	71.000	CALCIUM	0.020	1.000	1
P-25U	5.600	IRON	0.005	0.050	1
P-25U	23.000	MAGNESIUM	0.040	1.000	1
P-25U	0.061	MANGANESE	0.001	0.020	1
P-25U	6.900	POTASSIUM	0.200	5.000	1
P-25U	40.000	SODIUM	0.050	1.000	1
P-25U	0.430	ZINC	0.003	0.020	1
P-27U	1.400	ALUMINUM	0.080	0.500	1
P-27U	190.000	CALCIUM	0.020	1.000	1
P-27U	8.900	IRON	0.005	0.050	1
P-27U	31.000	MAGNESIUM	0.040	1.000	1
P-27U	0.400	MANGANESE	0.001	0.020	1
P-27U	6.700	POTASSIUM	0.200	5.000	1
P-27U	50.000	SODIUM	0.050	1.000	1
P-27U	0.025	ZINC	0.003	0.020	1
P-28U	0.009	CADMIUM	0.002	0.005	1
P-28U	410.000	CALCIUM	0.200	10.000	10
P-28U	3.800	IRON	0.005	0.050	1
P-28U	76.000	MAGNESIUM	0.040	1.000	1
P-28U	0.380	MANGANESE	0.001	0.020	1
P-28U	7.400	POTASSIUM	0.200	5.000	1
P-28U	26.000	SODIUM	0.050	1.000	1
P-28U	0.042	ZINC	0.003	0.020	1
		Paluxy Upper Sand Wells			
P-8US	0.840	ALUMINUM	0.080	0.500	1
P-8US	0.006	CADMIUM	0.002	0.005	1
P-8US	42.000	CALCIUM	0.020	1.000	1
P-8US	0.100	IRON	0.005	0.050	1
P-8US	6.100	POTASSIUM	0.200	5.000	1
P-8US	24.000	SODIUM	0.050	1.000	1
P-9US	1.100	ALUMINUM	0.080	0.500	1
P-9US	170.000	CALCIUM	0.020	1.000	1
P-9US	1.100	IRON	0.005	0.050	1
P-9US	9.100	MAGNESIUM	0.040	1.000	1
P-9US	0.033	MANGANESE	0.001	0.020	1
P-9US	24.000	SODIUM	0.050	1.000	1
P-9US (dup.)	1.100	ALUMINUM	0.080	0.500	1
P-9US (dup.)	170.000	CALCIUM	0.020	1.000	1
P-9US (dup.)	1.200	IRON	0.005	0.050	1

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P-9US (dup.)	9.100	MAGNESIUM	0.040	1.000	1
P-9US (dup.)	0.036	MANGANESE	0.001	0.020	1
P-9US (dup.)	24.000	SODIUM	0.050	1.000	1
P-12US	2.100	ALUMINUM	0.080	0.500	1
P-12US	84.000	CALCIUM	0.020	1.000	1
P-12US	0.150	IRON	0.005	0.050	1
P-12US	27.000	POTASSIUM	0.200	5.000	1
P-12US	24.000	SODIUM	0.050	1.000	1
P-12US	0.079	ZINC	0.003	0.020	1
P-14US	0.007	CADMIUM	0.002	0.005	1
P-14US	27.000	CALCIUM	0.020	1.000	1
P-14US	0.110	IRON	0.005	0.050	1
P-14US	4.200	MAGNESIUM	0.040	1.000	1
P-14US	5.500	POTASSIUM	0.200	5.000	1
P-14US	41.000	SODIUM	0.050	1.000	1
P-15US	0.110	BARIUM	0.001	0.100	1
P-15US	0.006	CADMIUM	0.002	0.005	1
P-15US	44.000	CALCIUM	0.020	1.000	1
P-15US	0.200	IRON	0.005	0.050	1
P-15US	16.000	POTASSIUM	0.200	5.000	1
P-15US	43.000	SODIUM	0.050	1.000	1
P-16US	0.820	ALUMINUM	0.080	0.500	1
P-16US	0.120	BARIUM	0.001	0.100	1
P-16US	0.006	CADMIUM	0.002	0.005	1
P-16US	64.000	CALCIUM	0.020	1.000	1
P-16US	1.200	IRON	0.005	0.050	1
P-16US	6.800	MAGNESIUM	0.040	1.000	1
P-16US	5.100	POTASSIUM	0.200	5.000	1
P-16US	32.000	SODIUM	0.050	1.000	1
P-16US	0.065	ZINC	0.003	0.020	1
P-18US	1.700	ALUMINUM	0.080	0.500	1
P-18US	0.110	BARIUM	0.001	0.100	1
P-18US	100.000	CALCIUM	0.020	1.000	1
P-18US	4.000	IRON	0.005	0.050	1
P-18US	11.000	MAGNESIUM	0.040	1.000	1
P-18US	0.076	MANGANESE	0.001	0.020	1
P-18US	32.000	SODIUM	0.050	1.000	1
P-18US	0.025	ZINC	0.003	0.020	1
P-19US	17.000	ALUMINUM	0.080	0.500	1
P-19US	0.120	BARIUM	0.001	0.100	1
P-19US	140.000	CALCIUM	0.020	1.000	1
P-19US	0.110	CHROMIUM, TOTAL	0.005	0.050	1
P-19US	9.600	IRON	0.005	0.050	1
P-19US	9.100	MAGNESIUM	0.040	1.000	1
P-19US	0.100	MANGANESE	0.001	0.020	1
P-19US	27.000	SODIUM	0.050	1.000	1
P-19US	0.140	ZINC	0.003	0.020	1
USGS Paluxy Wells					
USGS08PL	44.000	CALCIUM	0.020	1.000	1
USGS08PL	0.340	IRON	0.005	0.050	1
USGS08PL	23.000	MAGNESIUM	0.040	1.000	1
USGS08PL	0.036	MANGANESE	0.001	0.020	1
USGS08PL	5.500	POTASSIUM	0.200	5.000	1
USGS08PL	42.000	SODIUM	0.050	1.000	1
USGS08PL	0.050	ZINC	0.003	0.020	1
USGS08PM	73.000	CALCIUM	0.020	1.000	1
USGS08PM	0.230	IRON	0.005	0.050	1
USGS08PM	19.000	MAGNESIUM	0.040	1.000	1
USGS08PM	0.050	MANGANESE	0.001	0.020	1

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Dup. = field duplicate
mg/L = milligrams per liter = parts per million

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
USGS08PM	21.000	SODIUM	0.050	1.000	1
USGS08PM	0.029	ZINC	0.003	0.020	1
USGS08PU	33.000	ALUMINUM	0.080	0.500	1
USGS08PU	360.000	CALCIUM	0.200	10.000	10
USGS08PU	17.000	IRON	0.005	0.050	1
USGS08PU	13.000	MAGNESIUM	0.040	1.000	1
USGS08PU	0.092	MANGANESE	0.001	0.020	1
USGS08PU	6.900	POTASSIUM	0.200	5.000	1
USGS08PU	17.000	SODIUM	0.050	1.000	1
USGS08PU	0.072	ZINC	0.003	0.020	1
USGS09PL	43.000	CALCIUM	0.020	1.000	1
USGS09PL	0.340	IRON	0.005	0.050	1
USGS09PL	21.000	MAGNESIUM	0.040	1.000	1
USGS09PL	0.026	MANGANESE	0.001	0.020	1
USGS09PL	5.000	POTASSIUM	0.200	5.000	1
USGS09PL	44.000	SODIUM	0.050	1.000	1
USGS09PL	0.060	ZINC	0.003	0.020	1
USGS09PM	56.000	CALCIUM	0.020	1.000	1
USGS09PM	0.850	IRON	0.005	0.050	1
USGS09PM	18.000	MAGNESIUM	0.040	1.000	1
USGS09PM	0.029	MANGANESE	0.001	0.020	1
USGS09PM	6.000	POTASSIUM	0.200	5.000	1
USGS09PM	23.000	SODIUM	0.050	1.000	1
USGS09PM	0.066	ZINC	0.003	0.020	1
USGS09PU	0.670	ALUMINUM	0.080	0.500	1
USGS09PU	150.000	CALCIUM	0.020	1.000	1
USGS09PU	0.120	COBALT	0.005	0.050	1
USGS09PU	0.240	IRON	0.005	0.050	1
USGS09PU	22.000	MAGNESIUM	0.040	1.000	1
USGS09PU	0.092	MANGANESE	0.001	0.020	1
USGS09PU	5.800	POTASSIUM	0.200	5.000	1
USGS09PU	23.000	SODIUM	0.050	1.000	1
USGS09PU	0.070	ZINC	0.003	0.020	1
AFP4 Terrace Alluvium Wells					
DOCK-17	0.100	BARIUM	0.001	0.100	1
DOCK-17	0.011	CADMIUM	0.002	0.005	1
DOCK-17	110.000	CALCIUM	0.020	1.000	1
DOCK-17	1.200	IRON	0.005	0.050	1
DOCK-17	19.000	MAGNESIUM	0.040	1.000	1
DOCK-17	0.530	MANGANESE	0.001	0.020	1
DOCK-17	64.000	SODIUM	0.050	1.000	1
DOCK-17	0.039	ZINC	0.003	0.020	1
F-200	0.180	BARIUM	0.001	0.100	1
F-200	97.000	CALCIUM	0.020	1.000	1
F-200	1.900	IRON	0.005	0.050	1
F-200	6.600	MAGNESIUM	0.040	1.000	1
F-200	0.810	MANGANESE	0.001	0.020	1
F-200	78.000	SODIUM	0.050	1.000	1
F-200	0.022	ZINC	0.003	0.020	1
F-203	0.180	BARIUM	0.001	0.100	1
F-203	110.000	CALCIUM	0.020	1.000	1
F-203	14.000	IRON	0.005	0.050	1
F-203	5.300	MAGNESIUM	0.040	1.000	1
F-203	1.100	MANGANESE	0.001	0.020	1
F-203	49.000	SODIUM	0.050	1.000	1
F-203	0.027	ZINC	0.003	0.020	1
F-203 (dup.)	0.180	BARIUM	0.001	0.100	1
F-203 (dup.)	120.000	CALCIUM	0.020	1.000	1
F-203 (dup.)	15.000	IRON	0.005	0.050	1

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Dup. = field duplicate
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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
F-203 (dup.)	5.500	MAGNESIUM	0.040	1.000	1
F-203 (dup.)	1.100	MANGANESE	0.001	0.020	1
F-203 (dup.)	51.000	SODIUM	0.050	1.000	1
F-203 (dup.)	0.037	ZINC	0.003	0.020	1
F-204	2.100	ALUMINUM	0.080	0.500	1
F-204	0.530	BARIUM	0.001	0.100	1
F-204	85.000	CALCIUM	0.020	1.000	1
F-204	5.900	IRON	0.005	0.050	1
F-204	3.200	MAGNESIUM	0.040	1.000	1
F-204	0.160	MANGANESE	0.001	0.020	1
F-204	32.000	SODIUM	0.050	1.000	1
F-204	0.025	ZINC	0.003	0.020	1
F-207	0.110	BARIUM	0.001	0.100	1
F-207	140.000	CALCIUM	0.020	1.000	1
F-207	0.570	IRON	0.005	0.050	1
F-207	3.500	MAGNESIUM	0.040	1.000	1
F-207	100.000	SODIUM	0.050	1.000	1
F-208	0.120	BARIUM	0.001	0.100	1
F-208	0.005	CADMIUM	0.002	0.005	1
F-208	95.000	CALCIUM	0.020	1.000	1
F-208	0.420	IRON	0.005	0.050	1
F-208	5.800	MAGNESIUM	0.040	1.000	1
F-208	1.400	MANGANESE	0.001	0.020	1
F-208	20.000	SODIUM	0.050	1.000	1
F-208	0.020	ZINC	0.003	0.020	1
F-209	0.250	BARIUM	0.001	0.100	1
F-209	110.000	CALCIUM	0.020	1.000	1
F-209	12.000	IRON	0.005	0.050	1
F-209	17.000	MAGNESIUM	0.040	1.000	1
F-209	0.320	MANGANESE	0.001	0.020	1
F-209	51.000	SODIUM	0.050	1.000	1
F-209	0.042	ZINC	0.003	0.020	1
F-211	0.650	ALUMINUM	0.080	0.500	1
F-211	0.110	BARIUM	0.001	0.100	1
F-211	93.000	CALCIUM	0.020	1.000	1
F-211	0.088	CHROMIUM, TOTAL	0.005	0.050	1
F-211	0.600	IRON	0.005	0.050	1
F-211	2.700	MAGNESIUM	0.040	1.000	1
F-211	140.000	SODIUM	0.050	1.000	1
F-212	1.300	ALUMINUM	0.080	0.500	1
F-212	510.000	CALCIUM	0.200	10.000	10
F-212	1.700	IRON	0.005	0.050	1
F-212	14.000	MAGNESIUM	0.040	1.000	1
F-212	0.045	MANGANESE	0.001	0.020	1
F-212	140.000	SODIUM	0.050	1.000	1
F-212	0.180	ZINC	0.003	0.020	1
F-213	0.120	BARIUM	0.001	0.100	1
F-213	190.000	CALCIUM	0.020	1.000	1
F-213	0.370	IRON	0.005	0.050	1
F-213	20.000	MAGNESIUM	0.040	1.000	1
F-213	0.055	MANGANESE	0.001	0.020	1
F-213	54.000	SODIUM	0.050	1.000	1
F-213	0.024	ZINC	0.003	0.020	1
F-214	0.012	CADMIUM	0.002	0.005	1
F-214	230.000	CALCIUM	0.020	1.000	1
F-214	3.400	IRON	0.005	0.050	1
F-214	39.000	MAGNESIUM	0.040	1.000	1
F-214	0.730	MANGANESE	0.001	0.020	1
F-214	0.250	NICKEL	0.020	0.100	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
F-214	7.200	POTASSIUM	0.200	5.000	1
F-214	150.000	SODIUM	0.050	1.000	1
F-214	0.024	ZINC	0.003	0.020	1
F-215	2.400	ALUMINUM	0.080	0.500	1
F-215	0.130	BARIUM	0.001	0.100	1
F-215	130.000	CALCIUM	0.020	1.000	1
F-215	0.067	CHROMIUM, TOTAL	0.005	0.050	1
F-215	2.000	IRON	0.005	0.050	1
F-215	4.600	MAGNESIUM	0.040	1.000	1
F-215	0.051	MANGANESE	0.001	0.020	1
F-215	140.000	SODIUM	0.050	1.000	1
F-215	0.057	ZINC	0.003	0.020	1
F-216	0.690	ALUMINUM	0.080	0.500	1
F-216	220.000	CALCIUM	0.020	1.000	1
F-216	0.520	IRON	0.005	0.050	1
F-216	13.000	MAGNESIUM	0.040	1.000	1
F-216	0.430	MANGANESE	0.001	0.020	1
F-216	280.000	SODIUM	0.050	1.000	1
F-217	0.580	ALUMINUM	0.080	0.500	1
F-217	0.110	BARIUM	0.001	0.100	1
F-217	0.014	CADMIUM	0.002	0.005	1
F-217	160.000	CALCIUM	0.020	1.000	1
F-217	1.400	IRON	0.005	0.050	1
F-217	0.350	LEAD	0.030	0.200	1
F-217	21.000	MAGNESIUM	0.040	1.000	1
F-217	0.370	MANGANESE	0.001	0.020	1
F-217	0.130	NICKEL	0.020	0.100	1
F-217	13.000	POTASSIUM	0.200	5.000	1
F-217	85.000	SODIUM	0.050	1.000	1
F-217	0.380	ZINC	0.003	0.020	1
F-218	110.000	CALCIUM	0.020	1.000	1
F-218	0.087	CHROMIUM, TOTAL	0.005	0.050	1
F-218	6.000	COBALT	0.005	0.050	1
F-218	0.300	IRON	0.005	0.050	1
F-218	3.200	MAGNESIUM	0.040	1.000	1
F-218	0.023	MANGANESE	0.001	0.020	1
F-218	39.000	SODIUM	0.050	1.000	1
F-218	0.037	ZINC	0.003	0.020	1
F-218 (dup.)	0.590	ALUMINUM	0.080	0.500	1
F-218 (dup.)	110.000	CALCIUM	0.020	1.000	1
F-218 (dup.)	0.110	CHROMIUM, TOTAL	0.005	0.050	1
F-218 (dup.)	0.520	IRON	0.005	0.050	1
F-218 (dup.)	3.200	MAGNESIUM	0.040	1.000	1
F-218 (dup.)	0.026	MANGANESE	0.001	0.020	1
F-218 (dup.)	38.000	SODIUM	0.050	1.000	1
F-218 (dup.)	0.023	ZINC	0.003	0.020	1
F-219	0.014	CADMIUM	0.002	0.005	1
F-219	700.000	CALCIUM	0.200	10.000	10
F-219	0.170	IRON	0.005	0.050	1
F-219	26.000	MAGNESIUM	0.040	1.000	1
F-219	53.000	SODIUM	0.050	1.000	1
F-219	0.021	ZINC	0.003	0.020	1
F-220	0.510	BARIUM	0.001	0.100	1
F-220	150.000	CALCIUM	0.020	1.000	1
F-220	0.130	COBALT	0.005	0.050	1
F-220	0.072	COPPER	0.005	0.050	1
F-220	0.400	IRON	0.005	0.050	1
F-220	41.000	MAGNESIUM	0.040	1.000	1
F-220	0.430	MANGANESE	0.001	0.020	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
F-220	0.650	MOLYBDENUM	0.003	0.100	1
F-220	2500.000	SODIUM	0.500	10.000	10
F-220	0.030	ZINC	0.003	0.020	1
F-221	0.670	ALUMINUM	0.080	0.500	1
F-221	0.150	BARIUM	0.001	0.100	1
F-221	170.000	CALCIUM	0.020	1.000	1
F-221	1.200	IRON	0.005	0.050	1
F-221	6.100	MAGNESIUM	0.040	1.000	1
F-221	1.200	MANGANESE	0.001	0.020	1
F-221	54.000	SODIUM	0.050	1.000	1
F-221	0.024	ZINC	0.003	0.020	1
FSA-3-01	0.260	BARIUM	0.001	0.100	1
FSA-3-01	120.000	CALCIUM	0.020	1.000	1
FSA-3-01	8.600	IRON	0.005	0.050	1
FSA-3-01	14.000	MAGNESIUM	0.040	1.000	1
FSA-3-01	0.220	MANGANESE	0.001	0.020	1
FSA-3-01	30.000	SODIUM	0.050	1.000	1
FSA-3-02	0.290	BARIUM	0.001	0.100	1
FSA-3-02	84.000	CALCIUM	0.020	1.000	1
FSA-3-02	5.100	IRON	0.005	0.050	1
FSA-3-02	12.000	MAGNESIUM	0.040	1.000	1
FSA-3-02	0.140	MANGANESE	0.001	0.020	1
FSA-3-02	84.000	SODIUM	0.050	1.000	1
FSA-3-02	0.029	ZINC	0.003	0.020	1
FSA-3-02 (dup.)	0.270	BARIUM	0.001	0.100	1
FSA-3-02 (dup.)	0.020	CADMIUM	0.002	0.005	1
FSA-3-02 (dup.)	81.000	CALCIUM	0.020	1.000	1
FSA-3-02 (dup.)	5.100	IRON	0.005	0.050	1
FSA-3-02 (dup.)	12.000	MAGNESIUM	0.040	1.000	1
FSA-3-02 (dup.)	0.140	MANGANESE	0.001	0.020	1
FSA-3-02 (dup.)	80.000	SODIUM	0.050	1.000	1
FSA-3-02 (dup.)	0.028	ZINC	0.003	0.020	1
FSA-3-03	5.600	ALUMINUM	0.080	0.500	1
FSA-3-03	0.120	BARIUM	0.001	0.100	1
FSA-3-03	77.000	CALCIUM	0.020	1.000	1
FSA-3-03	3.200	IRON	0.005	0.050	1
FSA-3-03	10.000	MAGNESIUM	0.040	1.000	1
FSA-3-03	0.080	MANGANESE	0.001	0.020	1
FSA-3-03	480.000	SODIUM	0.500	10.000	10
FSA-3-03	0.027	ZINC	0.003	0.020	1
FSA-3-04	1.300	ALUMINUM	0.080	0.500	1
FSA-3-04	0.210	BARIUM	0.001	0.100	1
FSA-3-04	77.000	CALCIUM	0.020	1.000	1
FSA-3-04	1.500	IRON	0.005	0.050	1
FSA-3-04	20.000	MAGNESIUM	0.040	1.000	1
FSA-3-04	0.200	MANGANESE	0.001	0.020	1
FSA-3-04	72.000	SODIUM	0.050	1.000	1
FSA-3-06	0.300	BARIUM	0.001	0.100	1
FSA-3-06	0.014	CADMIUM	0.002	0.005	1
FSA-3-06	70.000	CALCIUM	0.020	1.000	1
FSA-3-06	5.000	IRON	0.005	0.050	1
FSA-3-06	18.000	MAGNESIUM	0.040	1.000	1
FSA-3-06	0.590	MANGANESE	0.001	0.020	1
FSA-3-06	75.000	SODIUM	0.050	1.000	1
FSA-3-07	4.800	ALUMINUM	0.080	0.500	1
FSA-3-07	0.310	BARIUM	0.001	0.100	1
FSA-3-07	120.000	CALCIUM	0.020	1.000	1
FSA-3-07	46.000	IRON	0.005	0.050	1
FSA-3-07	13.000	MAGNESIUM	0.040	1.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
FSA-3-07	0.610	MANGANESE	0.001	0.020	1
FSA-3-07	61.000	SODIUM	0.050	1.000	1
FSA-3-07	0.035	ZINC	0.003	0.020	1
FSA-3-08	0.240	BARIUM	0.001	0.100	1
FSA-3-08	0.006	CADMIUM	0.002	0.005	1
FSA-3-08	110.000	CALCIUM	0.020	1.000	1
FSA-3-08	6.900	IRON	0.005	0.050	1
FSA-3-08	9.400	MAGNESIUM	0.040	1.000	1
FSA-3-08	0.620	MANGANESE	0.001	0.020	1
FSA-3-08	40.000	SODIUM	0.050	1.000	1
FSA-3-10	1.200	ALUMINUM	0.080	0.500	1
FSA-3-10	0.250	BARIUM	0.001	0.100	1
FSA-3-10	150.000	CALCIUM	0.020	1.000	1
FSA-3-10	12.000	IRON	0.005	0.050	1
FSA-3-10	8.900	MAGNESIUM	0.040	1.000	1
FSA-3-10	0.740	MANGANESE	0.001	0.020	1
FSA-3-10	48.000	SODIUM	0.050	1.000	1
FSA-3-10	0.031	ZINC	0.003	0.020	1
FSA-3-12	1.800	ALUMINUM	0.080	0.500	1
FSA-3-12	0.240	BARIUM	0.001	0.100	1
FSA-3-12	170.000	CALCIUM	0.020	1.000	1
FSA-3-12	9.500	IRON	0.005	0.050	1
FSA-3-12	14.000	MAGNESIUM	0.040	1.000	1
FSA-3-12	0.230	MANGANESE	0.001	0.020	1
FSA-3-12	33.000	SODIUM	0.050	1.000	1
FSA-3-12	0.031	ZINC	0.003	0.020	1
FSA-3-14	1.100	ALUMINUM	0.080	0.500	1
FSA-3-14	0.460	BARIUM	0.001	0.100	1
FSA-3-14	84.000	CALCIUM	0.020	1.000	1
FSA-3-14	4.000	IRON	0.005	0.050	1
FSA-3-14	16.000	MAGNESIUM	0.040	1.000	1
FSA-3-14	0.340	MANGANESE	0.001	0.020	1
FSA-3-14	62.000	SODIUM	0.050	1.000	1
FSA-3-14	0.140	ZINC	0.003	0.020	1
FSA-3-15	1.900	ALUMINUM	0.080	0.500	1
FSA-3-15	0.320	BARIUM	0.001	0.100	1
FSA-3-15	91.000	CALCIUM	0.020	1.000	1
FSA-3-15	5.300	IRON	0.005	0.050	1
FSA-3-15	20.000	MAGNESIUM	0.040	1.000	1
FSA-3-15	0.260	MANGANESE	0.001	0.020	1
FSA-3-15	60.000	SODIUM	0.050	1.000	1
FSA-3-15	0.072	ZINC	0.003	0.020	1
FSA-3-15 (dup.)	1.300	ALUMINUM	0.080	0.500	1
FSA-3-15 (dup.)	0.310	BARIUM	0.001	0.100	1
FSA-3-15 (dup.)	0.008	CADMIUM	0.002	0.005	1
FSA-3-15 (dup.)	87.000	CALCIUM	0.020	1.000	1
FSA-3-15 (dup.)	3.900	IRON	0.005	0.050	1
FSA-3-15 (dup.)	20.000	MAGNESIUM	0.040	1.000	1
FSA-3-15 (dup.)	0.230	MANGANESE	0.001	0.020	1
FSA-3-15 (dup.)	59.000	SODIUM	0.050	1.000	1
FSA-3-15 (dup.)	0.061	ZINC	0.003	0.020	1
FSA-3-17	0.530	ALUMINUM	0.080	0.500	1
FSA-3-17	120.000	CALCIUM	0.020	1.000	1
FSA-3-17	0.410	IRON	0.005	0.050	1
FSA-3-17	29.000	MAGNESIUM	0.040	1.000	1
FSA-3-17	0.100	MANGANESE	0.001	0.020	1
FSA-3-17	47.000	SODIUM	0.050	1.000	1
FSA-3-17	0.024	ZINC	0.003	0.020	1
GMI-03M	60.000	ALUMINUM	0.080	0.500	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
GMI-03M	0.590	BARIUM	0.001	0.100	1
GMI-03M	480.000	CALCIUM	0.200	10.000	10
GMI-03M	0.084	CHROMIUM, TOTAL	0.005	0.050	1
GMI-03M	0.052	COPPER	0.005	0.050	1
GMI-03M	67.000	IRON	0.005	0.050	1
GMI-03M	32.000	MAGNESIUM	0.040	1.000	1
GMI-03M	1.500	MANGANESE	0.001	0.020	1
GMI-03M	11.000	POTASSIUM	0.200	5.000	1
GMI-03M	93.000	SODIUM	0.050	1.000	1
GMI-03M	0.110	VANADIUM	0.005	0.100	1
GMI-03M	0.250	ZINC	0.003	0.020	1
GMI-05M	28.000	ALUMINUM	0.080	0.500	1
GMI-05M	0.350	BARIUM	0.001	0.100	1
GMI-05M	520.000	CALCIUM	0.200	10.000	10
GMI-05M	31.000	IRON	0.005	0.050	1
GMI-05M	14.000	MAGNESIUM	0.040	1.000	1
GMI-05M	0.860	MANGANESE	0.001	0.020	1
GMI-05M	5.500	POTASSIUM	0.200	5.000	1
GMI-05M	10.000	SODIUM	0.050	1.000	1
GMI-05M	0.078	ZINC	0.003	0.020	1
HM-2	140.000	CALCIUM	0.020	1.000	1
HM-2	0.220	IRON	0.005	0.050	1
HM-2	3.100	MAGNESIUM	0.040	1.000	1
HM-2	15.000	SODIUM	0.050	1.000	1
HM-5	9.500	ALUMINUM	0.080	0.500	1
HM-5	370.000	CALCIUM	0.200	10.000	10
HM-5	12.000	IRON	0.005	0.050	1
HM-5	30.000	MAGNESIUM	0.040	1.000	1
HM-5	0.260	MANGANESE	0.001	0.020	1
HM-5	6.100	POTASSIUM	0.200	5.000	1
HM-5	140.000	SODIUM	0.050	1.000	1
HM-5	0.039	ZINC	0.003	0.020	1
HM-7	0.290	BARIUM	0.001	0.100	1
HM-7	130.000	CALCIUM	0.020	1.000	1
HM-7	7.300	IRON	0.005	0.050	1
HM-7	16.000	MAGNESIUM	0.040	1.000	1
HM-7	0.360	MANGANESE	0.001	0.020	1
HM-7	9.500	POTASSIUM	0.200	5.000	1
HM-7	61.000	SODIUM	0.050	1.000	1
HM-7	0.024	ZINC	0.003	0.020	1
HM-8	4.800	ALUMINUM	0.080	0.500	1
HM-8	200.000	CALCIUM	0.020	1.000	1
HM-8	4.400	IRON	0.005	0.050	1
HM-8	4.000	MAGNESIUM	0.040	1.000	1
HM-8	0.130	MANGANESE	0.001	0.020	1
HM-8	11.000	SODIUM	0.050	1.000	1
HM-8	0.150	ZINC	0.003	0.020	1
HM-9	1.000	ALUMINUM	0.080	0.500	1
HM-9	0.010	CADMIUM	0.002	0.005	1
HM-9	650.000	CALCIUM	0.200	10.000	10
HM-9	1.800	IRON	0.005	0.050	1
HM-9	130.000	MAGNESIUM	0.040	1.000	1
HM-9	0.850	MANGANESE	0.001	0.020	1
HM-9	19.000	POTASSIUM	0.200	5.000	1
HM-9	100.000	SODIUM	0.050	1.000	1
HM-9	0.074	ZINC	0.003	0.020	1
HM-10	7.000	ALUMINUM	0.080	0.500	1
HM-10	0.150	BARIUM	0.001	0.100	1
HM-10	220.000	CALCIUM	0.020	1.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-10	0.050	CHROMIUM, TOTAL	0.005	0.050	1
HM-10	0.080	COPPER	0.005	0.050	1
HM-10	11.000	IRON	0.005	0.050	1
HM-10	81.000	MAGNESIUM	0.040	1.000	1
HM-10	0.390	MANGANESE	0.001	0.020	1
HM-10	23.000	POTASSIUM	0.200	5.000	1
HM-10	190.000	SODIUM	0.050	1.000	1
HM-10	0.250	ZINC	0.003	0.020	1
HM-11	130.000	CALCIUM	0.020	1.000	1
HM-11	0.260	IRON	0.005	0.050	1
HM-11	3.500	MAGNESIUM	0.040	1.000	1
HM-11	0.021	MANGANESE	0.001	0.020	1
HM-11	16.000	SODIUM	0.050	1.000	1
HM-11	0.150	ZINC	0.003	0.020	1
HM-12	0.012	CADMIUM	0.002	0.005	1
HM-12	690.000	CALCIUM	0.200	10.000	10
HM-12	0.390	IRON	0.005	0.050	1
HM-12	19.000	MAGNESIUM	0.040	1.000	1
HM-12	41.000	SODIUM	0.050	1.000	1
HM-12	0.043	ZINC	0.003	0.020	1
HM-13	3.000	ALUMINUM	0.080	0.500	1
HM-13	0.100	BARIUM	0.001	0.100	1
HM-13	0.008	CADMIUM	0.002	0.005	1
HM-13	170.000	CALCIUM	0.020	1.000	1
HM-13	3.400	IRON	0.005	0.050	1
HM-13	5.900	MAGNESIUM	0.040	1.000	1
HM-13	0.087	MANGANESE	0.001	0.020	1
HM-13	26.000	SODIUM	0.050	1.000	1
HM-13	0.022	ZINC	0.003	0.020	1
HM-14	1.200	ALUMINUM	0.080	0.500	1
HM-14	0.130	BARIUM	0.001	0.100	1
HM-14	160.000	CALCIUM	0.020	1.000	1
HM-14	6.000	IRON	0.005	0.050	1
HM-14	4.100	MAGNESIUM	0.040	1.000	1
HM-14	0.067	MANGANESE	0.001	0.020	1
HM-14	42.000	SODIUM	0.050	1.000	1
HM-14	0.190	ZINC	0.003	0.020	1
HM-17	1.700	ALUMINUM	0.080	0.500	1
HM-17	130.000	CALCIUM	0.020	1.000	1
HM-17	2.900	IRON	0.005	0.050	1
HM-17	5.300	MAGNESIUM	0.040	1.000	1
HM-17	0.054	MANGANESE	0.001	0.020	1
HM-17	10.000	SODIUM	0.050	1.000	1
HM-17	0.081	ZINC	0.003	0.020	1
HM-18	0.120	BARIUM	0.001	0.100	1
HM-18	150.000	CALCIUM	0.020	1.000	1
HM-18	0.120	CHROMIUM, TOTAL	0.005	0.050	1
HM-18	0.130	IRON	0.005	0.050	1
HM-18	4.300	MAGNESIUM	0.040	1.000	1
HM-18	83.000	SODIUM	0.050	1.000	1
HM-18	0.024	ZINC	0.003	0.020	1
HM-19	0.750	ALUMINUM	0.080	0.500	1
HM-19	440.000	CALCIUM	0.200	10.000	10
HM-19	2.400	IRON	0.005	0.050	1
HM-19	36.000	MAGNESIUM	0.040	1.000	1
HM-19	0.220	MANGANESE	0.001	0.020	1
HM-19	110.000	SODIUM	0.050	1.000	1
HM-19	0.100	ZINC	0.003	0.020	1
HM-20	0.630	ALUMINUM	0.080	0.500	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-20	0.008	CADMIUM	0.002	0.005	1
HM-20	78.000	CALCIUM	0.020	1.000	1
HM-20	2.000	IRON	0.005	0.050	1
HM-20	2.000	MAGNESIUM	0.040	1.000	1
HM-20	0.140	MANGANESE	0.001	0.020	1
HM-20	87.000	SODIUM	0.050	1.000	1
HM-20	0.120	ZINC	0.003	0.020	1
HM-20 (dup.)	0.740	ALUMINUM	0.080	0.500	1
HM-20 (dup.)	0.005	CADMIUM	0.002	0.005	1
HM-20 (dup.)	97.000	CALCIUM	0.020	1.000	1
HM-20 (dup.)	1.900	IRON	0.005	0.050	1
HM-20 (dup.)	2.600	MAGNESIUM	0.040	1.000	1
HM-20 (dup.)	0.150	MANGANESE	0.001	0.020	1
HM-20 (dup.)	120.000	SODIUM	0.050	1.000	1
HM-20 (dup.)	0.090	ZINC	0.003	0.020	1
HM-22	6.700	ALUMINUM	0.080	0.500	1
HM-22	0.150	BARIUM	0.001	0.100	1
HM-22	0.006	CADMIUM	0.002	0.005	1
HM-22	370.000	CALCIUM	0.200	10.000	10
HM-22	15.000	IRON	0.005	0.050	1
HM-22	42.000	MAGNESIUM	0.040	1.000	1
HM-22	0.220	MANGANESE	0.001	0.020	1
HM-22	5.200	POTASSIUM	0.200	5.000	1
HM-22	38.000	SODIUM	0.050	1.000	1
HM-22	0.054	ZINC	0.003	0.020	1
HM-23	0.550	ALUMINUM	0.080	0.500	1
HM-23	0.130	BARIUM	0.001	0.100	1
HM-23	150.000	CALCIUM	0.020	1.000	1
HM-23	5.400	IRON	0.005	0.050	1
HM-23	3.700	MAGNESIUM	0.040	1.000	1
HM-23	0.056	MANGANESE	0.001	0.020	1
HM-23	24.000	SODIUM	0.050	1.000	1
HM-23	0.380	ZINC	0.003	0.020	1
HM-24	0.740	ALUMINUM	0.080	0.500	1
HM-24	680.000	CALCIUM	0.200	10.000	10
HM-24	2.400	IRON	0.005	0.050	1
HM-24	23.000	MAGNESIUM	0.040	1.000	1
HM-24	0.300	MANGANESE	0.001	0.020	1
HM-24	50.000	SODIUM	0.050	1.000	1
HM-24	2.400	ZINC	0.003	0.020	1
HM-24 (dup.)	0.770	ALUMINUM	0.080	0.500	1
HM-24 (dup.)	680.000	CALCIUM	0.200	10.000	10
HM-24 (dup.)	2.600	IRON	0.005	0.050	1
HM-24 (dup.)	23.000	MAGNESIUM	0.040	1.000	1
HM-24 (dup.)	0.310	MANGANESE	0.001	0.020	1
HM-24 (dup.)	49.000	SODIUM	0.050	1.000	1
HM-24 (dup.)	2.300	ZINC	0.003	0.020	1
HM-26	1.100	ALUMINUM	0.080	0.500	1
HM-26	370.000	CALCIUM	0.200	10.000	10
HM-26	1.300	IRON	0.005	0.050	1
HM-26	120.000	MAGNESIUM	0.040	1.000	1
HM-26	2.300	MANGANESE	0.001	0.020	1
HM-26	24.000	POTASSIUM	0.200	5.000	1
HM-26	240.000	SODIUM	0.050	1.000	1
HM-26	0.042	ZINC	0.003	0.020	1
HM-29	0.005	CADMIUM	0.002	0.005	1
HM-29	80.000	CALCIUM	0.020	1.000	1
HM-29	0.085	CHROMIUM, TOTAL	0.005	0.050	1
HM-29	0.290	IRON	0.005	0.050	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-29	2.600	MAGNESIUM	0.040	1.000	1
HM-29	120.000	SODIUM	0.050	1.000	1
HM-29	0.100	ZINC	0.003	0.020	1
HM-30	58.000	CALCIUM	0.020	1.000	1
HM-30	0.380	IRON	0.005	0.050	1
HM-30	1.500	MAGNESIUM	0.040	1.000	1
HM-30	15.000	SODIUM	0.050	1.000	1
HM-30	0.041	ZINC	0.003	0.020	1
HM-31	1.600	ALUMINUM	0.080	0.500	1
HM-31	160.000	CALCIUM	0.020	1.000	1
HM-31	2.400	IRON	0.005	0.050	1
HM-31	9.700	MAGNESIUM	0.040	1.000	1
HM-31	0.057	MANGANESE	0.001	0.020	1
HM-31	88.000	SODIUM	0.050	1.000	1
HM-31	0.120	ZINC	0.003	0.020	1
HM-32	40.000	CALCIUM	0.020	1.000	1
HM-32	0.290	IRON	0.005	0.050	1
HM-32	1.100	MAGNESIUM	0.040	1.000	1
HM-32	9.800	SODIUM	0.050	1.000	1
HM-32	0.150	ZINC	0.003	0.020	1
HM-33	34.000	ALUMINUM	0.080	0.500	1
HM-33	0.310	BARIUM	0.001	0.100	1
HM-33	0.007	CADMIUM	0.002	0.005	1
HM-33	1800.000	CALCIUM	0.200	10.000	10
HM-33	0.059	CHROMIUM, TOTAL	0.005	0.050	1
HM-33	0.051	COPPER	0.005	0.050	1
HM-33	57.000	IRON	0.005	0.050	1
HM-33	27.000	MAGNESIUM	0.040	1.000	1
HM-33	1.400	MANGANESE	0.001	0.020	1
HM-33	9.200	POTASSIUM	0.200	5.000	1
HM-33	22.000	SODIUM	0.050	1.000	1
HM-33	0.130	VANADIUM	0.005	0.100	1
HM-33	0.110	ZINC	0.003	0.020	1
HM-34	60.000	ALUMINUM	0.080	0.500	1
HM-34	0.650	BARIUM	0.001	0.100	1
HM-34	650.000	CALCIUM	0.200	10.000	10
HM-34	0.057	CHROMIUM, TOTAL	0.005	0.050	1
HM-34	39.000	IRON	0.005	0.050	1
HM-34	13.000	MAGNESIUM	0.040	1.000	1
HM-34	1.000	MANGANESE	0.001	0.020	1
HM-34	7.000	POTASSIUM	0.200	5.000	1
HM-34	23.000	SODIUM	0.050	1.000	1
HM-34	0.100	VANADIUM	0.005	0.100	1
HM-34	0.091	ZINC	0.003	0.020	1
HM-35	9.500	ALUMINUM	0.080	0.500	1
HM-35	0.140	BARIUM	0.001	0.100	1
HM-35	360.000	CALCIUM	0.200	10.000	10
HM-35	6.400	IRON	0.005	0.050	1
HM-35	18.000	MAGNESIUM	0.040	1.000	1
HM-35	3.800	MANGANESE	0.001	0.020	1
HM-35	29.000	SODIUM	0.050	1.000	1
HM-36	26.000	ALUMINUM	0.080	0.500	1
HM-36	0.150	BARIUM	0.001	0.100	1
HM-36	690.000	CALCIUM	0.200	10.000	10
HM-36	0.063	CHROMIUM, TOTAL	0.005	0.050	1
HM-36	23.000	IRON	0.005	0.050	1
HM-36	19.000	MAGNESIUM	0.040	1.000	1
HM-36	1.200	MANGANESE	0.001	0.020	1
HM-36	5.300	POTASSIUM	0.200	5.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-36	140.000	SODIUM	0.050	1.000	1
HM-36	0.068	ZINC	0.003	0.020	1
HM-37	220.000	CALCIUM	0.020	1.000	1
HM-37	0.150	IRON	0.005	0.050	1
HM-37	69.000	MAGNESIUM	0.040	1.000	1
HM-37	0.830	MANGANESE	0.001	0.020	1
HM-37	0.150	NICKEL	0.020	0.100	1
HM-37	17.000	POTASSIUM	0.200	5.000	1
HM-37	120.000	SODIUM	0.050	1.000	1
HM-40	8.400	ALUMINUM	0.080	0.500	1
HM-40	0.130	BARIUM	0.001	0.100	1
HM-40	250.000	CALCIUM	0.020	1.000	1
HM-40	5.700	IRON	0.005	0.050	1
HM-40	4.800	MAGNESIUM	0.040	1.000	1
HM-40	0.130	MANGANESE	0.001	0.020	1
HM-40	19.000	SODIUM	0.050	1.000	1
HM-40	0.067	ZINC	0.003	0.020	1
HM-41	0.007	CADMIUM	0.002	0.005	1
HM-41	110.000	CALCIUM	0.020	1.000	1
HM-41	0.170	IRON	0.005	0.050	1
HM-41	2.700	MAGNESIUM	0.040	1.000	1
HM-41	23.000	SODIUM	0.050	1.000	1
HM-41 (dup.)	0.006	CADMIUM	0.002	0.005	1
HM-41 (dup.)	110.000	CALCIUM	0.020	1.000	1
HM-41 (dup.)	0.250	IRON	0.005	0.050	1
HM-41 (dup.)	2.800	MAGNESIUM	0.040	1.000	1
HM-41 (dup.)	22.000	SODIUM	0.050	1.000	1
HM-42	1.800	ALUMINUM	0.080	0.500	1
HM-42	0.005	CADMIUM	0.002	0.005	1
HM-42	160.000	CALCIUM	0.020	1.000	1
HM-42	0.054	CHROMIUM, TOTAL	0.005	0.050	1
HM-42	2.600	IRON	0.005	0.050	1
HM-42	3.100	MAGNESIUM	0.040	1.000	1
HM-42	0.036	MANGANESE	0.001	0.020	1
HM-42	9.800	SODIUM	0.050	1.000	1
HM-43	41.000	ALUMINUM	0.080	0.500	1
HM-43	0.220	BARIUM	0.001	0.100	1
HM-43	1700.000	CALCIUM	0.200	10.000	10
HM-43	0.063	CHROMIUM, TOTAL	0.005	0.050	1
HM-43	0.051	COPPER	0.005	0.050	1
HM-43	35.000	IRON	0.005	0.050	1
HM-43	24.000	MAGNESIUM	0.040	1.000	1
HM-43	0.480	MANGANESE	0.001	0.020	1
HM-43	10.000	POTASSIUM	0.200	5.000	1
HM-43	8.400	SODIUM	0.050	1.000	1
HM-43	0.130	VANADIUM	0.005	0.100	1
HM-43	0.140	ZINC	0.003	0.020	1
HM-44	4.700	ALUMINUM	0.080	0.500	1
HM-44	0.009	CADMIUM	0.002	0.005	1
HM-44	140.000	CALCIUM	0.020	1.000	1
HM-44	3.600	IRON	0.005	0.050	1
HM-44	3.200	MAGNESIUM	0.040	1.000	1
HM-44	0.042	MANGANESE	0.001	0.020	1
HM-44	16.000	SODIUM	0.050	1.000	1
HM-44	0.027	ZINC	0.003	0.020	1
HM-46	180.000	ALUMINUM	0.080	0.500	1
HM-46	1.000	BARIUM	0.001	0.100	1
HM-46	0.017	BERYLLIUM	0.000	0.010	1
HM-46	730.000	CALCIUM	0.200	10.000	10

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-46	0.058	CHROMIUM, TOTAL	0.005	0.050	1
HM-46	0.090	COPPER	0.005	0.050	1
HM-46	110.000	IRON	0.005	0.050	1
HM-46	0.300	LEAD	0.030	0.200	1
HM-46	27.000	MAGNESIUM	0.040	1.000	1
HM-46	1.200	MANGANESE	0.001	0.020	1
HM-46	14.000	POTASSIUM	0.200	5.000	1
HM-46	29.000	SODIUM	0.050	1.000	1
HM-46	0.160	VANADIUM	0.005	0.100	1
HM-46	0.380	ZINC	0.003	0.020	1
HM-47	0.140	BARIUM	0.001	0.100	1
HM-47	170.000	CALCIUM	0.020	1.000	1
HM-47	0.061	CHROMIUM, TOTAL	0.005	0.050	1
HM-47	0.690	IRON	0.005	0.050	1
HM-47	6.500	MAGNESIUM	0.040	1.000	1
HM-47	0.980	MANGANESE	0.001	0.020	1
HM-47	110.000	SODIUM	0.050	1.000	1
HM-47	0.062	ZINC	0.003	0.020	1
HM-49	1.500	ALUMINUM	0.080	0.500	1
HM-49	750.000	CALCIUM	0.200	10.000	10
HM-49	1.800	IRON	0.005	0.050	1
HM-49	53.000	MAGNESIUM	0.040	1.000	1
HM-49	0.048	MANGANESE	0.001	0.020	1
HM-49	6.200	POTASSIUM	0.200	5.000	1
HM-49	24.000	SODIUM	0.050	1.000	1
HM-49	0.031	ZINC	0.003	0.020	1
HM-50	10.000	ALUMINUM	0.080	0.500	1
HM-50	0.130	BARIUM	0.001	0.100	1
HM-50	0.035	CADMIUM	0.002	0.005	1
HM-50	640.000	CALCIUM	0.200	10.000	10
HM-50	0.054	CHROMIUM, TOTAL	0.005	0.050	1
HM-50	0.120	COPPER	0.005	0.050	1
HM-50	84.000	IRON	0.005	0.050	1
HM-50	33.000	MAGNESIUM	0.040	1.000	1
HM-50	0.270	MANGANESE	0.001	0.020	1
HM-50	8.200	POTASSIUM	0.200	5.000	1
HM-50	170.000	SODIUM	0.050	1.000	1
HM-50	1.500	ZINC	0.003	0.020	1
HM-51	0.034	CADMIUM	0.002	0.005	1
HM-51	1100.000	CALCIUM	0.200	10.000	10
HM-51	0.053	CHROMIUM, TOTAL	0.005	0.050	1
HM-51	20.000	IRON	0.005	0.050	1
HM-51	92.000	MAGNESIUM	0.040	1.000	1
HM-51	0.370	MANGANESE	0.001	0.020	1
HM-51	0.120	NICKEL	0.020	0.100	1
HM-51	490.000	SODIUM	0.500	10.000	10
HM-51	0.075	ZINC	0.003	0.020	1
HM-52	0.970	ALUMINUM	0.080	0.500	1
HM-52	0.022	CADMIUM	0.002	0.005	1
HM-52	110.000	CALCIUM	0.020	1.000	1
HM-52	1.100	IRON	0.005	0.050	1
HM-52	2.900	MAGNESIUM	0.040	1.000	1
HM-52	12.000	SODIUM	0.050	1.000	1
HM-52	0.059	ZINC	0.003	0.020	1
HM-53	0.290	BARIUM	0.001	0.100	1
HM-53	0.008	CADMIUM	0.002	0.005	1
HM-53	120.000	CALCIUM	0.020	1.000	1
HM-53	16.000	IRON	0.005	0.050	1
HM-53	6.000	MAGNESIUM	0.040	1.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-53	0.380	MANGANESE	0.001	0.020	1
HM-53	33.000	SODIUM	0.050	1.000	1
HM-53	0.066	ZINC	0.003	0.020	1
HM-54	0.560	ALUMINUM	0.080	0.500	1
HM-54	93.000	CALCIUM	0.020	1.000	1
HM-54	0.580	IRON	0.005	0.050	1
HM-54	2.400	MAGNESIUM	0.040	1.000	1
HM-54	7.600	SODIUM	0.050	1.000	1
HM-54	0.250	ZINC	0.003	0.020	1
HM-54 (dup.)	0.730	ALUMINUM	0.080	0.500	1
HM-54 (dup.)	0.007	CADMIUM	0.002	0.005	1
HM-54 (dup.)	94.000	CALCIUM	0.020	1.000	1
HM-54 (dup.)	0.760	IRON	0.005	0.050	1
HM-54 (dup.)	2.400	MAGNESIUM	0.040	1.000	1
HM-54 (dup.)	7.700	SODIUM	0.050	1.000	1
HM-54 (dup.)	0.270	ZINC	0.003	0.020	1
HM-55	20.000	ALUMINUM	0.080	0.500	1
HM-55	0.220	BARIUM	0.001	0.100	1
HM-55	0.006	CADMIUM	0.002	0.005	1
HM-55	390.000	CALCIUM	0.200	10.000	10
HM-55	28.000	IRON	0.005	0.050	1
HM-55	8.500	MAGNESIUM	0.040	1.000	1
HM-55	0.800	MANGANESE	0.001	0.020	1
HM-55	7.800	POTASSIUM	0.200	5.000	1
HM-55	56.000	SODIUM	0.050	1.000	1
HM-55	0.097	ZINC	0.003	0.020	1
HM-56	40.000	ALUMINUM	0.080	0.500	1
HM-56	0.980	BARIUM	0.001	0.100	1
HM-56	0.007	CADMIUM	0.002	0.005	1
HM-56	680.000	CALCIUM	0.200	10.000	10
HM-56	0.059	CHROMIUM, TOTAL	0.005	0.050	1
HM-56	33.000	IRON	0.005	0.050	1
HM-56	15.000	MAGNESIUM	0.040	1.000	1
HM-56	0.410	MANGANESE	0.001	0.020	1
HM-56	0.120	NICKEL	0.020	0.100	1
HM-56	10.000	POTASSIUM	0.200	5.000	1
HM-56	30.000	SODIUM	0.050	1.000	1
HM-56	0.110	ZINC	0.003	0.020	1
HM-57	1.600	ALUMINUM	0.080	0.500	1
HM-57	180.000	CALCIUM	0.020	1.000	1
HM-57	1.600	IRON	0.005	0.050	1
HM-57	11.000	MAGNESIUM	0.040	1.000	1
HM-57	0.067	MANGANESE	0.001	0.020	1
HM-57	35.000	SODIUM	0.050	1.000	1
HM-58	140.000	ALUMINUM	0.080	0.500	1
HM-58	0.520	ARSENIC	0.030	0.300	1
HM-58	0.740	BARIUM	0.001	0.100	1
HM-58	0.013	BERYLLIUM	0.000	0.010	1
HM-58	0.032	CADMIUM	0.002	0.005	1
HM-58	3000.000	CALCIUM	0.200	10.000	10
HM-58	0.170	CHROMIUM, TOTAL	0.005	0.050	1
HM-58	0.150	COBALT	0.005	0.050	1
HM-58	0.160	COPPER	0.005	0.050	1
HM-58	430.000	IRON	0.050	0.500	10
HM-58	54.000	MAGNESIUM	0.040	1.000	1
HM-58	15.000	MANGANESE	0.001	0.020	1
HM-58	0.200	NICKEL	0.020	0.100	1
HM-58	28.000	POTASSIUM	0.200	5.000	1
HM-58	110.000	SODIUM	0.050	1.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-58	0.330	VANADIUM	0.005	0.100	1
HM-58	0.470	ZINC	0.003	0.020	1
HM-59	10.000	ALUMINUM	0.080	0.500	1
HM-59	0.110	BARIUM	0.001	0.100	1
HM-59	0.007	CADMIUM	0.002	0.005	1
HM-59	410.000	CALCIUM	0.200	10.000	10
HM-59	9.300	IRON	0.005	0.050	1
HM-59	14.000	MAGNESIUM	0.040	1.000	1
HM-59	0.083	MANGANESE	0.001	0.020	1
HM-59	5.400	POTASSIUM	0.200	5.000	1
HM-59	83.000	SODIUM	0.050	1.000	1
HM-59	0.024	ZINC	0.003	0.020	1
HM-60	2.000	ALUMINUM	0.080	0.500	1
HM-60	150.000	CALCIUM	0.020	1.000	1
HM-60	2.000	IRON	0.005	0.050	1
HM-60	3.500	MAGNESIUM	0.040	1.000	1
HM-60	0.036	MANGANESE	0.001	0.020	1
HM-60	26.000	SODIUM	0.050	1.000	1
HM-60	0.029	ZINC	0.003	0.020	1
HM-61	2.900	ALUMINUM	0.080	0.500	1
HM-61	180.000	CALCIUM	0.020	1.000	1
HM-61	7.900	IRON	0.005	0.050	1
HM-61	13.000	MAGNESIUM	0.040	1.000	1
HM-61	0.560	MANGANESE	0.001	0.020	1
HM-61	15.000	SODIUM	0.050	1.000	1
HM-61	0.035	ZINC	0.003	0.020	1
HM-62	3.400	ALUMINUM	0.080	0.500	1
HM-62	0.120	BARIUM	0.001	0.100	1
HM-62	210.000	CALCIUM	0.020	1.000	1
HM-62	3.900	IRON	0.005	0.050	1
HM-62	4.700	MAGNESIUM	0.040	1.000	1
HM-62	0.065	MANGANESE	0.001	0.020	1
HM-62	95.000	SODIUM	0.050	1.000	1
HM-62	0.038	ZINC	0.003	0.020	1
HM-63	1.300	ALUMINUM	0.080	0.500	1
HM-63	0.440	BARIUM	0.001	0.100	1
HM-63	170.000	CALCIUM	0.020	1.000	1
HM-63	12.000	IRON	0.005	0.050	1
HM-63	5.800	MAGNESIUM	0.040	1.000	1
HM-63	2.100	MANGANESE	0.001	0.020	1
HM-63	49.000	SODIUM	0.050	1.000	1
HM-64	12.000	ALUMINUM	0.080	0.500	1
HM-64	420.000	CALCIUM	0.200	10.000	10
HM-64	16.000	IRON	0.005	0.050	1
HM-64	8.200	MAGNESIUM	0.040	1.000	1
HM-64	0.570	MANGANESE	0.001	0.020	1
HM-64	85.000	SODIUM	0.050	1.000	1
HM-64	0.055	ZINC	0.003	0.020	1
HM-65	5.400	ALUMINUM	0.080	0.500	1
HM-65	590.000	CALCIUM	0.200	10.000	10
HM-65	3.500	IRON	0.005	0.050	1
HM-65	68.000	MAGNESIUM	0.040	1.000	1
HM-65	0.110	MANGANESE	0.001	0.020	1
HM-65	130.000	SODIUM	0.050	1.000	1
HM-65	0.210	ZINC	0.003	0.020	1
HM-66	13.000	ALUMINUM	0.080	0.500	1
HM-66	410.000	CALCIUM	0.200	10.000	10
HM-66	15.000	IRON	0.005	0.050	1
HM-66	14.000	MAGNESIUM	0.040	1.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-66	0.190	MANGANESE	0.001	0.020	1
HM-66	41.000	SODIUM	0.050	1.000	1
HM-66	0.110	ZINC	0.003	0.020	1
HM-68	3.400	ALUMINUM	0.080	0.500	1
HM-68	0.110	BARIUM	0.001	0.100	1
HM-68	130.000	CALCIUM	0.020	1.000	1
HM-68	4.900	IRON	0.005	0.050	1
HM-68	3.900	MAGNESIUM	0.040	1.000	1
HM-68	0.074	MANGANESE	0.001	0.020	1
HM-68	6.200	SODIUM	0.050	1.000	1
HM-68	0.026	ZINC	0.003	0.020	1
HM-68 (dup.)	4.200	ALUMINUM	0.080	0.500	1
HM-68 (dup.)	0.120	BARIUM	0.001	0.100	1
HM-68 (dup.)	0.007	CADMIUM	0.002	0.005	1
HM-68 (dup.)	130.000	CALCIUM	0.020	1.000	1
HM-68 (dup.)	5.300	IRON	0.005	0.050	1
HM-68 (dup.)	4.000	MAGNESIUM	0.040	1.000	1
HM-68 (dup.)	0.093	MANGANESE	0.001	0.020	1
HM-68 (dup.)	6.100	SODIUM	0.050	1.000	1
HM-68 (dup.)	0.037	ZINC	0.003	0.020	1
HM-69	0.930	ALUMINUM	0.080	0.500	1
HM-69	130.000	CALCIUM	0.020	1.000	1
HM-69	1.100	IRON	0.005	0.050	1
HM-69	6.200	MAGNESIUM	0.040	1.000	1
HM-69	9.700	SODIUM	0.050	1.000	1
HM-69	0.043	ZINC	0.003	0.020	1
HM-71	18.000	ALUMINUM	0.080	0.500	1
HM-71	0.140	BARIUM	0.001	0.100	1
HM-71	140.000	CALCIUM	0.020	1.000	1
HM-71	13.000	IRON	0.005	0.050	1
HM-71	5.200	MAGNESIUM	0.040	1.000	1
HM-71	0.170	MANGANESE	0.001	0.020	1
HM-71	91.000	SODIUM	0.050	1.000	1
HM-71	0.082	ZINC	0.003	0.020	1
HM-71 (dup.)	19.000	ALUMINUM	0.080	0.500	1
HM-71 (dup.)	0.140	BARIUM	0.001	0.100	1
HM-71 (dup.)	130.000	CALCIUM	0.020	1.000	1
HM-71 (dup.)	0.055	CHROMIUM, TOTAL	0.005	0.050	1
HM-71 (dup.)	13.000	IRON	0.005	0.050	1
HM-71 (dup.)	5.300	MAGNESIUM	0.040	1.000	1
HM-71 (dup.)	0.170	MANGANESE	0.001	0.020	1
HM-71 (dup.)	92.000	SODIUM	0.050	1.000	1
HM-71 (dup.)	0.074	ZINC	0.003	0.020	1
HM-72	3.300	ALUMINUM	0.080	0.500	1
HM-72	190.000	CALCIUM	0.020	1.000	1
HM-72	2.200	IRON	0.005	0.050	1
HM-72	9.400	MAGNESIUM	0.040	1.000	1
HM-72	0.065	MANGANESE	0.001	0.020	1
HM-72	110.000	SODIUM	0.050	1.000	1
HM-72	0.066	ZINC	0.003	0.020	1
HM-73	0.650	ALUMINUM	0.080	0.500	1
HM-73	1000.000	CALCIUM	0.020	1.000	10
HM-73	0.820	IRON	0.005	0.050	1
HM-73	55.000	MAGNESIUM	0.040	1.000	1
HM-73	0.029	MANGANESE	0.001	0.020	1
HM-73	5.100	POTASSIUM	0.200	5.000	1
HM-73	140.000	SODIUM	0.050	1.000	1
HM-73	0.029	ZINC	0.003	0.020	1
HM-74	2.100	ALUMINUM	0.080	0.500	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-74	550.000	CALCIUM	0.200	10.000	10
HM-74	4.100	IRON	0.005	0.050	1
HM-74	15.000	MAGNESIUM	0.040	1.000	1
HM-74	0.220	MANGANESE	0.001	0.020	1
HM-74	260.000	SODIUM	0.050	1.000	1
HM-74	0.090	ZINC	0.003	0.020	1
HM-75	0.620	ALUMINUM	0.080	0.500	1
HM-75	480.000	CALCIUM	0.200	10.000	10
HM-75	2.600	IRON	0.005	0.050	1
HM-75	25.000	MAGNESIUM	0.040	1.000	1
HM-75	0.065	MANGANESE	0.001	0.020	1
HM-75	110.000	SODIUM	0.050	1.000	1
HM-75	0.029	ZINC	0.003	0.020	1
HM-76	3.000	ALUMINUM	0.080	0.500	1
HM-76	270.000	CALCIUM	0.020	1.000	1
HM-76	5.400	IRON	0.005	0.050	1
HM-76	15.000	MAGNESIUM	0.040	1.000	1
HM-76	0.090	MANGANESE	0.001	0.020	1
HM-76	36.000	SODIUM	0.050	1.000	1
HM-76	0.039	ZINC	0.003	0.020	1
HM-77	5.700	ALUMINUM	0.080	0.500	1
HM-77	0.200	BARIUM	0.001	0.100	1
HM-77	0.006	CADMIUM	0.002	0.005	1
HM-77	220.000	CALCIUM	0.020	1.000	1
HM-77	7.700	IRON	0.005	0.050	1
HM-77	5.200	MAGNESIUM	0.040	1.000	1
HM-77	0.300	MANGANESE	0.001	0.020	1
HM-77	31.000	SODIUM	0.050	1.000	1
HM-77	0.230	ZINC	0.003	0.020	1
HM-79	2.000	ALUMINUM	0.080	0.500	1
HM-79	150.000	CALCIUM	0.020	1.000	1
HM-79	1.800	IRON	0.005	0.050	1
HM-79	4.900	MAGNESIUM	0.040	1.000	1
HM-79	0.044	MANGANESE	0.001	0.020	1
HM-79	55.000	SODIUM	0.050	1.000	1
HM-79	0.100	ZINC	0.003	0.020	1
HM-80	5.300	ALUMINUM	0.080	0.500	1
HM-80	0.005	CADMIUM	0.002	0.005	1
HM-80	490.000	CALCIUM	0.200	10.000	10
HM-80	7.100	IRON	0.005	0.050	1
HM-80	17.000	MAGNESIUM	0.040	1.000	1
HM-80	0.170	MANGANESE	0.001	0.020	1
HM-80	120.000	SODIUM	0.050	1.000	1
HM-80	0.470	ZINC	0.003	0.020	1
HM-81	17.000	ALUMINUM	0.080	0.500	1
HM-81	0.130	BARIUM	0.001	0.100	1
HM-81	1000.000	CALCIUM	0.200	10.000	10
HM-81	0.078	COPPER	0.005	0.050	1
HM-81	32.000	IRON	0.005	0.050	1
HM-81	0.660	LEAD	0.030	0.200	1
HM-81	23.000	MAGNESIUM	0.040	1.000	1
HM-81	0.460	MANGANESE	0.001	0.020	1
HM-81	6.600	POTASSIUM	0.200	5.000	1
HM-81	86.000	SODIUM	0.050	1.000	1
HM-81	0.110	ZINC	0.003	0.020	1
HM-84	0.900	ALUMINUM	0.080	0.500	1
HM-84	150.000	CALCIUM	0.020	1.000	1
HM-84	0.980	IRON	0.005	0.050	1
HM-84	11.000	MAGNESIUM	0.040	1.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-84	0.640	MANGANESE	0.001	0.020	1
HM-84	99.000	SODIUM	0.050	1.000	1
HM-84	0.057	ZINC	0.003	0.020	1
HM-87	1.000	ALUMINUM	0.080	0.500	1
HM-87	120.000	CALCIUM	0.020	1.000	1
HM-87	0.580	IRON	0.005	0.050	1
HM-87	3.200	MAGNESIUM	0.040	1.000	1
HM-87	10.000	SODIUM	0.050	1.000	1
HM-87	0.028	ZINC	0.003	0.020	1
HM-88	1.300	ALUMINUM	0.080	0.500	1
HM-88	130.000	CALCIUM	0.020	1.000	1
HM-88	0.081	CHROMIUM, TOTAL	0.005	0.050	1
HM-88	1.000	IRON	0.005	0.050	1
HM-88	3.500	MAGNESIUM	0.040	1.000	1
HM-88	0.024	MANGANESE	0.001	0.020	1
HM-88	22.000	SODIUM	0.050	1.000	1
HM-88	0.051	ZINC	0.003	0.020	1
HM-88 (dup.)	1.200	ALUMINUM	0.080	0.500	1
HM-88 (dup.)	130.000	CALCIUM	0.020	1.000	1
HM-88 (dup.)	0.081	CHROMIUM, TOTAL	0.005	0.050	1
HM-88 (dup.)	0.930	IRON	0.005	0.050	1
HM-88 (dup.)	3.600	MAGNESIUM	0.040	1.000	1
HM-88 (dup.)	23.000	SODIUM	0.050	1.000	1
HM-88 (dup.)	0.026	ZINC	0.003	0.020	1
HM-89	0.450	BARIUM	0.001	0.100	1
HM-89	110.000	CALCIUM	0.020	1.000	1
HM-89	0.260	IRON	0.005	0.050	1
HM-89	3.200	MAGNESIUM	0.040	1.000	1
HM-89	8.100	MANGANESE	0.001	0.020	1
HM-89	29.000	SODIUM	0.050	1.000	1
HM-89	0.500	ZINC	0.003	0.020	1
HM-92	0.007	CADMIUM	0.002	0.005	1
HM-92	87.000	CALCIUM	0.020	1.000	1
HM-92	0.350	IRON	0.005	0.050	1
HM-92	3.200	MAGNESIUM	0.040	1.000	1
HM-92	5.800	POTASSIUM	0.200	5.000	1
HM-92	32.000	SODIUM	0.050	1.000	1
HM-92	0.180	ZINC	0.003	0.020	1
HM-93	1.500	ALUMINUM	0.080	0.500	1
HM-93	0.007	CADMIUM	0.002	0.005	1
HM-93	560.000	CALCIUM	0.200	10.000	10
HM-93	1.600	IRON	0.005	0.050	1
HM-93	18.000	MAGNESIUM	0.040	1.000	1
HM-93	0.044	MANGANESE	0.001	0.020	1
HM-93	39.000	SODIUM	0.050	1.000	1
HM-93	0.031	ZINC	0.003	0.020	1
HM-95	1.600	ALUMINUM	0.080	0.500	1
HM-95	110.000	CALCIUM	0.020	1.000	1
HM-95	1.400	IRON	0.005	0.050	1
HM-95	3.300	MAGNESIUM	0.040	1.000	1
HM-95	0.037	MANGANESE	0.001	0.020	1
HM-95	15.000	SODIUM	0.050	1.000	1
HM-96	2.400	ALUMINUM	0.080	0.500	1
HM-96	0.140	BARIUM	0.001	0.100	1
HM-96	120.000	CALCIUM	0.020	1.000	1
HM-96	2.200	IRON	0.005	0.050	1
HM-96	3.100	MAGNESIUM	0.040	1.000	1
HM-96	0.065	MANGANESE	0.001	0.020	1
HM-96	44.000	SODIUM	0.050	1.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-96	0.029	ZINC	0.003	0.020	1
HM-98	17.000	ALUMINUM	0.080	0.500	1
HM-98	0.210	BARIUM	0.001	0.100	1
HM-98	160.000	CALCIUM	0.020	1.000	1
HM-98	11.000	IRON	0.005	0.050	1
HM-98	8.200	MAGNESIUM	0.040	1.000	1
HM-98	0.230	MANGANESE	0.001	0.020	1
HM-98	83.000	SODIUM	0.050	1.000	1
HM-98	0.260	ZINC	0.003	0.020	1
HM-99	10.000	ALUMINUM	0.080	0.500	1
HM-99	0.170	BARIUM	0.001	0.100	1
HM-99	460.000	CALCIUM	0.200	10.000	10
HM-99	15.000	IRON	0.005	0.050	1
HM-99	6.600	MAGNESIUM	0.040	1.000	1
HM-99	0.390	MANGANESE	0.001	0.020	1
HM-99	32.000	SODIUM	0.050	1.000	1
HM-99	0.049	ZINC	0.003	0.020	1
HM-100	6.200	ALUMINUM	0.080	0.500	1
HM-100	0.100	BARIUM	0.001	0.100	1
HM-100	280.000	CALCIUM	0.020	1.000	1
HM-100	7.100	IRON	0.005	0.050	1
HM-100	4.800	MAGNESIUM	0.040	1.000	1
HM-100	0.200	MANGANESE	0.001	0.020	1
HM-100	19.000	SODIUM	0.050	1.000	1
HM-100	0.034	ZINC	0.003	0.020	1
HM-101	4.700	ALUMINUM	0.080	0.500	1
HM-101	570.000	CALCIUM	0.200	10.000	10
HM-101	5.700	IRON	0.005	0.050	1
HM-101	25.000	MAGNESIUM	0.040	1.000	1
HM-101	0.210	MANGANESE	0.001	0.020	1
HM-101	20.000	SODIUM	0.050	1.000	1
HM-102	4.300	ALUMINUM	0.080	0.500	1
HM-102	0.150	BARIUM	0.001	0.100	1
HM-102	0.012	CADMIUM	0.002	0.005	1
HM-102	150.000	CALCIUM	0.020	1.000	1
HM-102	13.000	IRON	0.005	0.050	1
HM-102	5.200	MAGNESIUM	0.040	1.000	1
HM-102	1.000	MANGANESE	0.001	0.020	1
HM-102	11.000	SODIUM	0.050	1.000	1
HM-102	0.021	ZINC	0.003	0.020	1
HM-103	24.000	ALUMINUM	0.080	0.500	1
HM-103	0.210	BARIUM	0.001	0.100	1
HM-103	450.000	CALCIUM	0.020	1.000	1
HM-103	0.062	CHROMIUM, TOTAL	0.005	0.050	1
HM-103	0.130	COPPER	0.005	0.050	1
HM-103	25.000	IRON	0.005	0.050	1
HM-103	0.700	LEAD	0.030	0.200	1
HM-103	10.000	MAGNESIUM	0.040	1.000	1
HM-103	0.870	MANGANESE	0.001	0.020	1
HM-103	5.100	POTASSIUM	0.200	5.000	1
HM-103	16.000	SODIUM	0.050	1.000	1
HM-103	1.300	ZINC	0.003	0.020	1
HM-104	18.000	ALUMINUM	0.080	0.500	1
HM-104	960.000	CALCIUM	0.200	10.000	10
HM-104	25.000	IRON	0.005	0.050	1
HM-104	35.000	MAGNESIUM	0.040	1.000	1
HM-104	0.320	MANGANESE	0.001	0.020	1
HM-104	9.200	POTASSIUM	0.200	5.000	1
HM-104	83.000	SODIUM	0.050	1.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-104	0.081	ZINC	0.003	0.020	1
HM-105	95.000	CALCIUM	0.020	1.000	1
HM-105	8.100	IRON	0.005	0.050	1
HM-105	16.000	MAGNESIUM	0.040	1.000	1
HM-105	0.840	MANGANESE	0.001	0.020	1
HM-105	44.000	SODIUM	0.050	1.000	1
HM-107	1.100	ALUMINUM	0.080	0.500	1
HM-107	0.200	BARIUM	0.001	0.100	1
HM-107	0.008	CADMIUM	0.002	0.005	1
HM-107	130.000	CALCIUM	0.020	1.000	1
HM-107	2.100	IRON	0.005	0.050	1
HM-107	10.000	MAGNESIUM	0.040	1.000	1
HM-107	0.330	MANGANESE	0.001	0.020	1
HM-107	0.140	NICKEL	0.020	0.100	1
HM-107	23.000	SODIUM	0.050	1.000	1
HM-107	0.023	ZINC	0.003	0.020	1
HM-110	4.700	ALUMINUM	0.080	0.500	1
HM-110	200.000	CALCIUM	0.020	1.000	1
HM-110	5.300	IRON	0.005	0.050	1
HM-110	4.600	MAGNESIUM	0.040	1.000	1
HM-110	0.200	MANGANESE	0.001	0.020	1
HM-110	13.000	SODIUM	0.050	1.000	1
HM-110	0.036	ZINC	0.003	0.020	1
HM-111	120.000	CALCIUM	0.020	1.000	1
HM-111	0.710	IRON	0.005	0.050	1
HM-111	3.200	MAGNESIUM	0.040	1.000	1
HM-111	14.000	SODIUM	0.050	1.000	1
HM-111	0.050	ZINC	0.003	0.020	1
HM-111 (dup.)	120.000	CALCIUM	0.020	1.000	1
HM-111 (dup.)	0.690	IRON	0.005	0.050	1
HM-111 (dup.)	3.200	MAGNESIUM	0.040	1.000	1
HM-111 (dup.)	14.000	SODIUM	0.050	1.000	1
HM-111 (dup.)	0.069	ZINC	0.003	0.020	1
HM-112	14.000	ALUMINUM	0.080	0.500	1
HM-112	0.170	BARIUM	0.001	0.100	1
HM-112	210.000	CALCIUM	0.020	1.000	1
HM-112	0.059	CHROMIUM, TOTAL	0.005	0.050	1
HM-112	15.000	IRON	0.005	0.050	1
HM-112	6.200	MAGNESIUM	0.040	1.000	1
HM-112	1.100	MANGANESE	0.001	0.020	1
HM-112	31.000	SODIUM	0.050	1.000	1
HM-112	0.074	ZINC	0.003	0.020	1
HM-113	3.200	ALUMINUM	0.080	0.500	1
HM-113	0.110	BARIUM	0.001	0.100	1
HM-113	0.005	CADMIUM	0.002	0.005	1
HM-113	110.000	CALCIUM	0.020	1.000	1
HM-113	6.300	IRON	0.005	0.050	1
HM-113	3.600	MAGNESIUM	0.040	1.000	1
HM-113	0.390	MANGANESE	0.001	0.020	1
HM-113	5.100	POTASSIUM	0.200	5.000	1
HM-113	14.000	SODIUM	0.050	1.000	1
HM-113	0.250	ZINC	0.003	0.020	1
HM-113 (dup.)	3.500	ALUMINUM	0.080	0.500	1
HM-113 (dup.)	0.110	BARIUM	0.001	0.100	1
HM-113 (dup.)	110.000	CALCIUM	0.020	1.000	1
HM-113 (dup.)	7.800	IRON	0.005	0.050	1
HM-113 (dup.)	3.400	MAGNESIUM	0.040	1.000	1
HM-113 (dup.)	0.380	MANGANESE	0.001	0.020	1
HM-113 (dup.)	13.000	SODIUM	0.050	1.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-113 (dup.)	0.300	ZINC	0.003	0.020	1
HM-114	0.920	ALUMINUM	0.080	0.500	1
HM-114	110.000	CALCIUM	0.020	1.000	1
HM-114	1.100	IRON	0.005	0.050	1
HM-114	3.500	MAGNESIUM	0.040	1.000	1
HM-114	0.065	MANGANESE	0.001	0.020	1
HM-114	18.000	SODIUM	0.050	1.000	1
HM-115	2.200	ALUMINUM	0.080	0.500	1
HM-115	0.140	BARIUM	0.001	0.100	1
HM-115	130.000	CALCIUM	0.020	1.000	1
HM-115	2.700	IRON	0.005	0.050	1
HM-115	3.900	MAGNESIUM	0.040	1.000	1
HM-115	0.250	MANGANESE	0.001	0.020	1
HM-115	20.000	SODIUM	0.050	1.000	1
HM-115	0.020	ZINC	0.003	0.020	1
HM-116	6.600	ALUMINUM	0.080	0.500	1
HM-116	0.140	BARIUM	0.001	0.100	1
HM-116	150.000	CALCIUM	0.020	1.000	1
HM-116	6.200	IRON	0.005	0.050	1
HM-116	4.500	MAGNESIUM	0.040	1.000	1
HM-116	0.087	MANGANESE	0.001	0.020	1
HM-116	44.000	SODIUM	0.050	1.000	1
HM-116	0.037	ZINC	0.003	0.020	1
HM-117	0.140	BARIUM	0.001	0.100	1
HM-117	110.000	CALCIUM	0.020	1.000	1
HM-117	0.840	IRON	0.005	0.050	1
HM-117	3.200	MAGNESIUM	0.040	1.000	1
HM-117	0.037	MANGANESE	0.001	0.020	1
HM-117	87.000	SODIUM	0.050	1.000	1
HM-117	0.020	ZINC	0.003	0.020	1
HM-117 (dup.)	1.200	ALUMINUM	0.080	0.500	1
HM-117 (dup.)	0.130	BARIUM	0.001	0.100	1
HM-117 (dup.)	110.000	CALCIUM	0.020	1.000	1
HM-117 (dup.)	1.900	IRON	0.005	0.050	1
HM-117 (dup.)	3.200	MAGNESIUM	0.040	1.000	1
HM-117 (dup.)	0.043	MANGANESE	0.001	0.020	1
HM-117 (dup.)	80.000	SODIUM	0.050	1.000	1
HM-118	1.400	ALUMINUM	0.080	0.500	1
HM-118	0.180	BARIUM	0.001	0.100	1
HM-118	230.000	CALCIUM	0.020	1.000	1
HM-118	1.900	IRON	0.005	0.050	1
HM-118	7.000	MAGNESIUM	0.040	1.000	1
HM-118	0.120	MANGANESE	0.001	0.020	1
HM-118	150.000	SODIUM	0.050	1.000	1
HM-118	0.045	ZINC	0.003	0.020	1
HM-119	0.180	BARIUM	0.001	0.100	1
HM-119	0.007	CADMIUM	0.002	0.005	1
HM-119	99.000	CALCIUM	0.020	1.000	1
HM-119	1.800	IRON	0.005	0.050	1
HM-119	13.000	MAGNESIUM	0.040	1.000	1
HM-119	0.480	MANGANESE	0.001	0.020	1
HM-119	40.000	SODIUM	0.050	1.000	1
HM-119	0.190	ZINC	0.003	0.020	1
HM-120	150.000	CALCIUM	0.020	1.000	1
HM-120	0.190	IRON	0.005	0.050	1
HM-120	27.000	MAGNESIUM	0.040	1.000	1
HM-120	0.630	MANGANESE	0.001	0.020	1
HM-120	74.000	SODIUM	0.050	1.000	1
HM-120	0.047	ZINC	0.003	0.020	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
HM-121	2.400	ALUMINUM	0.080	0.500	1
HM-121	0.240	BARIUM	0.001	0.100	1
HM-121	0.007	CADMIUM	0.002	0.005	1
HM-121	160.000	CALCIUM	0.020	1.000	1
HM-121	5.100	IRON	0.005	0.050	1
HM-121	5.800	MAGNESIUM	0.040	1.000	1
HM-121	0.170	MANGANESE	0.001	0.020	1
HM-121	140.000	SODIUM	0.050	1.000	1
HM-121	0.030	ZINC	0.003	0.020	1
HM-122	19.000	ALUMINUM	0.080	0.500	1
HM-122	0.670	BARIUM	0.001	0.100	1
HM-122	300.000	CALCIUM	0.020	1.000	1
HM-122	19.000	IRON	0.005	0.050	1
HM-122	9.700	MAGNESIUM	0.040	1.000	1
HM-122	2.000	MANGANESE	0.001	0.020	1
HM-122	18.000	SODIUM	0.050	1.000	1
HM-122	0.110	ZINC	0.003	0.020	1
HM-123	1.400	ALUMINUM	0.080	0.500	1
HM-123	0.100	BARIUM	0.001	0.100	1
HM-123	150.000	CALCIUM	0.020	1.000	1
HM-123	3.000	IRON	0.005	0.050	1
HM-123	5.700	MAGNESIUM	0.040	1.000	1
HM-123	0.076	MANGANESE	0.001	0.020	1
HM-123	21.000	SODIUM	0.050	1.000	1
HM-123	0.028	ZINC	0.003	0.020	1
HM-124	120.000	CALCIUM	0.020	1.000	1
HM-124	0.200	IRON	0.005	0.050	1
HM-124	3.400	MAGNESIUM	0.040	1.000	1
HM-124	18.000	SODIUM	0.050	1.000	1
HM-125	19.000	ALUMINUM	0.080	0.500	1
HM-125	0.180	BARIUM	0.001	0.100	1
HM-125	240.000	CALCIUM	0.020	1.000	1
HM-125	24.000	IRON	0.005	0.050	1
HM-125	7.900	MAGNESIUM	0.040	1.000	1
HM-125	0.310	MANGANESE	0.001	0.020	1
HM-125	5.000	POTASSIUM	0.200	5.000	1
HM-125	20.000	SODIUM	0.050	1.000	1
HM-125	0.084	ZINC	0.003	0.020	1
HM-126	0.840	ALUMINUM	0.080	0.500	1
HM-126	100.000	CALCIUM	0.020	1.000	1
HM-126	1.600	IRON	0.005	0.050	1
HM-126	3.200	MAGNESIUM	0.040	1.000	1
HM-126	0.060	MANGANESE	0.001	0.020	1
HM-126	17.000	SODIUM	0.050	1.000	1
HM-126	0.063	ZINC	0.003	0.020	1
HM-127	2.000	ALUMINUM	0.080	0.500	1
HM-127	160.000	CALCIUM	0.020	1.000	1
HM-127	2.300	IRON	0.005	0.050	1
HM-127	1.600	MAGNESIUM	0.040	1.000	1
HM-127	0.061	MANGANESE	0.001	0.020	1
HM-127	54.000	SODIUM	0.050	1.000	1
HM-127	0.022	ZINC	0.003	0.020	1
MW-3	0.720	ALUMINUM	0.080	0.500	1
MW-3	180.000	CALCIUM	0.020	1.000	1
MW-3	0.080	CHROMIUM, TOTAL	0.005	0.050	1
MW-3	0.950	IRON	0.005	0.050	1
MW-3	3.800	MAGNESIUM	0.040	1.000	1
MW-3	0.025	MANGANESE	0.001	0.020	1
MW-3	120.000	SODIUM	0.050	1.000	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
MW-3	0.130	ZINC	0.003	0.020	1
MW-5	2.100	ALUMINUM	0.080	0.500	1
MW-5	0.006	CADMIUM	0.002	0.005	1
MW-5	730.000	CALCIUM	0.200	10.000	10
MW-5	0.140	CHROMIUM, TOTAL	0.005	0.050	1
MW-5	4.000	IRON	0.005	0.050	1
MW-5	18.000	MAGNESIUM	0.040	1.000	1
MW-5	0.140	MANGANESE	0.001	0.020	1
MW-5	0.320	NICKEL	0.020	0.100	1
MW-5	73.000	SODIUM	0.050	1.000	1
MW-5	0.042	ZINC	0.003	0.020	1
MW-IT-02T	34.000	CALCIUM	0.020	1.000	1
MW-IT-02T	0.130	CHROMIUM, TOTAL	0.005	0.050	1
MW-IT-02T	0.150	IRON	0.005	0.050	1
MW-IT-02T	1.700	MAGNESIUM	0.040	1.000	1
MW-IT-02T	110.000	POTASSIUM	0.200	5.000	1
MW-IT-02T	74.000	SODIUM	0.050	1.000	1
W-128L	2.600	ALUMINUM	0.080	0.500	1
W-128L	720.000	CALCIUM	0.200	10.000	10
W-128L	3.400	IRON	0.005	0.050	1
W-128L	23.000	MAGNESIUM	0.040	1.000	1
W-128L	0.080	MANGANESE	0.001	0.020	1
W-128L	37.000	SODIUM	0.050	1.000	1
W-131L	3.000	ALUMINUM	0.080	0.500	1
W-131L	350.000	CALCIUM	0.200	10.000	10
W-131L	3.300	IRON	0.005	0.050	1
W-131L	7.700	MAGNESIUM	0.040	1.000	1
W-131L	0.150	MANGANESE	0.001	0.020	1
W-131L	73.000	SODIUM	0.050	1.000	1
W-131L	0.088	ZINC	0.003	0.020	1
W-131U	3.000	ALUMINUM	0.080	0.500	1
W-131U	0.250	BARIUM	0.001	0.100	1
W-131U	260.000	CALCIUM	0.020	1.000	1
W-131U	2.700	IRON	0.005	0.050	1
W-131U	7.000	MAGNESIUM	0.040	1.000	1
W-131U	2.200	MANGANESE	0.001	0.020	1
W-131U	36.000	SODIUM	0.050	1.000	1
W-133L	22.000	ALUMINUM	0.080	0.500	1
W-133L	0.420	BARIUM	0.001	0.100	1
W-133L	990.000	CALCIUM	0.200	10.000	10
W-133L	0.093	CHROMIUM, TOTAL	0.005	0.050	1
W-133L	0.075	COPPER	0.005	0.050	1
W-133L	37.000	IRON	0.005	0.050	1
W-133L	14.000	MAGNESIUM	0.040	1.000	1
W-133L	1.200	MANGANESE	0.001	0.020	1
W-133L	5.100	POTASSIUM	0.200	5.000	1
W-133L	43.000	SODIUM	0.050	1.000	1
W-133L	0.130	ZINC	0.003	0.020	1
W-133L (dup.)	18.000	ALUMINUM	0.080	0.500	1
W-133L (dup.)	0.410	BARIUM	0.001	0.100	1
W-133L (dup.)	0.009	CADMIUM	0.002	0.005	1
W-133L (dup.)	800.000	CALCIUM	0.200	10.000	10
W-133L (dup.)	0.091	CHROMIUM, TOTAL	0.005	0.050	1
W-133L (dup.)	0.089	COPPER	0.005	0.050	1
W-133L (dup.)	32.000	IRON	0.005	0.050	1
W-133L (dup.)	13.000	MAGNESIUM	0.040	1.000	1
W-133L (dup.)	1.100	MANGANESE	0.001	0.020	1
W-133L (dup.)	44.000	SODIUM	0.050	1.000	1
W-133L (dup.)	0.100	ZINC	0.003	0.020	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
W-135	4.400	ALUMINUM	0.080	0.500	1
W-135	0.010	CADMIUM	0.002	0.005	1
W-135	940.000	CALCIUM	0.200	10.000	10
W-135	0.051	COPPER	0.005	0.050	1
W-135	5.300	IRON	0.005	0.050	1
W-135	74.000	MAGNESIUM	0.040	1.000	1
W-135	0.310	MANGANESE	0.001	0.020	1
W-135	640.000	SODIUM	0.500	10.000	10
W-135	0.040	ZINC	0.003	0.020	1
W-136	5.400	ALUMINUM	0.080	0.500	1
W-136	0.440	BARIUM	0.001	0.100	1
W-136	140.000	CALCIUM	0.020	1.000	1
W-136	9.100	IRON	0.005	0.050	1
W-136	5.700	MAGNESIUM	0.040	1.000	1
W-136	0.530	MANGANESE	0.001	0.020	1
W-136	61.000	SODIUM	0.050	1.000	1
W-136	0.023	ZINC	0.003	0.020	1
W-137	16.000	ALUMINUM	0.080	0.500	1
W-137	0.370	BARIUM	0.001	0.100	1
W-137	1200.000	CALCIUM	0.200	10.000	10
W-137	23.000	IRON	0.005	0.050	1
W-137	13.000	MAGNESIUM	0.040	1.000	1
W-137	1.700	MANGANESE	0.001	0.020	1
W-137	33.000	SODIUM	0.050	1.000	1
W-137	0.061	ZINC	0.003	0.020	1
W-139L	41.000	ALUMINUM	0.080	0.500	1
W-139L	4.700	BARIUM	0.001	0.100	1
W-139L	2200.000	CALCIUM	0.200	10.000	10
W-139L	0.081	CHROMIUM, TOTAL	0.005	0.050	1
W-139L	0.160	COPPER	0.005	0.050	1
W-139L	82.000	IRON	0.005	0.050	1
W-139L	24.000	MAGNESIUM	0.040	1.000	1
W-139L	1.200	MANGANESE	0.001	0.020	1
W-139L	14.000	POTASSIUM	0.200	5.000	1
W-139L	46.000	SODIUM	0.050	1.000	1
W-139L	0.180	VANADIUM	0.005	0.100	1
W-139L	0.260	ZINC	0.003	0.020	1
W-139U	0.860	ALUMINUM	0.080	0.500	1
W-139U	0.580	BARIUM	0.001	0.100	1
W-139U	160.000	CALCIUM	0.020	1.000	1
W-139U	22.000	IRON	0.005	0.050	1
W-139U	6.300	MAGNESIUM	0.040	1.000	1
W-139U	0.440	MANGANESE	0.001	0.020	1
W-139U	46.000	SODIUM	0.050	1.000	1
W-139U	0.027	ZINC	0.003	0.020	1
W-140L	3.600	ALUMINUM	0.080	0.500	1
W-140L	0.980	BARIUM	0.001	0.100	1
W-140L	0.008	CADMIUM	0.002	0.005	1
W-140L	140.000	CALCIUM	0.020	1.000	1
W-140L	13.000	IRON	0.005	0.050	1
W-140L	6.400	MAGNESIUM	0.040	1.000	1
W-140L	0.350	MANGANESE	0.001	0.020	1
W-140L	59.000	SODIUM	0.050	1.000	1
W-140L (dup.)	3.300	ALUMINUM	0.080	0.500	1
W-140L (dup.)	0.970	BARIUM	0.001	0.100	1
W-140L (dup.)	130.000	CALCIUM	0.020	1.000	1
W-140L (dup.)	13.000	IRON	0.005	0.050	1
W-140L (dup.)	6.300	MAGNESIUM	0.040	1.000	1
W-140L (dup.)	0.350	MANGANESE	0.001	0.020	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
W-140L (dup.)	59.000	SODIUM	0.050	1.000	1
W-141L	7.900	ALUMINUM	0.080	0.500	1
W-141L	2.000	BARIUM	0.001	0.100	1
W-141L	570.000	CALCIUM	0.200	10.000	10
W-141L	0.073	COPPER	0.005	0.050	1
W-141L	17.000	IRON	0.005	0.050	1
W-141L	8.500	MAGNESIUM	0.040	1.000	1
W-141L	0.600	MANGANESE	0.001	0.020	1
W-141L	37.000	SODIUM	0.050	1.000	1
W-141L	0.270	ZINC	0.003	0.020	1
W-141U	2.200	BARIUM	0.001	0.100	1
W-141U	0.006	CADMIUM	0.002	0.005	1
W-141U	130.000	CALCIUM	0.020	1.000	1
W-141U	15.000	IRON	0.005	0.050	1
W-141U	4.800	MAGNESIUM	0.040	1.000	1
W-141U	0.470	MANGANESE	0.001	0.020	1
W-141U	38.000	SODIUM	0.050	1.000	1
W-141U	0.040	ZINC	0.003	0.020	1
W-143	31.000	ALUMINUM	0.080	0.500	1
W-143	0.260	BARIUM	0.001	0.100	1
W-143	630.000	CALCIUM	0.200	10.000	10
W-143	25.000	IRON	0.005	0.050	1
W-143	14.000	MAGNESIUM	0.040	1.000	1
W-143	1.400	MANGANESE	0.001	0.020	1
W-143	5.500	POTASSIUM	0.200	5.000	1
W-143	210.000	SODIUM	0.050	1.000	1
W-143	0.079	ZINC	0.003	0.020	1
W-144	10.000	ALUMINUM	0.080	0.500	1
W-144	0.160	BARIUM	0.001	0.100	1
W-144	420.000	CALCIUM	0.200	10.000	10
W-144	0.079	COPPER	0.005	0.050	1
W-144	14.000	IRON	0.005	0.050	1
W-144	6.700	MAGNESIUM	0.040	1.000	1
W-144	0.490	MANGANESE	0.001	0.020	1
W-144	110.000	SODIUM	0.050	1.000	1
W-144	0.041	ZINC	0.003	0.020	1
W-145	1.600	ALUMINUM	0.080	0.500	1
W-145	0.012	CADMIUM	0.002	0.005	1
W-145	130.000	CALCIUM	0.020	1.000	1
W-145	1.500	IRON	0.005	0.050	1
W-145	4.300	MAGNESIUM	0.040	1.000	1
W-145	0.045	MANGANESE	0.001	0.020	1
W-145	28.000	SODIUM	0.050	1.000	1
W-146	5.800	ALUMINUM	0.080	0.500	1
W-146	130.000	CALCIUM	0.020	1.000	1
W-146	7.000	IRON	0.005	0.050	1
W-146	3.000	MAGNESIUM	0.040	1.000	1
W-146	0.120	MANGANESE	0.001	0.020	1
W-146	29.000	SODIUM	0.050	1.000	1
W-146	0.057	ZINC	0.003	0.020	1
W-147	4.100	ALUMINUM	0.080	0.500	1
W-147	24.000	CALCIUM	0.020	1.000	1
W-147	3.400	IRON	0.005	0.050	1
W-147	1.000	MAGNESIUM	0.040	1.000	1
W-147	0.032	MANGANESE	0.001	0.020	1
W-147	130.000	SODIUM	0.050	1.000	1
W-147	0.025	ZINC	0.003	0.020	1
W-148	36.000	ALUMINUM	0.080	0.500	1
W-148	1.000	BARIUM	0.001	0.100	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
W-148	870.000	CALCIUM	0.200	10.000	10
W-148	0.070	CHROMIUM, TOTAL	0.005	0.050	1
W-148	0.077	COPPER	0.005	0.050	1
W-148	74.000	IRON	0.005	0.050	1
W-148	14.000	MAGNESIUM	0.040	1.000	1
W-148	1.400	MANGANESE	0.001	0.020	1
W-148	8.600	POTASSIUM	0.200	5.000	1
W-148	42.000	SODIUM	0.050	1.000	1
W-148	0.160	VANADIUM	0.005	0.100	1
W-148	0.160	ZINC	0.003	0.020	1
W-149	4.000	ALUMINUM	0.080	0.500	1
W-149	0.150	BARIUM	0.001	0.100	1
W-149	170.000	CALCIUM	0.020	1.000	1
W-149	0.560	CHROMIUM, TOTAL	0.005	0.050	1
W-149	4.100	IRON	0.005	0.050	1
W-149	5.200	MAGNESIUM	0.040	1.000	1
W-149	0.073	MANGANESE	0.001	0.020	1
W-149	24.000	SODIUM	0.050	1.000	1
W-149	0.026	ZINC	0.003	0.020	1
W-149 (dup.)	4.600	ALUMINUM	0.080	0.500	1
W-149 (dup.)	0.150	BARIUM	0.001	0.100	1
W-149 (dup.)	170.000	CALCIUM	0.020	1.000	1
W-149 (dup.)	0.570	CHROMIUM, TOTAL	0.005	0.050	1
W-149 (dup.)	4.500	IRON	0.005	0.050	1
W-149 (dup.)	5.300	MAGNESIUM	0.040	1.000	1
W-149 (dup.)	0.068	MANGANESE	0.001	0.020	1
W-149 (dup.)	25.000	SODIUM	0.050	1.000	1
W-149 (dup.)	0.029	ZINC	0.003	0.020	1
W-150U	0.750	ALUMINUM	0.080	0.500	1
W-150U	0.018	CADMIUM	0.002	0.005	1
W-150U	650.000	CALCIUM	0.200	10.000	10
W-150U	0.054	CHROMIUM, TOTAL	0.005	0.050	1
W-150U	1.200	IRON	0.005	0.050	1
W-150U	23.000	MAGNESIUM	0.040	1.000	1
W-150U	0.038	MANGANESE	0.001	0.020	1
W-150U	45.000	SODIUM	0.500	10.000	10
W-150U	0.027	ZINC	0.003	0.020	1
W-151	0.850	ALUMINUM	0.080	0.500	1
W-151	0.120	BARIUM	0.001	0.100	1
W-151	130.000	CALCIUM	0.020	1.000	1
W-151	1.100	IRON	0.005	0.050	1
W-151	3.600	MAGNESIUM	0.040	1.000	1
W-151	0.021	MANGANESE	0.001	0.020	1
W-151	13.000	SODIUM	0.050	1.000	1
W-151	0.027	ZINC	0.003	0.020	1
W-152	11.000	ALUMINUM	0.080	0.500	1
W-152	1200.000	CALCIUM	0.020	1.000	10
W-152	16.000	IRON	0.005	0.050	1
W-152	21.000	MAGNESIUM	0.040	1.000	1
W-152	0.240	MANGANESE	0.001	0.020	1
W-152	9.900	POTASSIUM	0.200	5.000	1
W-152	62.000	SODIUM	0.050	1.000	1
W-152	0.072	ZINC	0.003	0.020	1
W-153	7.300	ALUMINUM	0.080	0.500	1
W-153	0.160	BARIUM	0.001	0.100	1
W-153	0.006	CADMIUM	0.002	0.005	1
W-153	190.000	CALCIUM	0.020	1.000	1
W-153	0.060	CHROMIUM, TOTAL	0.005	0.050	1
W-153	9.700	IRON	0.005	0.050	1

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Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
W-153	6.100	MAGNESIUM	0.040	1.000	1
W-153	0.130	MANGANESE	0.001	0.020	1
W-153	22.000	SODIUM	0.050	1.000	1
W-153	0.034	ZINC	0.003	0.020	1
W-154	0.021	ZINC	0.003	0.020	1
W-154 (dup.)	14.000	ALUMINUM	0.080	0.500	1
W-154 (dup.)	0.150	BARIUM	0.001	0.100	1
W-154 (dup.)	180.000	CALCIUM	0.020	1.000	1
W-154 (dup.)	0.320	CHROMIUM, TOTAL	0.005	0.050	1
W-154 (dup.)	15.000	IRON	0.005	0.050	1
W-154 (dup.)	6.700	MAGNESIUM	0.040	1.000	1
W-154 (dup.)	0.120	MANGANESE	0.001	0.020	1
W-154 (dup.)	190.000	SODIUM	0.050	1.000	1
W-154 (dup.)	0.130	ZINC	0.003	0.020	1
W-155	0.930	ALUMINUM	0.080	0.500	1
W-155	0.130	BARIUM	0.001	0.100	1
W-155	130.000	CALCIUM	0.020	1.000	1
W-155	6.100	IRON	0.005	0.050	1
W-155	20.000	MAGNESIUM	0.040	1.000	1
W-155	0.260	MANGANESE	0.001	0.020	1
W-155	87.000	SODIUM	0.050	1.000	1
W-156	13.000	ALUMINUM	0.080	0.500	1
W-156	0.190	BARIUM	0.001	0.100	1
W-156	380.000	CALCIUM	0.200	10.000	10
W-156	0.073	CHROMIUM, TOTAL	0.005	0.050	1
W-156	14.000	IRON	0.005	0.050	1
W-156	8.400	MAGNESIUM	0.040	1.000	1
W-156	0.310	MANGANESE	0.001	0.020	1
W-156	33.000	SODIUM	0.050	1.000	1
W-156	0.042	ZINC	0.003	0.020	1
W-156 (dup.)	13.000	ALUMINUM	0.080	0.500	1
W-156 (dup.)	0.180	BARIUM	0.001	0.100	1
W-156 (dup.)	370.000	CALCIUM	0.200	10.000	10
W-156 (dup.)	0.067	CHROMIUM, TOTAL	0.005	0.050	1
W-156 (dup.)	13.000	IRON	0.005	0.050	1
W-156 (dup.)	8.000	MAGNESIUM	0.040	1.000	1
W-156 (dup.)	0.290	MANGANESE	0.001	0.020	1
W-156 (dup.)	31.000	SODIUM	0.050	1.000	1
W-156 (dup.)	0.037	ZINC	0.003	0.020	1
W-157	19.000	ALUMINUM	0.080	0.500	1
W-157	960.000	CALCIUM	0.200	10.000	10
W-157	21.000	IRON	0.005	0.050	1
W-157	21.000	MAGNESIUM	0.040	1.000	1
W-157	0.290	MANGANESE	0.001	0.020	1
W-157	8.600	POTASSIUM	0.200	5.000	1
W-157	140.000	SODIUM	0.050	1.000	1
W-157	0.043	ZINC	0.003	0.020	1
W-158	61.000	ALUMINUM	0.080	0.500	1
W-158	0.490	BARIUM	0.001	0.100	1
W-158	1800.000	CALCIUM	0.200	10.000	10
W-158	0.150	CHROMIUM, TOTAL	0.005	0.050	1
W-158	0.220	COPPER	0.005	0.050	1
W-158	70.000	IRON	0.005	0.050	1
W-158	22.000	MAGNESIUM	0.040	1.000	1
W-158	2.500	MANGANESE	0.001	0.020	1
W-158	11.000	POTASSIUM	0.200	5.000	1
W-158	33.000	SODIUM	0.050	1.000	1
W-158	0.180	VANADIUM	0.005	0.100	1
W-158	0.170	ZINC	0.003	0.020	1

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W-159	32.000	ALUMINUM	0.080	0.500	1
W-159	0.200	BARIUM	0.001	0.100	1
W-159	890.000	CALCIUM	0.200	10.000	10
W-159	0.120	CHROMIUM, TOTAL	0.005	0.050	1
W-159	0.110	COPPER	0.005	0.050	1
W-159	35.000	IRON	0.005	0.050	1
W-159	12.000	MAGNESIUM	0.040	1.000	1
W-159	0.660	MANGANESE	0.001	0.020	1
W-159	5.800	POTASSIUM	0.200	5.000	1
W-159	37.000	SODIUM	0.050	1.000	1
W-159	0.094	ZINC	0.003	0.020	1
W-160	31.000	ALUMINUM	0.080	0.500	1
W-160	0.170	BARIUM	0.001	0.100	1
W-160	760.000	CALCIUM	0.200	10.000	10
W-160	0.059	CHROMIUM, TOTAL	0.005	0.050	1
W-160	0.100	COPPER	0.005	0.050	1
W-160	28.000	IRON	0.005	0.050	1
W-160	11.000	MAGNESIUM	0.040	1.000	1
W-160	0.700	MANGANESE	0.001	0.020	1
W-160	6.500	POTASSIUM	0.200	5.000	1
W-160	16.000	SODIUM	0.050	1.000	1
W-160	0.110	VANADIUM	0.005	0.100	1
W-160	0.077	ZINC	0.003	0.020	1
W-163	7.800	ALUMINUM	0.080	0.500	1
W-163	0.260	BARIUM	0.001	0.100	1
W-163	0.008	CADMIUM	0.002	0.005	1
W-163	230.000	CALCIUM	0.020	1.000	1
W-163	21.000	IRON	0.005	0.050	1
W-163	6.900	MAGNESIUM	0.040	1.000	1
W-163	1.500	MANGANESE	0.001	0.020	1
W-163	26.000	SODIUM	0.050	1.000	1
W-163	0.021	ZINC	0.003	0.020	1
W-163 (dup.)	7.500	ALUMINUM	0.080	0.500	1
W-163 (dup.)	0.260	BARIUM	0.001	0.100	1
W-163 (dup.)	230.000	CALCIUM	0.020	1.000	1
W-163 (dup.)	22.000	IRON	0.005	0.050	1
W-163 (dup.)	6.900	MAGNESIUM	0.040	1.000	1
W-163 (dup.)	1.500	MANGANESE	0.001	0.020	1
W-163 (dup.)	26.000	SODIUM	0.050	1.000	1
W-163 (dup.)	0.023	ZINC	0.003	0.020	1
NASFW Terrace Alluvium Wells					
LF03-3D	27.000	ALUMINUM	0.080	0.500	1
LF03-3D	0.280	BARIUM	0.001	0.100	1
LF03-3D	810.000	CALCIUM	0.200	10.000	10
LF03-3D	31.000	IRON	0.005	0.050	1
LF03-3D	22.000	MAGNESIUM	0.040	1.000	1
LF03-3D	1.600	MANGANESE	0.001	0.020	1
LF03-3D	7.400	POTASSIUM	0.200	5.000	1
LF03-3D	29.000	SODIUM	0.050	1.000	1
LF03-3D	0.055	ZINC	0.003	0.020	1
LF04-01	58.000	ALUMINUM	0.080	0.500	1
LF04-01	0.510	BARIUM	0.001	0.100	1
LF04-01	960.000	CALCIUM	0.200	10.000	10
LF04-01	0.072	CHROMIUM, TOTAL	0.005	0.050	1
LF04-01	0.068	COBALT	0.005	0.050	1
LF04-01	0.071	COPPER	0.005	0.050	1
LF04-01	110.000	IRON	0.005	0.050	1
LF04-01	18.000	MAGNESIUM	0.040	1.000	1
LF04-01	4.400	MANGANESE	0.001	0.020	1

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LF04-01	10.000	POTASSIUM	0.200	5.000	1
LF04-01	20.000	SODIUM	0.050	1.000	1
LF04-01	0.210	VANADIUM	0.005	0.100	1
LF04-01	0.200	ZINC	0.003	0.020	1
LF04-02	8.800	ALUMINUM	0.080	0.500	1
LF04-02	0.140	BARIUM	0.001	0.100	1
LF04-02	250.000	CALCIUM	0.020	1.000	1
LF04-02	14.000	IRON	0.005	0.050	1
LF04-02	8.900	MAGNESIUM	0.040	1.000	1
LF04-02	0.300	MANGANESE	0.001	0.020	1
LF04-02	20.000	SODIUM	0.050	1.000	1
LF04-02	0.082	ZINC	0.003	0.020	1
LF04-04	19.000	ALUMINUM	0.080	0.500	1
LF04-04	0.160	BARIUM	0.001	0.100	1
LF04-04	660.000	CALCIUM	0.200	10.000	10
LF04-04	60.000	IRON	0.005	0.050	1
LF04-04	13.000	MAGNESIUM	0.040	1.000	1
LF04-04	1.000	MANGANESE	0.001	0.020	1
LF04-04	5.900	POTASSIUM	0.200	5.000	1
LF04-04	26.000	SODIUM	0.050	1.000	1
LF04-04	0.110	VANADIUM	0.005	0.100	1
LF04-04	0.079	ZINC	0.003	0.020	1
LF04-4C	16.000	ALUMINUM	0.080	0.500	1
LF04-4C	0.780	BARIUM	0.001	0.100	1
LF04-4C	500.000	CALCIUM	0.200	10.000	10
LF04-4C	28.000	IRON	0.005	0.050	1
LF04-4C	14.000	MAGNESIUM	0.040	1.000	1
LF04-4C	8.500	MANGANESE	0.001	0.020	1
LF04-4C	39.000	SODIUM	0.050	1.000	1
LF04-4C	0.056	ZINC	0.003	0.020	1
LF04-4C (dup.)	13.000	ALUMINUM	0.080	0.500	1
LF04-4C (dup.)	0.810	BARIUM	0.001	0.100	1
LF04-4C (dup.)	530.000	CALCIUM	0.200	10.000	10
LF04-4C (dup.)	24.000	IRON	0.005	0.050	1
LF04-4C (dup.)	14.000	MAGNESIUM	0.040	1.000	1
LF04-4C (dup.)	8.600	MANGANESE	0.001	0.020	1
LF04-4C (dup.)	40.000	SODIUM	0.050	1.000	1
LF04-4C (dup.)	0.033	ZINC	0.003	0.020	1
LF04-4G	35.000	ALUMINUM	0.080	0.500	1
LF04-4G	0.280	BARIUM	0.001	0.100	1
LF04-4G	860.000	CALCIUM	0.200	10.000	10
LF04-4G	0.065	CHROMIUM, TOTAL	0.005	0.050	1
LF04-4G	64.000	IRON	0.005	0.050	1
LF04-4G	20.000	MAGNESIUM	0.040	1.000	1
LF04-4G	1.500	MANGANESE	0.001	0.020	1
LF04-4G	9.200	POTASSIUM	0.200	5.000	1
LF04-4G	21.000	SODIUM	0.050	1.000	1
LF04-4G	0.170	VANADIUM	0.005	0.100	1
LF04-4G	0.096	ZINC	0.003	0.020	1
LF04-10	49.000	ALUMINUM	0.080	0.500	1
LF04-10	0.420	BARIUM	0.001	0.100	1
LF04-10	0.010	CADMIUM	0.002	0.005	1
LF04-10	810.000	CALCIUM	0.200	10.000	10
LF04-10	0.082	CHROMIUM, TOTAL	0.005	0.050	1
LF04-10	0.096	COPPER	0.005	0.050	1
LF04-10	130.000	IRON	0.005	0.050	1
LF04-10	16.000	MAGNESIUM	0.040	1.000	1
LF04-10	2.300	MANGANESE	0.001	0.020	1
LF04-10	9.400	POTASSIUM	0.200	5.000	1

Estimated ("J") data are not included in this appendix.
Dup. = field duplicate
mg/L = milligrams per liter = parts per million

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
LF04-10	22.000	SODIUM	0.050	1.000	1
LF04-10	0.300	VANADIUM	0.005	0.100	1
LF04-10	0.350	ZINC	0.003	0.020	1
LF05-01	70.000	ALUMINUM	0.080	0.500	1
LF05-01	1.200	BARIUM	0.001	0.100	1
LF05-01	0.007	CADMIUM	0.002	0.005	1
LF05-01	1200.000	CALCIUM	0.200	10.000	10
LF05-01	0.130	CHROMIUM, TOTAL	0.005	0.050	1
LF05-01	0.120	COPPER	0.005	0.050	1
LF05-01	120.000	IRON	0.005	0.050	1
LF05-01	0.310	LEAD	0.030	0.200	1
LF05-01	27.000	MAGNESIUM	0.040	1.000	1
LF05-01	1.800	MANGANESE	0.001	0.020	1
LF05-01	0.100	NICKEL	0.020	0.100	1
LF05-01	14.000	POTASSIUM	0.200	5.000	1
LF05-01	23.000	SODIUM	0.050	1.000	1
LF05-01	0.200	VANADIUM	0.005	0.100	1
LF05-01	0.260	ZINC	0.003	0.020	1
LF05-02	52.000	ALUMINUM	0.080	0.500	1
LF05-02	0.540	ARSENIC	0.030	0.300	1
LF05-02	0.690	BARIUM	0.001	0.100	1
LF05-02	0.008	CADMIUM	0.002	0.005	1
LF05-02	1000.000	CALCIUM	0.200	10.000	10
LF05-02	0.057	CHROMIUM, TOTAL	0.005	0.050	1
LF05-02	0.071	COPPER	0.005	0.050	1
LF05-02	210.000	IRON	0.050	0.500	10
LF05-02	19.000	MAGNESIUM	0.040	1.000	1
LF05-02	3.100	MANGANESE	0.001	0.020	1
LF05-02	8.400	POTASSIUM	0.200	5.000	1
LF05-02	19.000	SODIUM	0.050	1.000	1
LF05-02	0.180	VANADIUM	0.005	0.100	1
LF05-02	0.130	ZINC	0.003	0.020	1
LF05-5A	8.500	ALUMINUM	0.080	0.500	1
LF05-5A	0.210	BARIUM	0.001	0.100	1
LF05-5A	240.000	CALCIUM	0.020	1.000	1
LF05-5A	16.000	IRON	0.005	0.050	1
LF05-5A	8.400	MAGNESIUM	0.040	1.000	1
LF05-5A	1.100	MANGANESE	0.001	0.020	1
LF05-5A	19.000	SODIUM	0.050	1.000	1
LF05-5A	0.048	ZINC	0.003	0.020	1
LF05-5B	8.000	ALUMINUM	0.080	0.500	1
LF05-5B	0.490	BARIUM	0.001	0.100	1
LF05-5B	180.000	CALCIUM	0.020	1.000	1
LF05-5B	32.000	IRON	0.005	0.050	1
LF05-5B	9.600	MAGNESIUM	0.040	1.000	1
LF05-5B	2.300	MANGANESE	0.001	0.020	1
LF05-5B	25.000	SODIUM	0.050	1.000	1
LF05-5B	0.038	ZINC	0.003	0.020	1
LF05-5E	17.000	ALUMINUM	0.080	0.500	1
LF05-5E	0.200	BARIUM	0.001	0.100	1
LF05-5E	840.000	CALCIUM	0.200	10.000	10
LF05-5E	41.000	IRON	0.005	0.050	1
LF05-5E	12.000	MAGNESIUM	0.040	1.000	1
LF05-5E	1.100	MANGANESE	0.001	0.020	1
LF05-5E	26.000	SODIUM	0.050	1.000	1
LF05-5E	0.090	ZINC	0.003	0.020	1
LF05-14	2.500	ALUMINUM	0.080	0.500	1
LF05-14	0.190	BARIUM	0.001	0.100	1
LF05-14	210.000	CALCIUM	0.020	1.000	1

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Dup. = field duplicate
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MDL = Method Detection Limit
PQL = Practical Quantitation Limit

Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
LF05-14	3.700	IRON	0.005	0.050	1
LF05-14	10.000	MAGNESIUM	0.040	1.000	1
LF05-14	0.410	MANGANESE	0.001	0.020	1
LF05-14	40.000	SODIUM	0.050	1.000	1
LF05-14	0.024	ZINC	0.003	0.020	1
LF05-18	1.500	ALUMINUM	0.080	0.500	1
LF05-18	0.180	BARIUM	0.001	0.100	1
LF05-18	180.000	CALCIUM	0.020	1.000	1
LF05-18	1.900	IRON	0.005	0.050	1
LF05-18	8.800	MAGNESIUM	0.040	1.000	1
LF05-18	0.035	MANGANESE	0.001	0.020	1
LF05-18	45.000	SODIUM	0.050	1.000	1
LF05-18	0.021	ZINC	0.003	0.020	1
LF05-19	1.800	ALUMINUM	0.080	0.500	1
LF05-19	0.150	BARIUM	0.001	0.100	1
LF05-19	200.000	CALCIUM	0.020	1.000	1
LF05-19	4.600	IRON	0.005	0.050	1
LF05-19	9.600	MAGNESIUM	0.040	1.000	1
LF05-19	0.590	MANGANESE	0.001	0.020	1
LF05-19	38.000	SODIUM	0.050	1.000	1
LF05-19	0.030	ZINC	0.003	0.020	1
LF05-19 (dup.)	1.600	ALUMINUM	0.080	0.500	1
LF05-19 (dup.)	0.150	BARIUM	0.001	0.100	1
LF05-19 (dup.)	190.000	CALCIUM	0.020	1.000	1
LF05-19 (dup.)	4.200	IRON	0.005	0.050	1
LF05-19 (dup.)	9.500	MAGNESIUM	0.040	1.000	1
LF05-19 (dup.)	0.460	MANGANESE	0.001	0.020	1
LF05-19 (dup.)	38.000	SODIUM	0.050	1.000	1
LF05-19 (dup.)	0.043	ZINC	0.003	0.020	1
Surface Water Sampling Locations					
C-5	100.000	CALCIUM	0.020	1.000	1
C-5	0.490	IRON	0.005	0.050	1
C-5	14.000	MAGNESIUM	0.040	1.000	1
C-5	47.000	SODIUM	0.050	1.000	1
C-5	0.048	ZINC	0.003	0.020	1
EGL-1	55.000	CALCIUM	0.020	1.000	1
EGL-1	0.094	IRON	0.005	0.050	1
EGL-1	6.300	MAGNESIUM	0.040	1.000	1
EGL-1	37.000	SODIUM	0.050	1.000	1
EGL-1	0.037	ZINC	0.003	0.020	1
EGL-2	79.000	CALCIUM	0.020	1.000	1
EGL-2	5.400	MAGNESIUM	0.040	1.000	1
EGL-2	35.000	SODIUM	0.050	1.000	1
EGL-2	0.038	ZINC	0.003	0.020	1
LF05-S5	67.000	CALCIUM	0.020	1.000	1
LF05-S5	0.094	IRON	0.005	0.050	1
LF05-S5	5.300	MAGNESIUM	0.040	1.000	1
LF05-S5	32.000	SODIUM	0.050	1.000	1
LF05-S5	0.030	ZINC	0.003	0.020	1
LF05-S6	90.000	CALCIUM	0.020	1.000	1
LF05-S6	0.070	IRON	0.005	0.050	1
LF05-S6	5.900	MAGNESIUM	0.040	1.000	1
LF05-S6	30.000	SODIUM	0.050	1.000	1
LF05-S6	0.042	ZINC	0.003	0.020	1
LF05-S7	150.000	CALCIUM	0.020	1.000	1
LF05-S7	7.800	MAGNESIUM	0.040	1.000	1
LF05-S7	29.000	SODIUM	0.050	1.000	1
LF05-S7	0.031	ZINC	0.003	0.020	1
LF05-S7 (dup.)	140.000	CALCIUM	0.020	1.000	1

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mg/L = milligrams per liter = parts per million

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

Location	Result (mg/L)	Compound	MDL (mg/L)	PQL (mg/L)	Dilution
LF05-S7 (dup.)	7.500	MAGNESIUM	0.040	1.000	1
LF05-S7 (dup.)	28.000	SODIUM	0.050	1.000	1
LF05-S7 (dup.)	0.032	ZINC	0.003	0.020	1
SW-08	140.000	CALCIUM	0.020	1.000	1
SW-08	0.050	IRON	0.005	0.050	1
SW-08	19.000	MAGNESIUM	0.040	1.000	1
SW-08	54.000	SODIUM	0.050	1.000	1
SW-08	0.030	ZINC	0.003	0.020	1

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MDL = Method Detection Limit
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APPENDIX C

Positive Lead and Chromium Detects: October/November 1995

	Lead by SW7421				Total Chromium by SW6010			
Location	Result (mg/L)	MDL (mg/L)	PQL (mg/L)	Dilution	Result (mg/L)	MDL (mg/L)	PQL (mg/L)	Dilution
Middle Paluxy Wells								
P-8M	0.0079	0.0020	0.0050	1	nd	-	-	-
P-9M	0.0088	0.0020	0.0050	1	nd	-	-	-
P-11M	0.0130	0.0020	0.0050	1	nd	-	-	-
P-11M (dup.)	0.0120	0.0020	0.0050	1	nd	-	-	-
P-13M	0.0083	0.0020	0.0050	1	nd	-	-	-
WS-8	0.0065	0.0020	0.0050	1	nd	-	-	-
Upper Paluxy Wells								
P-6U	0.0330	0.0020	0.0050	1	nd	-	-	-
P-11U	0.0190	0.0020	0.0050	1	nd	-	-	-
P-12UN	0.0160	0.0020	0.0050	1	nd	-	-	-
P-13U	0.0088	0.0020	0.0050	1	nd	-	-	-
P-21U	0.0520	0.0020	0.0050	1	nd	-	-	-
P-25U	0.0130	0.0020	0.0050	1	nd	-	-	-
Paluxy Upper Sand Wells								
P-16US	0.0058	0.0020	0.0050	1	nd	-	-	-
P-18US	0.0068	0.0020	0.0050	1	nd	-	-	-
P-19US	0.0270	0.0020	0.0050	1	0.110	0.005	0.050	1
USGS Paluxy Wells								
USGS08PU	0.0300	0.0020	0.0050	1	nd	-	-	-
USGS09PU	0.0240	0.0020	0.0050	1	nd	-	-	-
AFP4 Terrace Alluvium Wells								
F-204	0.0068	0.0020	0.0050	1	nd	-	-	-
F-209	0.0057	0.0020	0.0050	1	nd	-	-	-
F-211	nd	-	-	-	0.088	0.005	0.050	1
F-212	0.0051	0.0020	0.0050	1	nd	-	-	-
F-215	0.0100	0.0020	0.0050	1	0.067	0.005	0.050	1
F-218	nd	-	-	-	0.087	0.005	0.050	1
F-218 (dup.)	nd	-	-	-	0.110	0.005	0.050	1
FSA-3-03	0.0110	0.0020	0.0050	1	nd	-	-	-
FSA-3-07	0.0059	0.0020	0.0050	1	nd	-	-	-
FSA-3-14	0.0055	0.0020	0.0050	1	nd	-	-	-
FSA-3-15	0.0067	0.0020	0.0050	1	nd	-	-	-
FSA-3-15 (dup.)	0.0067	0.0020	0.0050	1	nd	-	-	-
GMI-03M	0.1200	0.0020	0.0050	1	0.084	0.005	0.050	1
GMI-05M	0.0230	0.0020	0.0050	1	nd	-	-	-
HM-5	0.0240	0.0020	0.0050	1	nd	-	-	-
HM-10	0.1100	0.0200	0.0500	10	0.050	0.005	0.050	1
HM-11	0.0280	0.0020	0.0050	1	nd	-	-	-
HM-12	0.0051	0.0020	0.0050	1	nd	-	-	-
HM-13	0.0190	0.0020	0.0050	1	nd	-	-	-
HM-14	0.0370	0.0020	0.0050	1	nd	-	-	-
HM-17	0.0380	0.0020	0.0050	1	nd	-	-	-
HM-18	nd	-	-	-	0.120	0.005	0.050	1
HM-19	0.0180	0.0020	0.0050	1	nd	-	-	-

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PQL = Practical Quantitation Limit

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dup. = field duplicate
mg/L = milligrams per liter = parts per million

	Lead by SW7421				Total Chromium by SW6010			
Location	Result (mg/L)	MDL (mg/L)	PQL (mg/L)	Dilution	Result (mg/L)	MDL (mg/L)	PQL (mg/L)	Dilution
HM-20	0.0170	0.0020	0.0050	1	nd	-	-	-
HM-20 (dup.)	0.0130	0.0020	0.0050	1	nd	-	-	-
HM-22	0.0420	0.0020	0.0050	1	nd	-	-	-
HM-23	0.0280	0.0020	0.0050	1	nd	-	-	-
HM-24	0.0160	0.0020	0.0050	1	nd	-	-	-
HM-24 (dup.)	0.0160	0.0020	0.0050	1	nd	-	-	-
HM-26	0.0070	0.0020	0.0050	1	nd	-	-	-
HM-29	0.0071	0.0020	0.0050	1	0.085	0.005	0.050	1
HM-32	0.0083	0.0020	0.0050	1	nd	-	-	-
HM-33	0.0430	0.0020	0.0050	1	0.059	0.005	0.050	1
HM-34	0.0320	0.0020	0.0050	1	0.057	0.005	0.050	1
HM-35	0.0130	0.0020	0.0050	1	nd	-	-	-
HM-36	0.0190	0.0020	0.0050	1	0.063	0.005	0.050	1
HM-40	0.0310	0.0020	0.0050	1	nd	-	-	-
HM-42	nd	-	-	-	0.054	0.005	0.050	1
HM-43	0.0600	0.0020	0.0050	1	0.063	0.005	0.050	1
HM-44	0.0086	0.0020	0.0050	1	nd	-	-	-
HM-46	0.1900	0.0200	0.0500	10	0.058	0.005	0.050	1
HM-47	0.0130	0.0020	0.0050	1	0.061	0.005	0.050	1
HM-49	0.0056	0.0020	0.0050	1	nd	-	-	-
HM-50	0.1500	0.0200	0.0500	10	0.054	0.005	0.050	1
HM-51	0.0059	0.0020	0.0050	1	0.053	0.005	0.050	1
HM-53	0.0090	0.0020	0.0050	1	nd	-	-	-
HM-54	0.0200	0.0020	0.0050	1	nd	-	-	-
HM-54 (dup.)	0.0230	0.0020	0.0050	1	nd	-	-	-
HM-55	0.0460	0.0020	0.0050	1	nd	-	-	-
HM-56	0.0190	0.0020	0.0050	1	0.059	0.005	0.050	1
HM-58	0.1900	0.0200	0.0500	10	0.170	0.005	0.050	1
HM-61	0.0072	0.0020	0.0050	1	nd	-	-	-
HM-64	0.0420	0.0020	0.0050	1	nd	-	-	-
HM-65	0.0370	0.0020	0.0050	1	nd	-	-	-
HM-66	0.0990	0.0200	0.0500	10	nd	-	-	-
HM-68	0.1700	0.0200	0.0500	10	nd	-	-	-
HM-69	0.0056	0.0020	0.0050	1	nd	-	-	-
HM-71	0.0150	0.0020	0.0050	1	nd	-	-	-
HM-71 (dup.)	0.0160	0.0020	0.0050	1	0.055	0.005	0.050	1
HM-72	0.0140	0.0020	0.0050	1	nd	-	-	-
HM-73	0.0170	0.0020	0.0050	1	nd	-	-	-
HM-74	0.0340	0.0020	0.0050	1	nd	-	-	-
HM-75	0.0220	0.0020	0.0050	1	nd	-	-	-
HM-76	0.0520	0.0020	0.0050	1	nd	-	-	-
HM-77	0.0620	0.0040	0.0100	2	nd	-	-	-
HM-79	0.0150	0.0020	0.0050	1	nd	-	-	-
HM-81	0.6100	0.0200	0.0500	10	nd	-	-	-
HM-88	nd	-	-	-	0.081	0.005	0.050	1

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dup. = field duplicate
mg/L = milligrams per liter = parts per million

	Lead by SW7421				Total Chromium by SW6010			
Location	Result (mg/L)	MDL (mg/L)	PQL (mg/L)	Dilution	Result (mg/L)	MDL (mg/L)	PQL (mg/L)	Dilution
HM-88 (dup.)	nd	-	-	-	0.081	0.005	0.050	1
HM-89	0.0062	0.0020	0.0050	1	nd	-	-	-
HM-98	0.0130	0.0020	0.0050	1	nd	-	-	-
HM-99	0.0095	0.0020	0.0050	1	nd	-	-	-
HM-101	0.0190	0.0020	0.0050	1	nd	-	-	-
HM-103	0.6300	0.0200	0.0500	10	0.062	0.005	0.050	1
HM-104	0.0190	0.0020	0.0050	1	nd	-	-	-
HM-112	0.0090	0.0020	0.0050	1	0.059	0.005	0.050	1
HM-121	0.0069	0.0020	0.0050	1	nd	-	-	-
HM-122	0.0290	0.0020	0.0050	1	nd	-	-	-
HM-125	0.0240	0.0020	0.0050	1	nd	-	-	-
MW-3	0.0120	0.0020	0.0050	1	0.080	0.005	0.050	1
MW-5	nd	-	-	-	0.140	0.005	0.050	1
MW-IT-02T	nd	-	-	-	0.130	0.005	0.050	1
W-133L	0.0210	0.0020	0.0050	1	0.093	0.005	0.050	1
W-133L (dup.)	0.0160	0.0020	0.0050	1	0.091	0.005	0.050	1
W-136	0.0084	0.0020	0.0050	1	nd	-	-	-
W-137	0.0230	0.0020	0.0050	1	nd	-	-	-
W-139L	0.0590	0.0020	0.0050	1	0.081	0.005	0.050	1
W-139U	0.0053	0.0020	0.0050	1	nd	-	-	-
W-140L	0.0140	0.0020	0.0050	1	nd	-	-	-
W-140L (dup.)	0.0130	0.0020	0.0050	1	nd	-	-	-
W-141L	0.0270	0.0020	0.0050	1	nd	-	-	-
W-143	0.0150	0.0020	0.0050	1	nd	-	-	-
W-144	0.0170	0.0020	0.0050	1	nd	-	-	-
W-146	0.0052	0.0020	0.0050	1	nd	-	-	-
W-148	0.0410	0.0020	0.0050	1	0.070	0.005	0.050	1
W-149	nd	-	-	-	0.560	0.005	0.050	1
W-149 (dup.)	nd	-	-	-	0.570	0.005	0.050	1
W-150U	nd	-	-	-	0.054	0.005	0.050	1
W-152	0.0087	0.0020	0.0050	1	nd	-	-	-
W-153	nd	-	-	-	0.060	0.005	0.050	1
W-154 (dup.)	0.0089	0.0020	0.0050	1	0.320	0.005	0.050	1
W-156	0.0099	0.0020	0.0050	1	0.073	0.005	0.050	1
W-156 (dup.)	0.0081	0.0020	0.0050	1	0.067	0.005	0.050	1
W-158	0.0510	0.0020	0.0050	1	0.150	0.005	0.050	1
W-159	0.0260	0.0020	0.0050	1	0.120	0.005	0.050	1
W-160	0.0180	0.0020	0.0050	1	0.059	0.005	0.050	1
W-163	0.0052	0.0020	0.0050	1	nd	-	-	-
NASFW Terrace Alluvium Wells								
LF03-3D	0.0220	0.0020	0.0050	1	nd	-	-	-
LF04-01	0.0790	0.0200	0.0500	10	0.072	0.005	0.050	1
LF04-02	0.0069	0.0020	0.0050	1	nd	-	-	-
LF04-04	0.0170	0.0020	0.0050	1	nd	-	-	-
LF04-4C	0.0099	0.0020	0.0050	1	nd	-	-	-

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mg/L = milligrams per liter = parts per million

	Lead by SW7421				Total Chromium by SW6010			
Location	Result (mg/L)	MDL (mg/L)	PQL (mg/L)	Dilution	Result (mg/L)	MDL (mg/L)	PQL (mg/L)	Dilution
LF04-4C (dup.)	0.0160	0.0020	0.0050	1	nd	-	-	-
LF04-4G	0.0290	0.0020	0.0050	1	0.065	0.005	0.050	1
LF04-10	0.0610	0.0200	0.0500	10	0.082	0.005	0.050	1
LF05-01	0.2800	0.0200	0.0500	10	0.130	0.005	0.050	1
LF05-02	0.0450	0.0020	0.0050	1	0.057	0.005	0.050	1
LF05-5A	0.0190	0.0020	0.0050	1	nd	-	-	-
LF05-5E	0.0300	0.0020	0.0050	1	nd	-	-	-

NOTES: - = not applicable
nd = not detected

Estimated ("J") data are not included in this appendix
dup. = field duplicate
mg/L = milligrams per liter = parts per million

MDL = Method Detection Limit
PQL = Practical Quantitation Limit

APPENDIX D

Field Parameters: October/November 1995

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Location	Sample Date	Water Level (ft. BTOC)	Total Depth (ft. BTOC)	Casing Volume / Total Volume Purged (gal.)	Field Parameter Measurements: Temperature (°C)	pH	Specific Conductance (µmhos /cm)	Turbidity (NTUs)	Observations / Comments
Middle Paluxy Wells									
P-5M	14-Oct-95	81.05	154.96	68.00 / 210	21.2	7.00	777	6	Sulfur odor.
P-6M	13-Oct-95	87.12	168.25	75.00 / 225	21.5	7.10	672	0	Sulfur odor.
P-7M	9-Oct-95	85.40	161.00	69.55 / 210	20.8	7.20	661	17	Slight sulfur odor.
P-8M	4-Oct-95	82.45	163.03	74.13 / 225	22.6	7.40	655	0	No well cap on PVC - installed well cap.
P-9M	8-Oct-95	90.14	162.20	66.40 / 207	22.1	7.00	730	21	Sulfur odor.
P-10M	11-Oct-95	50.65	127.60	70.79 / 210	21.4	7.10	716	1	Sounding depth based on historical data - not measured this round.
P-11M	4-Oct-95	81.81	165.45	76.90 / 231	22.3	7.70	578	0	PVC casing loose
P-12M	16-Oct-95	85.57	156.08	40.32 / 120	21.6	7.30	764	0	Water in surface casing. Light sulfur odor.
P-13M	17-Oct-95	81.44	166.80	55.94 / 168	22.7	7.20	729	0	Concrete pad broken - void space around casing.
P-20M	5-Oct-95	107.88	149.59	38.37 / 120	19.9	7.70	589	0	Light sulfur odor.
P-24M	10-Oct-95	46.18	133.85	80.65 / 243	21.6	7.40	542	3	Sulfur odor.
P-25M	6-Oct-95	85.22	158.89	46.30 / 150	21.3	7.40	609	0	Slight sulfur odor.
P-26M	9-Oct-95	93.18	171.85	72.40 / 219	23.7	7.40	625	0	Slight sulfur odor.
P-29M	16-Oct-95	61.08	132.85	11.62 / 41	21.8	7.10	770	0	
P-30M	13-Oct-95	87.63	153.70	10.70 / 35	22.5	7.20	617	123	
White Settlement Middle Paluxy Wells									
WS-1	6-Oct-95	-	-	- / -	19.2	7.70	602	146	Paint on spigot. Production well - no water level measured.
WS-3	6-Oct-95	-	-	- / -	19.6	7.70	580	0	Production well - no water level measured.
WS-5A	6-Oct-95	-	-	- / -	19.0	7.90	667	0	Corrosion on well spigot. Production well - no water level measured.
WS-6	6-Oct-95	-	-	- / -	19.1	7.70	608	154	Production well - no water level measured.
WS-8	6-Oct-95	-	-	- / -	18.8	8.00	566	0	Production well - no water level measured.
WS-12	6-Oct-95	-	-	- / -	20.0	7.80	575	0	Production well - no water level measured.
WS-H3	6-Oct-95	-	-	- / -	22.0	8.90	1390	0	Production well - no water level measured.
Upper Paluxy Wells									
P-5UN	14-Oct-95	78.00	99.10	13.80 / 42.00	20.8	6.90	1120	0	
P-6U	9-Nov-95	83.24	99.58	15.00 / 15.00	20.2	10.90	1050	999	Replaced Dolphin lock. Solvent odor and sheen. PVC and Teflon tape in bailer.
P-7U	10-Oct-95	87.15	108.05	19.23 / 60.00	22.4	7.10	1240	32	Stopped purge for approx 10 min to allow well to recharge.
P-8UN	4-Oct-95	85.50	94.35	5.78 / 18.00	22.0	7.60	500	0	
P-9UN	8-Oct-95	89.15	110.97	14.30 / 45.00	22.4	7.10	901	6	
P-10U	11-Oct-95	35.26	56.65	19.67 / 60.00	20.4	7.10	983	0	Keck-float lost in well.
P-11U	16-Nov-95	82.26	93.28	7.25 / 21.75	21.7	7.90	512	384	
P-12UN	17-Oct-95	85.08	95.53	5.56 / 19.00	21.6	7.80	612	999	Well dry at 19 gallons.
P-13U	17-Oct-95	81.32	89.70	5.49 / 16.50	21.9	7.80	625	999	Void space around well casing.
P-14U	26-Oct-95	84.36	84.79	0.28 / -	-	-	-	-	Well dry.
P-15U	27-Oct-95	79.32	91.02	7.64 / 13.75	22.7	8.20	526	0	Well dry at 13.75 gallons.
P-21U	26-Oct-95	91.85	104.62	11.75 / 26.00	22.0	7.60	554	3	Well not locked. Dry at 26 gallons.
P-22U	8-Nov-95	54.92	62.84	7.30 / 21.10	20.2	6.80	1220	28	
P-23U	25-Oct-95	37.10	55.30	16.75 / 51.00	19.5	6.10	990	4	Slight sulfur odor
P-24U	16-Oct-95	36.54	57.60	13.80 / 39.00	20.1	7.00	910	0	Well dry at 39 gallons

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Location	Sample Date	Water Level (ft. BTOC)	Total Depth (ft. BTOC)	Casing Volume / Total Volume Purged (gal.)	Field Parameter Measurements: Temperature (°C)	pH	Specific Conductance (µmhos /cm)	Turbidity (NTUs)	Observations / Comments
Upper Paluxy Wells - Continued									
P-25U	16-Oct-95	88.74	115.70	15.42 / 48.00	21.8	7.60	662	31	Well dry at 48 gallons.
P-26U	9-Oct-95	0.00	0.00	0.00 / -	-	-	-	-	Well dry.
P-27U	25-Oct-95	84.00	94.43	1.70 / 5.10	22.0	6.80	1290	54	Water around casing.
P-28U	30-Oct-95	66.51	89.66	3.77 / 11.40	21.0	6.60	2320	0	
P-31U	29-Oct-95	91.16	91.42	0.04 / -	-	-	-	-	Insufficient volume to sample. Water in well may have leaked in from surface.
Paluxy Upper Sand Wells									
P-5US	10-Oct-95	0.00	0.00	0.00 / -	-	-	-	-	Well dry.
P-8US	5-Oct-95	56.03	66.67	6.95 / 19.00	22.0	8.00	441	43	Triloc pump seals need replacement. Water enters 1/2" drive pipe.
P-9US	8-Oct-95	47.12	75.76	18.76 / 57.00	22.0	6.80	905	147	
P-11US	16-Nov-95	-	62.44	0.00 / -	-	-	-	-	Well dry.
P-12US	17-Oct-95	57.80	60.02	1.27 / 7.75	21.8	11.50	1220	0	Replaced broken well cap. Well dry at 7.75 gallons.
P-13US	17-Oct-95	0.00	65.55	0.00 / -	-	-	-	-	Well dry.
P-14US	27-Oct-95	56.53	70.43	9.10 / 12.00	21.6	9.30	282	26	Well dry at 12 gallons. Top of casing cracked.
P-15US	27-Oct-95	53.77	69.90	10.53 / 15.00	23.9	10.30	304	0	Well dry at 15 gallons.
P-16US	27-Oct-95	39.38	69.80	19.86 / 25.00	24.8	8.60	324	3	Well dry at 25 gallons.
P-17US	10-Oct-95	68.08	72.97	3.20 / 6.00	22.5	7.80	330	883	Some water in vault below cap. Debris/roots. Dry at 6.0 gallons.
P-18US	10-Oct-95	69.20	73.70	2.90 / 9.00	20.6	7.20	636	516	Metal collar and concrete apron broken.
P-19US	16-Oct-95	66.79	69.38	1.70 / 1.70	20.7	7.00	769	999	Dry at 1.7 gallons.
USGS Paluxy Wells									
USGS08PL	12-Oct-95	56.46	203.00	23.80 / 72.00	19.8	7.40	601	0	Sulfur odor. Well not sounded.
USGS08PM	12-Oct-95	49.79	128.92	12.80 / 39.00	20.5	7.00	615	0	Sulfur odor.
USGS08PU	10-Oct-95	44.60	69.95	4.13 / 12.30	22.4	6.80	1260	999	
USGS09PL	13-Oct-95	57.16	203.00	23.60 / 72.00	21.1	7.50	609	106	Sounding depth from historical data. Well not sounded. Labeled P2L.
USGS09PM	13-Oct-95	48.16	116.80	11.10 / 37.00	20.8	7.10	624	0	Well labeled P2M.
USGS09PU	12-Oct-95	44.37	70.40	4.20 / 12.30	20.2	6.40	1020	56	
AFP4 Terrace Alluvium Wells									
DOCK-17	9-Nov-95	4.84	43.69	57.00 / 171.00	22.0	6.80	960	10	Red/brown organic debris in water.
F-200	31-Oct-95	15.86	27.91	6.90 / 21.00	21.8	7.60	771	0	Strong fuel odor.
F-203	12-Nov-95	22.16	29.60	5.00 / 15.00	21.8	6.70	804	3	LNAPL noted in first 2 gallons of purge. Fuel odor. Samples collected through triloc pump.
F-204	10-Nov-95	20.58	25.06	3.00 / 9.00	25.6	7.00	540	198	Fuel odor. Sheen. No bolts on lid. Nameplate missing.
F-207	30-Oct-95	24.01	34.38	6.80 / 20.40	21.8	6.90	1040	0	Soft bottom.
F-208	31-Oct-95	13.28	20.75	4.90 / 15.00	23.2	7.20	540	0	Well purged dry 2 times - recharges quickly.
F-209	15-Nov-95	14.29	17.30	2.00 / 8.00	22.7	7.00	442	0	Fuel odor. Floating flocs.
F-211	31-Oct-95	23.40	33.75	6.80 / 20.40	21.8	7.00	950	105	Soft bottom.
F-212	26-Oct-95	8.10	24.90	16.80 / 15.00	-	-	-	-	Dry at 15 gallons.
F-213	9-Oct-95	6.05	11.37	3.50 / 4.50	24.1	6.90	1110	9	Grass in water. Dry at 4.5 gallons.
F-214	17-Nov-95	14.94	21.79	4.50 / 9.00	21.1	6.20	4900	0	Fuel odor. Sepia blebs of product-coalesced in bottom of container.
F-215	31-Oct-95	21.35	33.45	8.00 / 24.00	22.4	7.00	1020	81	
F-216	8-Oct-95	14.95	25.77	7.00 / 21.00	22.5	7.10	2070	47	Slight sulfur odor. Well not locked.

Location	Sample Date	Water Level (ft. BTOC)	Total Depth (ft. BTOC)	Casing Volume / Total Volume Purged (gal.)	Field Parameter Measurements				291 75 Observations / Comments
					Temperature (°C)	pH	Specific Conductance (µmhos /cm)	Turbidity (NTUs)	
AFP4 Terrace Alluvium Wells - Continued									
F-217	17-Nov-95	8.89	18.44	6.50 / 32.50	23.2	7.20	1210	0	Low sulfur odor.
F-218	12-Nov-95	27.48	32.24	3.10 / 9.30	22.1	7.20	654	3	Slight solvent odor.
F-219	30-Oct-95	16.02	33.88	11.60 / 20.10	21.0	7.10	2350	0	Dry at 20.1 gallons.
F-220	13-Nov-95	30.45	33.24	2.00 / 2.00	17.5	7.00	9780	105	Dry at 2 gallons. Unidentified odor. VOAs effervesce.
F-221	27-Oct-95	15.20	20.80	3.70 / 6.00	24.5	7.10	940	94	Dry at 6 gallons.
FSA-3-01	16-Nov-95	13.48	19.27	4.00 / 28.00	21.8	7.00	664	999	Strong petroleum odor. Open hole. Installed outer box. No PVC cap.
FSA-3-02	16-Nov-95	13.13	20.14	4.50 / 21.00	22.7	6.90	816	0	No protective casing. Fuel odor. Sepia product removed from 2" insert.
FSA-3-03	10-Nov-95	7.56	17.68	6.60 / 9.60	21.8	7.50	2020	999	Fuel globules - sheen
FSA-3-04	10-Nov-95	6.03	14.49	5.50 / 9.00	22.1	7.20	1950	999	Fuel odor in first purge only. Bentonite in water. Dry at 9 gallons.
FSA-3-06	16-Nov-95	6.47	13.06	4.30 / 11.60	21.8	7.40	420	0	No protective casing. Dry at 7.3 gallons. 15 minutes to recharge.
FSA-3-07	16-Nov-95	10.95	16.65	3.70 / 11.10	22.0	6.90	434	0	No protective casing. Sulfur odor.
FSA-3-08	14-Nov-95	7.30	13.46	4.00 / 12.00	21.3	7.10	634	502	Fuel odor. Missing expansion cap. No lock.
FSA-3-10	14-Nov-95	13.40	19.65	4.00 / 12.00	20.2	7.00	664	999	Fuel odor.
FSA-3-12	13-Nov-95	14.20	18.78	3.00 / 9.00	23.1	6.90	592	999	Strong petroleum odor.
FSA-3-14	10-Nov-95	5.59	9.39	2.50 / 4.00	23.2	7.00	825	999	Hydrocarbon fuels odor. Dry at 4.0 gallons.
FSA-3-15	8-Nov-95	5.39	9.29	2.50 / 4.50	23.3	7.10	839	61	Fuel/Sulfur odor. Dry at 4.5 gallons.
FSA-3-16	8-Nov-95	5.45	9.15	2.40 / 5.90	23.3	7.10	866	379	Fuel odor. Dry at 5.9 gallons. No recharge.
FSA-3-17	10-Nov-95	6.36	9.38	2.00 / 2.75	21.3	7.20	1120	10	Dry at 2.75 gallons.
GMI-01M	5-Oct-95	0.00	18.47	0.00 / -	-	-	-	-	Dry well
GMI-02M	6-Oct-95	28.52	29.79	0.20 / 0.60	21.0	6.10	2900	999	Very little water in well. Dry at 0.6 gallons.
GMI-03M	6-Oct-95	24.06	30.30	1.00 / 3.00	19.9	6.20	1220	999	Low recovery. Slight sulfur odor. Very sandy.
GMI-04M	6-Oct-95	22.40	29.40	1.14 / 4.00	19.5	6.10	3380	420	Well recovered only 6" after 24 hours. Sulfur odor.
GMI-05M	5-Oct-95	16.03	20.11	0.67 / 2.10	21.6	6.00	793	999	Sediment in bottom of well
HM-2	24-Oct-95	24.25	35.34	6.36 / 19.50	20.1	6.90	729	0	
HM-5	4-Oct-95	13.77	33.50	12.87 / 18.50	21.6	6.80	1290	10	Slight sulfur odor.
HM-7	8-Oct-95	8.55	14.12	3.60 / 6.60	24.5	6.80	1030	79	Dry at 6.6 gallons. Fuel odor. Water in box - not above casing.
HM-8	1-Nov-95	35.04	45.00	6.50 / 19.50	20.5	7.00	664	0	Water in vault, well cap loose.
HM-9	4-Oct-95	4.60	6.99	1.56 / 4.68	23.6	6.20	3280	112	Plug jammed in cap, loose, no lock on cover. Supply lock. Weeds in well. Slow recharge.
HM-10	8-Oct-95	11.00	20.59	6.25 / 18.75	22.4	7.20	2060	134	New plug provided - old plug broken. Not lockable.
HM-11	17-Oct-95	11.74	34.58	14.97 / 31.00	23.1	7.60	737	0	Well cap very loose. Well dry at 12 gallons purge 2. Dry at 1gal. purge 3.
HM-12	27-Oct-95	12.18	33.25	13.80 / 26.80	22.7	7.00	2500	33	Slight sulfur odor. Black flakey debris in water. Dry at 26.8 gallons.
HM-13	25-Oct-95	25.30	30.20	3.20 / 9.60	21.1	7.10	646	11	
HM-14	1-Nov-95	30.08	38.38	4.76 / 15.00	20.8	6.90	980	0	

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Location	Sample Date	Water Level (ft. BTOC)	Total Depth (ft. BTOC)	Casing Volume / Total Volume Purged (gal.)	Field Parameter Measurements				Observations / Comments
					Temperature (°C)	pH	Specific Conductance (µmhos /cm)	Turbidity (NTUs)	
AFP4 Terrace Alluvium Wells - Continued									
HM-16	25-Oct-95	31.60	32.65	0.70 / 0.50	-	-	-	-	Dry at 0.5 gallon. Outer casing screw-on cap, no inner lock.
HM-17	31-Oct-95	15.88	35.95	13.00 / 23.00	22.2	7.10	563	153	Dry at 23 gallons. Well covered with mud on inside of casing.
HM-18	8-Oct-95	21.60	35.45	8.00 / 24.00	22.4	6.90	1270	10	
HM-19	30-Oct-95	10.85	23.15	7.06 / 21.00	23.6	6.70	2320	420	
HM-20	27-Oct-95	19.88	31.85	7.81 / 21.00	22.8	6.90	1090	8	Sulfur odor. Muck with sheen around casing. Replaced cap (broken and not locked)
HM-22	6-Oct-95	16.35	52.57	20.79 / 43.00	19.9	6.90	1360	35	Dry at 43 gallons. No recharge after 10 minutes.
HM-23	18-Oct-95	36.63	47.98	10.50 / 31.50	20.0	7.00	796	5	
HM-24	18-Oct-95	15.39	41.62	17.12 / 31.10	19.5	7.00	2760	600	Installed Triloc. Water is foamy. Dry at 31.1 gallons.
HM-26	6-Oct-95	4.36	15.30	8.75 / 26.25	24.4	6.60	3080	51	No lock. Soft bottom.
HM-29	27-Oct-95	26.10	44.22	10.40 / 31.50	22.2	7.20	950	0	Well cap was very loose, not locked.
HM-30	24-Oct-95	33.58	51.97	12.00 / 36.00	19.0	7.10	609	10	Concrete collar is loose. No well cap but screw on cap OK.
HM-31	29-Oct-95	13.33	38.96	16.70 / 41.00	22.7	7.40	1050	184	Dry at 41 gallons.
HM-32	24-Oct-95	30.60	44.95	8.20 / 25.50	19.7	6.90	784	0	Well cap was not on tight.
HM-33	4-Oct-95	19.28	27.00	1.25 / 3.75	20.2	6.20	860	10	Protective casing and concrete pad are loose.
HM-34	5-Oct-95	9.31	22.35	2.13 / 6.30	21.2	6.90	770	999	
HM-35	6-Oct-95	8.48	20.74	2.00 / 6.00	22.5	6.30	1380	99	No lock or plug. Both provided.
HM-36	6-Oct-95	6.66	15.55	1.45 / 4.50	23.5	6.20	1720	999	
HM-37	16-Nov-95	5.32	13.46	1.30 / 3.90	21.3	6.90	1900	0	
HM-38	17-Nov-95	18.93	22.01	0.50 / 0.40	0.0	0.00	0	0	Sepia colored floating product. Well dry at 0.4 gallon.
HM-40	25-Oct-95	33.65	44.45	1.80 / 5.40	19.6	7.10	629	920	Obstructions at 16.3 feet and 36.0 feet.
HM-41	27-Oct-95	31.48	45.50	2.30 / 6.90	20.6	7.10	605	24	
HM-42	26-Oct-95	29.68	36.25	1.00 / 3.00	20.6	7.00	563	417	Water in outer casing.
HM-43	25-Oct-95	17.47	23.83	1.00 / 4.00	20.6	7.00	589	999	
HM-44	25-Oct-95	28.53	37.20	1.40 / 4.20	19.2	7.10	592	189	Soft bottom.
HM-46	18-Oct-95	24.29	39.95	2.50 / 7.50	20.1	7.00	797	999	No lock. Water in surface casing. Casing bent at 7', 30' and 40'.
HM-47	8-Nov-95	22.73	27.55	3.10 / 9.60	23.1	6.90	1440	0	Replaced lock and Triloc pump-head (leaking). Water foamy (soapy?)
HM-49	9-Oct-95	6.03	10.68	0.76 / 2.30	24.5	6.50	2690	104	Well casing joint cracked. Sulfur odor.
HM-50	12-Oct-95	6.57	14.00	1.20 / 4.50	25.4	7.40	2260	215	Protective casing full of water but well cap good. Replaced lock and cap. Septic odor.
HM-51	17-Nov-95	7.18	18.03	7.00 / 8.50	22.0	6.10	4730	15	Sulfur odor. Dry at 6 gallons.
HM-52	17-Nov-95	14.89	23.20	5.50 / 8.50	22.5	7.20	494	25	Triloc top leaking - replaced. Dry at 8.5 gallons.
HM-53	29-Oct-95	21.33	36.10	9.64 / 30.00	23.1	6.80	789	1	Diesel odor.
HM-54	29-Oct-95	10.73	25.26	9.48 / 21.50	23.3	7.50	1350	52	Organic/sewage odor. Dry at 21.5 gallons.
HM-55	29-Oct-95	19.75	32.60	2.00 / 6.00	23.5	7.10	683	574	Seals leak on Triloc.

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Location	Sample Date	Water Level (ft. BTOC)	Total Depth (ft. BTOC)	Casing Volume / Total Volume Purged (gal.)	Field Parameter Measurements				Observations / Comments
					Temperature (°C)	pH	Specific Conductance (µmhos /cm)	Turbidity (NTUs)	
AFP4 Terrace Alluvium Wells - Continued									
HM-56	17-Nov-95	23.91	40.07	2.60 / 7.80	21.8	6.60	1190	999	Fuel odor. Small amount of sheen.
HM-57	29-Oct-95	19.18	28.30	1.50 / 4.50	22.3	7.30	822	216	Well vault full of water.
HM-58	30-Oct-95	10.79	27.48	2.72 / 8.25	21.8	6.80	1190	0	Water reacts with acid preservative in VOA and DRO samples.
HM-59	5-Oct-95	7.99	38.00	4.89 / 15.00	21.0	7.50	1660	151	Installed new well lock on protective casing. No hinges on casing lid. Strong sulfur odor
HM-60	10-Oct-95	23.17	36.15	2.16 / 6.60	21.3	7.00	660	140	Casing cracked/offset at 2 joints one shallow, one near water level.
HM-61	31-Oct-95	11.13	24.59	2.20 / 6.60	21.7	6.90	766	0	Sulfur odor. Water effervesces with acid preservative.
HM-62	12-Oct-95	22.76	39.00	2.60 / 7.80	23.2	7.00	1040	0	Pump needs handle (rope) to lift out of well.
HM-63	12-Oct-95	28.00	40.00	1.90 / 8.00	22.8	6.80	1120	272	
HM-64	30-Oct-95	22.01	30.33	1.36 / 4.50	21.5	7.10	765	999	Slightly oily odor. Casing cracked or offset at 4' & 23'. Vault full of water.
HM-65	9-Oct-95	6.57	13.70	5.75 / 7.00	22.9	6.50	2930	24	Well may have a lot of sediment. Dry at 7 gallons. H_2S odor.
HM-66	8-Oct-95	4.53	18.40	9.00 / 13.00	23.4	6.70	1000	140	Dry at 13 gallons. Moldy odor.
HM-68	29-Oct-95	28.63	35.02	3.67 / 7.60	21.5	7.00	575	999	Dry at 7.6 gallons.
HM-69	17-Oct-95	14.71	36.54	12.48 / 21.00	23.0	7.00	580	0	Well dry at 21 gallons.
HM-71	14-Oct-95	27.37	41.65	9.50 / 28.50	21.5	7.00	847	207	Soft bottom.
HM-72	14-Oct-95	7.25	39.37	21.00 / 63.00	22.7	6.90	1320	490	Water in vault above well cap. Sulfur odor.
HM-73	7-Nov-95	12.47	43.60	20.50 / 47.00	21.9	6.50	3690	203	Replaced lock. Loose cap. Dryat47 gallons. Soft bottom (grout or gray mud?)
HM-74	7-Nov-95	21.80	38.79	11.00 / 27.00	22.9	6.50	2900	177	No lock - replaced cap and lock. Muddy inside. Dry at 27 gallons.
HM-75	10-Nov-95	11.28	28.98	11.50 / 12.00	21.9	6.40	2440	10	Replaced O ring on leaking Triloc - still leaks. Replaced cap and lock.
HM-76	15-Nov-95	13.00	32.94	13.00 / 19.00	19.8	7.40	620	268	Lock rusted - replaced. Dry at 19 gallons.
HM-77	8-Nov-95	23.04	33.20	6.60 / 19.80	20.6	7.00	716	30	Cap loose. Replace Trioc spigot and cap.
HM-79	14-Oct-95	25.00	40.65	10.50 / 31.10	21.0	6.90	917	0	
HM-80	26-Oct-95	9.89	28.60	10.75 / 20.75	22.0	7.60	2400	860	Well dry at 20.75 gallons. Water around casing.
HM-81	14-Nov-95	15.32	25.81	6.85 / 12.00	21.1	7.00	1230	999	Concrete pad is loose.
HM-84	11-Oct-95	4.64	5.55	0.14 / 1.00	26.4	6.90	970	0	Slight sulfur odor.
HM-87	5-Oct-95	26.20	39.45	12.19 / 37.50	22.4	7.40	629	0	Stripped bolt in flushmount plate-needs new bolt. Water in protective casing.
HM-88	7-Nov-95	30.85	46.26	10.00 / 30.00	22.5	7.00	714	109	Some standing water in vault around casing.
HM-89	7-Nov-95	30.66	50.57	13.00 / 26.00	23.2	7.10	682	0	Needs new lock.
HM-92	28-Oct-95	28.10	61.25	21.65 / 66.00	21.2	6.90	970	0	Sulfur odor.
HM-93	29-Oct-95	28.84	39.18	5.94 / 7.50	21.8	7.90	2280	43	Dry at 7.5 gallons
HM-96	10-Oct-95	28.55	44.55	10.40 / 31.50	20.2	7.10	541	56	Silt in bottom of well. Compression plug and lock replaced.

Location	Sample Date	Water Level (ft. BTOC)	Total Depth (ft. BTOC)	Casing Volume / Total Volume Purged (gal.)	Field Parameter Measurements				291 78 Observations / Comments
					Temperature (°C)	pH	Specific Conductance (µmhos /cm)	Turbidity (NTUs)	
AFP4 Terrace Alluvium Wells - Continued									
HM-96	9-Oct-95	28.72	54.86	17.10 / 68.00	21.2	6.80	896	10	Small portion of collar broken.
HM-98	9-Oct-95	24.96	28.60	2.40 / 7.20	20.1	6.70	985	399	H_2S odor.
HM-99	10-Oct-95	29.46	43.26	9.00 / 27.00	21.1	7.00	613	999	No compression cap, collar cracked, portions missing. Water in vault below cap.
HM-100	24-Oct-95	35.55	47.09	1.90 / 6.00	19.4	7.00	620	999	Water in outer casing. Replaced lock.
HM-101	25-Oct-95	18.18	44.19	4.30 / 9.00	19.9	7.00	1120	999	
HM-102	27-Oct-95	21.80	32.72	1.80 / 5.40	19.8	6.90	623	352	Soft bottom.
HM-103	15-Nov-95	24.42	38.70	2.50 / 7.50	22.3	7.00	578	999	Soft bottom.
HM-104	9-Oct-95	24.95	38.35	2.18 / 6.60	23.3	7.00	1700	0	Lots of sediment in water.
HM-105	13-Nov-95	0.00	0.00	0.00 / 6.00	23.1	6.90	630	8	Depths not taken - Triloc prevents measurement. VOAs taken through Triloc.
HM-106	24-Oct-95	29.75	30.88	0.20 / 0.75	21.6	6.30	5390	0	
HM-107	17-Nov-95	15.58	25.34	1.75 / 5.25	20.6	7.20	631	999	Strong petroleum odor. Sheen. Casing latch broken.
HM-108	14-Nov-95	13.49	17.53	0.65 / 2.20	20.6	6.80	753	67	Well dry at 2.2 gallons.
HM-110	12-Oct-95	25.79	35.50	6.30 / 18.90	19.7	7.00	605	308	Very soft bottom. Triloc pump needs replacement.
HM-111	10-Oct-95	25.20	47.51	14.60 / 60.00	20.7	6.60	600	686	Not lockable - well cap loose and broken. Installed new Triloc.
HM-112	12-Oct-95	24.72	48.76	15.70 / 47.10	20.7	6.90	718	713	Very soft bottom. Triloc needs a 2.5' section installed on top.
HM-113	10-Oct-95	27.32	45.18	11.70 / 36.00	20.5	7.10	571	113	Sediment in well sump. Installed Triloc. H_2S odor.
HM-114	9-Nov-95	17.59	35.65	12.00 / 36.00	19.8	6.90	631	41	
HM-115	9-Nov-95	14.45	26.88	8.10 / 25.30	19.3	6.80	751	48	No well tag.
HM-116	9-Nov-95	21.90	31.37	6.50 / 19.50	19.5	7.00	767	401	Triloc removed for cleaning - lots of gravel removed from pump body.
HM-117	8-Nov-95	21.18	38.47	11.50 / 34.50	21.3	6.90	950	0	
HM-118	8-Nov-95	15.11	26.29	7.50 / 22.50	20.0	6.70	1970	12	
HM-119	8-Nov-95	13.05	28.78	10.50 / 31.50	19.0	6.80	1160	1	
HM-120	7-Nov-95	5.93	17.59	7.60 / 22.80	21.9	6.60	1260	0	
HM-121	7-Nov-95	17.23	30.29	8.50 / 25.50	21.3	6.80	1590	52	Well plug loose. Cut 4" off Triloc drive pipe for better compr. cap fit
HM-122	13-Nov-95	13.34	27.77	9.50 / 28.50	20.7	7.10	655	999	
HM-123	14-Nov-95	26.48	38.38	8.00 / 24.00	19.5	6.90	742	16	Well plug loose. Collar cracked - needs repair.
HM-124	14-Nov-95	15.32	24.30	6.00 / 8.00	21.1	7.00	762	999	Concrete pad cracked.
HM-125	13-Nov-95	17.39	33.01	10.00 / 30.00	21.3	7.10	645	999	
HM-126	14-Nov-95	14.87	33.66	12.50 / 37.50	20.0	7.10	579	3	
HM-127	14-Nov-95	25.07	37.76	8.50 / 25.50	18.8	6.80	933	91	
MW-2	15-Nov-95	21.43	22.75	0.20 / 0.25	-	-	-	-	Well dry at 0.25gal. Cap loose.
MW-3	13-Nov-95	22.54	24.97	0.40 / 0.40	-	-	-	-	Found VOA vial with string in bottom of well.
MW-5	13-Nov-95	15.34	33.17	11.60 / 22.60	22.5	6.80	2780	999	Strong solvent odor, TCE Replaced cap and lock
MW-IT-02T	1-Nov-95	33.03	57.70	16.00 / 48.00	22.1	6.90	765	142	
W-128L	26-Oct-95	16.72	34.10	2.80 / 8.40	21.5	7.10	2440	281	
W-128U	27-Oct-95	20.60	22.62	1.30 / 2.50	21.8	6.80	2570	86	PVC shavings in bottom of well. Odor not checked due to HNu at wellhead. Dry at 2.5 gal.

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Location	Sample Date	Water Level (ft. BTOC)	Total Depth (ft. BTOC)	Casing Volume / Total Volume Purged (gal.)	Field Parameter Measurements				Observations / Comments
					Temperature (°C)	pH	Specific Conductance (µmhos /cm)	Turbidity (NTUs)	
AFP4 Terrace Alluvium Wells - Continued									
W-129	7-Oct-95	13.98	14.96	0.16 / 0.16	23.3	6.60	4180	999	Not much water in well. Dry at 0.16 gallons. Slight sulfur odor.
W-130	17-Nov-95	16.13	25.40	1.50 / 2.00	21.2	6.20	4500	0	Fuel and solvent odor. VOAs effervesce. Visual 1/16" LNAPL. 1.17'DNAPL.
W-131L	27-Oct-95	15.58	32.53	2.80 / 6.60	22.6	6.90	2540	999	No lock. Dry at 6.6 gal.
W-131U	26-Oct-95	15.78	21.77	1.00 / 3.00	24.1	6.90	970	447	
W-132	7-Oct-95	20.59	22.36	0.29 / 0.30	21.6	7.00	842	999	Not much water in well. Dry at 0.3 gallons. Slight sulfur odor.
W-133L	15-Nov-95	21.38	31.84	1.70 / 8.50	21.6	6.80	1130	0	Old fuel odor. Sheen.
W-133U	14-Nov-95	19.61	19.71	0.00 / -	-	-	-	-	Well dry. No lock - replaced lock. Not sampled.
W-134	13-Nov-95	15.77	16.47	0.10 / 0.25	-	-	-	-	Dry at 0.25 gallon.
W-135	31-Oct-95	2.53	12.00	1.54 / 5.30	23.1	6.20	8430	999	Fuel odor. Purged dry at 4.3 gallons. Recharged in 5 minutes.
W-136	28-Oct-95	20.79	32.06	1.80 / 5.40	23.9	8.10	594	994	Fuel odor.
W-137	28-Oct-95	24.58	27.95	0.60 / 1.80	20.7	8.10	708	999	
W-139L	15-Nov-95	21.43	33.12	2.00 / 2.50	22.7	6.80	731	999	Expansion cap not secure. Dry at 2.6 gallons.
W-139U	12-Nov-95	21.63	29.27	5.00 / 15.00	22.9	6.60	930	264	Fuel odor. LNAPL noted in first purge only.
W-140L	28-Oct-95	21.05	29.10	5.30 / 15.90	22.9	7.90	733	999	
W-141L	15-Nov-95	20.12	32.23	2.00 / 2.50	22.9	6.70	910	999	Petroleum odor. Outer casing full of water, lock rusted. Dry at 2.5 gal.
W-141U	15-Nov-95	20.72	27.71	4.50 / 9.00	24.5	6.70	466	0	Slight fuel odor. Surface water could have gone down casing.
W-143	30-Oct-95	21.64	30.40	1.40 / 4.50	23.4	6.80	1920	999	
W-144	30-Oct-95	23.89	32.23	1.40 / 4.20	21.5	7.00	1020	999	
W-145	30-Oct-95	15.82	18.70	0.50 / 0.75	24.3	7.30	670	999	Dry at 0.75 gallons.
W-146	30-Oct-95	21.98	27.92	1.00 / 3.00	22.7	7.40	635	999	
W-147	31-Oct-95	21.71	30.28	5.60 / 10.10	21.7	8.40	587	895	Dry at 10.1 gallons.
W-148	10-Nov-95	23.47	30.24	1.00 / 3.00	24.6	6.80	643	999	Water in vault. No lock. Vault lid has only one bolt. Fuel odor. Sheen.
W-149	1-Nov-95	35.60	58.00	3.70 / 11.00	21.5	6.80	960	755	Removed Trioc - had to fish out. Will bail this well from now on.
W-150L	16-Nov-95	29.10	45.09	2.60 / 8.25	19.9	6.90	2160	0	Loose expansion cap. Water in outer casing.
W-150U	16-Nov-95	27.70	30.25	0.50 / 1.50	20.5	6.90	3600	0	No lock.
W-151	31-Oct-95	30.74	59.20	4.60 / 13.80	22.2	7.00	706	61	
W-152	13-Oct-95	26.09	35.80	1.60 / 7.40	23.4	6.80	2900	999	Some standing water in surface casing.
W-153	9-Nov-95	19.75	39.27	3.20 / 6.80	20.9	7.00	722	905	
W-154	24-Oct-95	31.05	41.85	1.80 / 5.40	19.0	7.20	1370	10	Replaced cap and lock.
W-155	9-Oct-95	19.42	22.75	0.54 / 1.50	19.5	7.00	970	605	Slight fuel odor.
W-156	7-Oct-95	31.77	57.66	4.20 / 12.60	22.6	7.10	712	999	
W-157	11-Oct-95	13.07	32.50	3.10 / 9.30	21.6	6.90	2680	999	
W-158	12-Nov-95	26.98	36.94	1.60 / 4.80	22.2	7.00	626	999	Replaced expansion cap.
W-159	13-Nov-95	27.82	37.19	1.50 / 4.50	23.4	7.10	608	999	Solvent odor. Replaced well cap.
W-160	10-Nov-95	28.62	37.98	1.50 / 4.50	23.9	7.20	483	999	Soft bottom. Sulfur odor.
W-162	29-Oct-95	26.41	27.55	0.75 / 0.80	19.3	8.00	793	265	Dry at 0.8 gallon.
W-163	27-Oct-95	26.73	29.60	2.00 / 6.00	21.5	6.90	716	999	Solvent odor

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Location	Sample Date	Water Level (ft. BTOC)	Total Depth (ft. BTOC)	Casing Volume / Total Volume Purged (gal.)	Field Parameter Measurements: Temperature (°C)	pH	Specific Conductance (µmhos /cm)	Turbidity (NTUs)	Observations / Comments
AFP4 Terrace Alluvium Wells - Continued									
W-164	27-Oct-95	25.85	26.05	0.00 / -	-	-	-	-	Dry well. Mud at bottom (0.2'). Could not sample.
NASFW Terrace Alluvium Wells									
LF03-3D	7-Oct-95	12.87	18.02	0.84 / 2.40	22.0	6.70	1310	999	Provided compression cap and lock.
LF04-01	13-Oct-95	31.06	41.36	1.70 / 5.10	20.7	6.80	842	999	VOAs effervesce.
LF04-02	11-Oct-95	28.48	38.65	1.70 / 5.10	20.9	6.80	727	688	Compression cap loose.
LF04-04	13-Oct-95	18.82	26.82	1.30 / 3.90	20.4	6.80	780	999	
LF04-10	13-Oct-95	32.84	47.50	2.40 / 7.50	19.3	6.80	828	999	VOAs effervesce.
LF04-4C	11-Oct-95	19.76	27.75	1.30 / 3.90	21.5	6.70	929	999	
LF04-4G	11-Oct-95	25.94	32.98	1.10 / 3.30	20.1	6.90	772	999	VOAs effervesce.
LF05-01	14-Nov-95	19.71	27.47	1.50 / 4.50	19.8	7.00	790	999	VOAs effervesce.
LF05-02	13-Nov-95	26.16	29.96	0.60 / 3.00	20.0	7.00	701	999	
LF05-14	11-Oct-95	9.70	12.54	0.50 / 1.50	22.2	6.80	902	614	Grass in water.
LF05-18	12-Oct-95	19.20	23.53	0.71 / 2.25	20.6	6.80	964	150	
LF05-19	12-Oct-95	14.25	19.40	0.84 / 2.55	22.4	6.80	888	999	
LF05-5A	13-Oct-95	24.90	30.42	1.00 / 3.00	20.6	6.70	893	999	
LF05-5B	13-Oct-95	4.20	12.44	1.40 / 4.20	21.9	6.80	846	497	Dolphin lock - unlocked.
LF05-5E	13-Oct-95	28.67	35.81	1.20 / 3.60	20.3	6.90	785	999	Casing cracked from top to approx 3" BTOC.
Surface Water Locations									
C-5	16-Oct-95	-	-	-	14.5	7.30	799	4	
EGL-1	16-Oct-95	-	-	-	19.2	7.60	589	0	
EGL-2	16-Oct-95	-	-	-	21.8	8.00	604	0	
LF05-S5	16-Oct-95	-	-	-	19.6	7.80	546	0	
LF05-S6	16-Oct-95	-	-	-	19.9	7.60	655	0	
LF05-S7	16-Oct-95	-	-	-	21.1	6.90	818	0	
SW-08	16-Oct-95	-	-	-	15.5	7.60	1090	1	

NOTES:

DNAPL = dense nonaqueous phase liquid
DRO = diesel-range organics
ft. BTOC = feet below top of casing
gal. = gallon
HNu = brand name of a portable photoionization detector
LNAPL = light nonaqueous phase liquid
mg/L = milligrams per liter
NTUs = nephelometric turbidity units
PVC = polyvinyl chloride
TCE = trichloroethylene
VOA = volatile organic analysis
- = not measured
° C = degrees Centigrade
µmhos/cm = micromhos per centimeter

When more than one field parameter measurement was taken (pH, temperature, etc.), the final, stabilized measurement is shown in this table.

APPENDIX E

Comparison of TCE Results to Previous Rounds: October/November 1995

APPENDIX E

NOTES

The charts in this appendix depict changes in concentration of trichloroethylene (TCE) and TCE degradation products for locations that Jacobs has sampled at various frequencies since October.

Detection limits and Practical Quantitation Limits (PQLs) for TCE-related compounds changed in October 1994. Since that time, results below 5.0 micrograms per liter (µg/L) for Method SW8240 and 2.0 µg/L for Method E524.2 have been qualified as "J" (estimated). When they occur, these results have been included in the data for comparison to earlier sampling rounds.

DATA

The data for these graphics were extracted directly from quarterly reports, which, prior to the April/May 1995 round, were not validated until *after* the quarterly letter reports had been produced. The purpose of this appendix is to illustrate general concentration trends over time. It would be inappropriate, for instance, to try to draw regression lines through these data or make statistical inferences from them.

When available, data acquired between April 1988 and spring 1991 by previous contractors at Air Force Plant 4 (AFP4) were included to show longer-term trends. These data are connected to the more recent Jacobs data by a dashed line, indicating a degree of uncertainty when comparing two such data sets. One previous analytical method, for example, did not detect cis-1,2-dichloroethylene (DCE). The following four documents were the sources of previous data:

- Hargis & Associates, Inc. 1989a (April). *Water Quality Data, May 1987 Through January 1989.* Volume I, Appendix A.
- Hargis & Associates, Inc. 1989b (July). *Summary of Interim Remedial Investigations, January 1987 to April 1989.* Volume III, Appendix G.
- Radian Corporation. 1991 (October). *Remedial Investigation Report for the Flightline Area - Final.* Various tables and figures.
- U.S. Department of Energy. 1992 (December). *Draft Final Preliminary Assessment/Site Inspection and Remedial Investigation Report.* Various tables and figures.

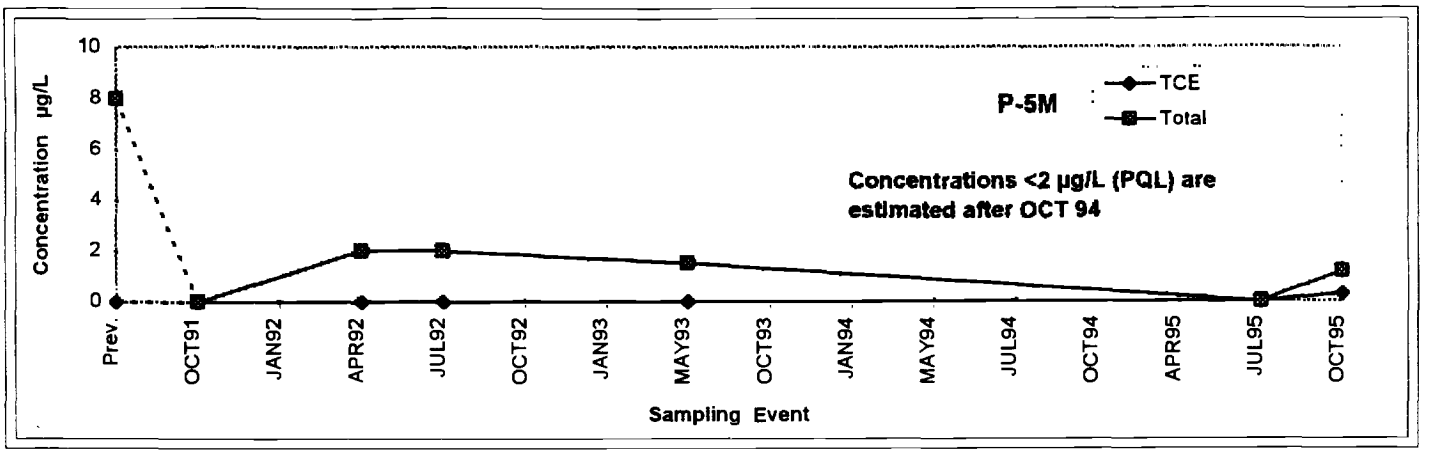
CHARTS

Concentrations are in micrograms per liter (µg/L). "Total" concentration is the total of TCE plus its degradation products: cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride. When TCE alone is plotted on a chart, it indicates that none of its degradation products were ever detected at that location.

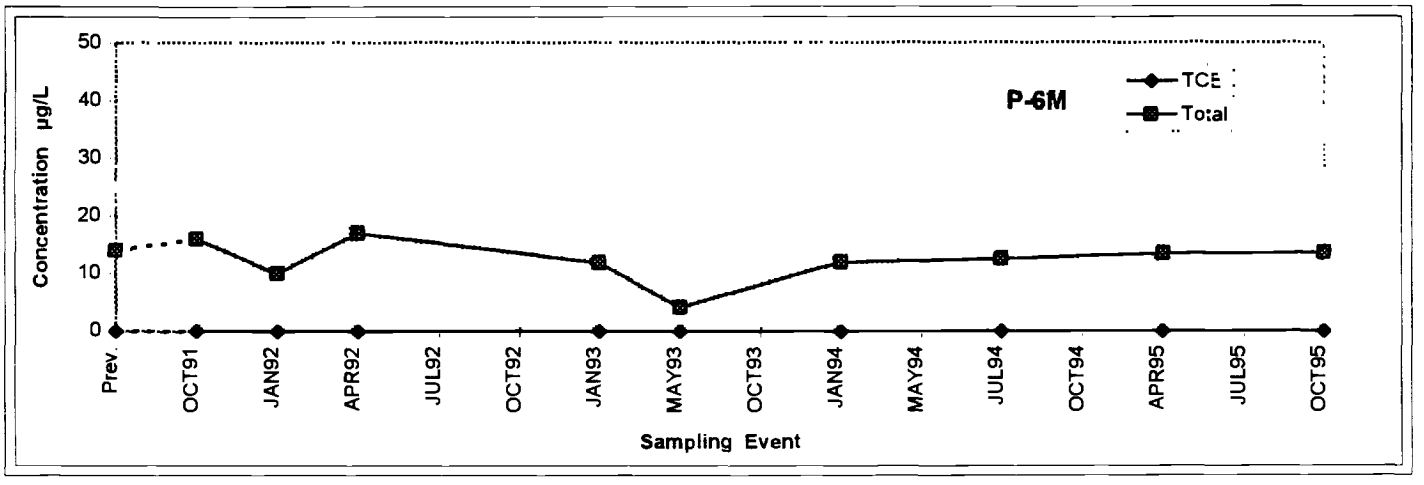
The data in this appendix are plotted at different scales. When there have been large changes in concentrations over time, a portion of a chart may be plotted a second time at a different scale to show more detail for a particular time frame.

Paluxy Wells

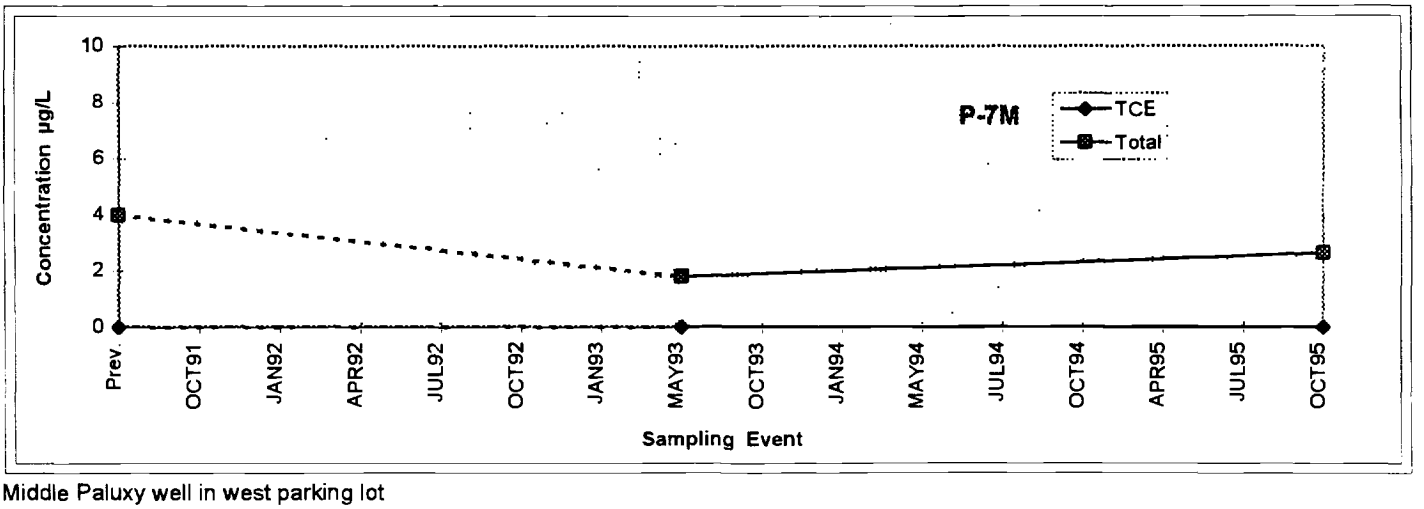
Historical Sampling results for TCE and degradation products through October 1995



Middle Paluxy well on west side of assembly bldg., below water towers



Middle Paluxy well adjacent to west side of assembly bldg.



Middle Paluxy well in west parking lot

"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

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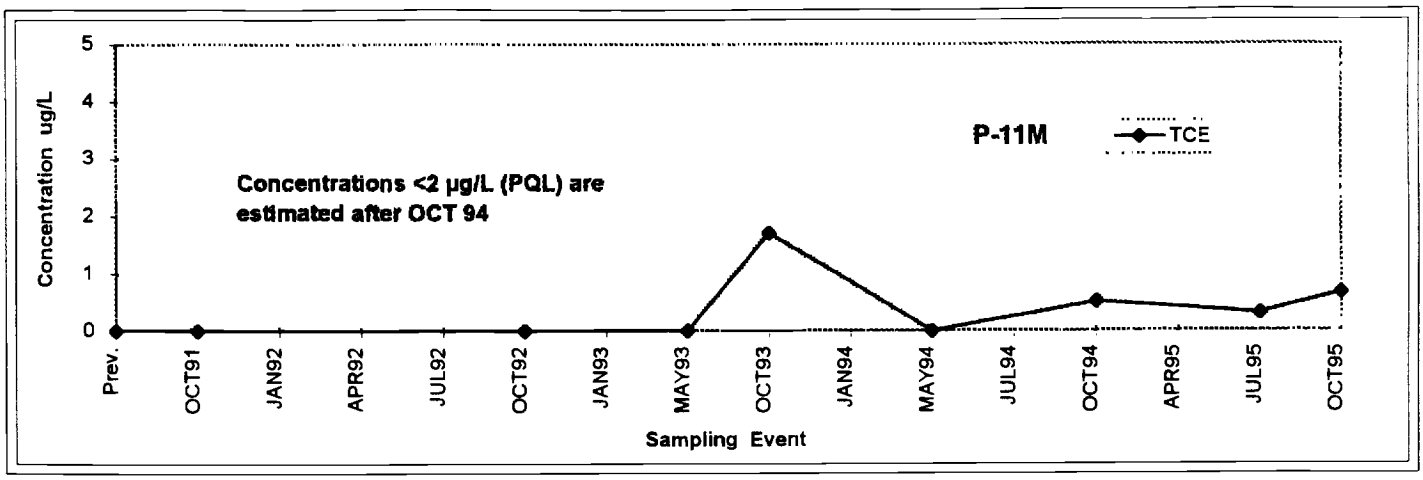
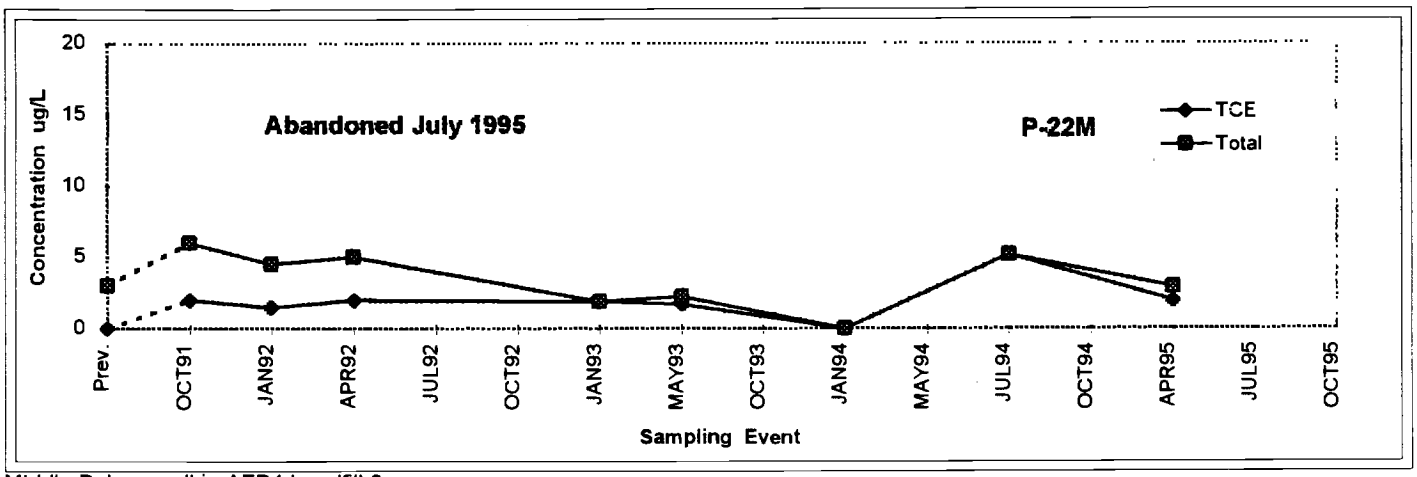
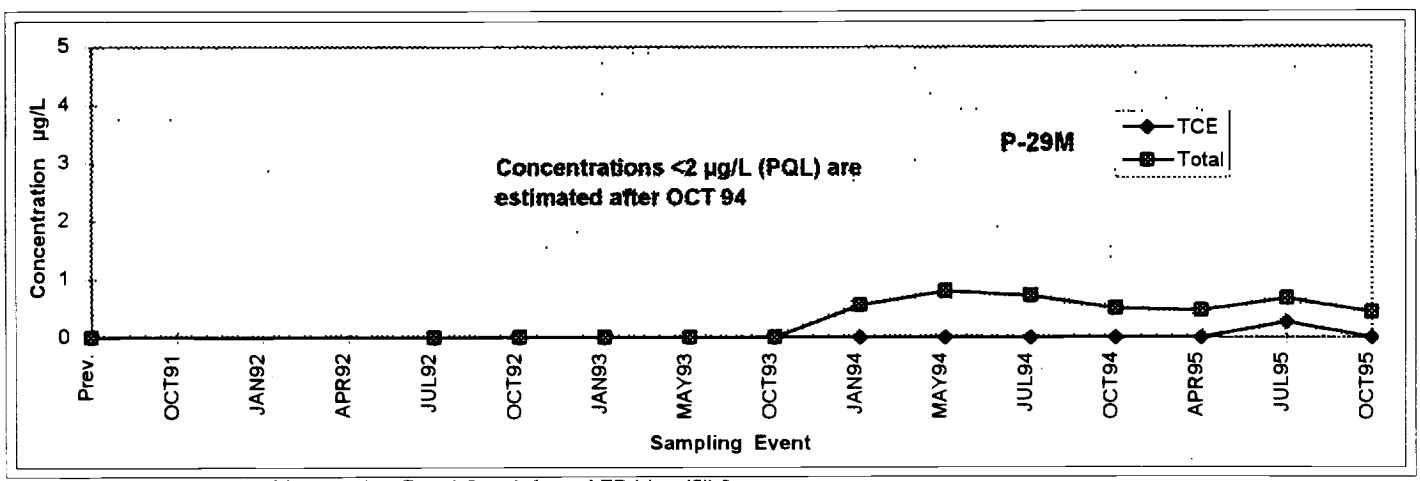
Paluxy Wells - continued



Middle Paluxy well in east parking lot



Middle Paluxy well in AFP4 Landfill 3



Middle Paluxy well across Meandering Road Creek from AFP4 landfill 3

"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

Paluxy Wells - continued

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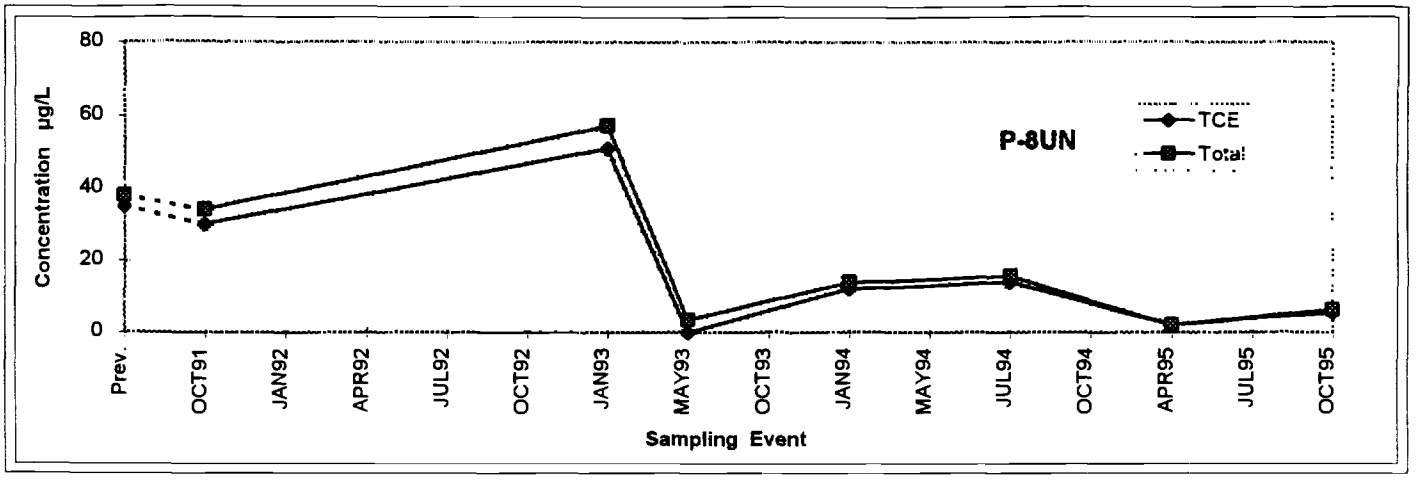
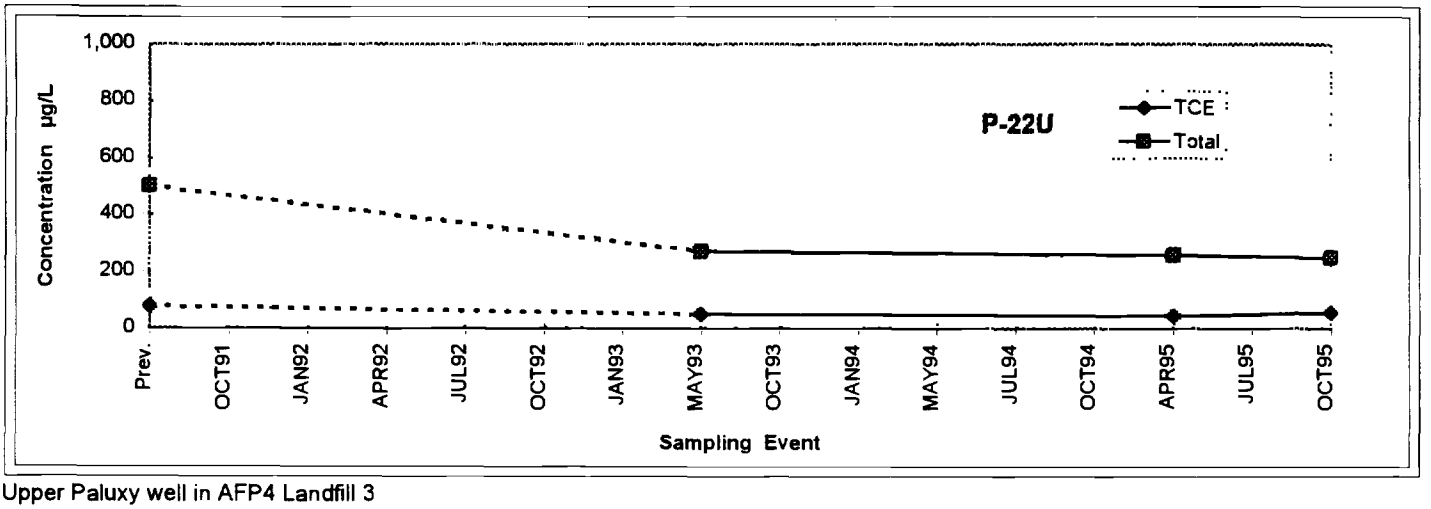
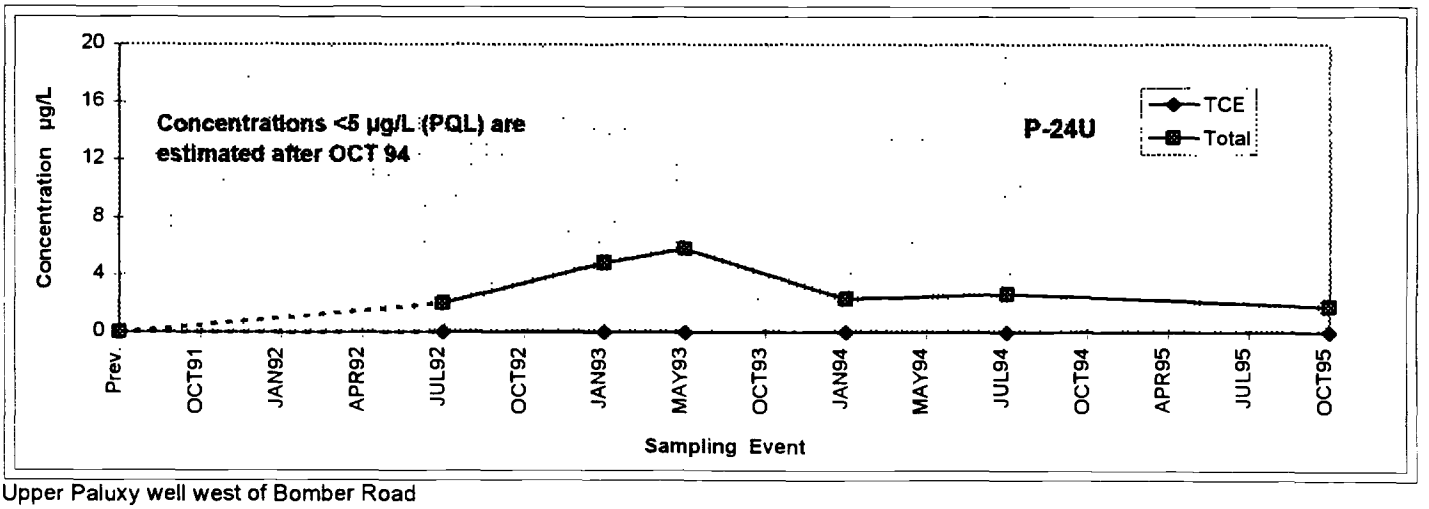


Upper Paluxy well along Lockheed-Martin Blvd.



Upper Paluxy well in AFP4 Landfill 3

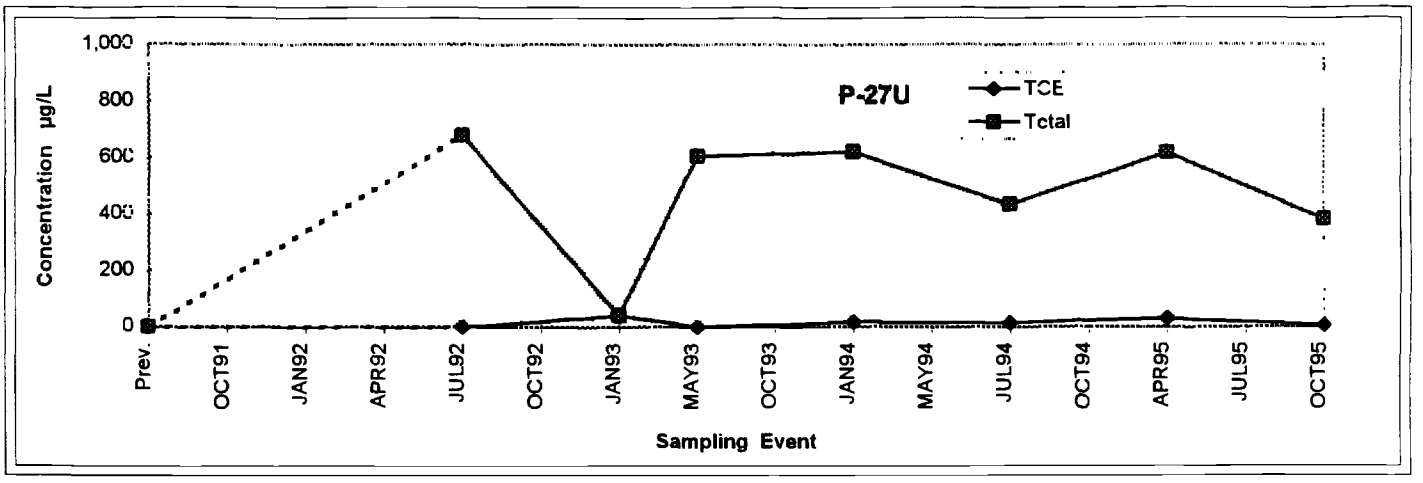


Upper Paluxy well west of Bomber Road

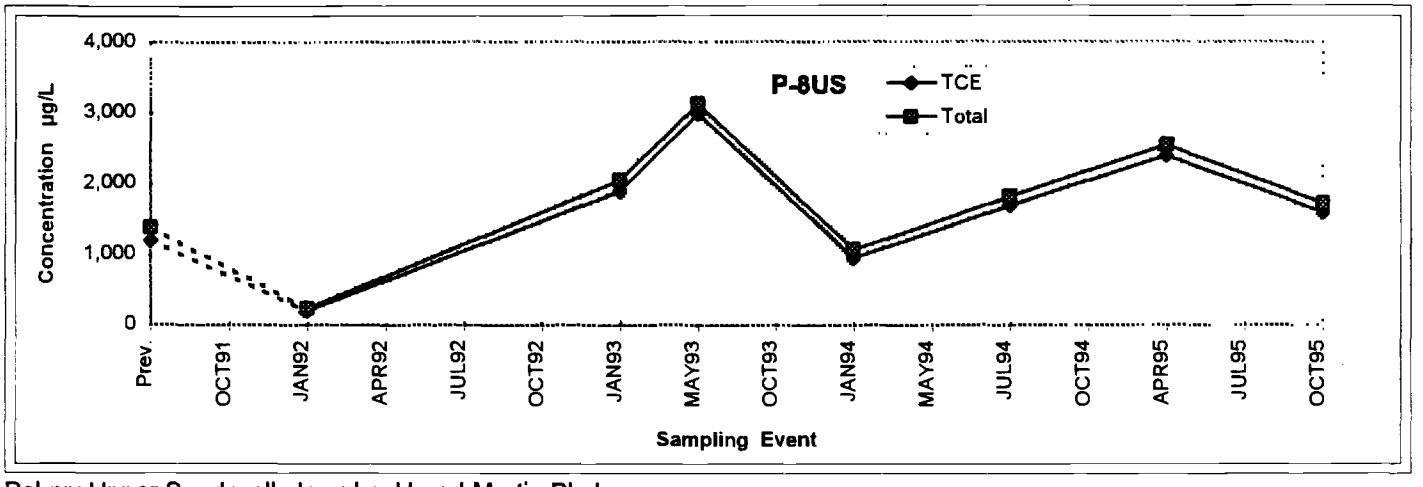
"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

291 86

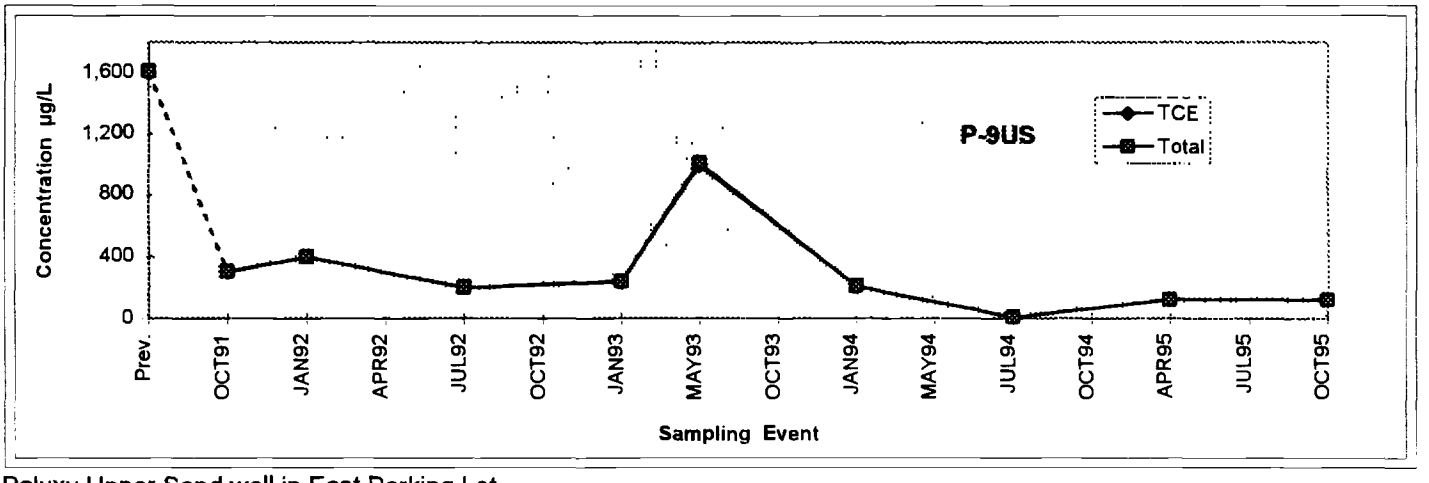
Paluxy Wells - continued



Upper Paluxy well along west side of Bldg. 14



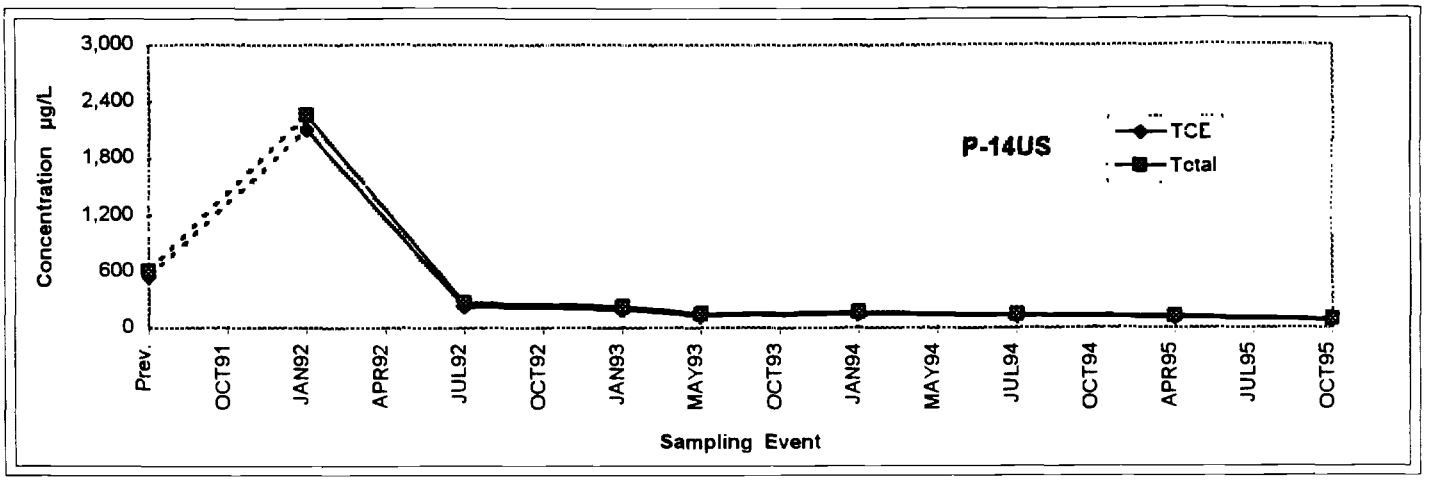
Paluxy Upper Sand well along Lockheed-Martin Blvd.



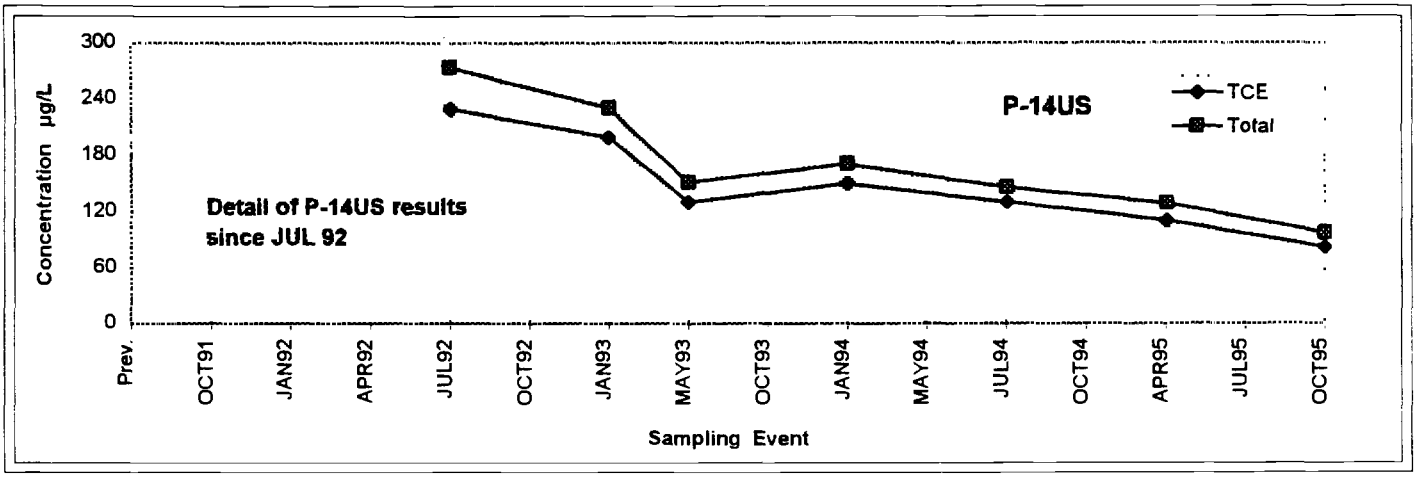
Paluxy Upper Sand well in East Parking Lot

"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

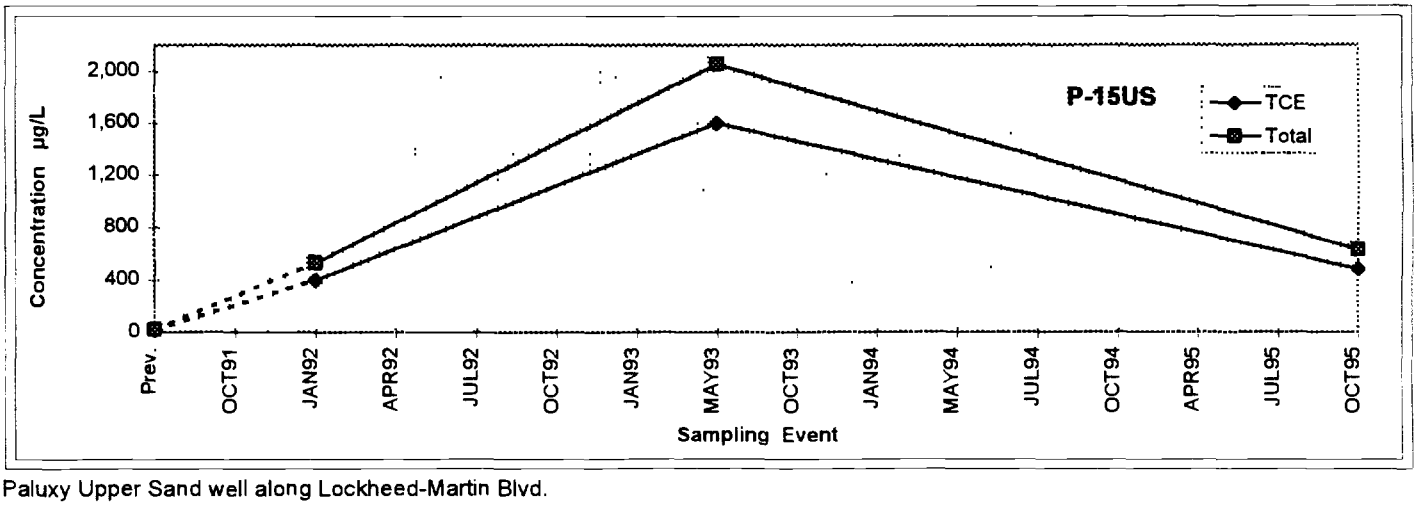
Paluxy Wells - continued



Paluxy Upper Sand well along Lockheed-Martin Blvd.



Paluxy Upper Sand well along Lockheed-Martin Blvd.

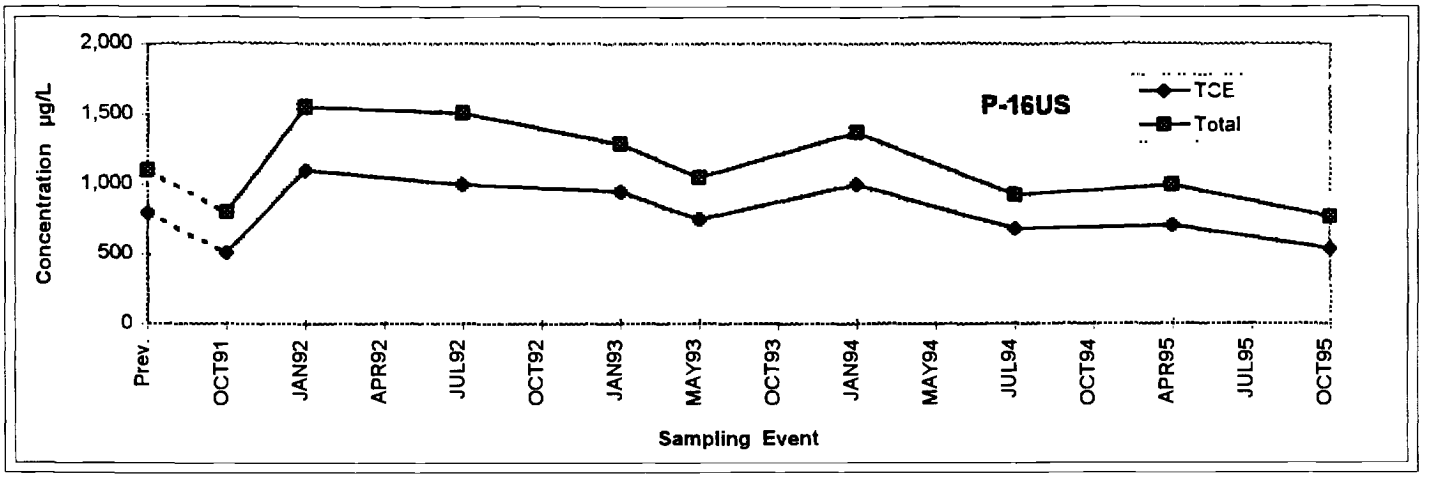


Paluxy Upper Sand well along Lockheed-Martin Blvd.

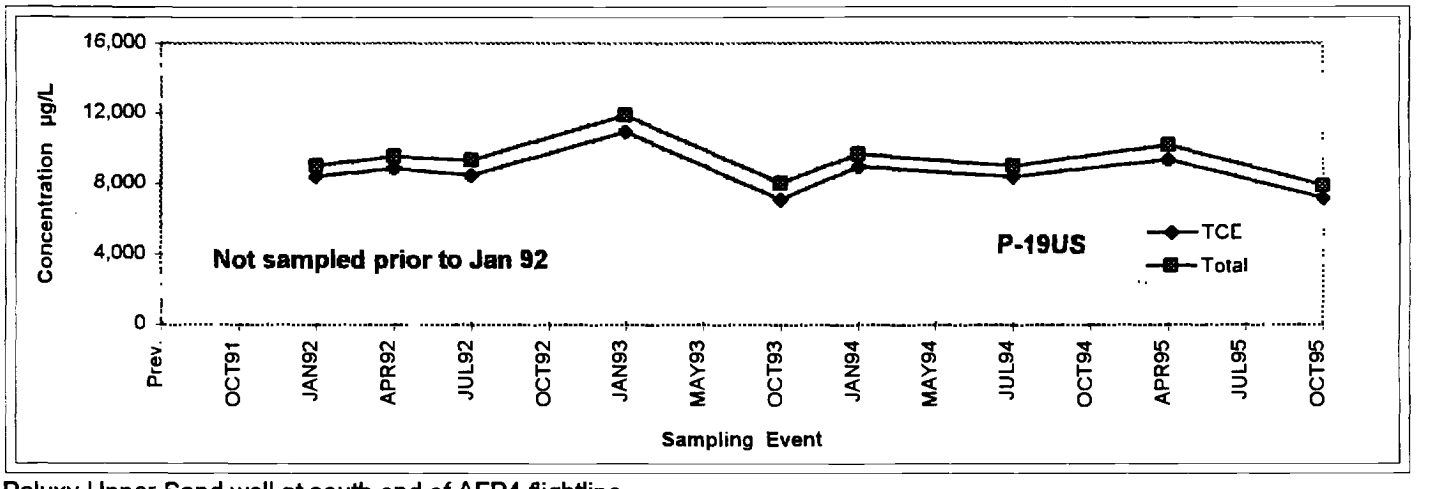
"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

Paluxy Wells - continued

291 88



Paluxy Upper Sand well along Lockheed-Martin Blvd.



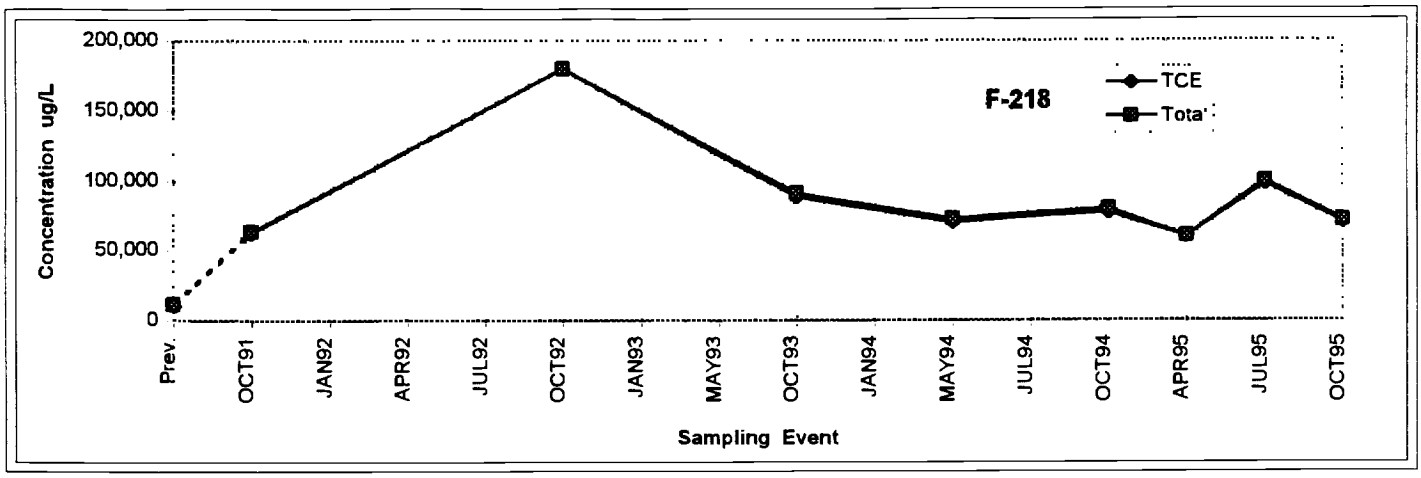
Paluxy Upper Sand well at south end of AFP4 flightline.

"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

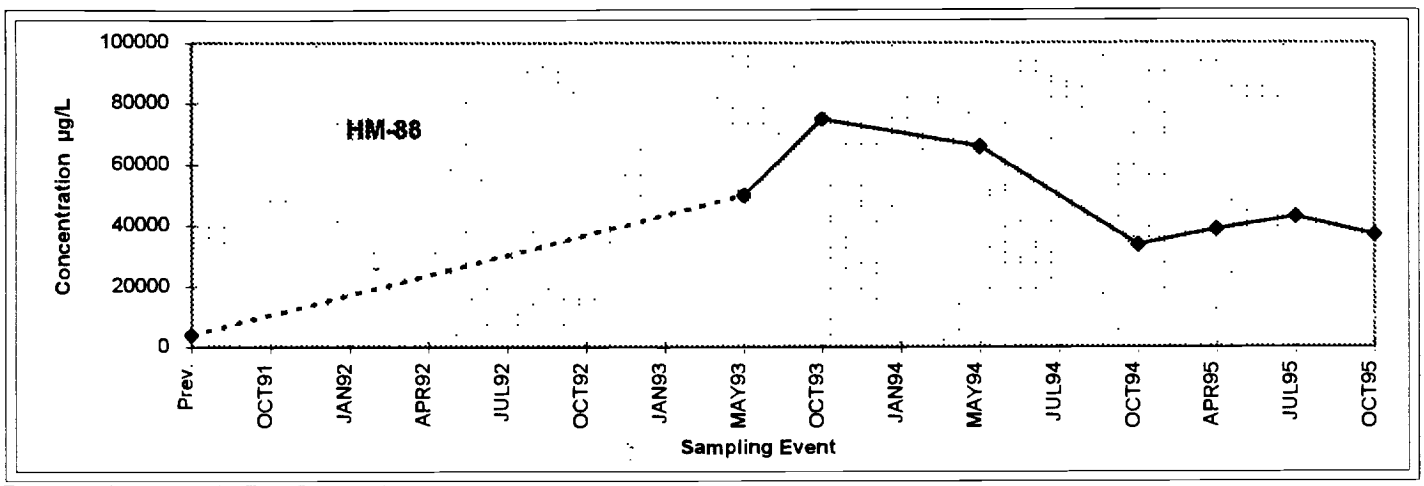
Terrace Alluvium Wells - East Parking Lot

291 89

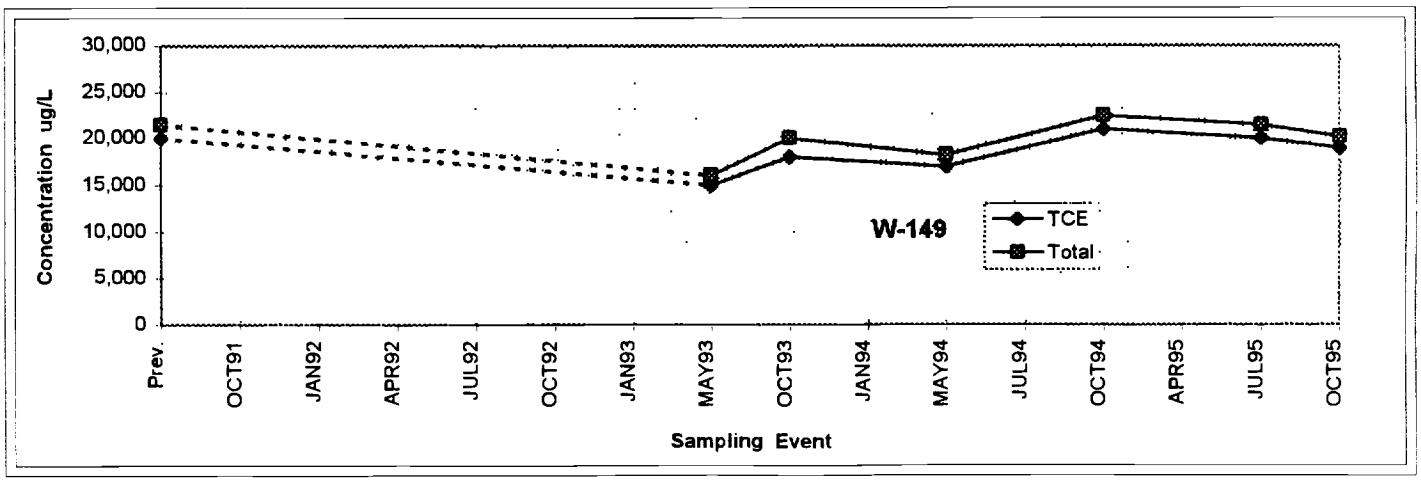
Historical Sampling results for TCE and degradation products through October 1995



Terrace Alluvium well - east parking lot



Terrace Alluvium well - East Parking Lot

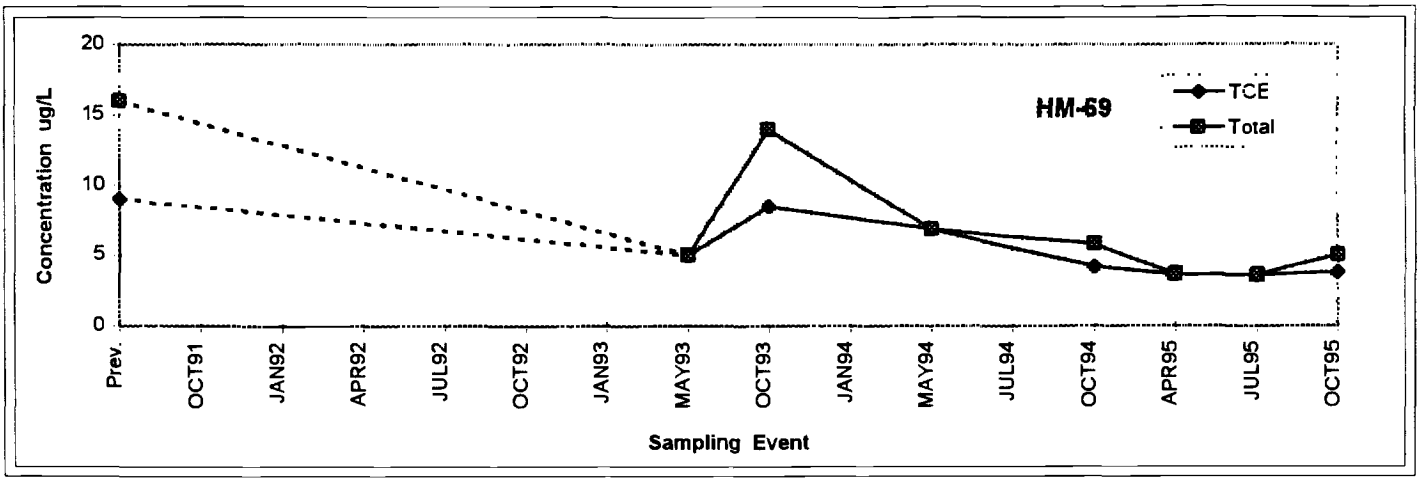


Terrace Alluvium well - east parking lot

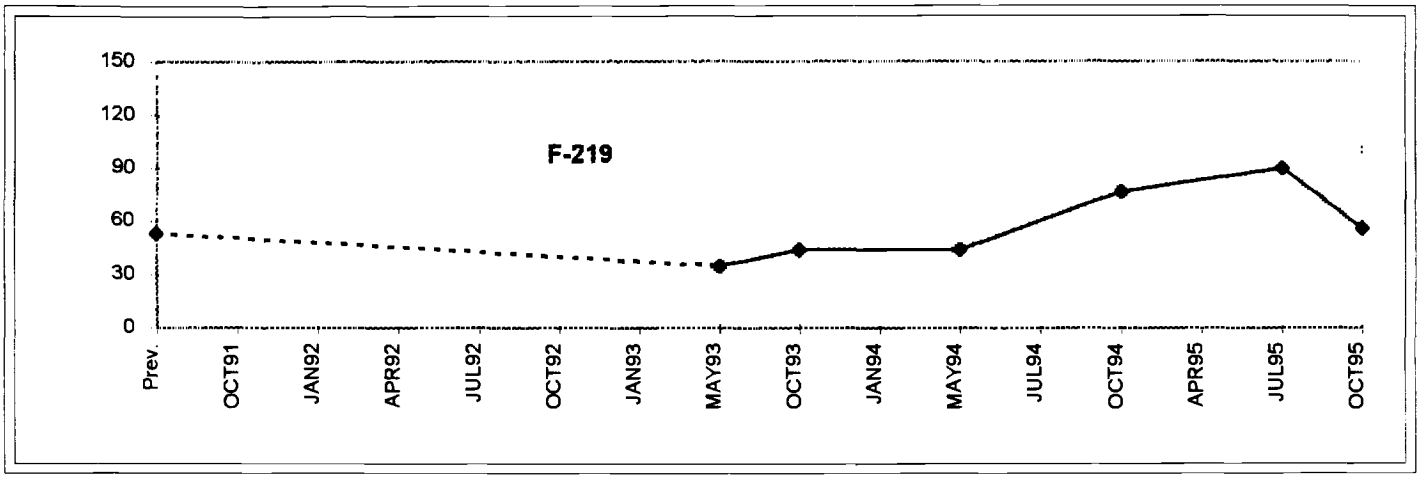
"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

Terrace Alluvium Wells - East Parking Lot (continued)

291 90



Terrace Alluvium well - east parking lot

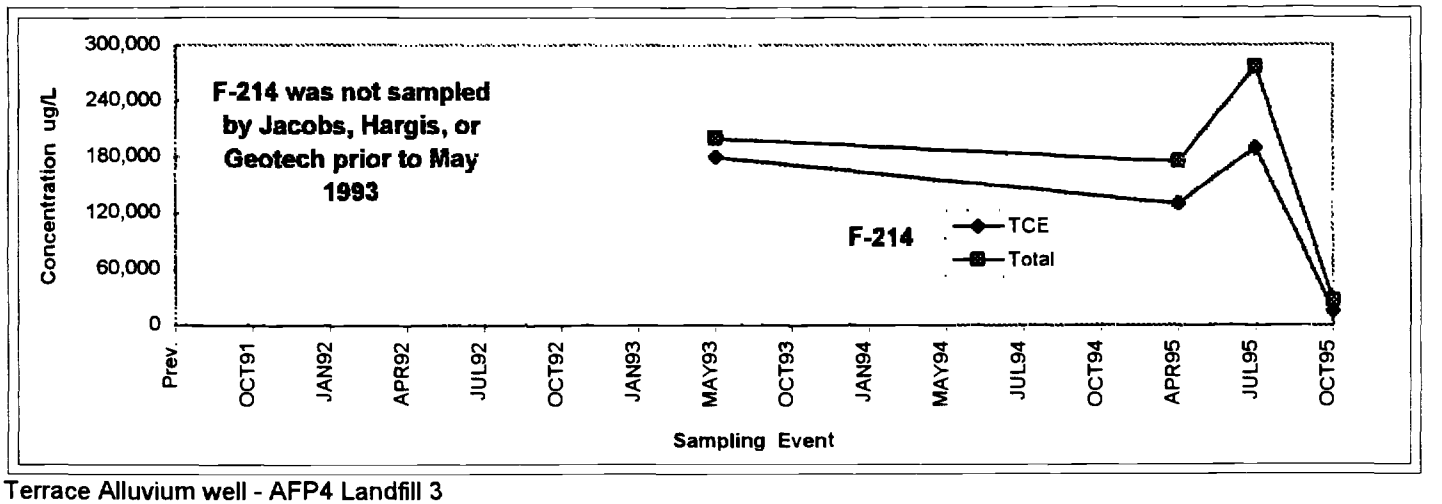


Terrace Alluvium well - east parking lot

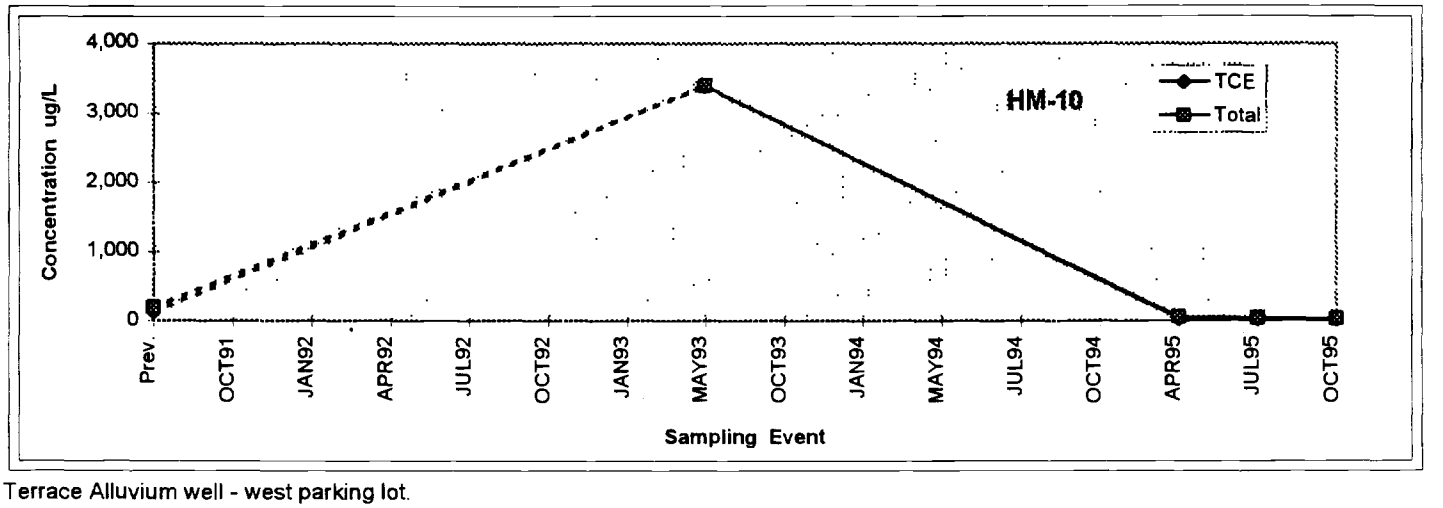
"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

Terrace Alluvium Wells - AFP4 Landfill 3

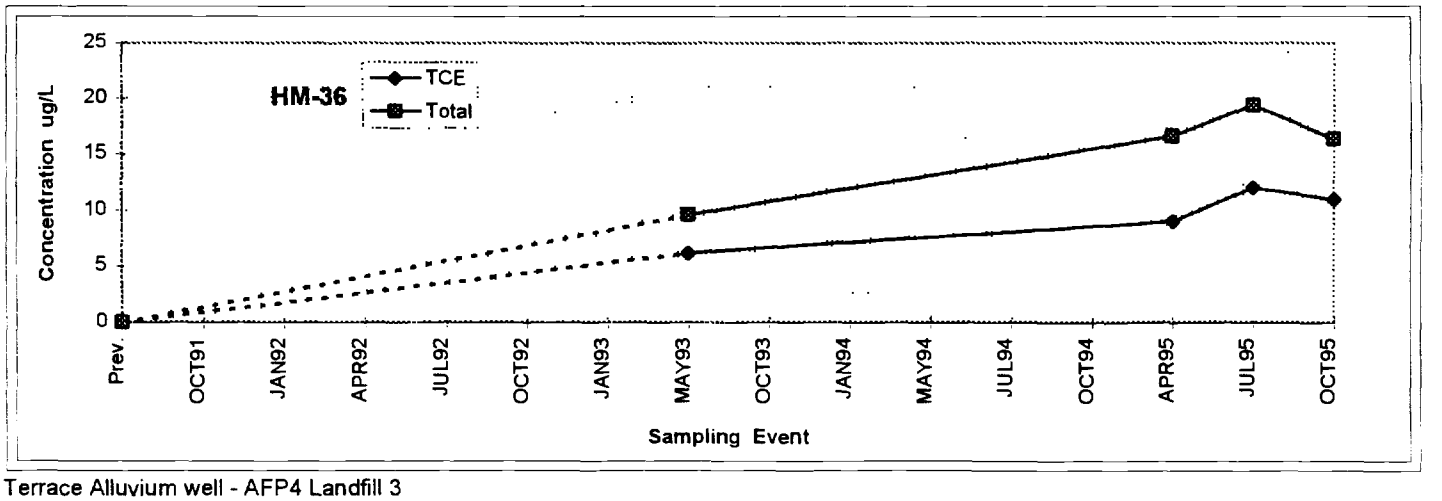
Historical Sampling results for TCE and degradation products through October 1995



Terrace Alluvium well - AFP4 Landfill 3



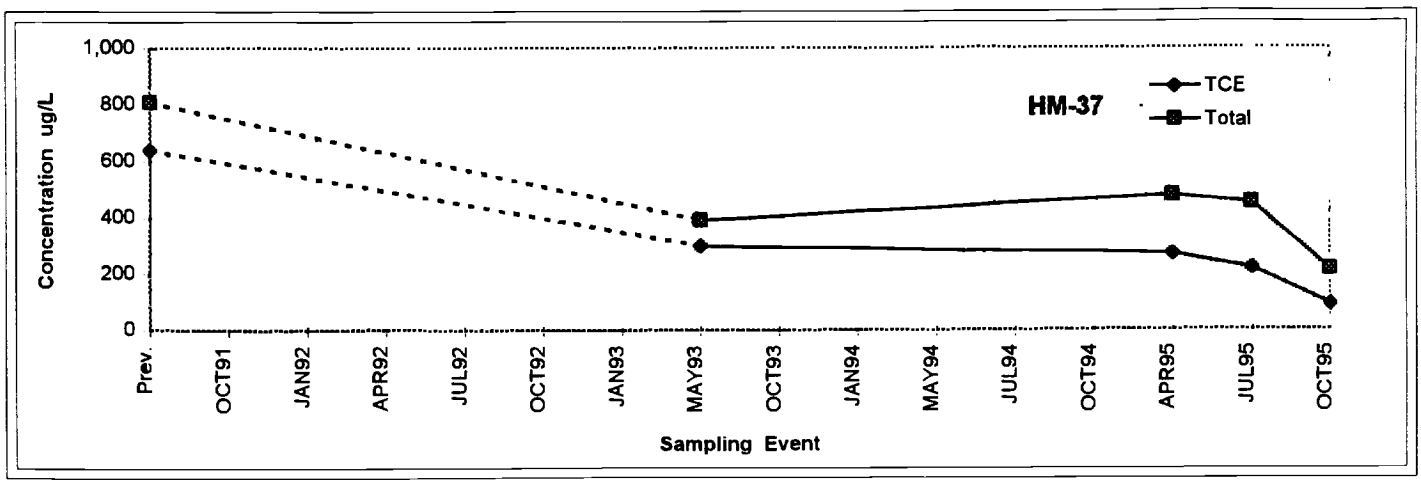
Terrace Alluvium well - west parking lot.



Terrace Alluvium well - AFP4 Landfill 3

"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

Terrace Alluvium Wells - AFP4 Landfill 3 (continued)

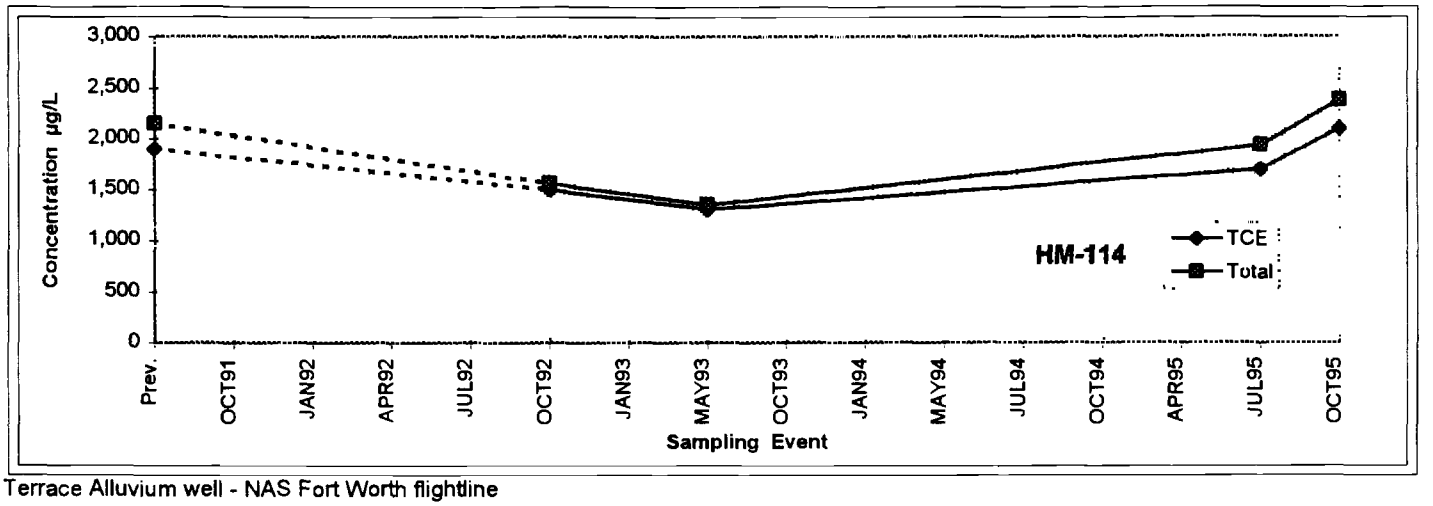


Terrace Alluvium well - AFP4 Landfill 3

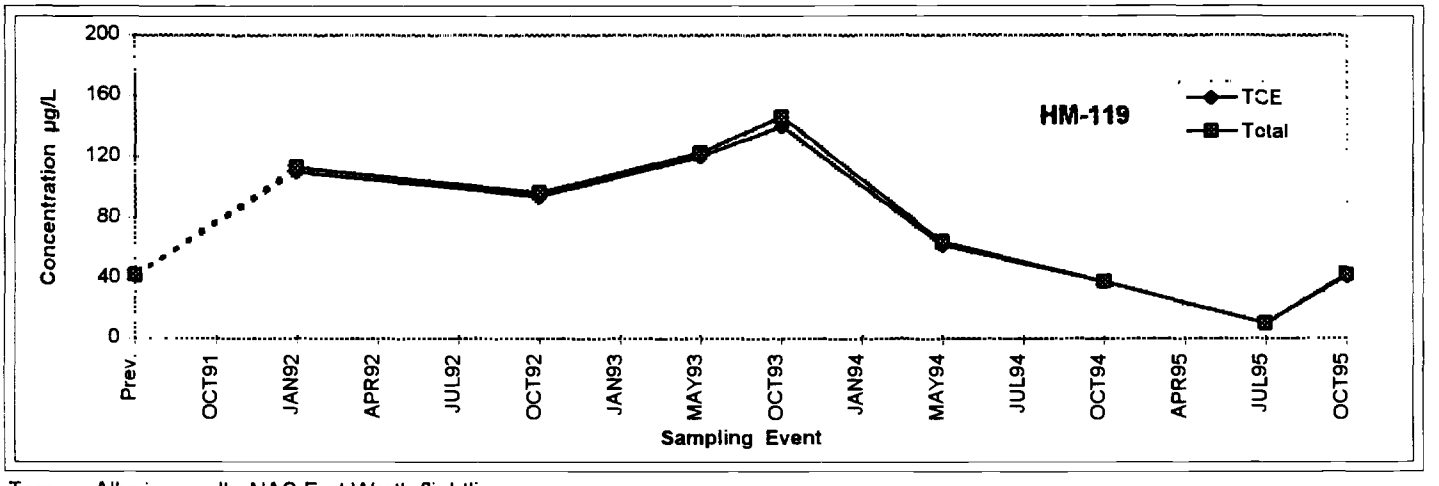
"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

Terrace Alluvium Wells - NAS Fort Worth

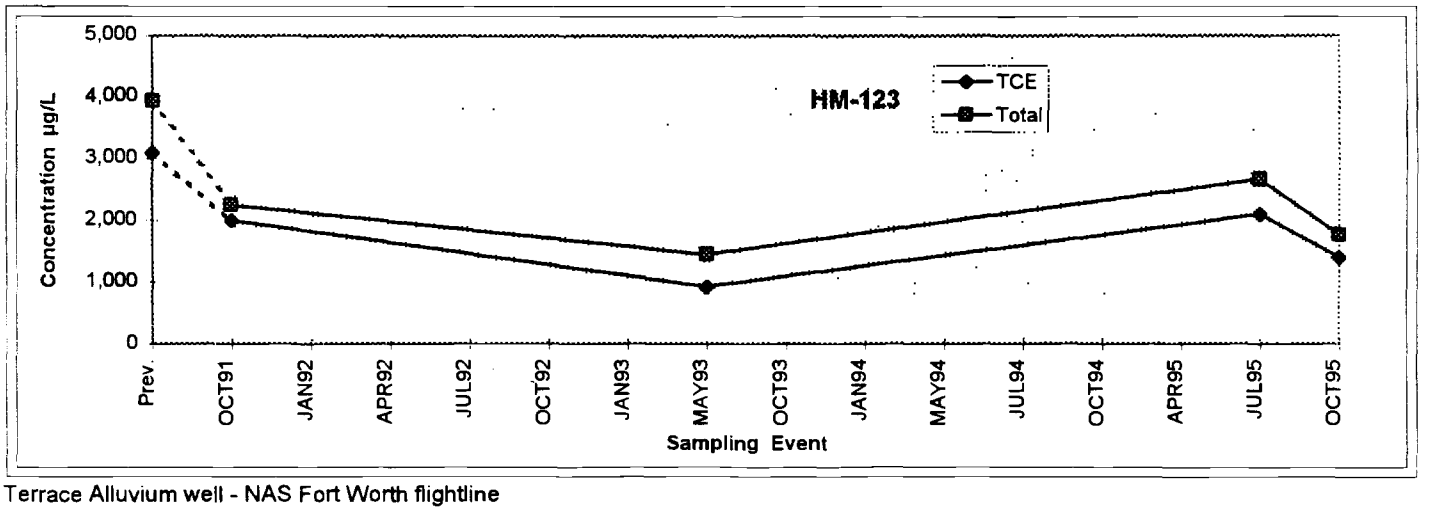
Historical Sampling results for TCE and degradation products through October 1995



Terrace Alluvium well - NAS Fort Worth flightline



Terrace Alluvium well - NAS Fort Worth flightline

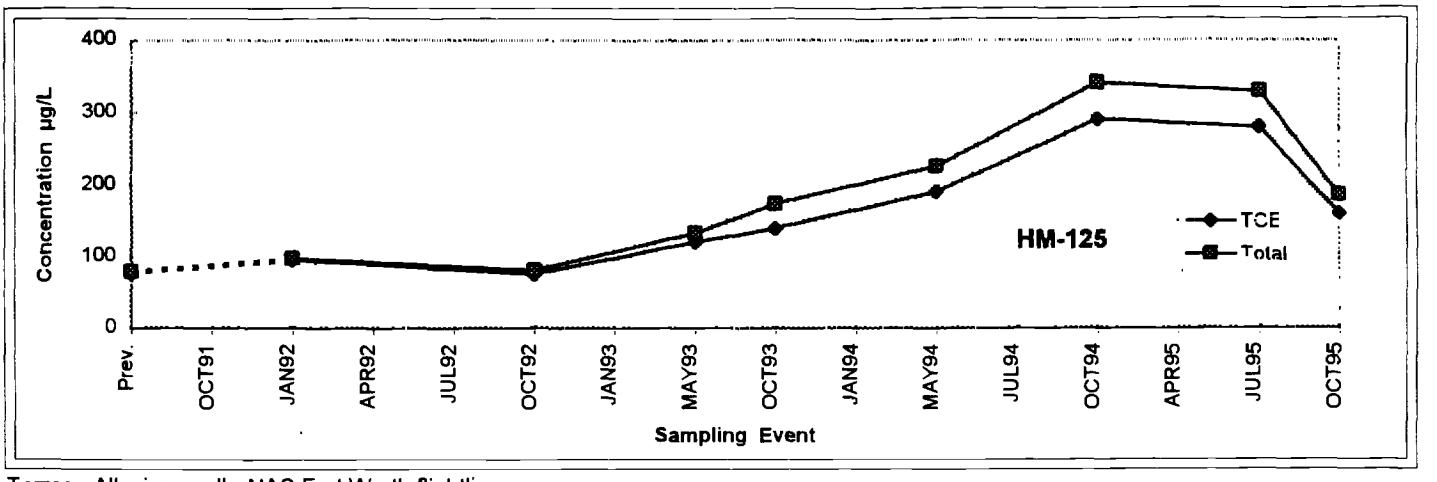


Terrace Alluvium well - NAS Fort Worth flightline

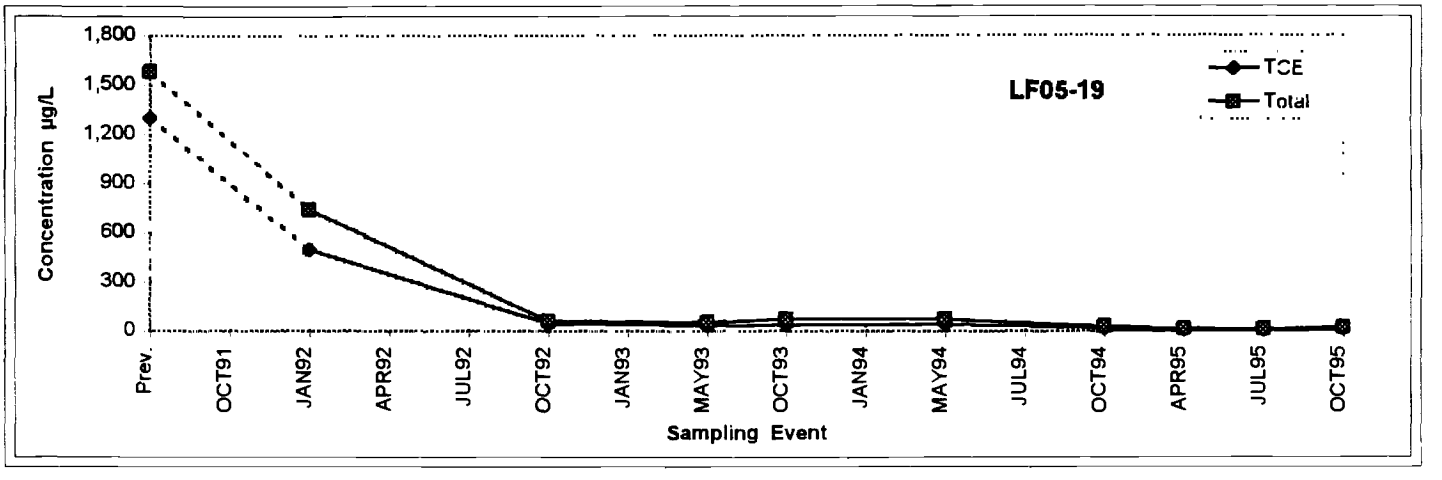
"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

Terrace Alluvium Wells - NAS Fort Worth (continued)

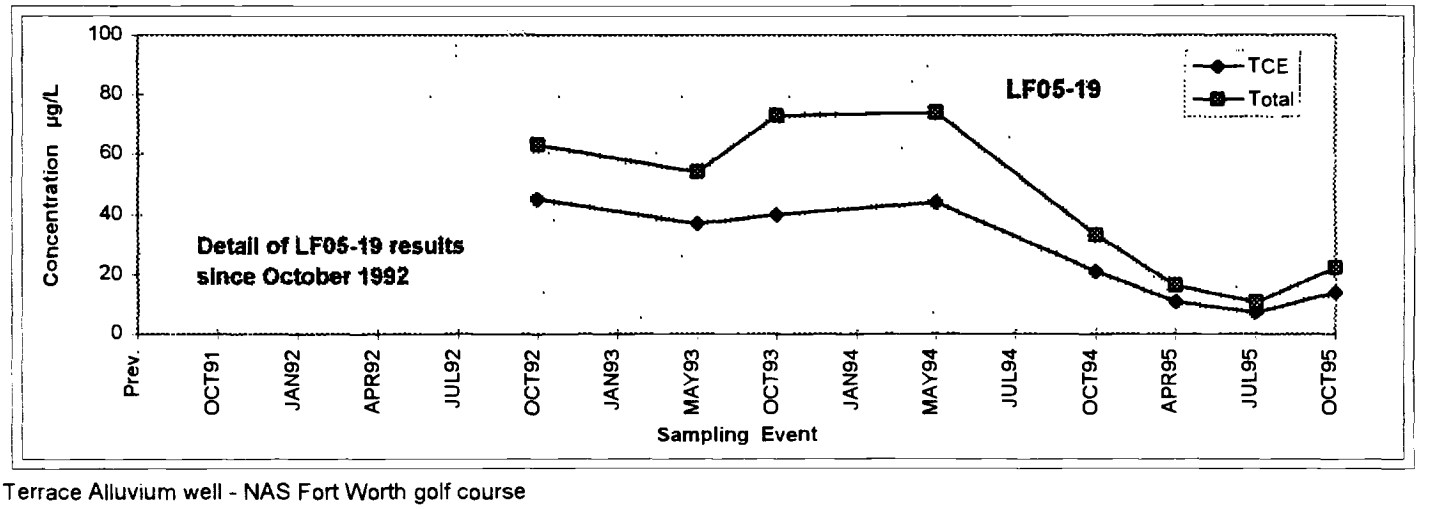
291 94



Terrace Alluvium well - NAS Fort Worth flightline



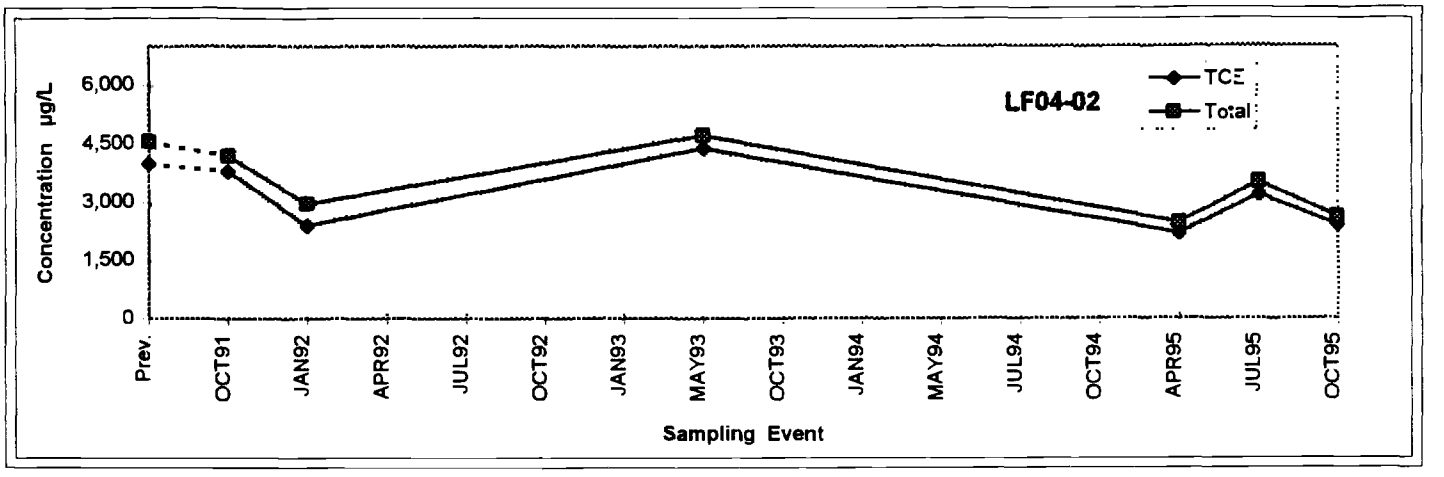
Terrace Alluvium well - NAS Fort Worth golf course



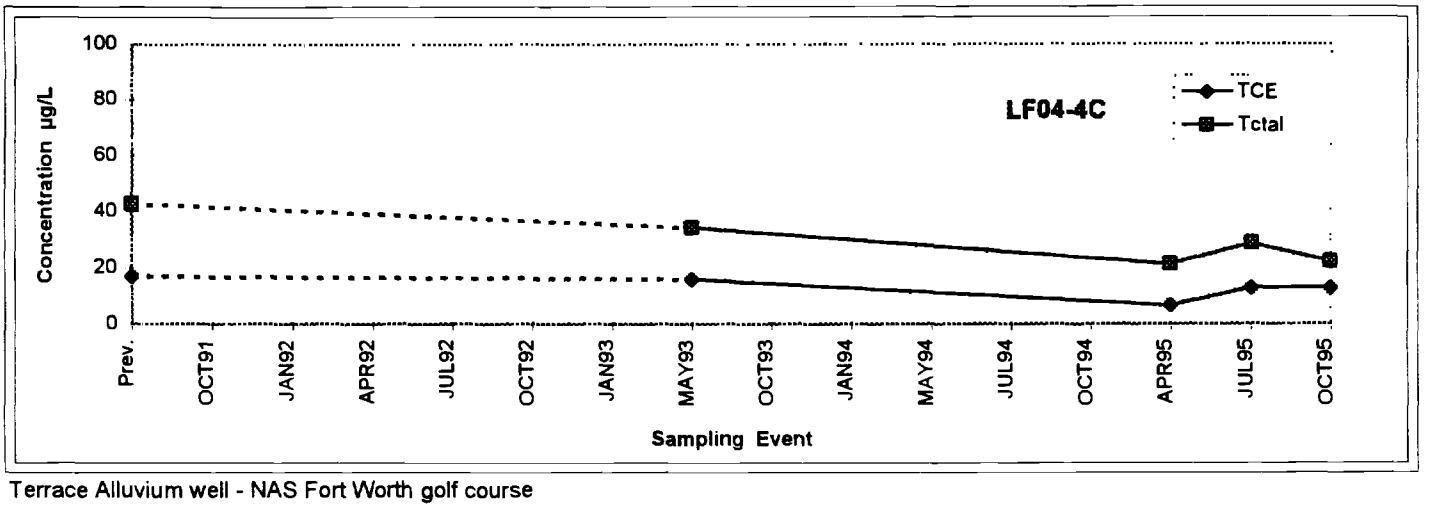
Terrace Alluvium well - NAS Fort Worth golf course

"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

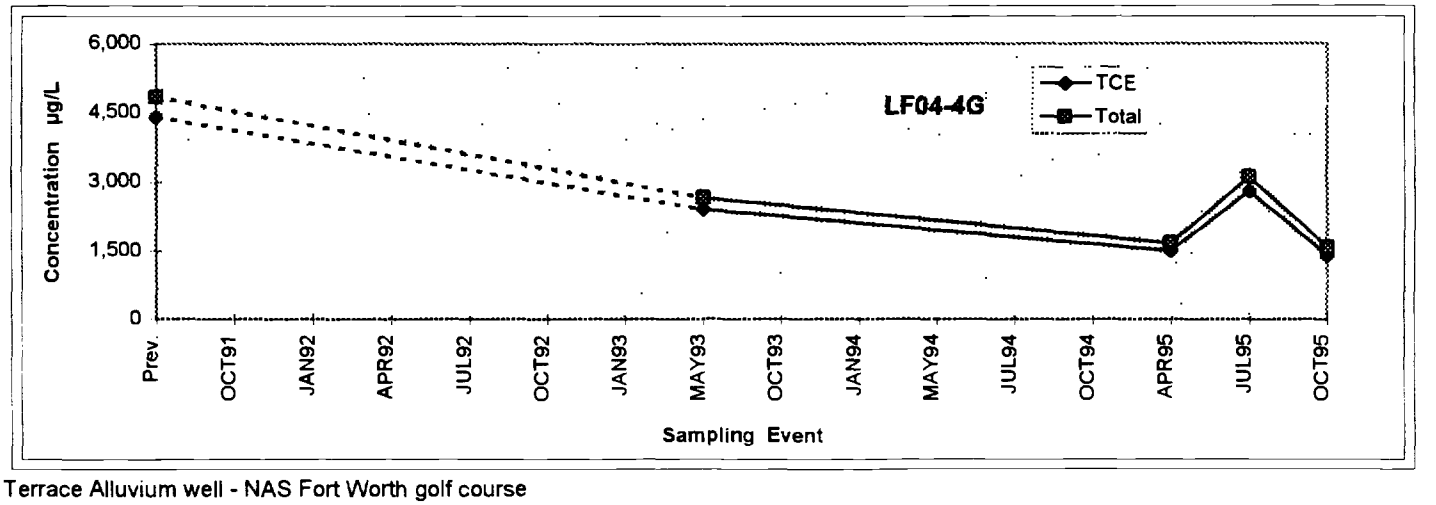
Terrace Alluvium Wells - NAS Fort Worth (continued)



Terrace Alluvium well - NAS Fort Worth golf course



Terrace Alluvium well - NAS Fort Worth golf course

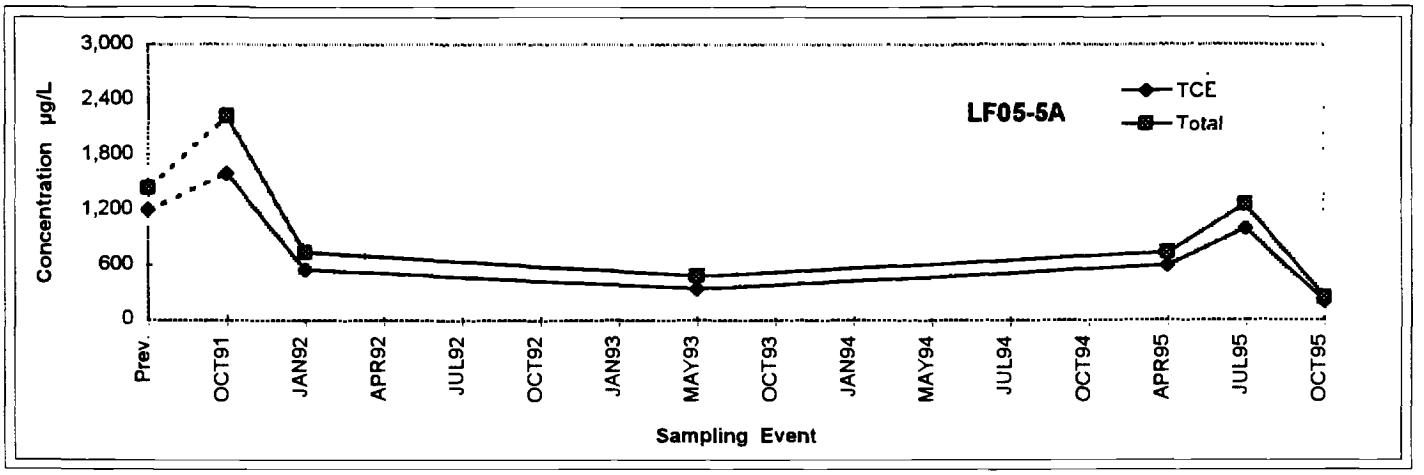


Terrace Alluvium well - NAS Fort Worth golf course

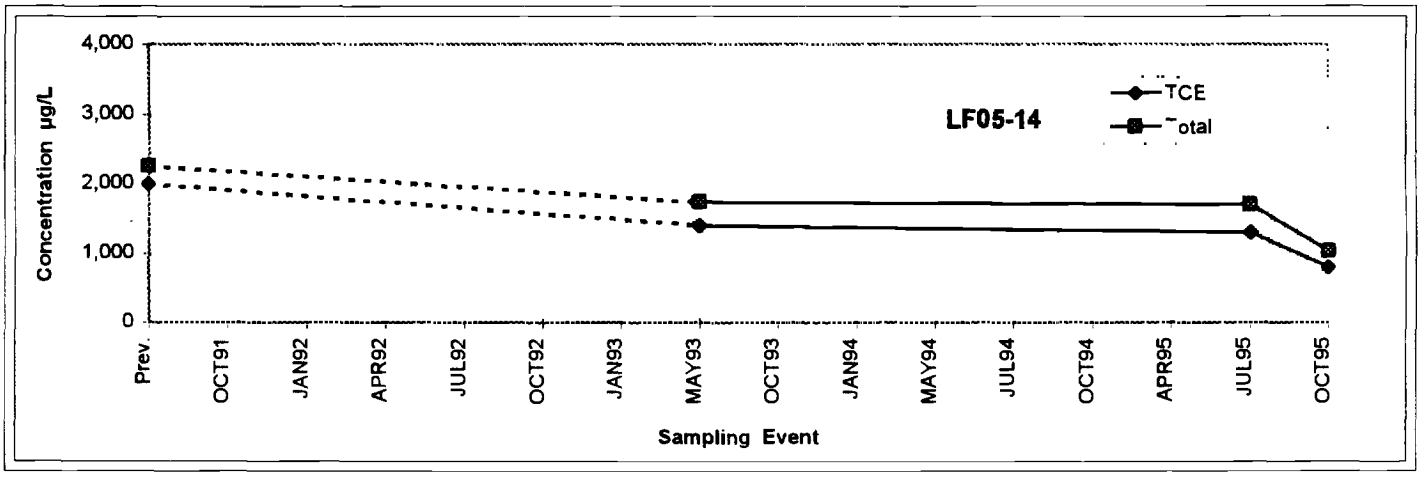
"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

Terrace Alluvium Wells - NAS Fort Worth (continued)

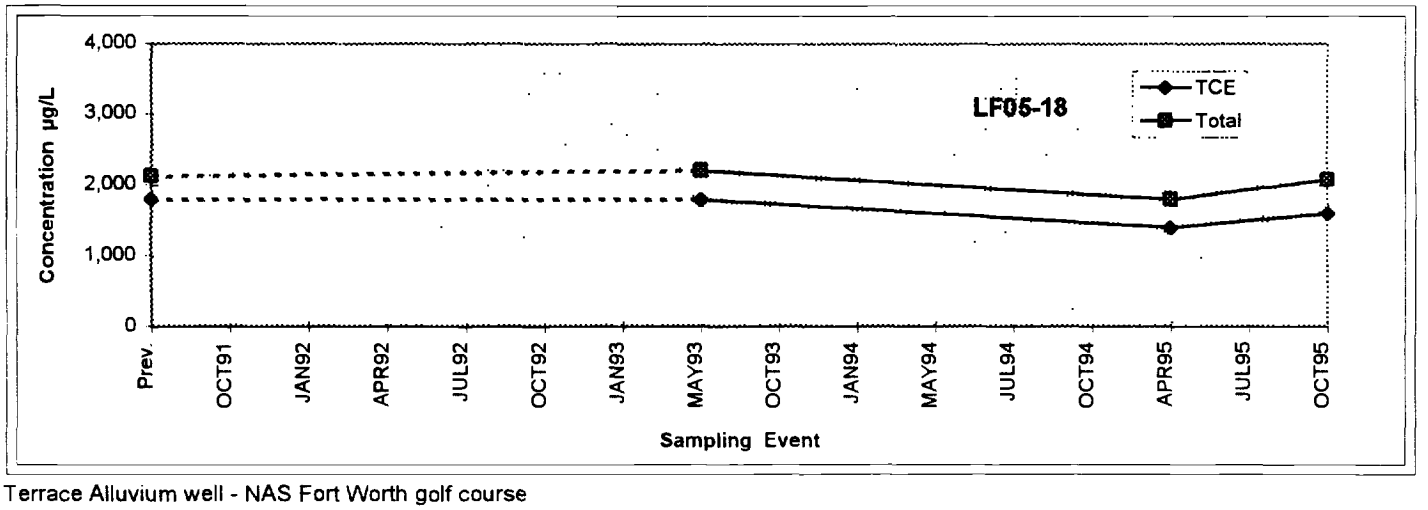
291 96



Terrace Alluvium well - NAS Fort Worth golf course



Terrace Alluvium well - NAS Fort Worth golf course



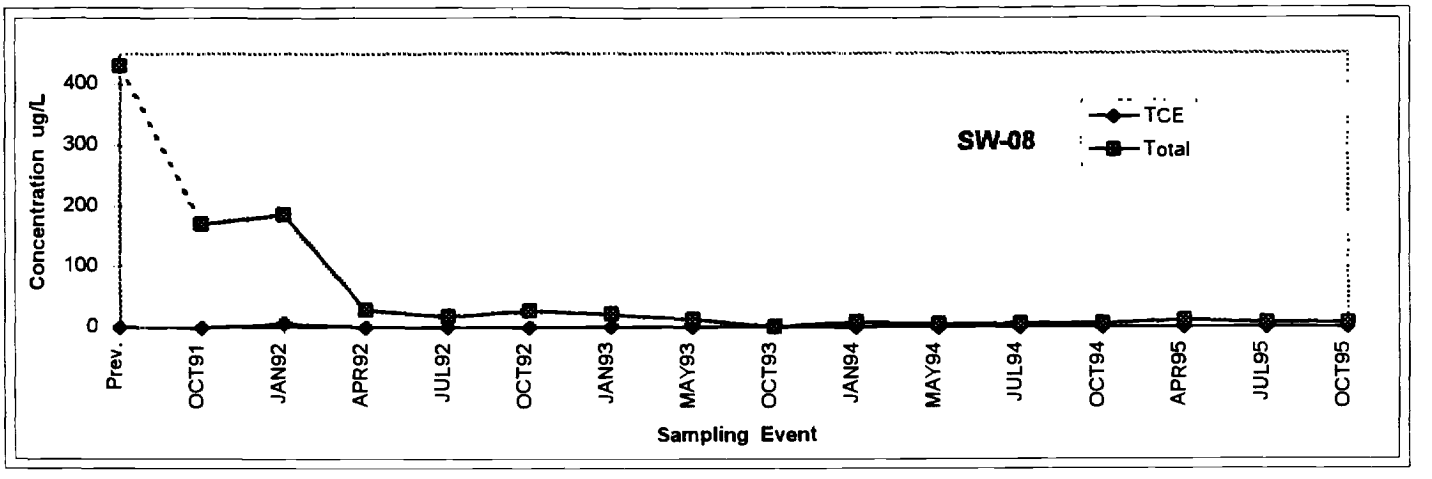
Terrace Alluvium well - NAS Fort Worth golf course

"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

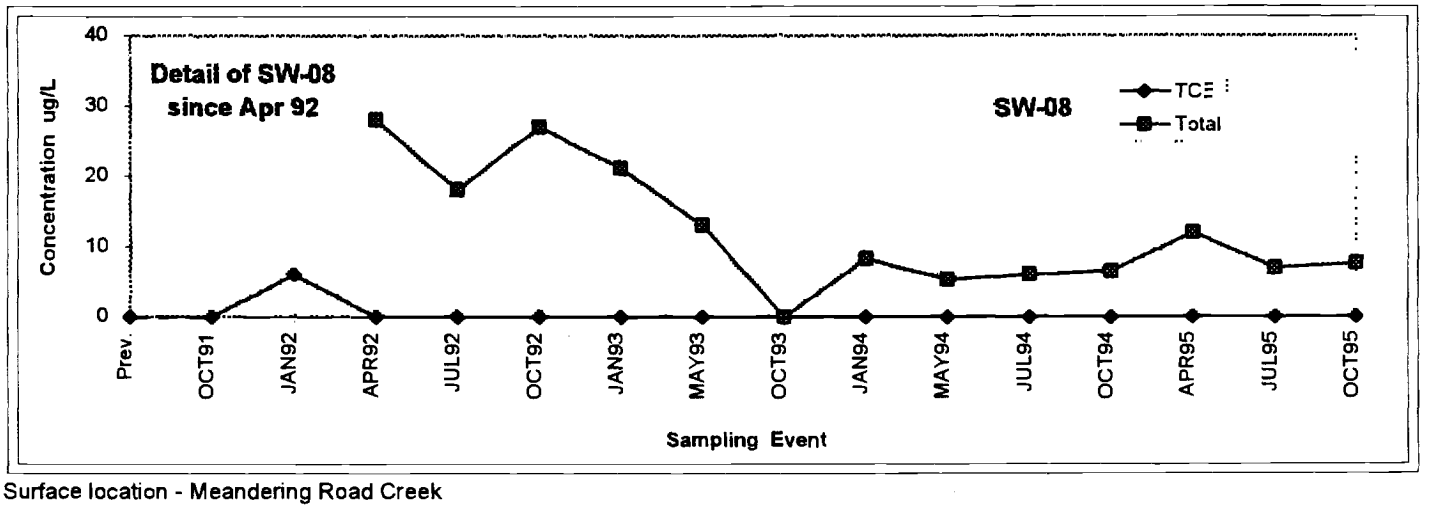
Surface Water Locations - Meandering Road Creek

291 97

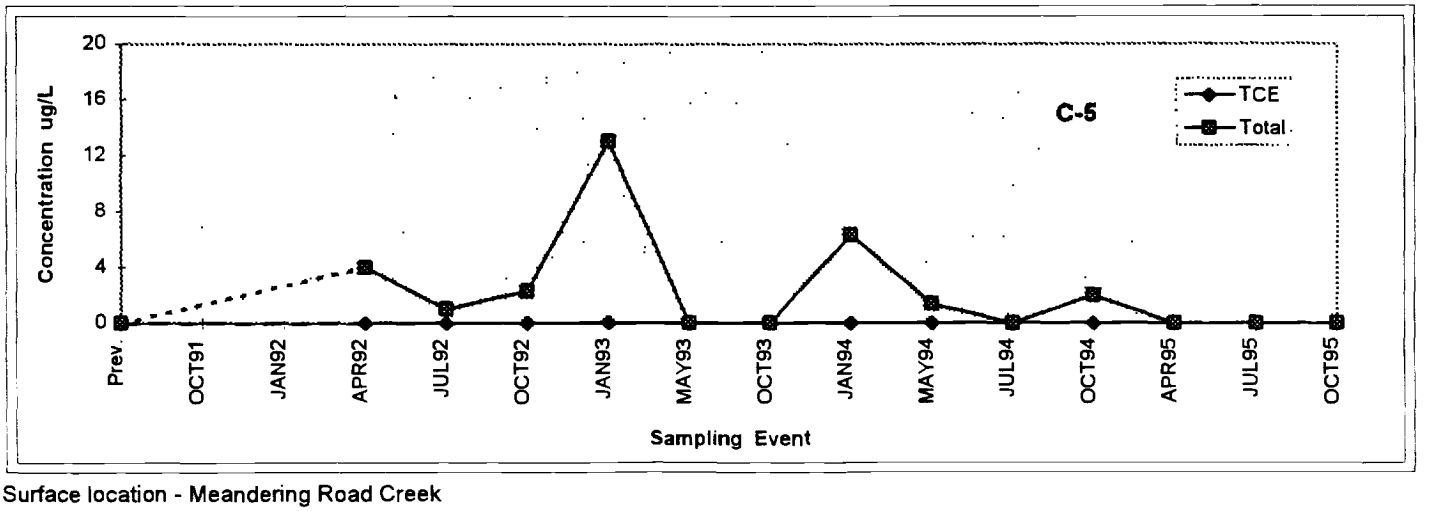
Historical Sampling results for TCE and degradation products through October 1995



Surface location - Meandering Road Creek



Surface location - Meandering Road Creek



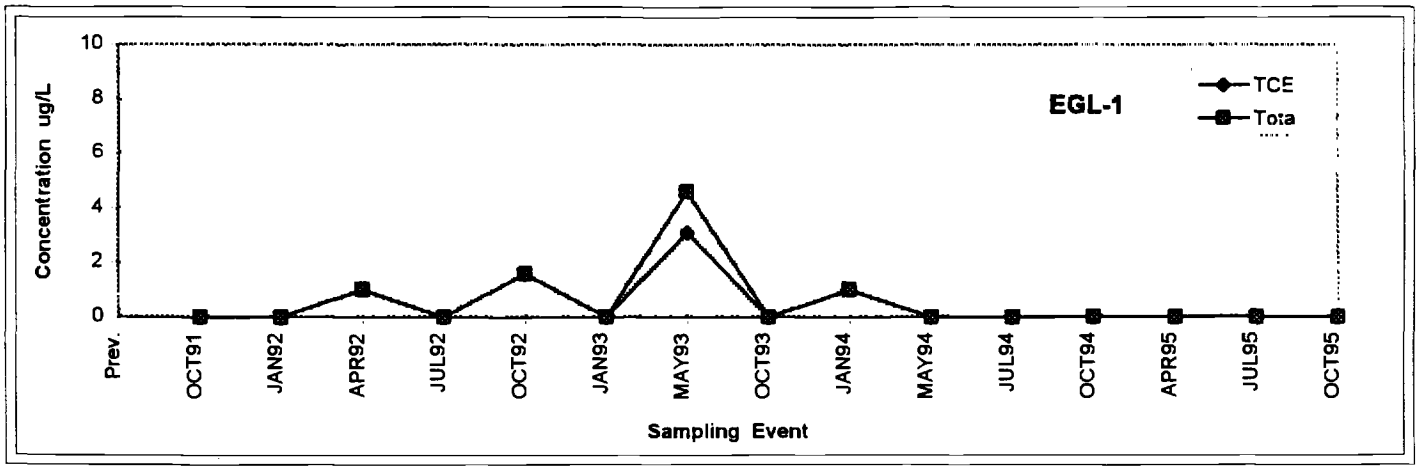
Surface location - Meandering Road Creek

"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

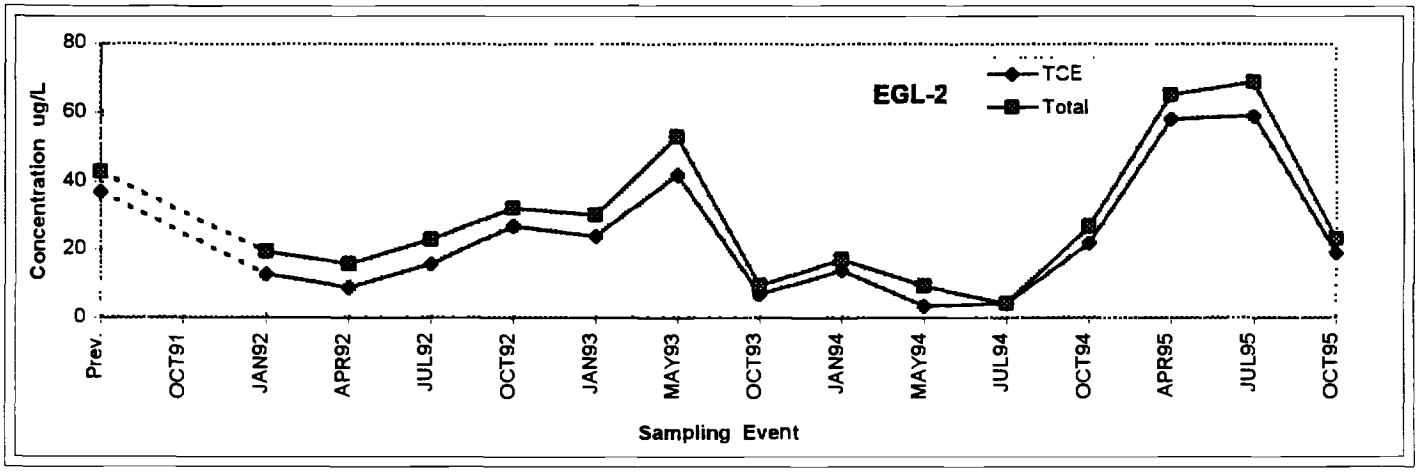
291 98

Surface Locations - Farmers Branch Aqueduct Inlet and Outlet

Historical Sampling results for TCE and degradation products through April 1995



Surface location - Farmers Branch aqueduct inlet



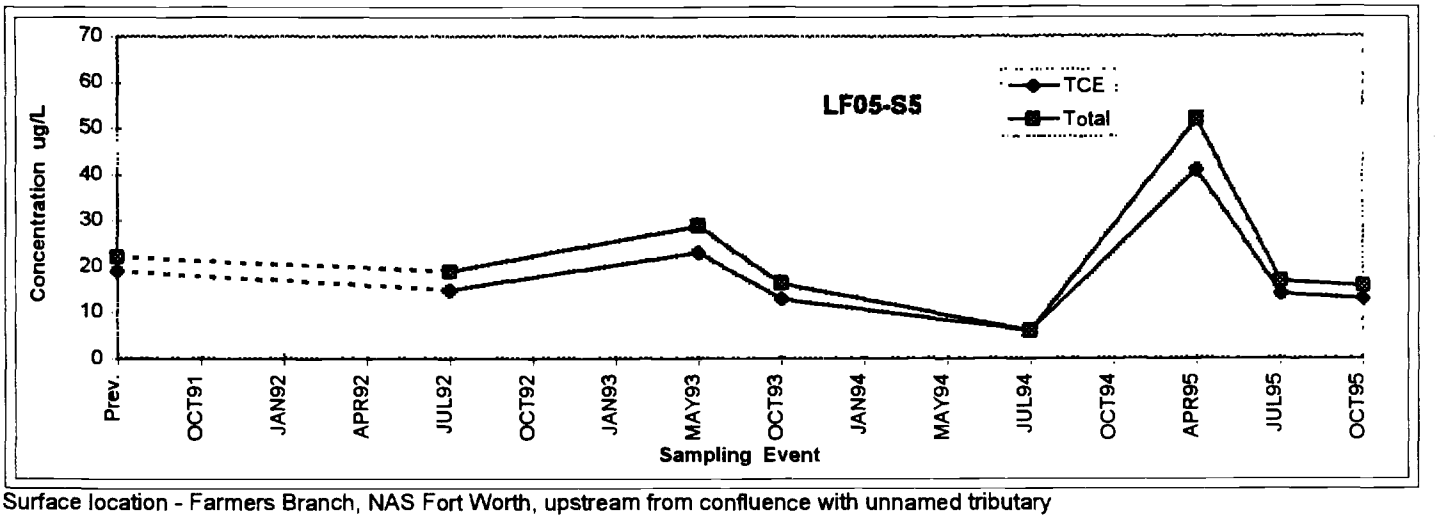
Surface location - Farmers Branch aqueduct outlet

"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

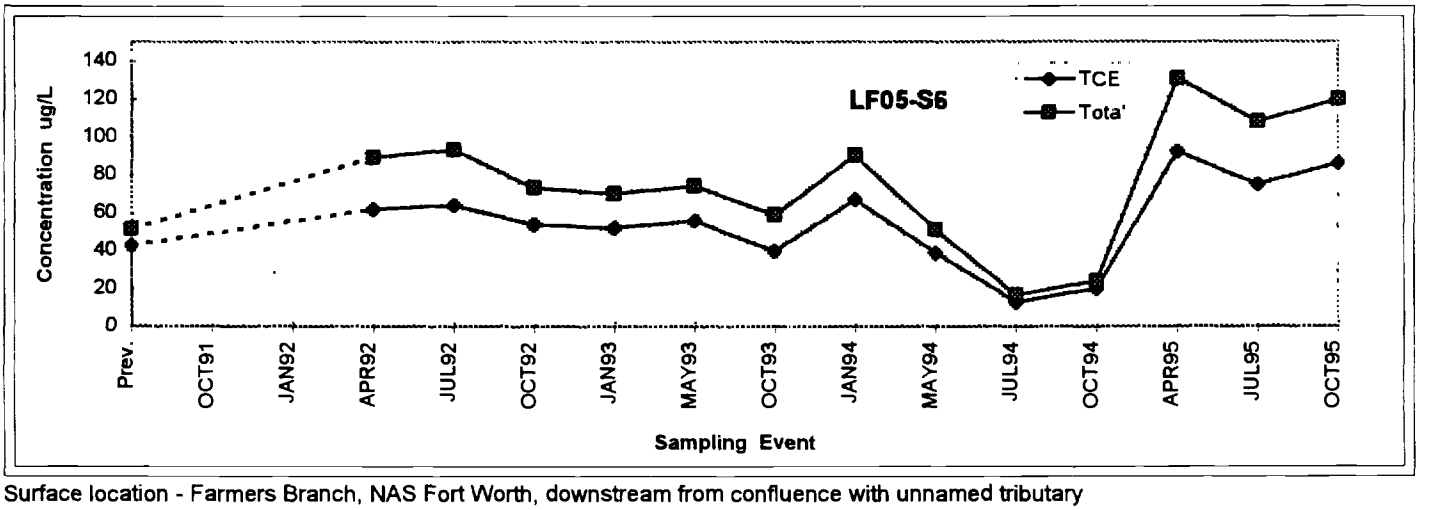
Surface Water Locations - Farmers Branch, NAS Ft. Worth

291

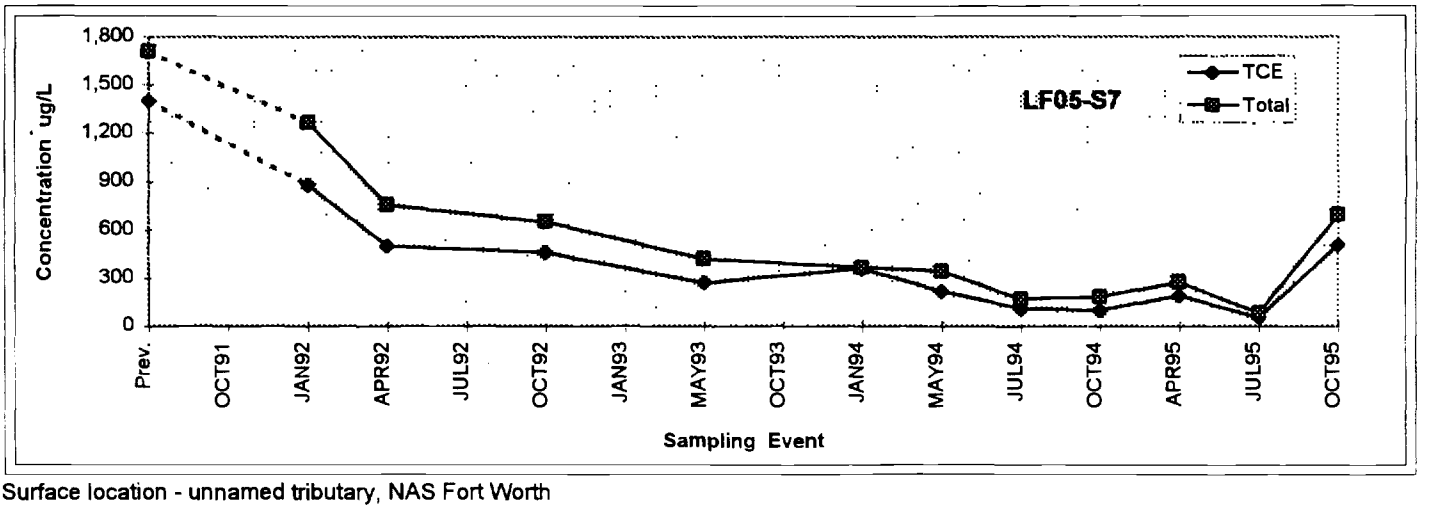
Historical Sampling results for TCE and degradation products through April 1995



Surface location - Farmers Branch, NAS Fort Worth, upstream from confluence with unnamed tributary



Surface location - Farmers Branch, NAS Fort Worth, downstream from confluence with unnamed tributary



Surface location - unnamed tributary, NAS Fort Worth

"Prev." data were acquired prior to Oct. 1991. See Appendix E Notes.
"Total" concentration = TCE plus its degradation products. See Appendix E Notes.

APPENDIX F

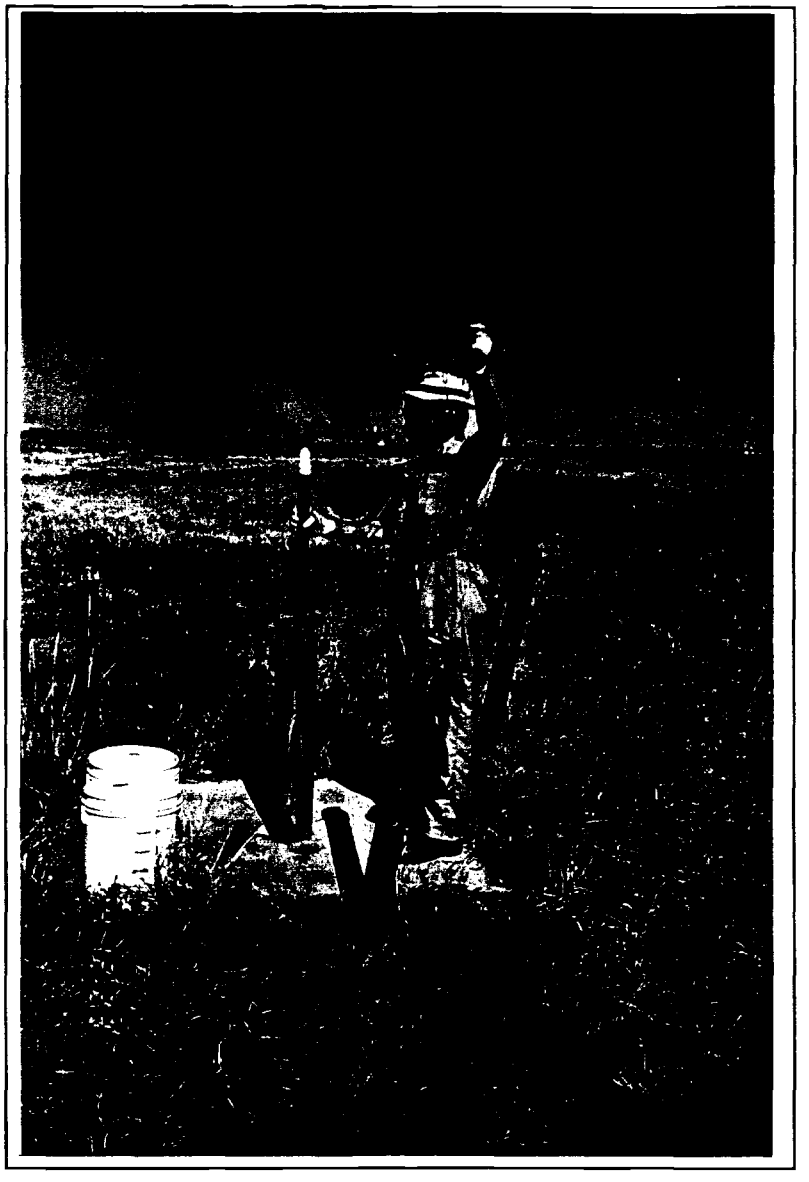
Photographs: October/November 1995

291101

Surface water collection using pond dipper at LF05-S6, Farmers Branch. (13:41, 10/16/95)

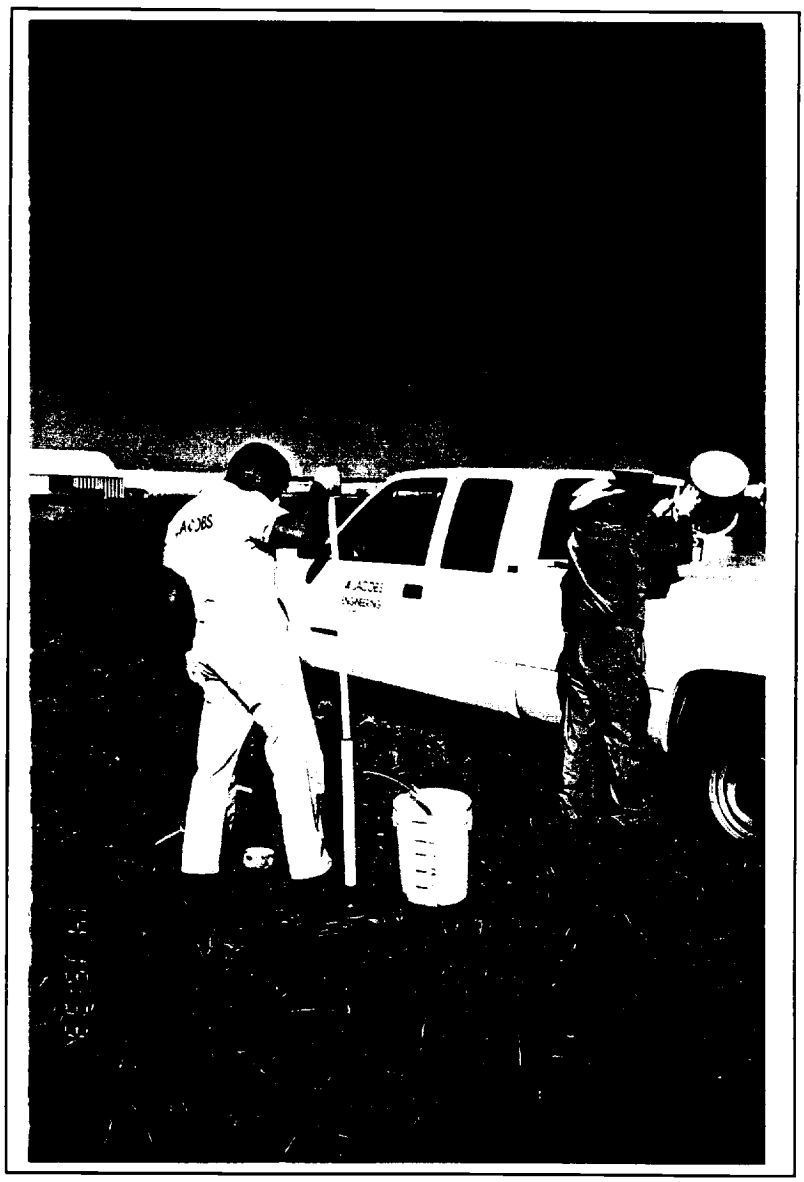
Surface water collection using polypropylene beaker at C-5, Meandering Rd. Creek. (09:56, 10/16/95)

291102



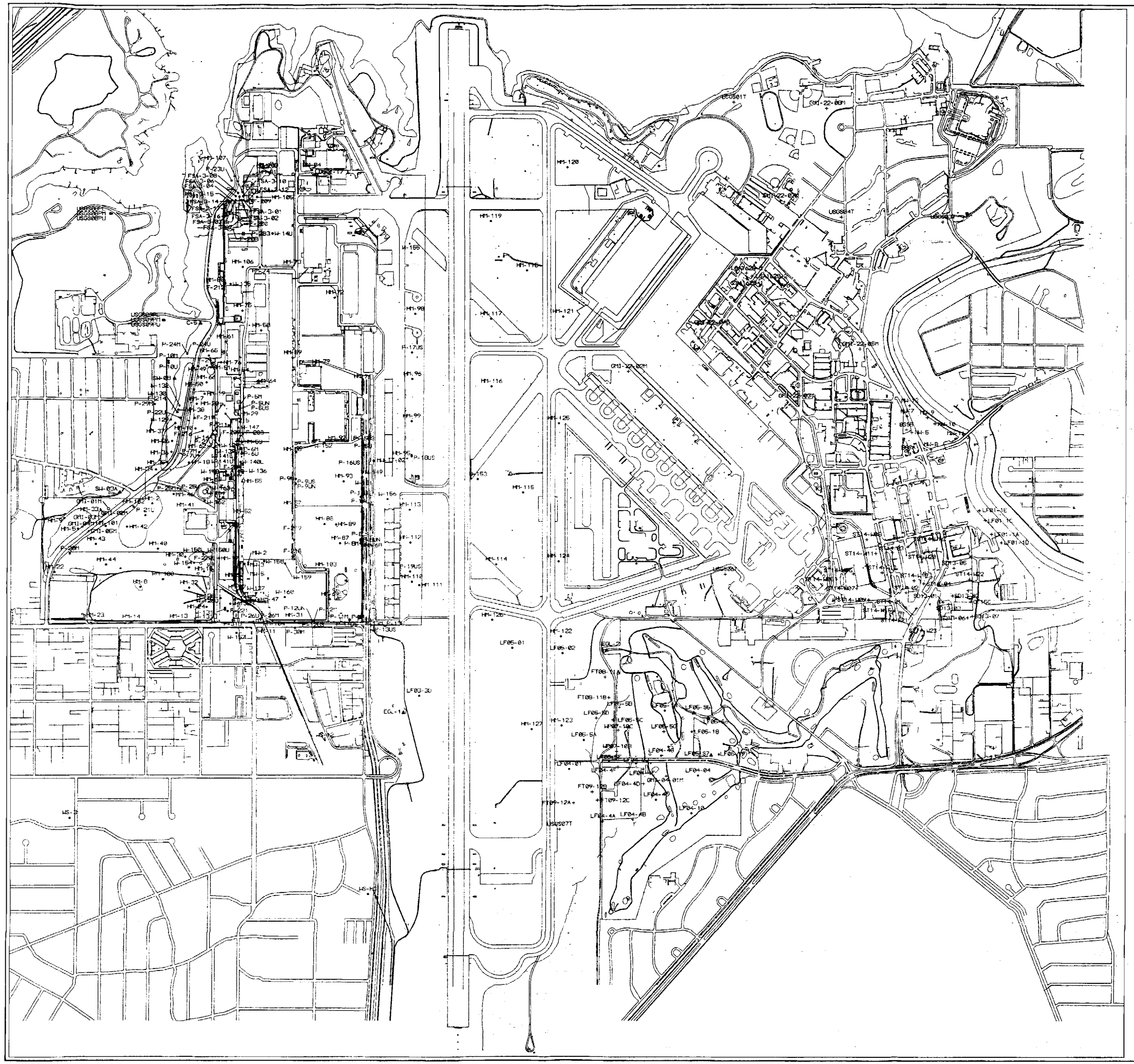
Purging NASFW flightline well LF05-01 using a Teflon® bailer. (12:23, 11/14/95)

291103



Purging NASFW flightline well HM-123 using a Triloc hand-pump. (15:33, 11/14/95)

291104



Legend

- HW-127 — Well Location Sampled (Jacobs)
- P-11US — Dry Well Location (Jacobs)
- SW-08 — Surface Water Location (Jacobs)
- MW-12 — Well Location Sampled by Law Environmental (October 1995)

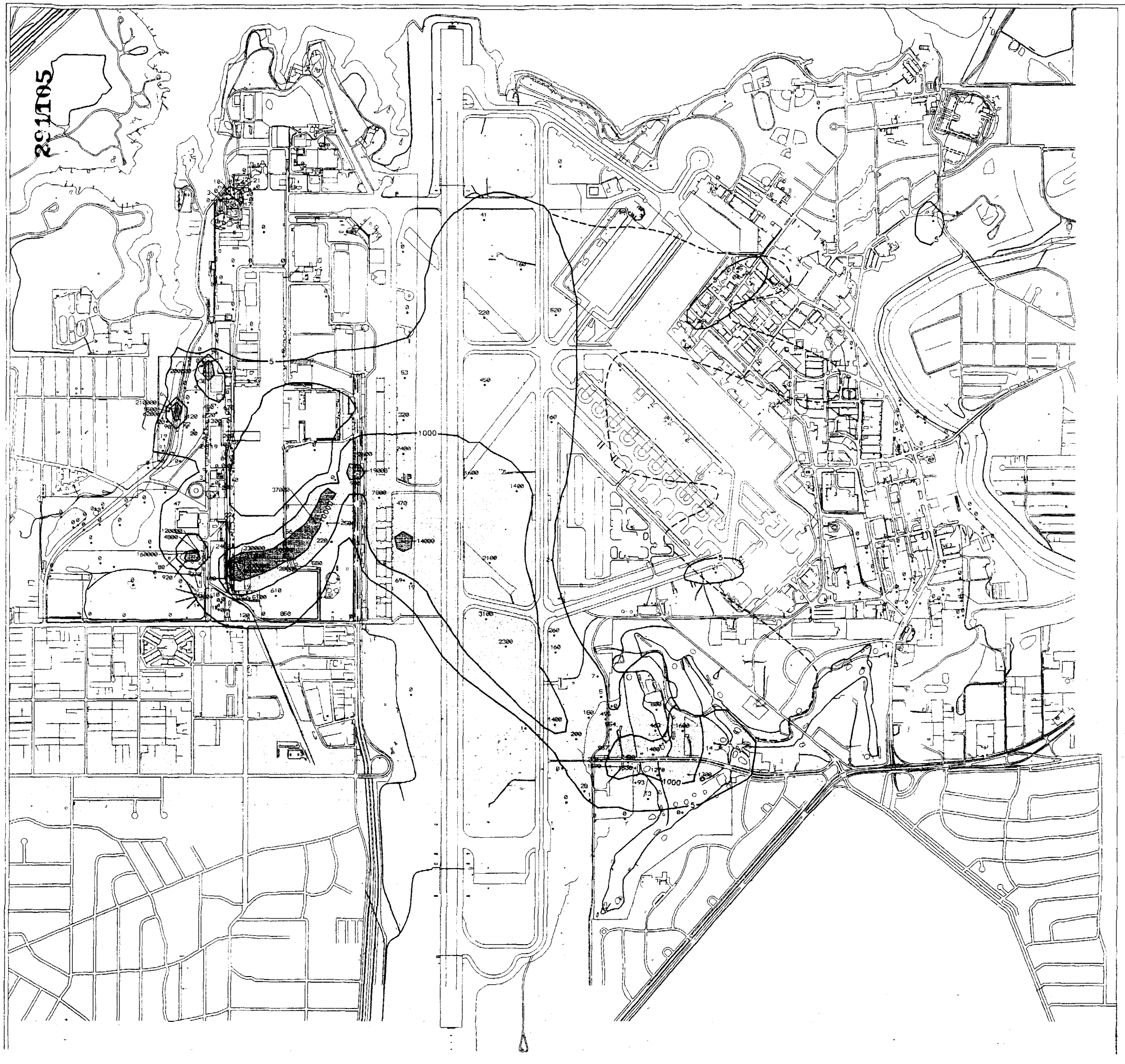
N

0 500 1000 2000
SCALE IN FEET

Air Force Plant 4 and Vicinity
Fort Worth, Texas

Locations Sampled in
October/November 1995

PROJ. MGR.	ACAD FILE NO.	FIGURE NO.	
L. SCHUETTER	PLATE1	PLATE 1	
DRAWN BY	PROJ. NO.		DATE
J. HUNTER	05-G-47000		3/7/96



Legend

1200 — TCE concentration, in µg/L

Approximate extent of TCE contamination as defined by Geomarine Hydropunch data and mapped by Rust-Geotech

References:
- Geomarine 1992
- Geomarine 1993
- Geomarine 1994
- Geotech 1995

Contour Interval and Color Key
µg/L TCE

- +10,000
- 1,000–10,000
- 1–1,000

N

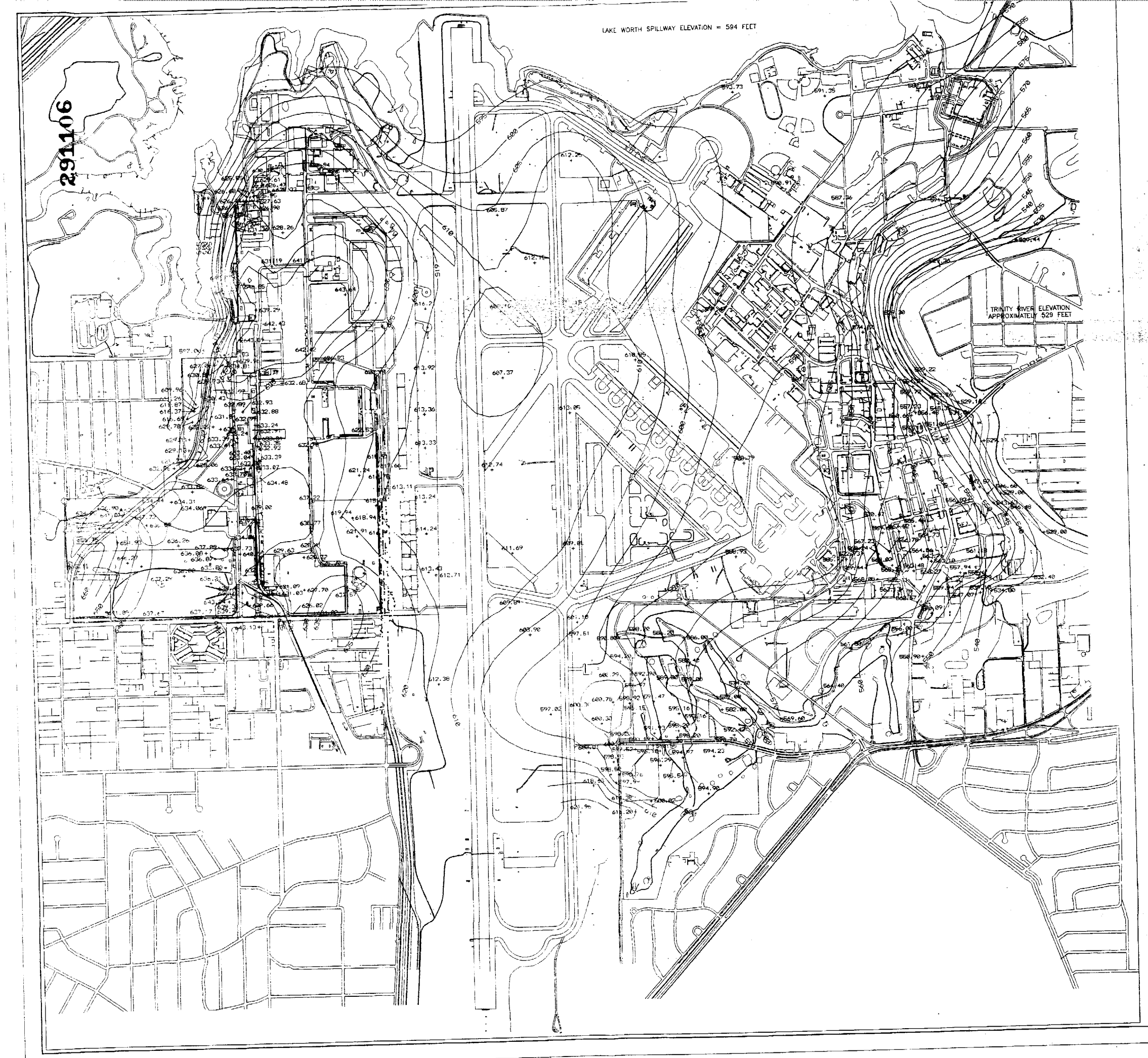
0 500 1000 2000
SCALE IN FEET

Air Force Plant 4 and Vicinity
Fort Worth, Texas

TCE Concentrations in Terrace Alluvium Wells – October/November 1995

PROJ. MGR.	ACAD FILE NO.	FIGURE NO.	
L. SCHUETTER	PLATE3	PLATE 3	
DRAWN BY	PROJ. NO.		DATE
L. HUNTER	05-C-47000		3/7/96

291106



612.15 + Water level elevation

Note:
Water levels recorded by IT Corporation June 12-27, 1995

Contour Interval = 5 feet

N

0 500 1000 2000
SCALE IN FEET

Air Force Plant 4 and Vicinity
Fort Worth, Texas

Terrace Alluvium Groundwater
Elevations in June 1995

PROJ. MGR. L. SCHUETTER	ACAD FILE NO. PLATE2	FIGURE NO. PLATE 2
DRAWN BY J. HUNTER	PROJ. NO. 05-G-47000	DATE 3/7/96

29110

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE

291106

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE